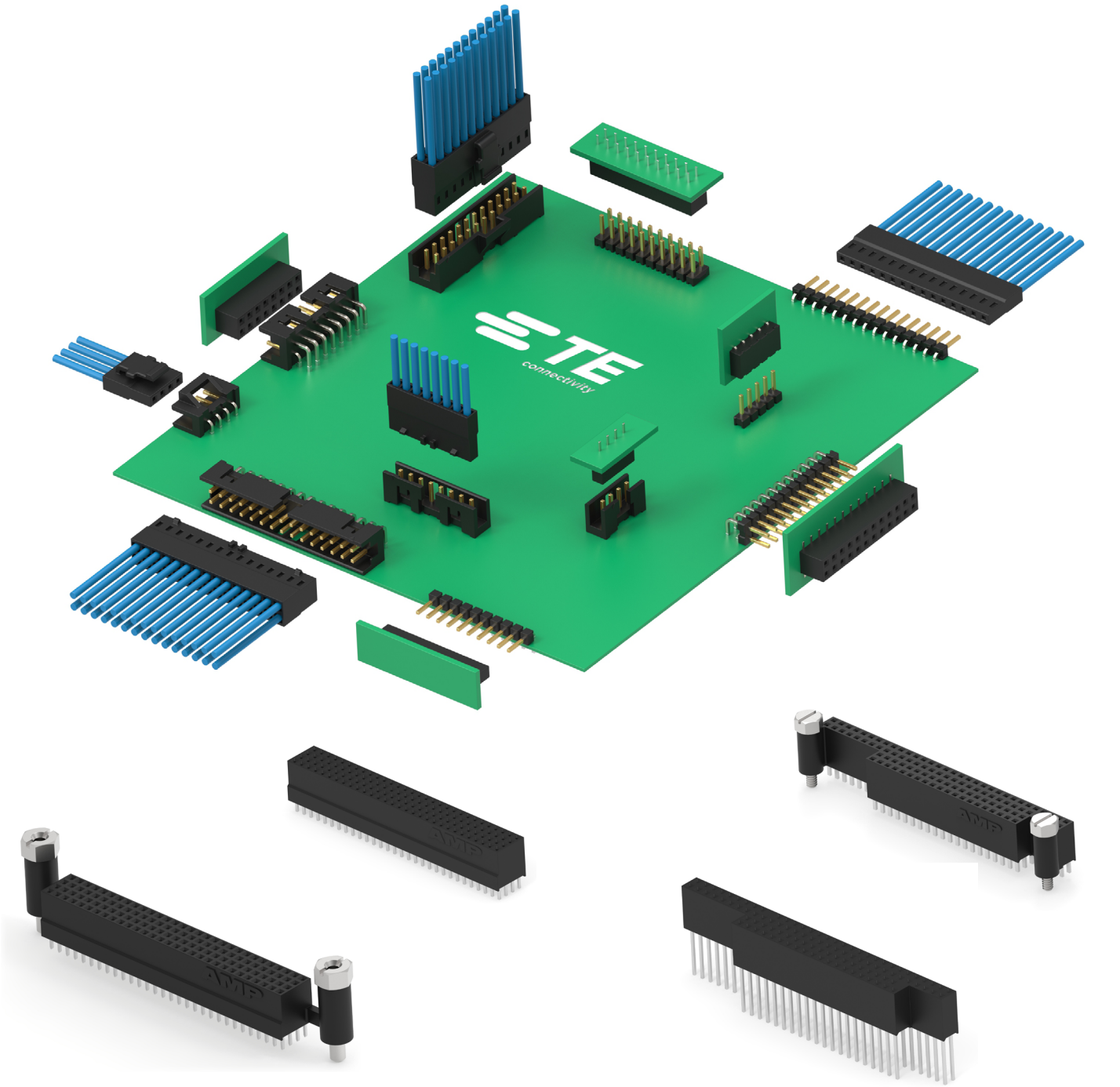


AMPMODU 2.54MM INTERCONNECT SYSTEM

.100 [2.54] X .100 [2.54] CENTERLINE

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PC/104 AND PC/104-PLUS CONNECTORS

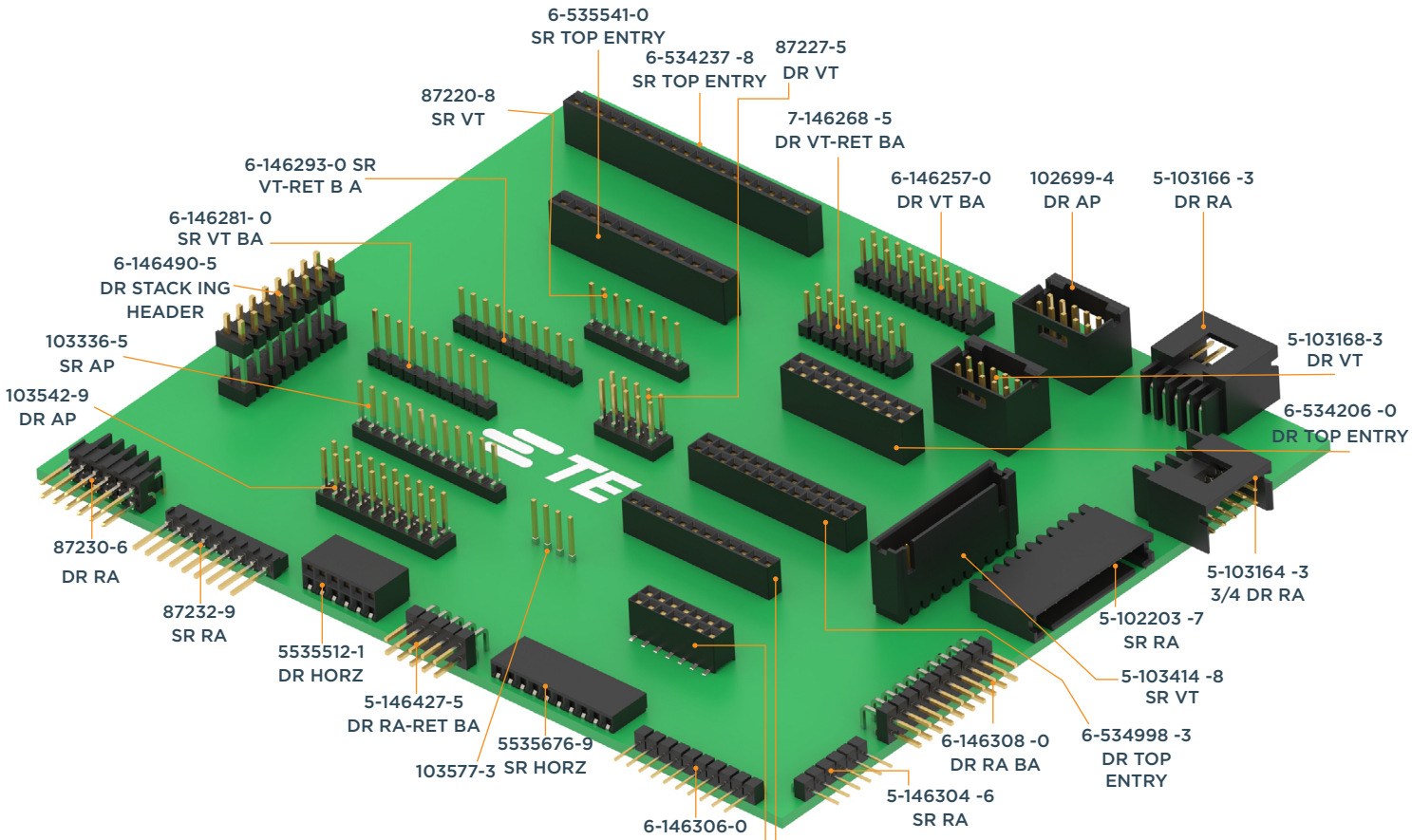
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AMPMODU .025 [0.64] SQUARE INTERCONNECTION SYSTEM

AMPMODU HEADERS AND RECEPTACLES, .100 [2.54] CENTERLINE



SR Single Row

VT Vertical

RA Right Angle

RET Retention Feature

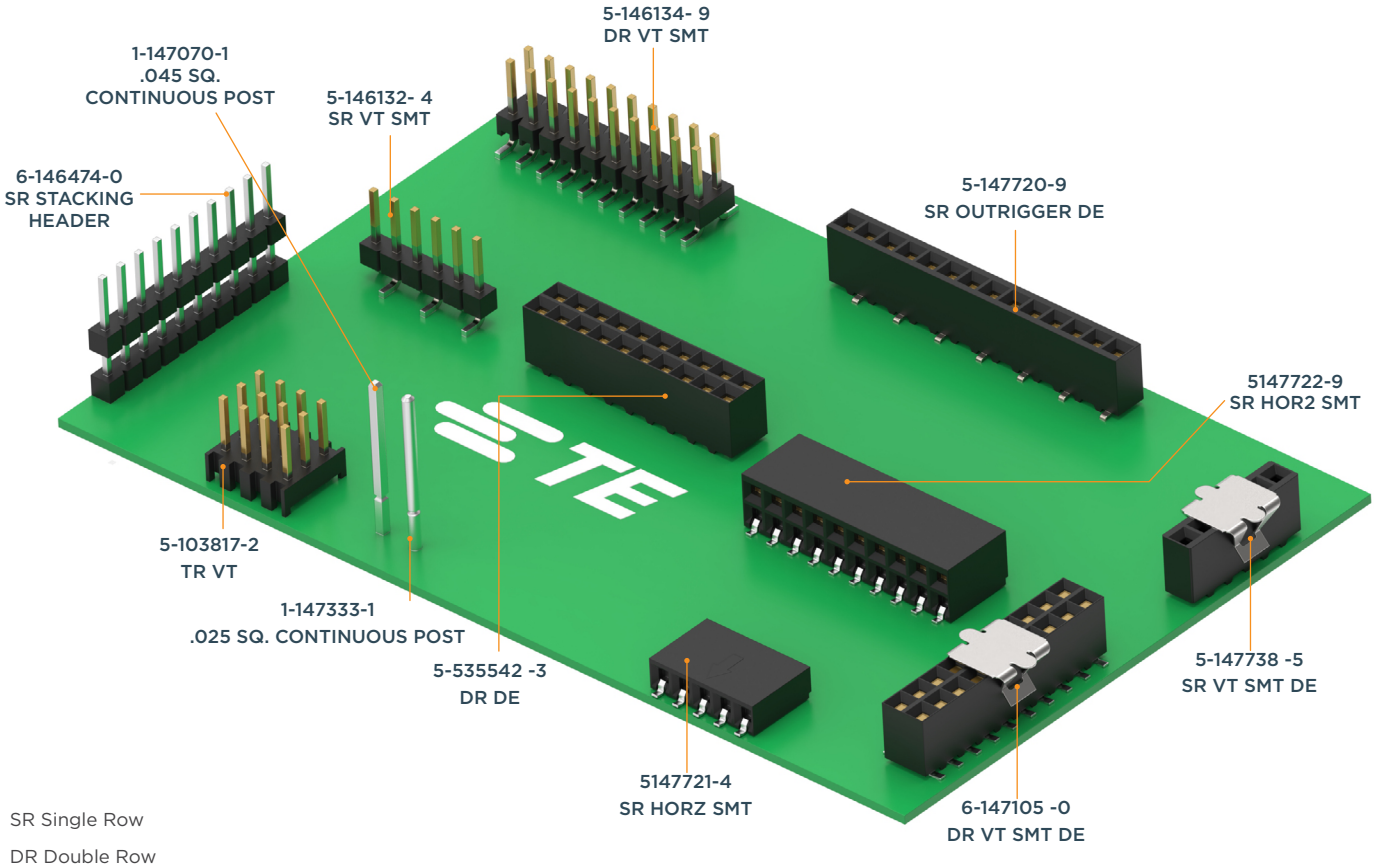
AP ACTION PIN

3/4 BA 3-Sided-Shrouded Header

BA Breakaway

DE Dual Entry

AMPMODU HEADERS AND RECEPTACLES, .100 [2.54] CENTERLINE



SR Single Row

DR Double Row

VT Vertical

TR Triple Row

SMT Surface Mount

HORZ Horizontal

DE Dual Entry

AMPMODU .025 [0.64] SQUARE INTERCONNECTION SYSTEM

INTRODUCTION

The AMPMODU 2.54 mm interconnection system provides interconnections with a unique modular concept, utilizing precision formed receptacle contacts and mating posts. Mating of the post and receptacle contacts of this system is very tolerant. This is made possible by a post with a burr-free lead-in and a receptacle contact featuring double cantilever beams and antioverstress stops. AMPMODU receptacle contacts and posts categorically fall into three general classifications of products, which include: board mounted posts and receptacle assemblies, post headers and wire-applied contact housings for crimp snap-in pin and receptacle contacts.

Board mounted receptacle assemblies are available in various geometries, offering packaging interconnections that include perpendicular, parallel and stacking capabilities. Crimp snap-in pins for 26-22 AWG [0.12-0.4 mm^2] wire and crimp snap-in receptacles for 32-20 AWG [0.03-0.6 mm^2] wire provide excellent discrete wire terminations. Housings for these contacts provide ease of handling terminations in high density applications. Machine applied terminations, through matched application equipment, are geared for virtually any production volume requirement, for the lowest possible applied cost.

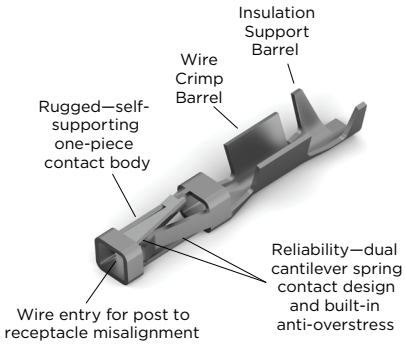
AMPMODU mating posts are supplied typically as headers. They are available in various populations to meet the interconnection and packaging requirements of most systems. However, in instances where packaging configurations do not lend themselves to the economies of headers, TE can provide application equipment for the discrete location of individual posts. Looking at the electronic industry's standard "levels of packaging". The .025 [0.64] square interconnection system offers the most complete line of post/receptacle packaging products available today. This system, rated at 3 amperes per contact, has been used by almost every industry and marketplace over the last decade and is one of the oldest, most versatile and reliable interconnection systems employing .025 [0.64] square packaging technology.

TERMS EXPLAINED

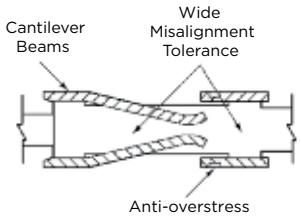
RECEPTACLE CONTACTS

The AMPMODU receptacle cross-section is primarily rectangular, with rounded corners. Two integral cantilever beams contact the mating square or round male posts. Deflection of these spring members is limited by anti-overstress stops, and excessive permanent deformation is prevented. This feature allows a wide range for tolerance of misalignment of mating contacts. The configuration of the receptacle completely encloses the spring members preventing damage during handling and assembly and makes the system compatible with automatic application techniques.

Note: Application of a contact lubricant is part of the manufacturing process of all AMPMODU tin-plated crimp products. However, it is not part of the manufacturing process of products that customers will solder, then clean. For these products, TE recommends that customers use contact lubricant. See the TE web page for further information.

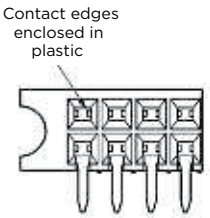


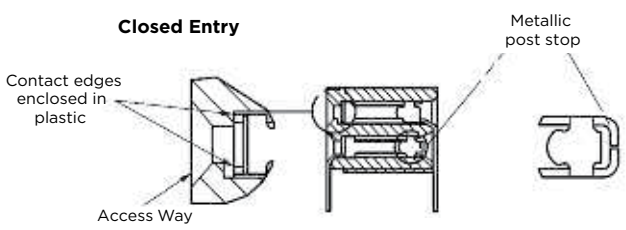
Offers standard, intermediate and high pressure contact forces



RECEPTACLE-CLOSED ENTRY HOUSING DESIGN

The closed entry housing style better eliminates the chance of a mating post stubbing on the edges of the receptacle contact.





WIRE SIZES

Wire Size		Product Family
AWG	[mm²]	
20	0.5-0.6	Locking Clip, Mod. IV, IV.v, V, MT, Short Point
22-30	0.3-0.05	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point
32	0.03	Mod. IV, IV.v, V, Short Point

CONTACT PLATINGS

Platings	Product Family
.000015 [0.00038] Gold	Mod. IV, IV.v, V, MTE, MT, Short Point
.000030 [0.00076] Gold	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point
.000050 [0.00127] Gold	Locking Clip, Mod. IV, IV.v, V, MT
Tin	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point

MATING POST LENGTHS

Post Lengths: in(mm)	Product Family
.210-.283 [5.33-7.19]	Mod. IV (.600 [15.24] Profile Height)
.205-.283 [5.21-7.19]	Mod. IV.v (.600 [15.24] Profile Height)
.185-.283 [4.70-7.19]	Mod. V (.600 [15.24] Profile Height)
.256-.323 [6.50-8.20]	Mod. IV (.645 [16.38] Profile Height)
.251-.323 [6.38-8.20]	Mod. IV.v (.645 [16.38] Profile Height)
.231-.323 [5.87-8.20]	Mod. V (.645 [16.38] Profile Height)
.222-.273 [5.64-6.93]	MT Assembly with Standard Pressure Contacts
.200-.273 [5.08-6.93]	MT Assembly with High Pressure Contacts
.200-.250 [5.08-6.35]	MTE Assembly
.169-.259 [4.29-6.58]	Short Point Connector Assembly
.273-.350 [6.93-8.89]	Locking Clip (Connector Assembly)
.200-.277 [5.08-7.04]	Locking Clip (Single Contact)

APPLICATION TOOLING

Application Tooling Description	Product Family				
	Mod. IV, IV.v, V	MT	Locking Clip	MTE	Short Point
Manual Hand Tools (Wire Crimp)	●		●	●	●
Manual Hand Tools (IDC)		●		●	
Pneumatic Hand Tools	●	●	●	●	●
Ocean Applicator	●		●	●	●

BOARD-TO-BOARD SOLUTIONS GUIDES, .100[2.54] CENTERLINE PRODUCTS

Problem or Concern	TE's Potential Solution	Single-Row Vertical Headers and Receptacles (Page Ref.)	Single-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.)	Double-Row Vertical Headers and Receptacles (Page Ref.)	Double-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.)
Headers Float Off Board Soldering Operation	**HEADERS** Retention Feature: Unshrouded Shrouded	Page 30 -	Page 30 -	Page 39 Page 143	Page 39 Page 145
Header Contacts Damaged During Manufacturing Operation or In-Field Use	Shrouded **HEADERS**: Standard Profile	Page 60	Page 60	Page 72	Page 72
Board/Backplane Requires High Temperature Surface-Mount Compatibility	Press-Fit ACTION PIN POST **HEADERS**: Unshrouded Shrouded	- -	- -	- -	- -
	Machine Applied Posts	Page 88			
	Surface-Mount Compatible Thru-Hole: **HEADERS**: Unshrouded Shrouded (Low Profile) **RECEPTACLES**	Page 26 - -	Page 26 - -	Page 34 Page 141	Page 39 Page 141
	Surface-Mount: **HEADERS** **RECEPTACLES**	Page 46 Page 126	- Page 97	Page 48 Page 131	- -
Application Requires Board Guidance, Polarization and/or Blind-Mate Capability	Two-Piece Family: w/Guide Posts: **HEADERS** **RECEPTACLES**	-	-	Page 143 Page 141	Page 145 Page 141
Reduction in Parallel Board-to-Board Stack Height Necessary (Refer to Parallel Stack Guide on Page 62.)	Mod IV Low Profile **RECEPTACLES**: **TOP ENTRY:** Thru-Hole Surface-Mount **BOTTOM ENTRY:** Thru-Hole Surface-Mount **DUAL ENTRY** Thru-Hole Surface Mount	Page 110 - Page 110 - Page 115 Page 126	-	Page 112 - - - Page 118 Page 131	-
Soldering Problems with Thru-Hole Bottom Entry Receptacles (Must Mask Post Holes in Board During Soldering Operation)	**RECEPTACLES:** Bottom Entry Outrigger (Separate Holes for Receptacle Leads and Mating Leads)	Page 115	-	Page 118	-
Application Requires Connectors to be End-to-End Stackable on .100 [2.54] Grid	End-to-End Stackable: **HEADERS** (Unshrouded): Thru-Hole Thru-Hole* Surface-Mount **RECEPTACLES:** Thru-Hole Surface Mount	Page 14, Page 26 Page 26 Page 46 Page 102, Page 110, Page 115 Page 128	Page 14, Page 26 Page 26 - Page 102 Page 97	Page 21 Page 34 Page 45 Page 105, Page 112, Page 118, Page 121, Page 133	Page 21, Page 34 Page 45 - Page 99 Page 97

***High temperature compatible version, refer to page ref. listed.**

WIRE-TO-BOARD SOLUTIONS GUIDE, .100 [2.54] CENTERLINE PRODUCTS

Customer Requirement	TE's Potential Solution	Catalogue Page(s)
Application Requires Guidance, Polarization	Mod IV Polarized Housing	Page 179
	Latched Receptacle and Header	Page 191, Page 205
	MT with Polarizing Covers	Page 224
	Short Point Polarized Housing	Page 184
Wire-to-Wire Application	Mod IV Receptacle Contacts and Pins	Page 159
Wire-to-Wire Application (Latched)	MTE Latched Receptacle and Shrouded Pin Assembly	Page 191, Page 197
Wire-to-Wire Application (Through Panel)	MTE Panel Mount	Page 204
High Vibration and Shock Applications	Locking Clip Contacts and Housings	Page 150
Printed Circuit Board Polarization	MTE Header with PC Board Orientation Peg	Page 209
Board Requires Surface Mount Capability	MTE Surface Mount Headers	Page 214
	MTE High Temperature Compatible Headers	Page 210
Need to mate to AMP-LATCH Eject Headers	Mod IV Ejection Housing	Page 179
Need to Minimize Strain to Cable	MT with Eject Covers	Page 224
	Mod IV Housing with Strain Relief	Page 179
Application Requires Self-Retaining Contacts	Locking Clip Contacts	Page 150
Header Secured to Board During/Prior to Soldering	MTE Headers with Post Retention or Holddowns	Page 205
Mate to Unshrouded Header with Retention Requirements	Mod IV plain Housing with Mod V Contacts	Page 160, Page 179
	MTE with High Pressure Contacts	Page 195
Multiple Cables to be Common to One Header	MTE Coupling Shroud, Double- or Single-Row	Page 201
Right-Angle Cable Dress	MT with Hermaphroditic Covers	Page 190, Page 224, Page 226
Application Requires Crimp Contacts and MTE Housings	Short Point Contacts	Page 182
Housings and End-to-End and Side-to-Side Stackable	Short Point Double-Row Housing, MTE Plain Housing	Page 183, Page 189
Connector Must Mate to Post Lengths of .169 [4.29] Min.	Short Point Contacts	Page 182

MATING POST SELECTION GUIDE

The following selection guide is provided to help in choosing a mating product after a receptacle, header or post has been selected. In some instances references are given on the catalogue page to specific mating connectors. In other instances the reader is referred here to the selection guide for mating product recommendations. If your application requirement is not answered here, consult TE for further recommendations.

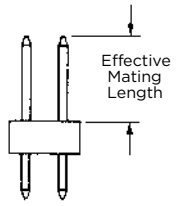
Posts Without Shoulders

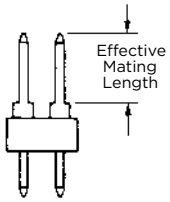
For drawn wire products (ie, AMPMODU Breakaway and Low Profile Headers) and for products having the shoulder of the post below the Housing or pc board surface (ie, AMPMODU MTE and Single Row Shrouded Headers) the effective mating length starts at the Housing or pc board surface.

Receptacle Type	Recommended Effective Mating Posts Lengths	
	Min : in(mm)	Max: in(mm)
AMPMODU Mod II Horizontal Board Mount Receptacle, Single and Double Row, Short Point-of-Contact - **Page 93, Page 97, Page 99**	.230 [5.84]	.280 [7.11]
AMPMODU Mod II Vertical Board Mount Receptacle, Single Row, Standard Profile, Top Entry - **Page 102**	.183 [4.65]	.330 [8.38]
AMPMODU Mod II Vertical Board Mount Receptacle, Standard Profile, Double Row, Top Entry, 100 x .100 mt.- **Page 105**	.183 [4.65]	.330 [8.38]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Top Entry, Single Tine- **Page 110**	.183 [4.65]	.255 [6.48]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Bottom Entry- **Page 108**	.280 [7.11]	*
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Double Row, Top Entry- **Page 112**	.183 [4.65]	.255 [6.48]
AMPMODU Surface-Mount Receptacle, Vertical Board Mount, Single Row, Dual Entry - **Page 126 - Page 128**	Top Entry: .183 [4.65] Bottom Entry: .204 [5.18]	* *
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Double Row, Dual Entry- **Page 118**	Top Entry: .183 [4.65] Bottom Entry: .204 [5.18]	* *
AMPMODU Surface-Mount Receptacle, Vertical Board Mount, Double Row, Dual Entry - **Page 131 - Page 133**	Top Entry: .183 [4.65] Bottom Entry: .204 [5.18]	* *
AMPMODU .600 [15.24] Mod IV Housing with Standard Pressure Contacts- **Page 159 - Page 179**	.210 [5.33]	.283 [7.19]
AMPMODU .600 [15.24] Mod IV Housing with Intermediate Pressure Contacts - **Page 159 - Page 179**	.205 [5.21]	.283 [7.19]
AMPMODU .600 [15.24] Mod IV Housing with High Pressure Contacts - **Page 159 - Page 179**	.185 [4.70]	.283 [7.19]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Dual Entry- **Page 115**	Top Entry: .183 [4.65] Bottom Entry: .204 [5.18]	* *

Posts With Shoulders

For product having the shoulder of the post extending above the Housing or pc board surface (ie, Standard AMPMODU Shrouded and Unshrouded Headers) the effective mating length starts at the top of the shoulder.





Receptacle Type		Recommended Effective Mating Posts Lengths	
		Min : in(mm)	Max: in(mm)
Short Point Housing with Contacts - **Page 181**		.169 [4.29]	.259 [6.58]
AMPMODU MTE Unloaded Housing with Short Point Contacts - **Page 185**		.169 [4.29]	.259 [6.58]
AMPMODU MTE IDC Assemblies		.200 [5.08]	.250 [6.35]
AMPMODU MT IDC Assembly with Standard Pressure Contacts - **Page 222**		.222 [5.64]	.273 [6.93]
AMPMODU MT IDC Assembly with High Pressure Contacts- **Page 224**		.200 [5.08]	.273 [6.93]
Locking Clip Housing with Contacts- **Page 151 - Page 155**		.273 [6.93]	.350 [8.89]
Locking Clip Contact without Housing- **Page 151**		.200 [5.08]	.277 [7.04]
Flexible Flat Conductor Cable Receptacle with Round Wire Crimp High Pressure Contact- Catalogue 82007	Single Row	.267 [6.78]	.323 [8.20]
	Double Row	.282 [7.16]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Multiple Wire Crimp High Pressure Contact- Catalogue 82007	Single Row	.210 [5.33]	.323 [8.20]
	Double Row	.225 [5.72]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Round Wire Crimp Standard Pressure Contact-Catalogue 82007	Single Row	.267 [6.78]	.323 [8.20]
	Double Row	.282 [7.16]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Multiple Crimp Standard Pressure Contact- Catalogue 82007	Single Row	.220 [5.59]	.323 [8.20]
	Double Row	.235 [5.97]	.323 [8.20]

*Maximum post length is determined by customer's application; (i.e., available space beyond rear of horizontal receptacle assembly, or above bottom entry vertical receptacle assembly or below vertical receptacle assemblies used in pass through applications).

PARALLEL STACKING GUIDE FOR BOARD-TO-BOARD APPLICATIONS

See Figure Below	Dimension Between PC Boards in(mm)	Product Family Headers (See Note 1.)	Single-Row (Page Ref.)	Double-Row (Page Ref.)	Product Family Receptacles	Single-Row (Page Ref.)	Double-Row (Page Ref.)
	.060 [1.52]	Bandolier Posts	**Page 88**	-	Dual Entry, Mod IV	**Page 110, Page 115, Page 126, Page 128**	**Page 118, Page 131**
1	.090 [2.29]	Breakaway** (Unshrouded)	**Page 26**	**Page 34**	Dual Entry, Mod IV	**Page 110, Page 115, Page 126, Page 128**	**Page 118, Page 131**
	.153 [3.89]	Surface Mount** Breakaway (Unshrouded)	-	**Page 48**	Dual Entry, Mod IV	**Page 110, Page 115, Page 126, Page 128**	**Page 118, Page 131**
	.265 [6.73]	Bandolier Posts	**Page 88**	-	Top Entry, Mod IV	**Page 110, Page 115, Page 126, Page 128**	**Page 112, Page 118, Page 131**
2	.355 [9.02]	Breakaway** (Unshrouded)	**Page 26**	**Page 34**	Top Entry, Mod IV	**Page 110, Page 115, Page 126, Page 128**	**Page 112, Page 118, Page 131**
	.385 [9.78]	Low Profile Shrouded	-	-	Top Entry, Mod IV	-	**Page 112**
3	.418 [1.06]	Surface Mount** Breakaway (Unshrouded)	**Page 46**	**Page 48**	Surface Mount**, Mod IV, Top Entry	**Page 126, Page 128**	**Page 131**
2*	.430 [10.92]	Breakaway** (Unshrouded)	**Page 26**	**Page 34**	Top Entry, Mod II	**Page 102**	**Page 105**
4*	.440 [11.18]	Shrouded, Mod II	**Page 60**	**Page 72**	Top Entry, Mod II or Mod IV	**Page 102, Page 110**	**Page 105, Page 112**
	.528 [13.41]	Staking Shroud (See Note. 2)	-	-	Inner board receptacle (see Note 2.)	-	-
	.547 [13.89]	Staking Shroud (See Note. 2)	-	-	Outer board receptacle (see Note 2.)	-	-
4	.550 [13.97]	Two-Piece Header Connector System	-	**Page 143**	Two-Piece receptacle** Connector System	-	**Page 141**
	.748 [19.00]	Staking Shroud (See Note. 2)	-	-	Inner board receptacle (see Note 2.)	-	-
	.768 [19.51]	Staking Shroud (See Note. 2)	-	-	Outer board receptacle (see Note 2.)	-	-
	Various	Stacking Unshrouded	**Page 51**	**Page 53**	Mod II/IV receptacle, Top/ Bottom Entry	Various	Various

**High temperature version available, see page ref. listed.

Note 1. Headers listed are standard thru-hole versions. Many headers are available with retention feature and ACTION PIN posts. See **product specification** pages in individual sections for option availability.

Note 2. These headers and receptacles are Related Board-to-Board products. They are not part of the AMPMODU .025 [0.64] Square Product Family.

BOARD-TO-BOARD STACKING HEIGHTS (BY RECEPTACLE/HEADER COMBINATION)

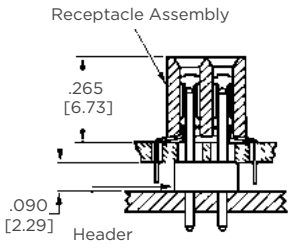


Figure 1
Double-Row, Mod IV, Bottom Entry, Breakaway Header

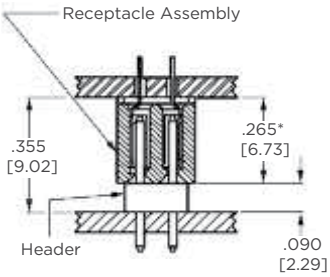


Figure 2
Double-Row, Mod IV, Top Entry, Breakaway Header
*Mod II Receptacle Height is .340 [8.64] for a total stack height of .430 [10.92]

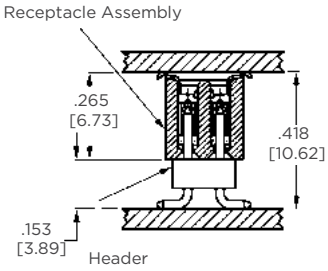


Figure 3
Double-Row, Mod IV, Surface-Mount, Top Entry, Receptacle and Surface-Mount Breakaway Header

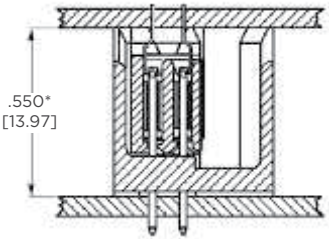
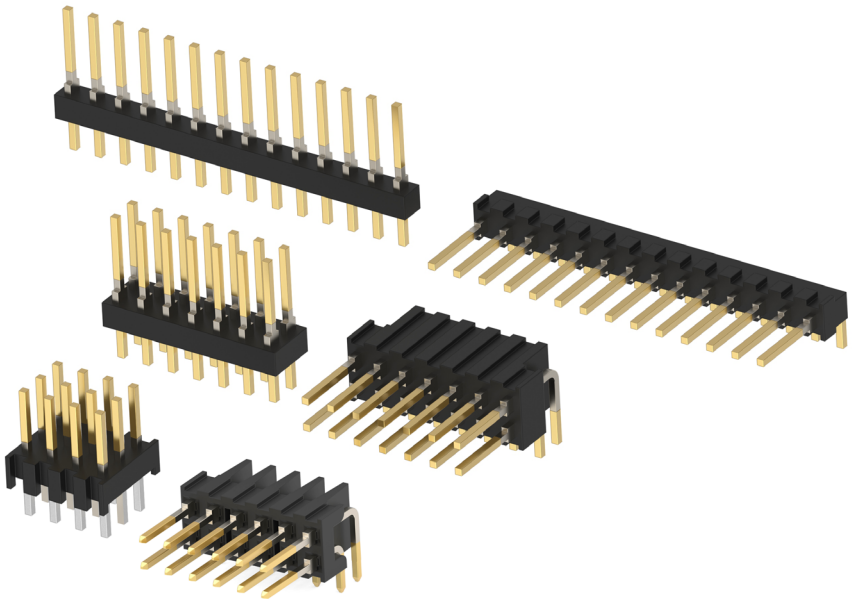


Figure 4
Double-Row, Two-Piece Receptacle and Two-Piece Shrouded Header
*Mod II Shrouded Header Height is .440 [11.18] for a total stack height of .440 [11.18]

STANDARD HEADERS-UNSHROUDED



PRODUCT FACTS

- Variety of popular sizes available
- Substantial time/labor savings-install all posts at one time
- Vertical and right-angle versions available in single- and double-row configurations
- Triple-row version available in vertical configuration with .230 [5.84] mating length
- Copper alloy posts. Choice of select gold or tin plated posts
- Mating length for single and double row is .318 [8.08] (.278 [7.06] effective mating length-see page 90)
- Flame retardant, black thermoplastic Housings; 94V-0 rated
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

Performance Characteristics

Electrical

Insulation Resistance - 5,000 megohms minimum initial

Eielectric Withstanding Voltage - 750 V rms at sea level

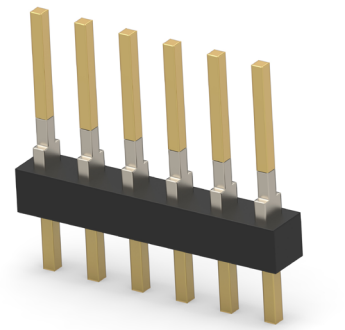
Environmental

Operating Temperature - -65°C to +105°C (black thermoplastic Housings)

Current - 3 amperes maximum per contact (dependent upon mating connector)

STANDARD HEADERS-UNSHROUDED, SINGLE ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated as follows:

Plating A - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

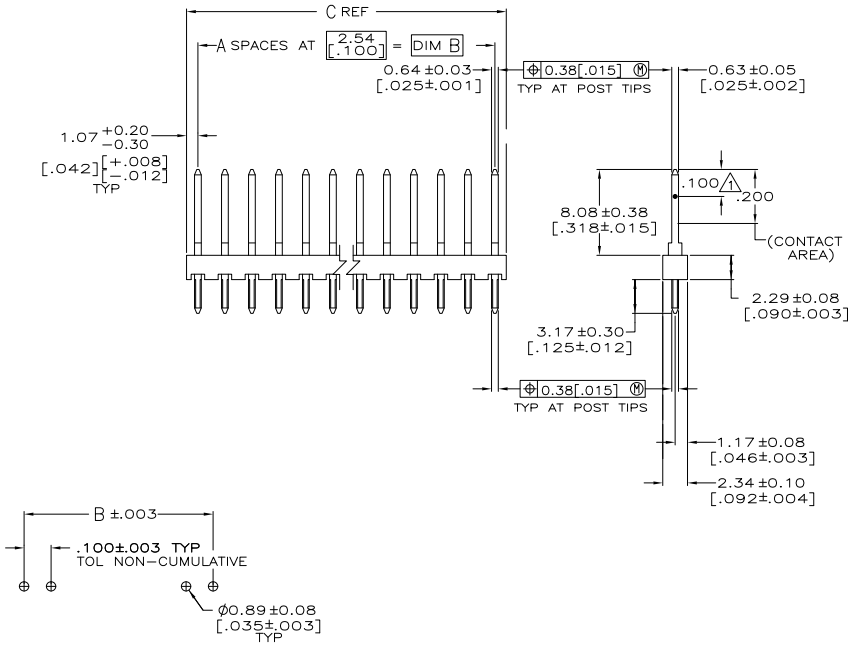
Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide - Page 10

Technical Documents - Page 243

See mating connector for applicable product and application specifications.

Dimensions: in(mm)



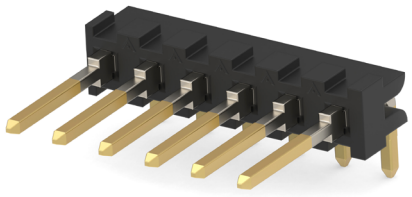
Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Post Plating/Part Numbers	
	C	B	Plating A	Plating B
1	.084 [2.13]	-	87220-1	87224-1
2	.184 [4.67]	.100 [2.54]	87220-2	87224-2
3	.284 [7.21]	.200 [5.08]	87220-3	87224-3
4	.384 [9.75]	.300 [7.62]	87220-4	87224-4
5	.484 [12.29]	.400 [10.16]	87220-5	87224-5
6	.584 [14.83]	.500 [12.70]	87220-6	87224-6
7	.684 [17.37]	.600 [15.24]	87220-7	87224-7
8	.784 [19.91]	.700 [17.78]	87220-8	87224-8
9	.884 [22.45]	.800 [20.32]	87220-9	-
10	.984 [24.99]	.900 [22.86]	1-87220-0	1-87224-0
11	1.084 [27.53]	1.000 [25.40]	1-87220-1	-
12	1.184 [30.07]	1.100 [27.94]	1-87220-2	1-87224-2
13	1.284 [32.61]	1.200 [30.48]	1-87220-3	-
14	1.384 [35.15]	1.300 [33.02]	1-87220-4	1-87224-4
15	1.484 [37.69]	1.400 [35.56]	1-87220-5	1-87224-5
16	1.584 [40.23]	1.500 [38.10]	1-87220-6	-
17	1.684 [42.77]	1.600 [40.64]	1-87220-7	-
18	1.784 [45.31]	1.700 [43.18]	1-87220-8	-
19	1.884 [47.85]	1.800 [45.72]	1-87220-9	-
20	1.984 [50.39]	1.900 [48.26]	2-87220-0	-
21	2.084 [52.93]	2.000 [50.80]	2-87220-1	-
22	2.184 [55.47]	2.100 [53.34]	2-87220-2	-
23	2.284 [58.01]	2.200 [55.88]	2-87220-3	-
24	2.384 [60.55]	2.300 [58.42]	2-87220-4	-
25	2.484 [63.09]	2.400 [60.96]	2-87220-5	-
26	2.584 [65.63]	2.500 [63.50]	2-87220-6	-
27	2.684 [68.17]	2.600 [66.04]	2-87220-7	-
28	2.784 [70.71]	2.700 [68.58]	2-87220-8	-
29	2.884 [73.25]	2.800 [71.12]	2-87220-9	-
30	2.984 [75.79]	2.900 [73.66]	3-87220-0	-
31	3.084 [78.33]	3.000 [76.20]	3-87220-1	-
32	3.184 [80.87]	3.100 [78.74]	3-87220-2	-
33	3.284 [83.41]	3.200 [81.28]	3-87220-3	-
34	3.384 [85.95]	3.300 [83.82]	3-87220-4	-
35	3.484 [88.49]	3.400 [86.36]	3-87220-5	-
36	3.584 [91.03]	3.500 [88.90]	3-87220-6	-
37	3.684 [93.57]	3.600 [91.44]	3-87220-7	-
38	3.784 [96.11]	3.700 [93.98]	3-87220-8	-
39	3.884 [98.65]	3.800 [96.52]	3-87220-9	-
40	3.984 [101.19]	3.900 [99.06]	4-87220-0	4-87224-0

STANDARD HEADERS-UNSHROUDED, SINGLE ROW, .100 [2.54] CENTERLINE (Continued)

.025 [0.64] SQUARE RIGHT-ANGLE POST



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated as follows:

Plating A - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

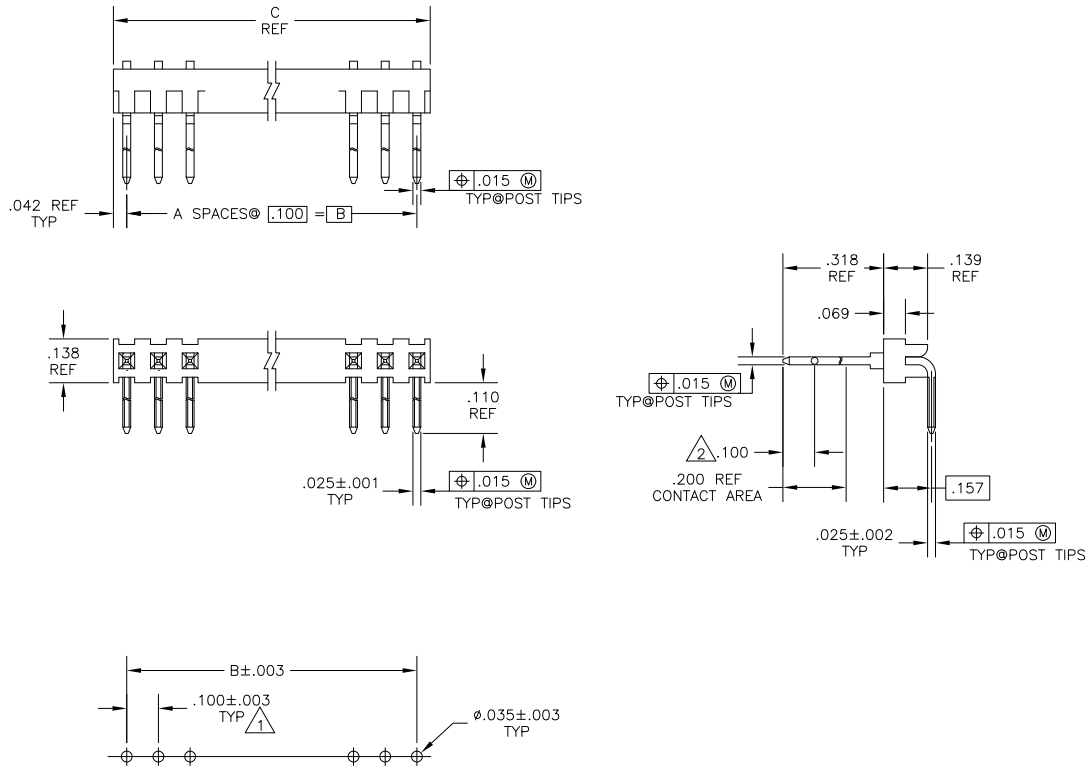
Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide - Page 10

Technical Documents - Page 243.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

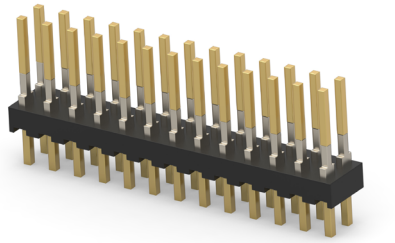
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Post Plating/Part Numbers
	C	B	Plating B
1	.084 [2.13]	-	87233-1
2	.184 [4.67]	.100 [2.54]	87233-2
3	.284 [7.21]	.200 [5.08]	87233-3
4	.384 [9.75]	.300 [7.62]	87233-4
5	.484 [12.29]	.400 [10.16]	87233-5
6	.584 [14.83]	.500 [12.70]	87233-6
7	.684 [17.37]	.600 [15.24]	87233-7
9	.884 [22.45]	.800 [20.32]	87233-9
10	.984 [24.99]	.900 [22.86]	1-87233-0
11	1.084 [27.53]	1.000 [25.40]	1-87233-1
12	1.184 [30.07]	1.100 [27.94]	1-87233-2
13	1.284 [32.61]	1.200 [30.48]	1-87233-3
14	1.384 [35.15]	1.300 [33.02]	1-87233-4
15	1.484 [37.69]	1.400 [35.56]	1-87233-5
16	1.584 [40.23]	1.500 [38.10]	1-87233-6
17	1.684 [42.77]	1.600 [40.64]	1-87233-7
18	1.784 [45.31]	1.700 [43.18]	1-87233-8
19	1.884 [47.85]	1.800 [45.72]	1-87233-9
20	1.984 [50.39]	1.900 [48.26]	2-87233-0
21	2.084 [52.93]	2.000 [50.80]	2-87233-1
22	2.184 [55.47]	2.100 [53.34]	2-87233-2
23	2.284 [58.01]	2.200 [55.88]	2-87233-3
24	2.384 [60.55	2.300 [58.42]	2-87233-4
25	2.484 [63.09]	2.400 [60.96]	2-87233-5
26	2.584 [65.63]	2.500 [63.50]	2-87233-6
27	2.684 [68.17]	2.600 [66.04]	2-87233-7
28	2.784 [70.71]	2.700 [68.58]	2-87233-8
29	2.884 [73.25]	2.800 [71.12]	2-87233-9
30	2.984 [75.79]	2.900 [73.66]	3-87233-0
31	3.084 [78.33]	3.000 [76.20]	3-87233-1
32	3.184 [80.87]	3.100 [78.74]	3-87233-2
33	3.284 [83.41]	3.200 [81.28]	3-87233-3
34	3.385 [85.95]	3.300 [83.82]	3-87233-4
35	3.484 [88.49]	3.400 [86.36]	3-87233-5
36	3.584 [91.03]	3.500 [88.90]	3-87233-6
37	3.684 [93.57]	3.600 [91.44]	3-87233-7
38	3.784 [96.11]	3.700 [93.98]	3-87233-8
39	3.884 [98.65]	3.800 [96.52]	3-87233-9
40	3.984 [101.19]	3.900 [99.06]	4-87233-0

Note: All Part Numbers are RoHS compliant.

STANDARD HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated as follows:

Plating A - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

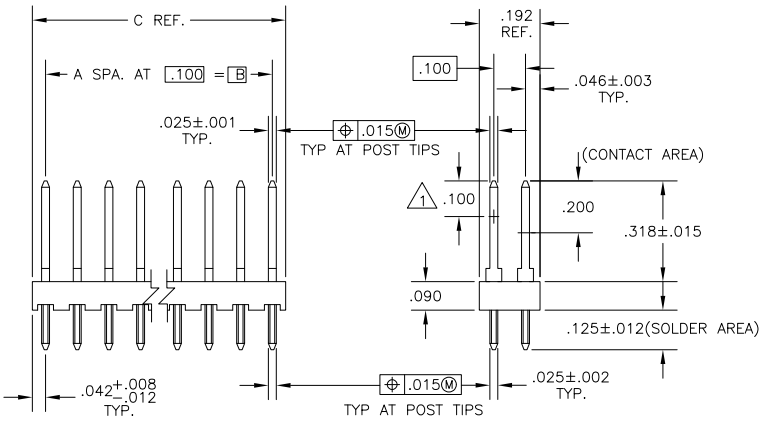
Related Product Data

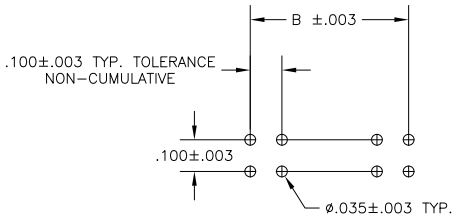
Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Accessories - Barrier Insert **-** page 125-127

Technical Documents See mating connector for applicable product and application specifications Page 243.

Dimensions: in(mm)





Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Post Plating/Part Numbers	
	A	B	Plating A	Plating B
2	.084 [2.13]	-	1-87215-0	87227-1
4	.184 [4.67]	.100 [2.54]	1-87215-1	87227-2
6	.284 [7.21]	.200 [5.08]	1-87215-2	87227-3
8	.384 [9.75]	.300 [7.62]	87215-1	87227-4
10	.484 [12.29]	.400 [10.16]	87215-2	87227-5
12	.584 [14.83]	.500 [12.70]	87215-3	87227-6
14	.684 [17.37]	.600 [15.24]	87215-4	87227-7
16	.784 [19.91]	.700 [17.78]	87215-5	87227-8
18	.884 [22.45]	.800 [20.32]	87215-6	87227-9
20	.984 [24.99]	.900 [22.86]	87215-7	1-87227-0
22	1.084 [27.53]	1.000 [25.40]	1-87215-3	-
24	1.184 [30.07]	1.100 [27.94]	87215-8	1-87227-2
26	1.284 [32.61]	1.200 [30.48]	87215-9	1-87227-3
28	1.384 [35.15]	1.300 [33.02]	1-87215-4	-
30	1.484 [37.69]	1.400 [35.56]	1-87215-5	-
32	1.584 [40.23]	1.500 [38.10]	1-87215-6	-
34	1.684 [42.77]	1.600 [40.64]	1-87215-7	-
36	1.784 [45.31]	1.700 [43.18]	1-87215-8	-
38	1.884 [47.85]	1.800 [45.72]	1-87215-9	-
40	1.984 [50.39]	1.900 [48.26]	2-87215-0	-
42	2.084 [52.93]	2.000 [50.80]	2-87215-1	-
44	2.184 [55.47]	2.100 [53.34]	2-87215-2	-
46	2.284 [58.01]	2.200 [55.88]	2-87215-3	-
48	2.384 [60.55]	2.300 [58.42]	2-87215-4	-
50	2.484 [63.09]	2.400 [60.96]	2-87215-5	-
52	2.584 [65.63]	2.500 [63.50]	2-87215-6	-
54	2.684 [68.17]	2.600 [66.04]	2-87215-7	-
56	2.784 [70.71]	2.700 [68.58]	2-87215-8	-
58	2.884 [73.25]	2.800 [71.12]	2-87215-9	-
60	2.984 [75.79]	2.900 [73.66]	3-87215-0	-

Note: All Part Numbers are RoHS compliant.

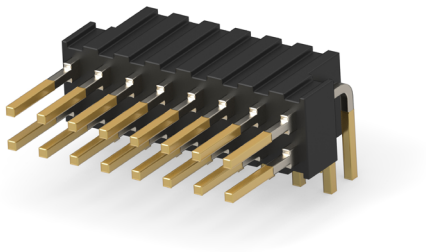
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Post Plating/Part Numbers	
	A	B	Plating A	Plating B
62	3.084 [78.33]	3.000 [76.20]	3-87215-1	-
64	3.184 [80.87]	3.100 [78.74]	3-87215-2	-
66	3.284 [83.41]	3.200 [81.28]	3-87215-3	-
68	3.384 [85.95]	3.300 [83.82]	3-87215-4	-
70	3.484 [88.49]	3.400 [86.36]	3-87215-5	-
72	3.584 [91.03]	3.500 [88.90]	3-87215-6	-
74	3.684 [93.57]	3.600 [91.44]	3-87215-7	-
76	3.784 [96.11]	3.700 [93.98]	3-87215-8	-
78	3.884 [98.65]	3.800 [96.52]	3-87215-9	-
80	3.984 [101.19]	3.900 [99.06]	4-87215-0	-

Note: All Part Numbers are RoHS compliant.

STANDARD HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated as follows:

Plating A - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

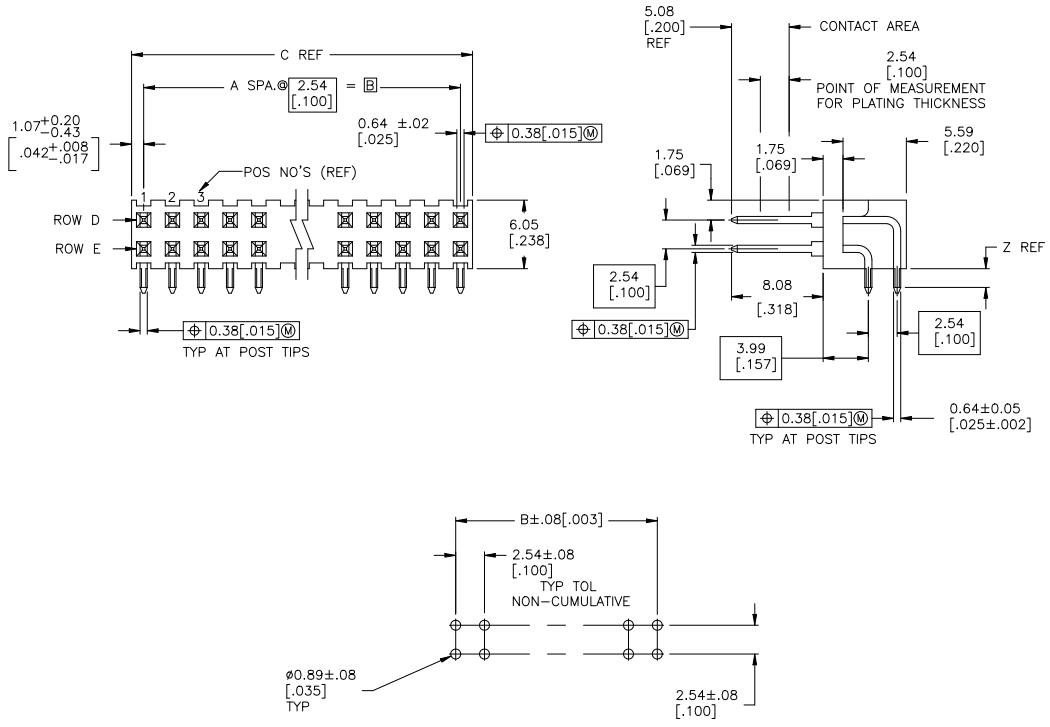
Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s .

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

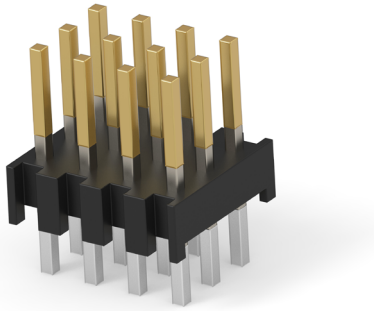
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Post Plating/Part Numbers	
	A	B	Plating A	Plating B
2	.084 [2.13]	-	1-86479-3	-
4	.184 [4.67]	.100 [2.54]	1-86479-4	87230-2
6	.284 [7.21]	.200 [5.08]	1-86479-5	87230-3
8	.384 [9.75]	.300 [7.62]	-	87230-4
10	.484 [12.29]	.400 [10.16]	86479-3	87230-5
12	.584 [14.83]	.500 [12.70]	86479-4	87230-6
14	.684 [17.37]	.600 [15.24]	86479-5	87230-7
16	.784 [19.91]	.700 [17.78]	86479-2	87230-8
18	.884 [22.45]	.800 [20.32]	-	87230-9
20	.984 [24.99]	.900 [22.86]	86479-1	1-87230-0
22	1.084 [27.53]	1.000 [25.40]	1-86479-7	-
24	1.184 [30.07]	1.100 [27.94]	86479-7	-
26	1.284 [32.61]	1.200 [30.48]	1-86479-0	-
28	1.384 [35.15]	1.300 [33.02]	1-86479-8	-
30	1.484 [37.69]	1.400 [35.56]	1-86479-9	-
32	1.584 [40.23]	1.500 [38.10]	2-86479-0	-
34	1.684 [42.77]	1.600 [40.64]	2-86479-1	-
36	1.784 [45.31]	1.700 [43.18]	2-86479-2	-
38	1.884 [47.85]	1.800 [45.72]	2-86479-3	-
40	1.984 [50.39]	1.900 [48.26]	2-86479-4	-
42	2.084 [52.93]	2.000 [50.80]	2-86479-5	-
44	2.184 [55.47]	2.100 [53.34]	2-86479-6	-
46	2.284 [58.01]	2.200 [55.88]	2-86479-7	-
48	2.384 [60.55]	2.300 [58.42]	2-86479-8	-
50	2.484 [63.09]	2.400 [60.96]	2-86479-9	-
52	2.584 [65.63]	2.500 [63.50]	3-86479-0	-
54	2.684 [68.17]	2.600 [66.04]	3-86479-1	-
56	2.784 [70.71]	2.700 [68.58]	3-86479-2	-
58	2.884 [73.25]	2.800 [71.12]	3-86479-3	-
60	2.984 [75.79]	2.900 [73.66]	3-86479-4	-
62	3.084 [78.33]	3.000 [76.20]	3-86479-5	-
64	3.184 [80.87]	3.100 [78.74]	3-86479-6	-
66	3.284 [83.41]	3.200 [81.28]	3-86479-7	-
68	3.384 [85.95]	3.300 [83.82]	3-86479-8	-
70	3.484 [88.49]	3.400 [86.36]	3-86479-9	-
72	3.584 [91.03]	3.500 [88.90]	4-86479-0	-
74	3.684 [93.57]	3.600 [91.44]	4-86479-1	-
76	3.784 [96.11]	3.700 [93.98]	4-86479-2	-
78	3.884 [98.65]	3.800 [96.52]	4-86479-3	-
80	3.984 [101.19]	3.900 [99.06]	4-86479-4	-

Note: All Part Numbers are RoHS compliant.

STANDARD HEADERS-UNSHROUDED, TRIPLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST



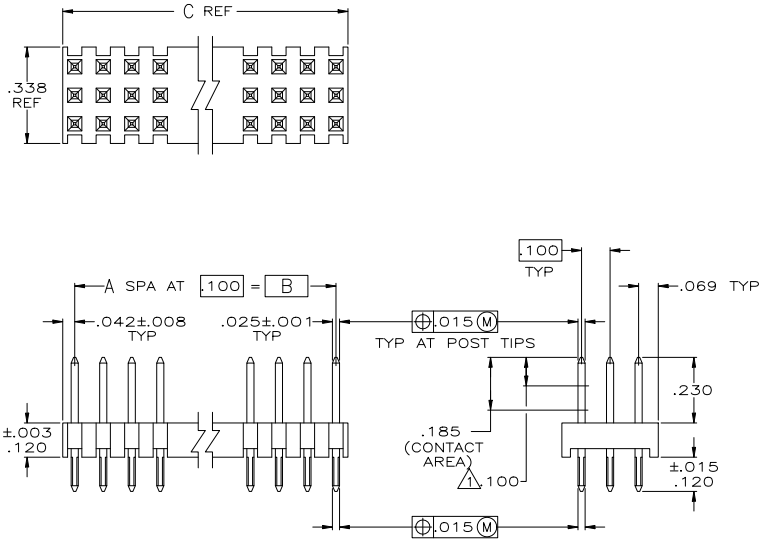
Material and Finish

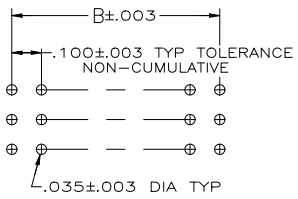
Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, duplex plated 000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel.

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)





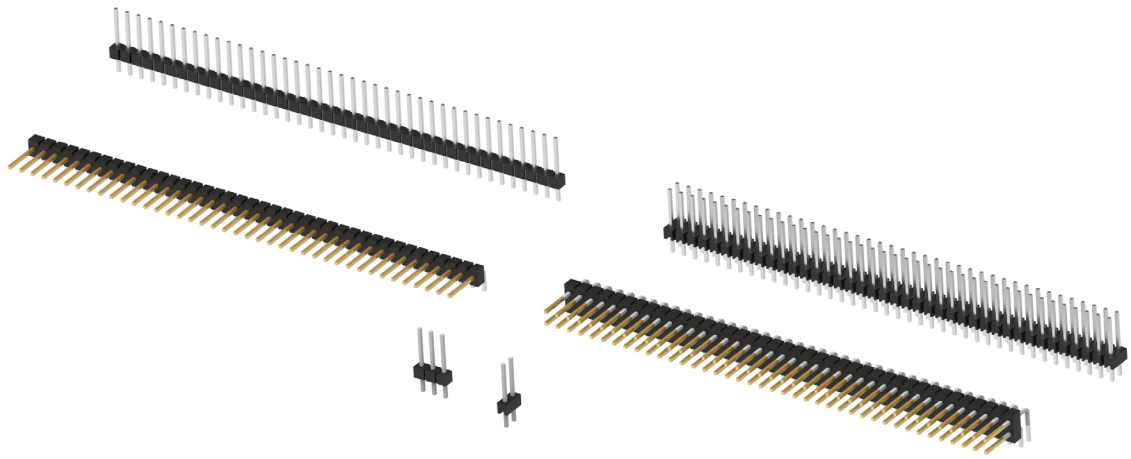
Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Part Numbers
	C	B	
12	.384 [9.75]	.300 [7.62]	5-103817-2
24	.784 [19.91]	.700 [17.78]	5-103817-6
42	1.384 [35.15]	1.300 [33.02]	5-146285-1
120	3.984 [101.19]	3.900 [99.06]	8-103817-8

Note: All Part Numbers are RoHS compliant.

BREAKAWAY AND RETENTION HEADERS-UNSHROUDED



PRODUCT FACTS

- Design and inventory versatility-headers can be broken into any size needed
- Variety of popular sizes available
- Substantial time/labor savings can install all posts at one time
- Vertical and right-angle versions available in single- and double-row configurations
- Phosphor bronze posts
- Choice of gold duplex or tin plated posts
- Post lengths include .230 [5.84] and .318 [8.08] for connector mating
- Board retention feature available
- Black, glass-filled thermoplastic Housings; high temperature compatible
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

PERFORMANCE CHARACTERISTICS

Electrical

Insulation Resistance - 5,000 megohms minimum initial

Dielectric Withstanding Voltage - 750 V rms at sea level

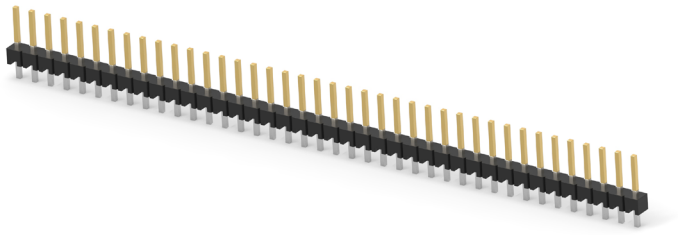
Environmental

Operating Temperature - -65°C to +105°C (black thermoplastic Housings)

Current - 3 amperes maximum per contact (dependent upon mating receptacle)

BREAKAWAY HEADERS-UNSHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel

Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

Performance Characteristics (Board Retention Tails)

Insertion Force - 12 lb [53.4N] max.

Retention Force - .25 lb [1.11N] min.

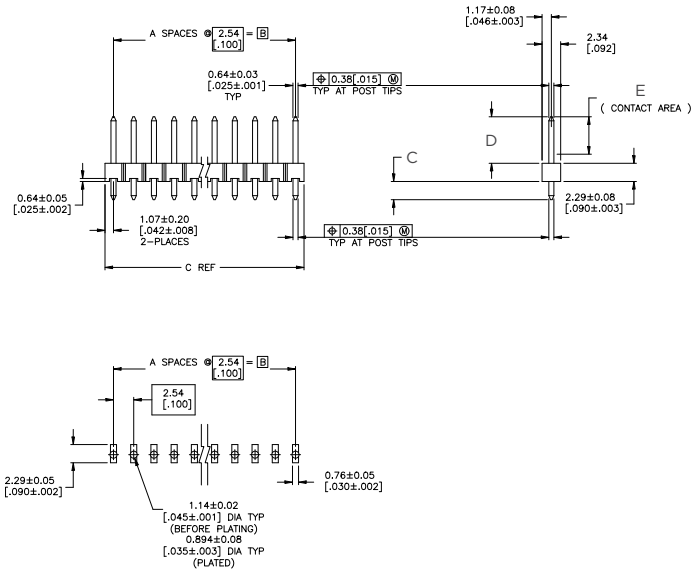
Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)

Headers with Solder Tails



Recommended PC Board Mounting Pattern (for .062 [1.57] thick PC board; .008 [.203] thick stencil)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions: in(mm)		C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]			C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
				Post Plating/Part Numbers			Post Plating/Part Numbers			Post Plating/Part Nos		
		C	B	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
With Solder Tails See Notes 1 and 2.)	1	.084 [2.13]	-	5-146285-1	-	5-146282-1	5-146281-1	5-146280-1	5-146278-1	5-146277-1	5-146276-1	5-146274-1
	40	3.984 [101.19]	3.900 [99.06]	9-146285-0	9-146284-0	9-146282-0	9-146281-0	9-146280-0	9-146278-0	9-146277-0	9-146276-0	9-146274-0

Notes:

1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).

2. Headers are also available in sizes 2 thru 39 positions (with Solder Tails) and 4 thru 39 positions (with Board Retention Tails). When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base Part Numbers that corresponds with the desired size. For example, the complete Part Numbers for an 8-position header with solder tails (C dimension .090 [2.29], post plating A) would be 5-146285-8. The complete Part Numbers for a 26-position header with board retention tails (C dimension .120 [3.05], post plating B) would be 7-146292-6. This Part Numbersing system applies only to this page.

3. For C dimensions .120 [3.05] and .125 [3.18], board retention using kinked tails are for headers 6 positions and smaller; headers 7 positions and larger use swaged tails. Headers with a C dimension of .090 [2.29] have swaged tails for all sizes.

Note: All Part Numbers are RoHS compliant.

MOD II LOW COST LINE BREAKAWAY PIN HEADERS

STRAIGHT, SINGLE ROW 0.63mm SQUARE POST

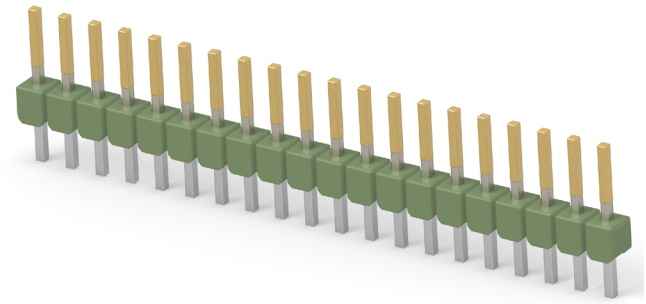
Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 3 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

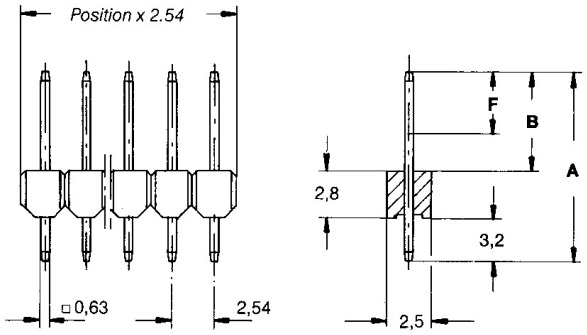
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	A=11.8 B=5.8 F=4.4 Part Numbers		A=12.7 B=6.7 F=4.4 Part Numbers		A=14.0 B=8.0 F=4.4 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	826646-2	826936-2	826629-2	826926-2	826648-2	826938-2
3	826646-3	826936-3	826629-3	826926-3	826648-3	826938-3
4	826646-4	826936-4	826629-4	826926-4	826648-4	826938-4
5	826646-5	-	826629-5	826926-5	826648-5	826938-5
6	826646-6	826936-6	826629-6	826926-6	826648-6	826938-6
7	826646-7	-	826629-7	826926-7	826648-7	-
8	826646-8	-	826629-8	826926-8	826648-8	-
9	826646-9	826936-9	826629-9	826926-9	-	-
10	1-826646-0	1-826936-0	1-826629-0	1-826926-0	1-826648-0	-
20	2-826646-0	2-826936-0	2-826629-0	2-826926-0	2-826648-0	-
50	5-826646-0	5-826936-0	5-826629-0	5-826926-0	5-826648-0	5-826938-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II ECONOMY LINE BREAKAWAY PIN HEADERS

STRAIGHT, SINGLE ROW 0.63mm SQUARE POST

Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm min. tin over 1.3 µm nickel

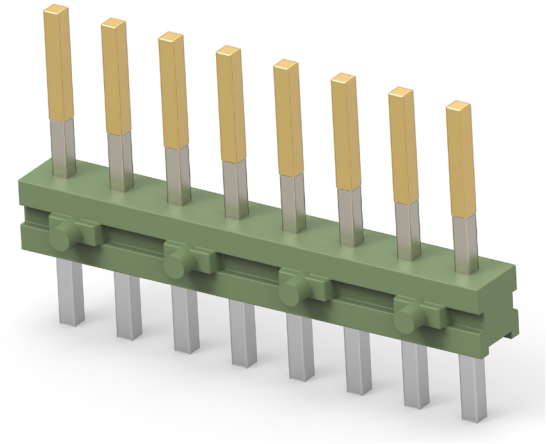
Plating B- 2 µm min. tin over 1.3 µm nickel

Mating Connectors:

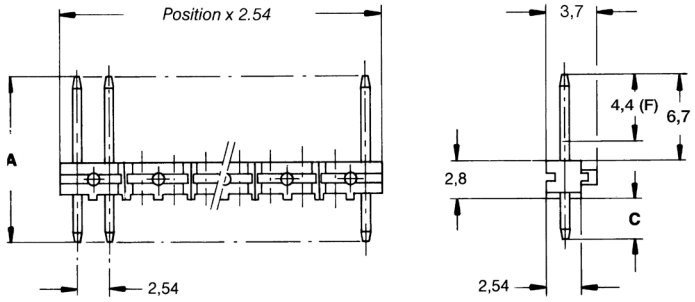
MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012



Dimensions: in(mm)



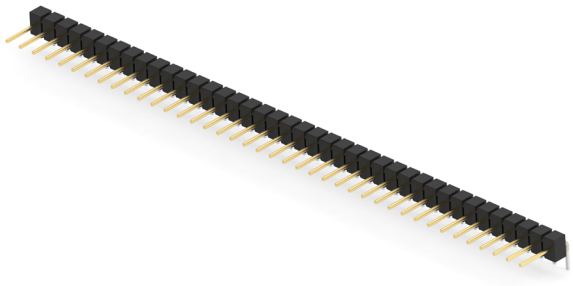
PRODUCT INFORMATION

No. of Positions	A=12.7 C=3.2 Part Numbers		A=15.2 C=5.7 Part Numbers		A=20.3 C=10.8 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	825433-2	828214-2	-	827312-2	825435-2	-
3	825433-3	828214-3	-	-	-	-
4	825433-4	828214-4	-	827312-4	-	-
5	825433-5	828214-5	825434-5	-	-	-
6	825433-6	828214-6	-	-	-	-
7	825433-7	828214-7	-	-	825435-7	-
8	825433-8	828214-8	-	-	-	-
9	825433-9	-	-	-	-	-
10	1-825433-0	1-828214-0	-	-	-	-
20	2-825433-0	-	-	-	-	-
50	5-825433-0	5-828214-0	5-825434-0	-	5-825435-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

BREAKAWAY HEADERS-UNSHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE (Continued)

.025 [0.64] SQUARE RIGHT-ANGLE POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated, high temperature compatible

Posts - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254- 0.00508] matte tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Performance Characteristics (Board Retention Tails)

Insertion Force - 12 lb [53.4N] max.

Retention Force - .25 lb [1.11N] min.

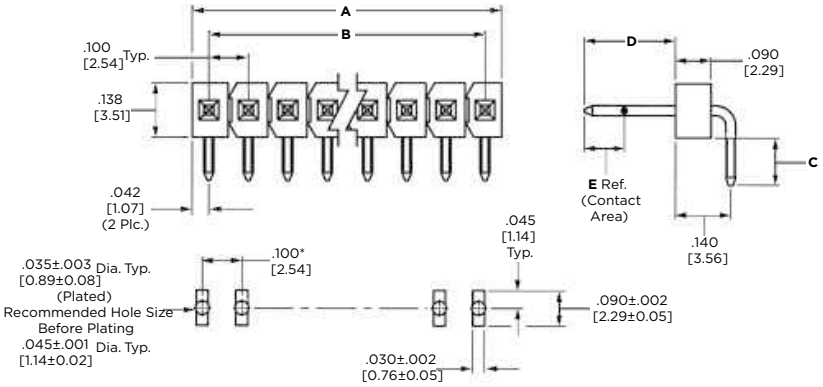
Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide - Page 10

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)

Headers with Solder Tails



Recommended PC Board Mounting Pattern (for .062 [1.57] thick PC board; .008 [.203] thick stencil)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions: in(mm)		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]	C = .110 [2.79] D = .318 [8.08] E = .200 [5.08]
		A	B	Part Numbers	Part Numbers
With Solder Tails (See Notes 1 and 2.)	40	3.984 [101.19]	3.900 [99.06]	9-146304-0	9-146305-0

Notes:
1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).

2. Headers are also available in sizes 2 thru 39 positions (with Solder Tails) and 4 thru 39 positions (with Board Retention Tails). When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base Part Numbers that corresponds with the number of positions. For example, the complete Part Numbers for an 8-position header with solder tails (C dimension .120 [3.05)] would be 5-146304-8. The complete Part Numbers for a 26-position header with board retention tails (C dimension .120 [3.05]) would be 7-146306-6. This Part Numbersing system applies only to this page.

Note: All Part Numbers are RoHS compliant.

MOD II LOW COST LINE BREAKAWAY PIN HEADERS

RIGHT ANGLE, SINGLE ROW 0.63mm SQUARE POST

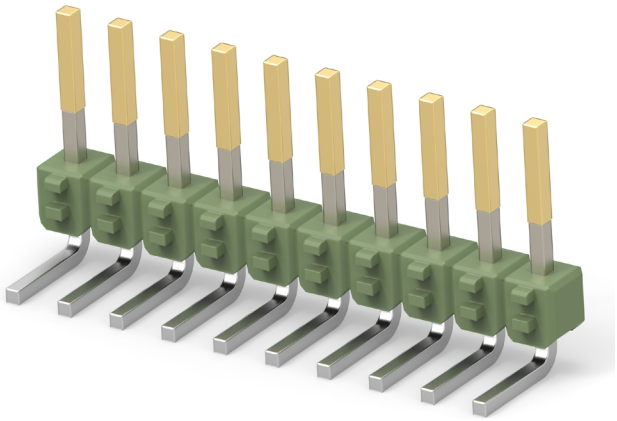
Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 3 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

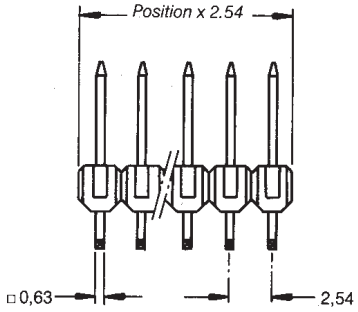
HV190 PCB Receptacles - Page 92, Page 95

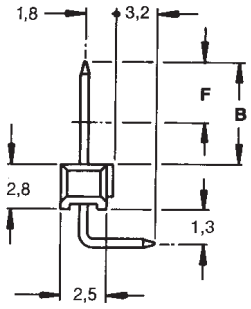
MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)





PRODUCT INFORMATION

No. of Positions	B=5.8 F=4.4 Part Numbers		B=6.7 F=4.4 Part Numbers		B=8.0 F=4.4 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	826652-2	826949-2	826631-2	-	-	826951-2
3	826652-3	826949-3	826631-3	826947-3	826654-3	826951-3
4	-	-	826631-4	826947-4	826654-4	826951-4
5	826652-5	826949-5	826631-5	826947-5	826654-5	826951-5
6	826652-6	826949-6	826631-6	826947-6	-	826951-6
7	826652-7	-	-	-	826654-7	826951-7
8	-	-	826631-8	826947-8	-	-
9	826652-9	-	826631-9	-	826654-9	826951-9
10	1-826652-0	-	1-826631-0	1-826947-0	-	-
20	-	-	-	2-826947-0	2-826654-0	2-826951-0
50	5-826652-0	5-826949-0	5-826631-0	5-826947-0	5-826654-0	5-826951-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II ECONOMY LINE BREAKAWAY PIN HEADERS

STRAIGHT, SINGLE ROW 0.63mm SQUARE POST

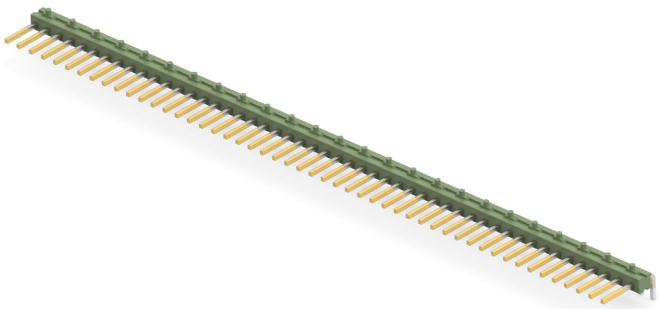
Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel

-Soldering Zone 2 µm min. tin over 1.3 µm nickel



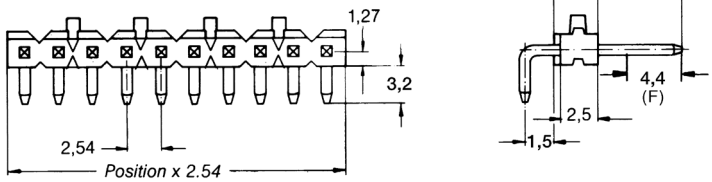
Mating Connectors:

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



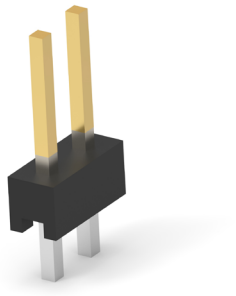
PRODUCT INFORMATION

No. of Positions	Part Numbers
2	825437-2
3	825437-3
4	825437-4
5	825437-5
6	825437-6
7	825437-7
8	825437-8
9	825437-9
10	1-825437-0
20	2-825437-0
50	5-825437-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

BREAKAWAY HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated, high temperature compatible

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel

Tin/Nickel - Plating option available; minimum order quantities may apply. Consult TE.

Performance Characteristics (Board Retention Tails)

Insertion Force **-** 12 lb [53.4N] max.

Retention Force **-** .25 lb [1.11N] min.

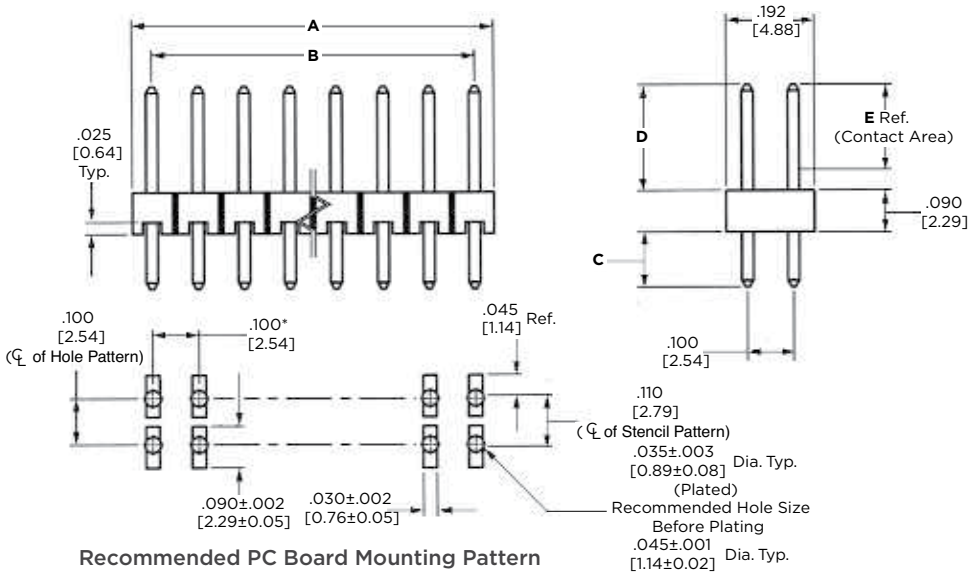
Related Product Data

Mateable Connectors **-** Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

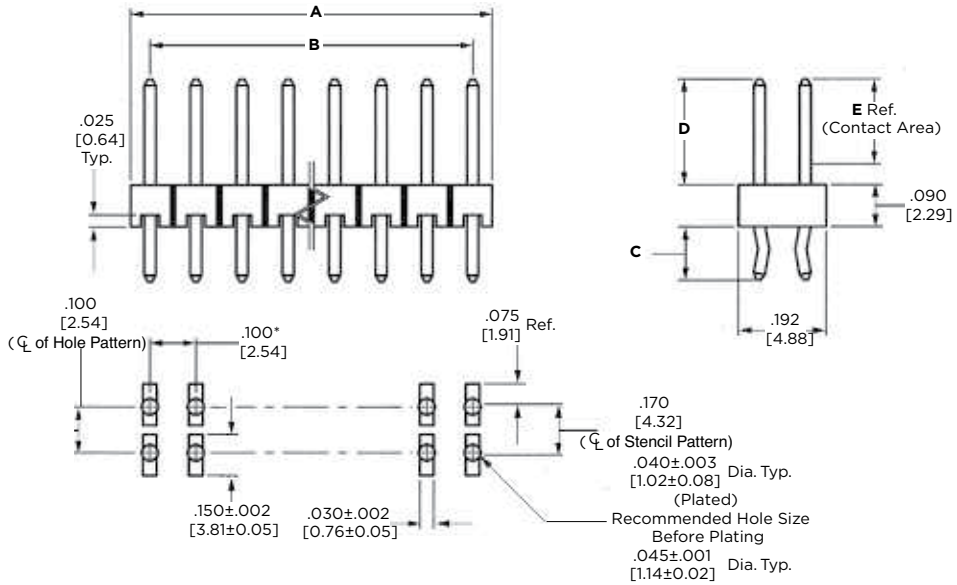
Dimensions: in(mm)

Headers with Solder Tails



Recommended PC Board Mounting Pattern
(for .062 [1.57] thick PC board; .008 [.203] thick stencil)
*±.003 [±0.08] tolerances not to accumulate
within one connector pattern.

Headers with Board Retention Tails



Recommended PC Board Mounting Pattern
(for .062 [1.57] thick PC board; .008 [.203] thick stencil)
*±.003 [±0.08] tolerances not to accumulate
within one connector pattern.

PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions: in(mm)		C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
				Post Plating/Part Numbers		Post Plating/Part Numbers			Post Plating/Part Numbers		
		A	B	Plating A	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
With Solder Tails See Notes 1 and 2.)	2	.084 [2.13]	-	5-146261-1	-	5-146257-1	5-146256-1	5-146254-1	5-146253-1	-	5-146250-1
	80	3.984 [101.19]	3.900 [99.06]	9-146261-0	9-146258-0	9-146257-0	9-146256-0	9-146254-0	9-146253-0	9-146252-0	9-146250-0
With Board Retention Tails (See Notes 2 and 3.)	2	.284 [2.13]	-	-	-	5-146269-1	-	-	-	-	-

Notes:

1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).

2. Headers are also available in sizes 4 thru 78 positions. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base Part Numbers that corresponds with the number of positions per row. For example, the complete Part Numbers for a 16-position header with solder tails (C dimension .090 [2.29], post plating A) would be 5-146261-8. The complete Part Numbers for a 40-position header with board retention tails (C dimension .120 [3.05], post plating B) would be 7-146268-0. This Part Numbersing system applies only to this page.

Note: All Part Numbers are RoHS compliant.

MOD II LOW COST LINE BREAKAWAY PIN HEADERS

STRAIGHT, DOUBLE ROW 0.63mm SQUARE POST

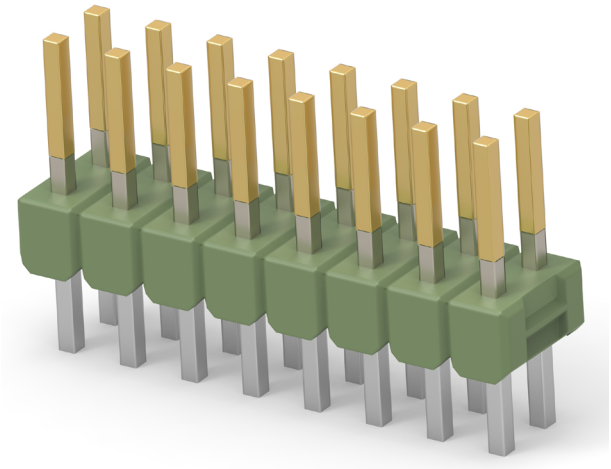
Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 3 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

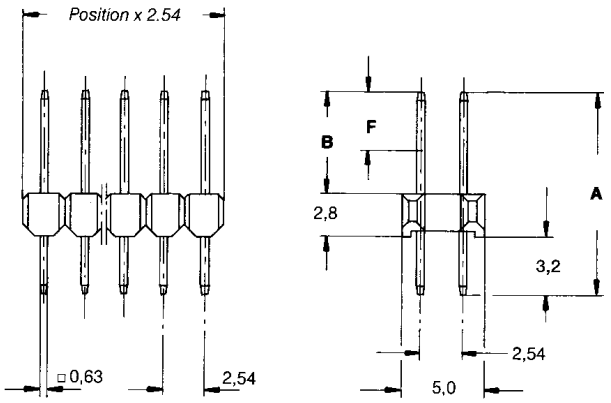
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	A=11.8 B=5.8 F=4.4 Part Numbers		A=12.7 B=6.7 F=5.5 Part Numbers		A=14.0 B=8.0 F=4.4 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2x2	826656-2	826942-2	826632-2	826925-2	-	826944-2
2x3	826656-3	826942-3	826632-3	826925-3	826658-3	826944-3
2x4	826656-4	826942-4	826632-4	826925-4	826658-4	-
2x5	826656-5	826942-5	826632-5	826925-5	826658-5	826944-5
2x6	826656-6	826942-6	826632-6	826925-6	826658-6	-
2x7	826656-7	826942-7	826632-7	826925-7	826658-7	-
2x8	826656-8	826942-8	826632-8	826925-8	826658-8	-
2x9	826656-9	826942-9	826632-9	826925-9	-	826944-9
2x10	1-826656-0	1-826942-0	1-826632-0	1-826925-0	1-826658-0	1-826944-0
2x20	2-826656-0	2-826942-0	2-826632-0	2-826925-0	2-826658-0	-
2x50	5-826656-0	5-826942-0	5-826632-0	5-826925-0	5-826658-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II ECONOMY LINE BREAKAWAY PIN HEADERS

STRAIGHT, DOUBLE ROW 0.63mm SQUARE POST

Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel

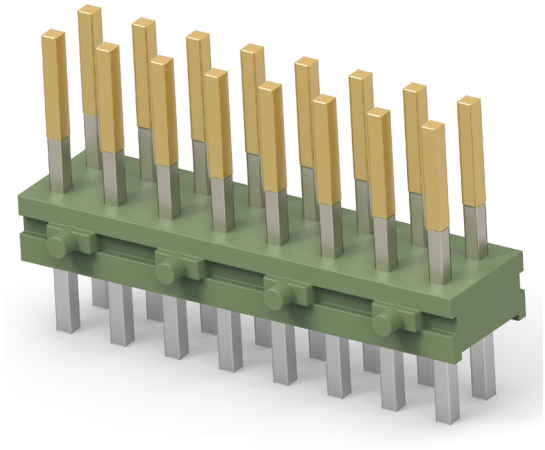
Mating Connectors:

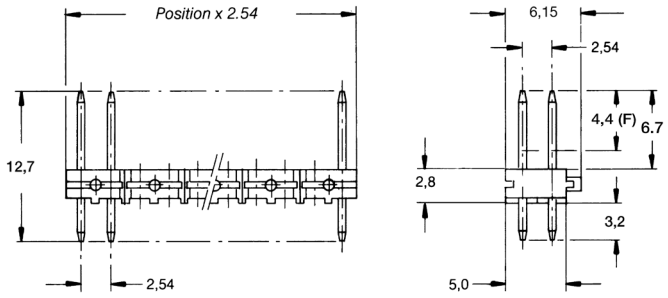
MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)





PRODUCT INFORMATION

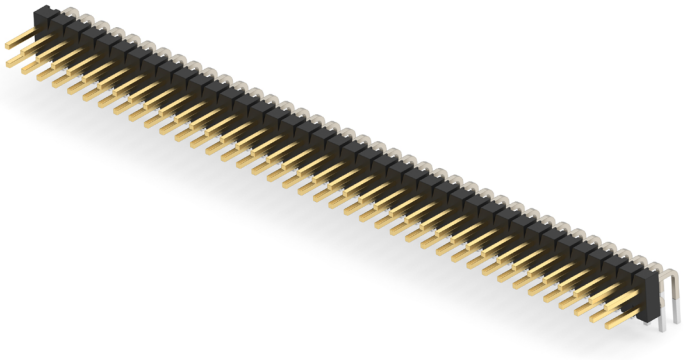
No. of Positions	Part Numbers
	Plating A
2x2	825440-2
2x3	825440-3
2x4	825440-4
2x5	825440-5
2x6	825440-6
2x7	825440-7
2x8	825440-8
2x9	825440-9
2x10	1-825440-0
2x20	2-825440-0
2x50	5-825440-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

BREAKAWAY HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

(CONTINUED)

.025 [0.64] SQUARE RIGHT-ANGLE POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated, high temperature compatible

Posts - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Performance Characteristics (Board Retention Tails)

Insertion Force - 12 lb [53.4N] max.

Retention Force - .25 lb [1.11N] min.

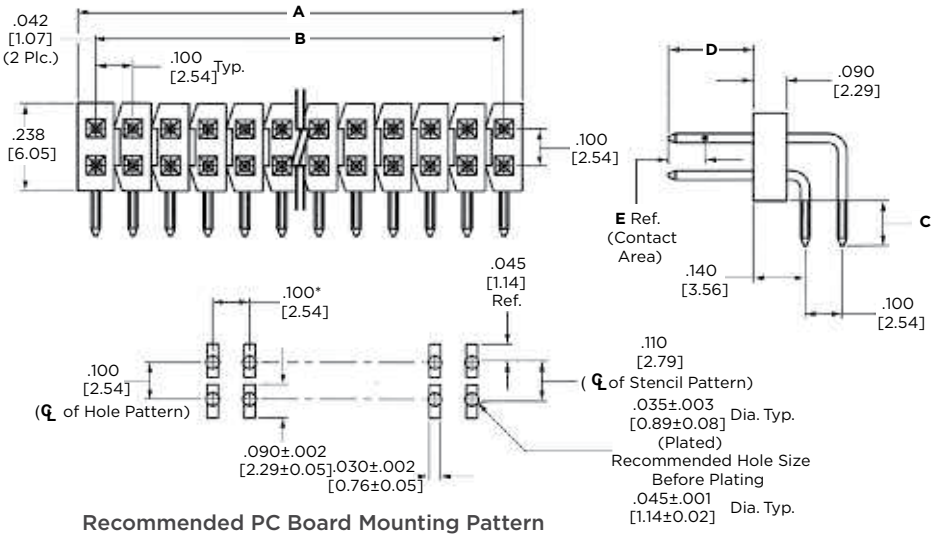
Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Dimesions

Headers with Solder Tails



Recommended PC Board Mounting Pattern
(for .062 [1.57] thick PC board; .008 [.203] thick stencil)
*±.003 [±0.08] tolerances not to accumulate
within one connector pattern.

PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions: in(mm)		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]	C = .110 [2.79] D = .318 [8.08] E = .200 [5.08]
		A	B	Part Numbers	Part Numbers
With Solder Tails (See Notes 1 and 2.)	80	3.984 [101.19]	3.900 [99.06]	9-146308-0	9-146309-0

Notes:
1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).

2. Headers are also available in sizes 4 thru 78 positions. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base Part Numbers that corresponds with the number of positions per row. For example, the complete Part Numbers for a 16- position header with solder tails (C dimension .120 [3.05)] would be 5-146308-8. The complete Part Numbers for a 40-position header with board retention tails (C dimension .120 [3.05]) would be 7-146310-0. This Part Numbersing system applies only to this page.

Note: All Part Numbers are RoHS compliant.

MOD II LOW COST LINE BREAKAWAY PIN HEADERS

RIGHT ANGLE, DOUBLE ROW 0.63mm SQUARE POST

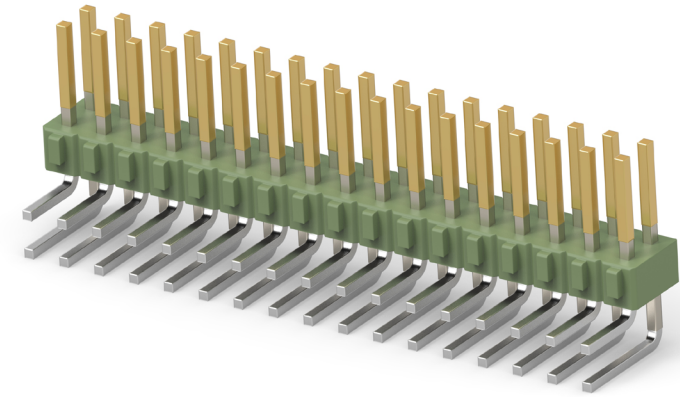
Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 3 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

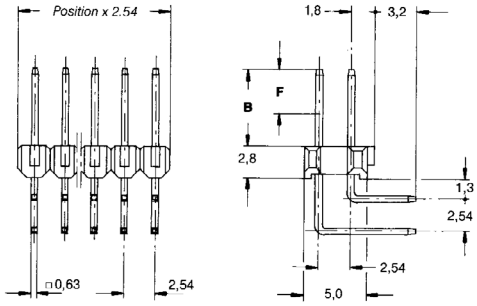
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	B=5.8 F=4.4 Part Numbers		B=6.7 F=4.4 Part Numbers		B=8.0 F=4.4 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2x2	826662-2	826955-2	826634-2	826953-2	826664-2	-
2x3	826662-3	826955-3	826634-3	826953-3	826664-3	-
2x4	826662-4	826955-4	826634-4	826953-4	826664-4	826957-4
2x5	826662-5	-	826634-5	826953-5	826664-5	-
2x6	826662-6	-	826634-6	-	-	-
2x7	-	826955-7	826634-7	-	-	-
2x8	826662-8	826955-8	826634-8	826953-8	826664-8	826957-8
2x9	826662-9	-	-	826953-9	-	-
2x10	1-826662-0	-	1-826634-0	1-826953-0	1-826664-0	-
2x20	-	-	2-826634-0	-	2-826664-0	-
2x50	5-826662-0	-	5-826634-0	5-826953-0	5-826664-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II ECONOMY LINE BREAKAWAY PIN HEADERS

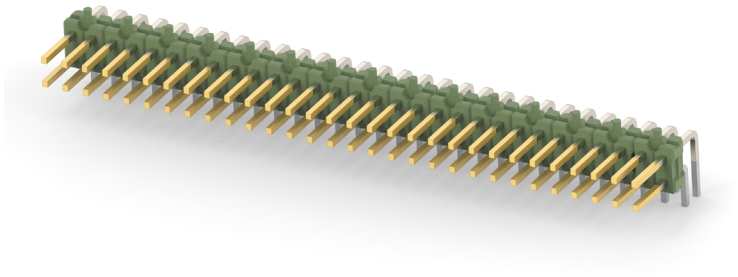
STRAIGHT, DOUBLE ROW 0.63mm SQUARE POST

Specification:

Housing- Green polyester, glass filled, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2 µm min. tin over 1.3 µm nickel



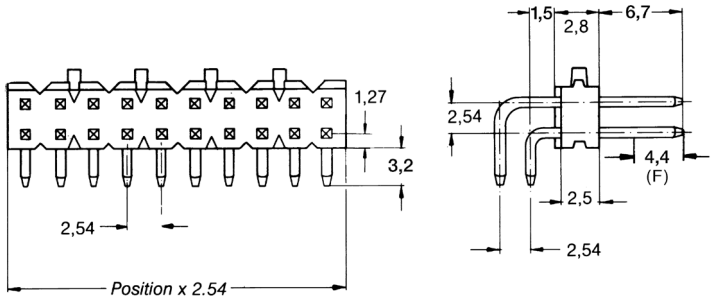
Mating Connectors:

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)

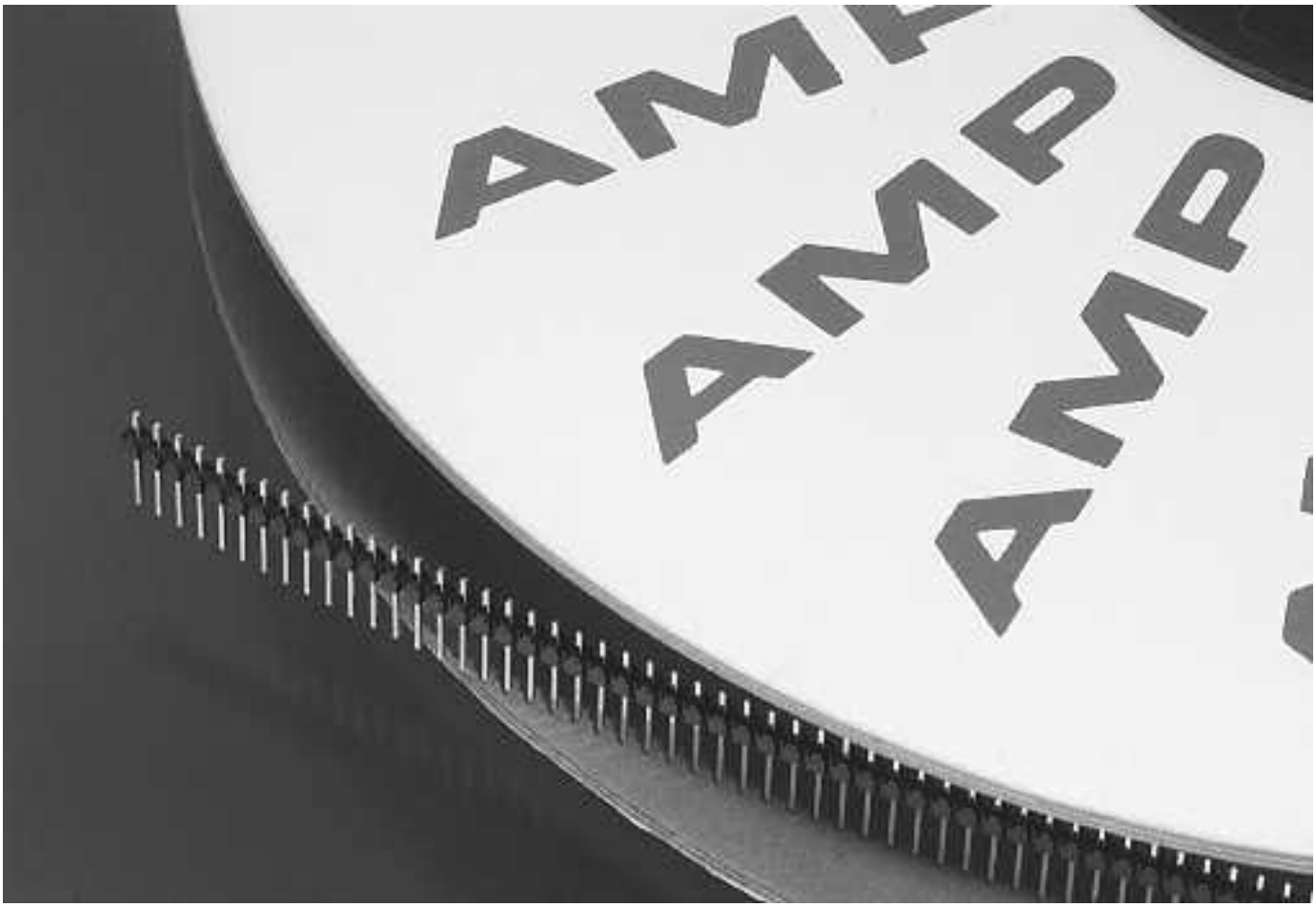


PRODUCT INFORMATION

No. of Positions	Part Numbers
2x2	825457-2
2x3	825457-3
2x4	825457-4
2x5	825457-5
2x6	825457-6
2x7	825457-7
2x8	825457-8
2x10	1-825457-0
2x20	2-825457-0
2x50	5-825457-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

AMPMODU REELED BREAKAWAY HEADERS



INTRODUCTION

TE now offers AMPMODU reeled breakaway headers, which are used for board-to- board interconnections, on a continuous reel. The reeled breakaway headers are an economy version of the standard breakaway headers, and continue to provide the same high quality standards that TE is known for in the connector industry. Reeled breakaway headers provide the flexibility to cut the headers to many different lengths, while only having to stock one Part Numbers. As a result, the amount of Part Numbers that need to be purchased and stored can be greatly reduced.

Reeled breakaway headers can be purchased in single and double rows with tin, 5 Au, 15 Au, and 30 Au duplex plating. The lower applied cost also offers .230" and .318" mating lengths. (See standard breakaway-to-reeled header conversion chart for vertical headers on the reverse side of this sheet) Potential industries include: computer peripherals, telecommunications equipment, consumer, automotive, medical and test equipment. Tooling available from: Robo-Pak, Inc. 814 Lakeshore Drive East Bethel, MN 55902 A pin retention and pin removal tooling option is also available in addition to cutting.

FEATURES OF BREAKAWAY HEADERS

- Design and inventory versatility - headers can easily be made into a variety of sizes High Temperature Compatible
- Reduced Part Numbers base
- Reduced inventory burden

APPLICATIONS

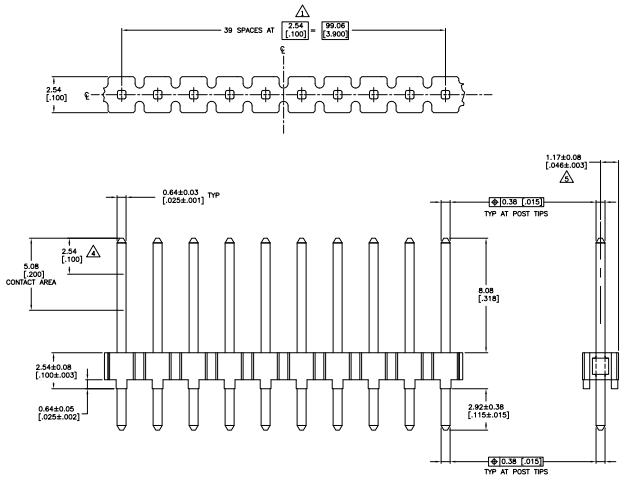
- Desktops & workstations
- Set-top boxes
- Televisions
- Automotive instrument panels & radios
- Medical and test equipment

BENEFITS

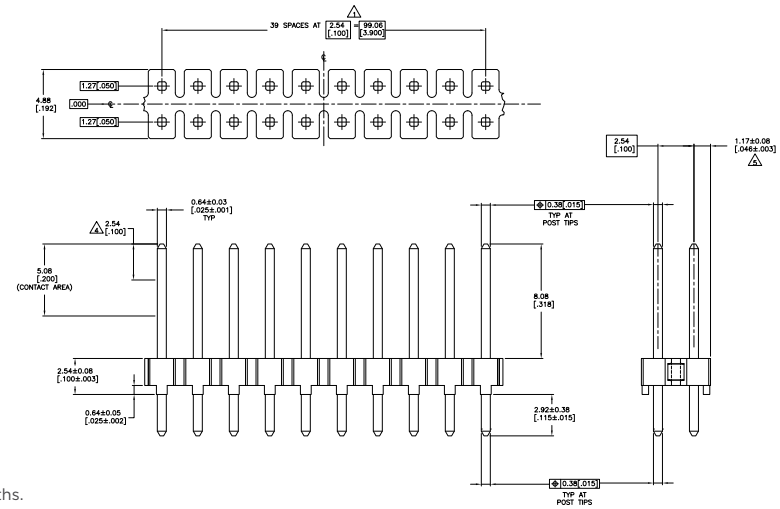
- Off the shelf availability
- Various header length capability using the same reel
- Reduction of inventory costs
- Economy version of the
- standard breakaway headers

AMPMODU REELED BREAKAWAY HEADERS

SINGLE ROW



DOUBLE ROW



See table for other mate and tail lengths.

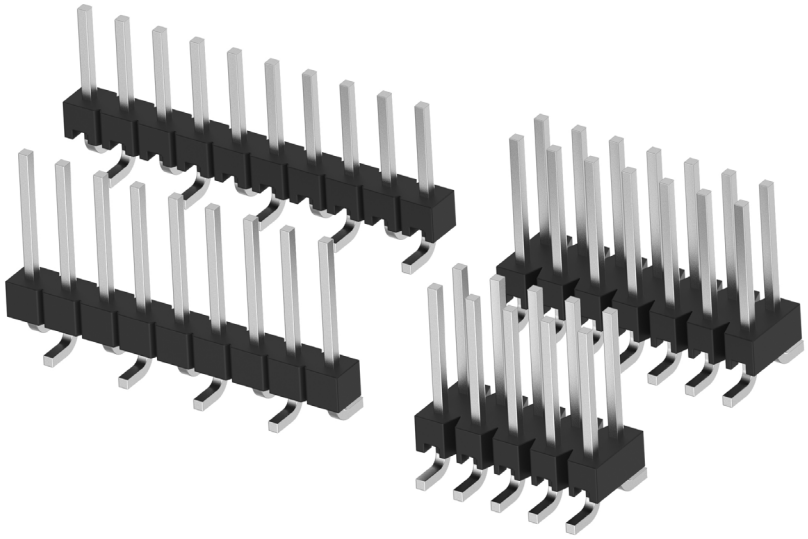
PRODUCT INFORMATION

Standard Breakaway-to-Reeled Header Conversion Chart (Vertical)								
Plating Options	Double Row Headers				Single Row Headers			
	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N
	Mate: .318 Tail: .125	Mate: .318 Tail: .115	Mate: .230 Tail: .120	Mate: .230 Tail: .110	Mate: .318 Tail: .125	Mate: .318 Tail: .115	Mate: .230 Tail: .120	Mate: .230 Tail: .110
Tin	103322 146250	5-146853-1	103328 146254	5-146851-1	103321 146274	5-146852-1	103327 146278	5-146850-1
15 Au Duplex	102973 146252	5-146861-1	103186 146256	5-146859-1	102972 146276	5-146860-1	103185 146280	5-146858-1
30 Au Duplex	102977 146253	5-146871-1	103240 146257	5-146869-1	102976 146277	5-146870-1	103239 146281	5-146868-1

Note:
Reeled Headers are a functional substitute for standard breakaways, however there are visual differences (i.e. housing appearance and bow due to reeling requirement).

Note: All Part Numbers are RoHS compliant.

BREAKAWAY SURFACE MOUNT HEADERS, .100 X .100 [2.54 X 2.54] CENTERLINE



INTRODUCTION

An extension of the AMPMODU Breakaway Header product family are the surface mount, vertical breakaway headers. The AMPMODU Surface Mount breakaway headers (Unshrouded) are available in single- and double-row vertical configurations with mating lengths of .230 [5.84] and .320 [8.13].
Posts are offered with a choice of either .000030 [.0007] gold duplex or tin plating. Current packaging is in a single tube but tape and reel is available for automatic pick-and-place. We also can provide a pick and- place cap for vacuum placement if required.

PRODUCT FACTS

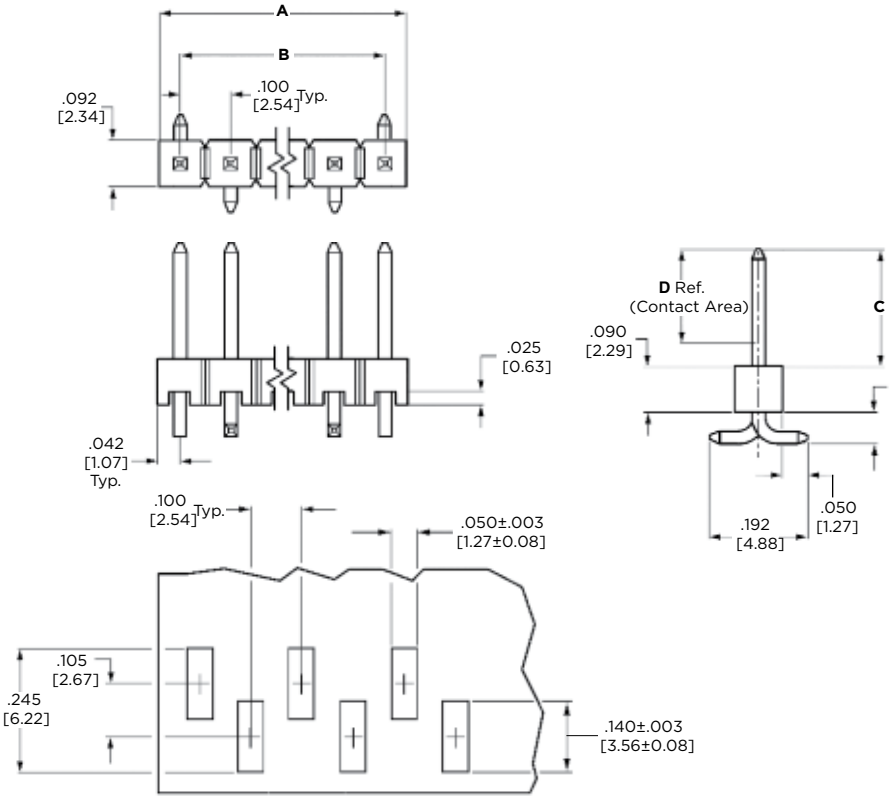
- Surface Mount Leads
- Contact Material: phosphor bronze
- High temperature, black thermoplastic Housings, 94V-0 rated, capable of withstanding IR or vaporphase reflow
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189
- Choice of gold duplex or tin plated posts
- Posts coplanar within .006 [0.15] Tape and reel packaging available in addition to single tube packaging. Contact TE
- Pick-and-place cap available for vacuum placement. Contact TE

BREAKAWAY SURFACE MOUNT HEADERS - UNSHROUDED SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Dimensions: in(mm)



Recommended Etched Circuit Layout
(Using .008 [0.20] thick stencil)

Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100 - .000200 [0.00254 - 0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel entire post

Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		C = .230 [5.84] D = .185 [4.70]		C = .320 [8.13] D = .200 [5.08]
			Post Plating/Part Numbers		Post Plating/Part Numbers
	A	B	Plating A	Plating B	Plating A
3	.284 [7.21]	.200 [5.08]	5-146128-1	5-146132-1	5-146129-1
4	.384 [9.75]	.300 [7.62]	5-146128-2	5-146132-2	-
5	.484 [12.29]	.400 [10.16]	5-146128-3	-	-
6	.584 [14.83]	.500 [12.70]	5-146128-4	5-146132-4	-
7	.684 [17.37]	.600 [15.24]	5-146128-5	-	-
8	.784 [19.91]	.700 [17.78]	5-146128-6	5-146132-6	-
9	.884 [22.45]	.800 [20.32]	5-146128-7	-	-
10	.984 [24.99]	.900 [22.86]	5-146128-8	-	-
15	1.484 [37.69]	1.400 [35.56]	6-146128-3	6-146132-3	-

Note: All Part Numbers are RoHS compliant.

MOD II SURFACE MOUNT BREAKAWAY PIN HEADERS

STRAIGHT, SINGLE ROW 0.63mm SQUARE POST - END STACKABLE

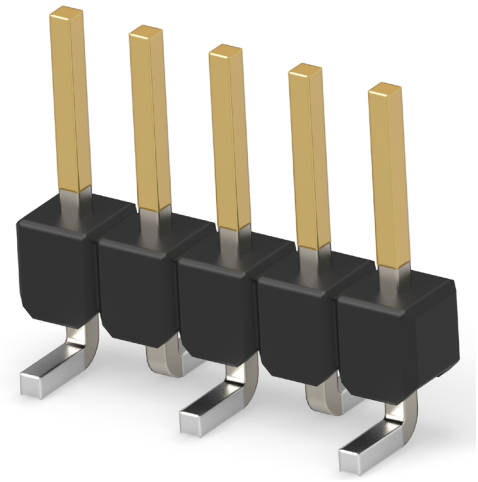
Specification:

Housing and pick&place cap- - PCT GV Black

Posts- Phosphor bronze, plated as follows:

- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
- Soldering Zone 2 µm min. tin over 1.3 µm nickel

Packaging- Tape & reel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

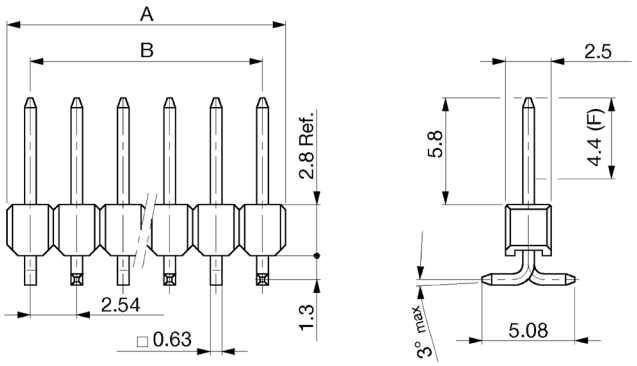
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in(mm)		Part Numbers
	A	B	
3	7.62 (0.30)	5.08 (0.20)	1241150-3
4	10.16 (0.40)	7.62 (0.30)	1241150-4
5	12.7 (0.50)	10.16 (0.40)	1241150-5
6	15.24 (0.60)	12.7 (0.50)	1241150-6
7	17.78 (0.70)	15.24 (0.60)	1241150-7
8	20.32 (0.80)	17.78 (0.70)	1241150-8
9	22.86 (0.90)	20.32 (0.80)	1241150-9
10	25.4 (1.00)	22.86 (0.90)	1-1241150-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

BREAKAWAY SURFACE MOUNT HEADERS - UNSHROUDED DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

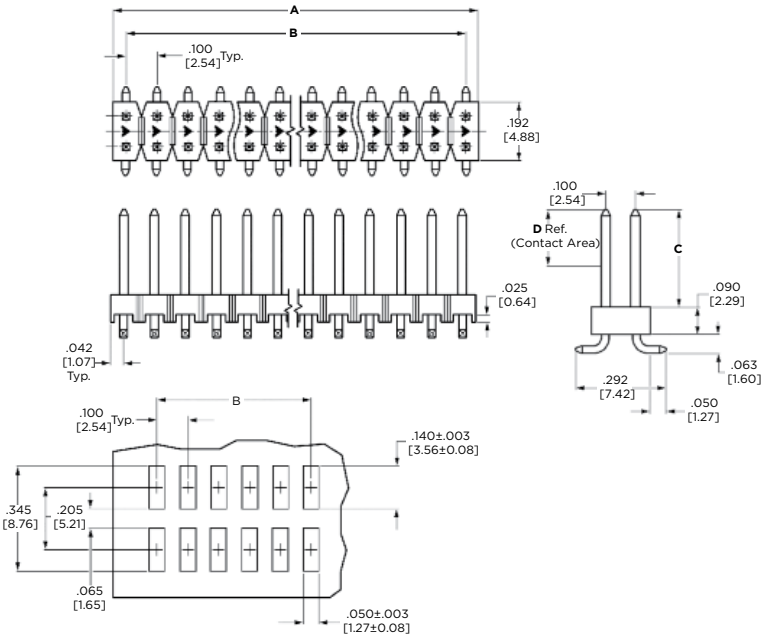
Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel entire post

Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide - Page 10

Dimensions: in(mm)



Recommended Etched Circuit Layout
(Using .008 [0.20] thick stencil)

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		C = .230 [5.84] D = .185 [4.70]		C = .320 [8.13] D = .200 [5.08]	
			Post Plating/Part Numbers		Post Plating/Part Numbers	
	A	B	Plating A	Plating B	Plating A	Plating B
4	.184 [4.67]	.100 [2.54]	5-146130-1	5-146134-1	-	-
6	.284 [7.21]	.200 [5.08]	5-146130-2	5-146134-2	5-146131-2	1-146135-6
8	.384 [9.75]	.300 [7.62]	5-146130-3	5-146134-3	5-146131-3	5-146135-3
10	.484 [12.29]	.400 [10.16]	5-146130-4	1-146134-7	5-146131-4	5-146135-4
12	.584 [14.83]	.500 [12.70]	5-146130-5	5-146134-5	5-146131-5	-
14	.684 [17.37]	.600 [15.24]	5-146130-6	5-146134-6	5-146131-6	5-146135-6
16	.784 [19.91]	.700 [17.78]	5-146130-7	1-146134-9	-	5-146135-7
20	.984 [24.99]	.900 [22.86]	5-146130-9	-	5-146131-9	-
24	1.184 [30.07]	1.100 [27.94]	6-146130-1	-	-	-
26	1.284 [32.61]	1.200 [30.48]	6-146130-2	-	6-146131-2	-
28	1.384 [35.15]	1.300 [33.02]	-	6-146134-3	-	-
30	1.484 [37.69]	1.400 [35.56]	6-146130-4	2-146134-1	-	-

Note: All Part Numbers are RoHS compliant.

MOD II SURFACE MOUNT BREAKAWAY PIN HEADERS

STRAIGHT, SINGLE ROW 0.63mm SQUARE POST - END STACKABLE

Specification:

Housing and pick&place cap- - PCT GV Black

Posts- Phosphor bronze, plated as follows:

- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
- Soldering Zone 2 µm min. tin over 1.3 µm nickel

Packaging- Tape & reel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

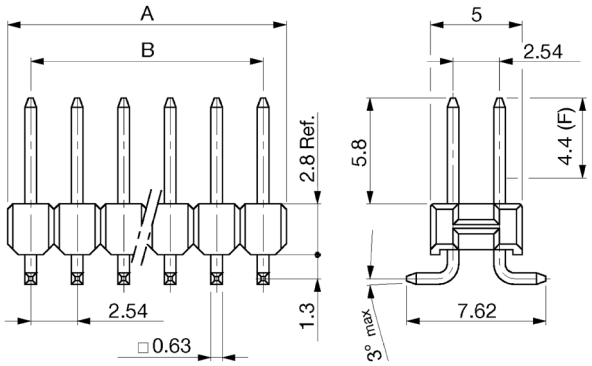
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)

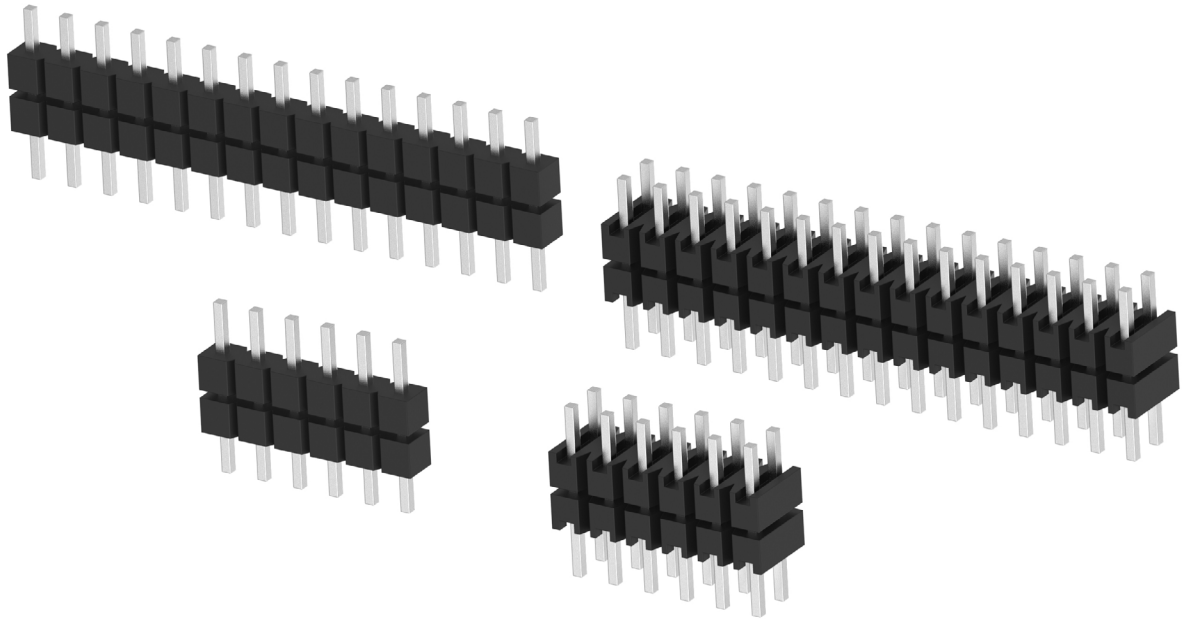


PRODUCT INFORMATION

No. of Positions	Dimensions: in(mm)		Part Numbers
	A	B	
2x2	5.08 (0.20)	2.54 (0.10)	1241050-2
2x3	7.62 (0.30)	5.08 (0.20)	1241050-3
2x4	10.16 (0.40)	7.62 (0.30)	1241050-4
2x5	12.7 (0.50)	10.16 (0.40)	1241050-5
2x6	15.24 (0.60)	12.7 (0.50)	1241050-6
2x7	17.78 (0.70)	15.24 (0.60)	1241050-7
2x8	20.32 (0.80)	17.78 (0.70)	1241050-8
2x9	22.86 (0.90)	20.32 (0.80)	-
2x10	25.4 (1.0)	22.86 (0.90)	1-1241050-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

UNSHROUDED STACKING HEADERS-BREAKAWAY .100 X .100 [2.54 X 2.54] CENTERLINE

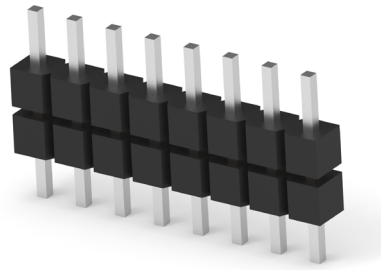


PRODUCT FACTS

- Available in single and double row
- Parallel PC board stacking with numerous stack heights available
- Drawn wire posts allow 4 side mateability
- May eliminate the need for additional board spacers
- Can be used in conjunction with bottom entry receptacles
- Gold or tin plated
- Up to 1.430 [36.32] overall post length
- Retention and surface mount features available upon request
- Other header sizes can be made upon request
- Tape and reel packaging available. Contact TE
- Pick-and-place cap available for vacuum placement. Contact TE

UNSHROUDED STACKING HEADERS - BREAKAWAY, SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating - As noted in chart:

Tin - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel entire post

15Au - .000015 [0.00038] gold over .000050 [0.00127] nickel entire post

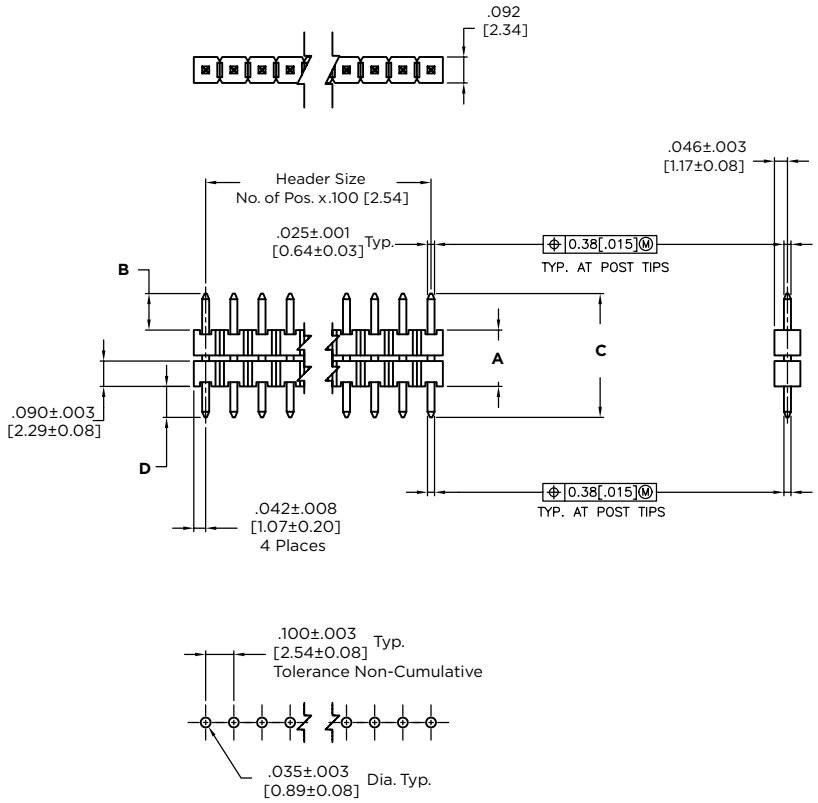
Related Product Data

Mateable Connectors - Refer to the Mating Post Selection Guide - Page 10

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Retention and surface mount features available upon request. Other header sizes can be made upon request.

Dimensions: in(mm)



Recommended PC Board Hole Layout

PRODUCT INFORMATION

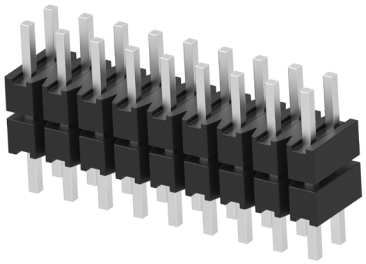
Base Number (see note)	Dimensions: in(mm)				B End Plating	D End Plating
	A	B	C	D		
	Stack Height	Tail Length	Post Length	Mating Length		
146455	.200 [5.08]	.130 [3.30]	.440 [11.17]	.110 [2.79]	TIN	TIN
146456	.250 [6.35]	.080 [2.03]	.440 [11.17]	.110 [2.79]	TIN	TIN
146457	.250 [6.35]	.114 [2.89]	.474 [12.03]	.110 [2.79]	TIN	TIN
146458	.300 [7.62]	.123 [3.12]	.533 [13.53]	.110 [2.79]	TIN	TIN
146459	.400 [10.16]	.107 [2.71]	.617 [15.67]	.110 [2.79]	TIN	TIN
146460	.450 [11.43]	.057 [1.45]	.617 [15.67]	.110 [2.79]	TIN	TIN
146461	.500 [12.70]	.129 [3.27]	.739 [18.77]	.110 [2.79]	TIN	TIN
146462	.300 [7.62]	.109 [2.77]	.739 [18.77]	.330 [8.38]	TIN	15 AU
146463	.600 [15.24]	.107 [2.71]	.817 [20.75]	.110 [2.79]	TIN	TIN
146464	.400 [10.16]	.087 [2.20]	.817 [20.75]	.330 [8.38]	TIN	15 AU
146465	.700 [17.78]	.120 [3.05]	.930 [23.62]	.110 [2.79]	TIN	TIN
146466	.500 [12.70]	.100 [2.54]	.930 [23.62]	.330 [8.38]	TIN	15 AU
146467	.270 [6.86]	.330 [8.38]	.930 [23.62]	.330 [8.38]	15 AU	15 AU
146468	.800 [20.32]	.120 [3.05]	1.030 [26.16]	.110 [2.79]	TIN	TIN
146469	.600 [15.24]	.100 [2.54]	1.030 [26.16]	.330 [8.38]	TIN	15 AU
146470	.370 [9.39]	.330 [8.38]	1.030 [26.16]	.330 [8.38]	15 AU	15 AU
146471	.900 [22.86]	.120 [3.05]	1.130 [28.70]	.110 [2.79]	TIN	TIN
146472	.700 [17.78]	.100 [2.54]	1.130 [28.70]	.330 [8.38]	TIN	15 AU
146473	.470 [11.39]	.330 [8.38]	1.130 [28.70]	.330 [8.38]	15 AU	15 AU
146474	1.000 [25.40]	.120 [3.05]	1.230 [31.24]	.110 [2.79]	TIN	TIN
146475	.800 [20.32]	.100 [2.54]	1.230 [31.24]	.330 [8.38]	TIN	15 AU
146476	.570 [14.47]	.330 [8.38]	1.230 [31.24]	.330 [8.38]	15 AU	15 AU
146477	1.100 [27.94]	.120 [3.05]	1.330 [33.78]	.110 [2.79]	TIN	TIN
146478	.900 [22.68]	.100 [2.54]	1.330 [33.78]	.330 [8.38]	TIN	15 AU
146479	.670 [17.01]	.330 [8.38]	1.330 [33.78]	.330 [8.38]	15 AU	15 AU
146480	1.200 [30.48]	.120 [3.05]	1.430 [36.32]	.110 [2.79]	TIN	TIN
146481	1.000 [25.40]	.100 [2.54]	1.430 [36.32]	.330 [8.38]	TIN	15 AU
146482	.770 [19.55]	.330 [8.38]	1.430 [36.32]	.330 [8.38]	15 AU	15 AU

***Note:** Headers are available in sizes 1 thru 40. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base Part Numbers that corresponds with the number of positions per row. For example, the complete Part Numbers for an 8-position header is 5-146455-8. The complete Part Numbers for a 16-position of the same series would be 6-146455-6.

Note: All Part Numbers are RoHS compliant.

UNSHROUDED STACKING HEADERS - BREAKAWAY, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating - As noted in chart:

Tin - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel entire post

15Au - .000015 [0.00038] gold over .000050 [0.00127] nickel entire post

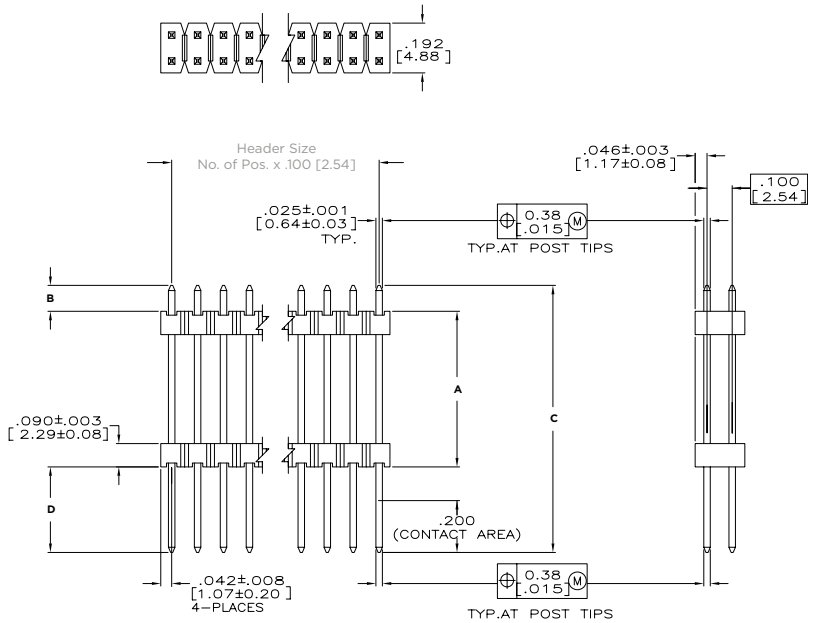
Related Product Data

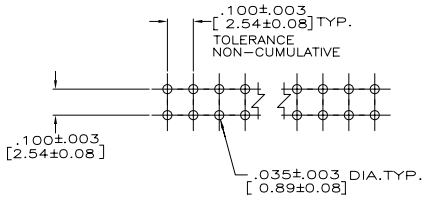
Mateable Connectors - Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243 See mating connector for applicable product and application specifications.

Retention and surface mount features available upon request. Other header sizes can be made upon request.

Dimensions: in(mm)





Recommended PC Board Hole Layout

PRODUCT INFORMATION

Base Number (see note)	Dimensions: in(mm)				B End Plating	D End Plating
	A	B	C	D		
	Stack Height	Tail Length	Post Length	Mating Length		
146483	.200 [5.08]	.130 [3.30]	.440 [11.17]	.110 [2.79]	TIN	TIN
146484	.250 [6.35]	.080 [2.03]	.440 [11.17]	.110 [2.79]	TIN	TIN
146485	.250 [6.35]	.114 [2.89]	.474 [12.03]	.110 [2.79]	TIN	TIN
146486	.300 [7.62]	.123 [3.12]	.533 [13.53]	.110 [2.79]	TIN	TIN
146487	.400 [10.16]	.107 [2.71]	.617 [15.67]	.110 [2.79]	TIN	TIN
146488	.450 [11.43]	.057 [1.45]	.617 [15.67]	.110 [2.79]	TIN	TIN
146489	.500 [12.70]	.129 [3.27]	.739 [18.77]	.110 [2.79]	TIN	TIN
146490	.300 [7.62]	.109 [2.77]	.739 [18.77]	.330 [8.38]	TIN	15 AU
146491	.600 [15.24]	.107 [2.71]	.817 [20.75]	.110 [2.79]	TIN	TIN
146492	.400 [10.16]	.087 [2.20]	.817 [20.75]	.330 [8.38]	TIN	15 AU
146493	.700 [17.78]	.120 [3.05]	.930 [23.62]	.110 [2.79]	TIN	TIN
146494	.500 [12.70]	.100 [2.54]	.930 [23.62]	.330 [8.38]	TIN	15 AU
146495	.270 [6.86]	.330 [8.38]	.930 [23.62]	.330 [8.38]	15 AU	15 AU
146496	.800 [20.32]	.120 [3.05]	1.030 [26.16]	.110 [2.79]	TIN	TIN
146497	.600 [15.24]	.100 [2.54]	1.030 [26.16]	.330 [8.38]	TIN	15 AU
146498	.370 [9.39]	.330 [8.38]	1.030 [26.16]	.330 [8.38]	15 AU	15 AU
146499	.900 [22.86]	.120 [3.05]	1.130 [28.70]	.110 [2.79]	TIN	TIN
146500	.700 [17.78]	.100 [2.54]	1.130 [28.70]	.330 [8.38]	TIN	15 AU
146501	.470 [11.93]	.330 [8.38]	1.130 [28.70]	.330 [8.38]	15 AU	15 AU
146502	1.000 [25.40]	.120 [3.05]	1.230 [31.24]	.110 [2.79]	TIN	TIN
146503	.800 [20.32]	.100 [2.54]	1.230 [31.24]	.330 [8.38]	TIN	15 AU
146504	.570 [14.74]	.330 [8.38]	1.230 [31.24]	.330 [8.38]	15 AU	15 AU
146505	1.100 [27.94]	.120 [3.05]	1.330 [33.78]	.110 [2.79]	TIN	TIN
146506	.900 [22.68]	.100 [2.54]	1.330 [33.78]	.330 [8.38]	TIN	15 AU
146507	.670 [17.01]	.330 [8.38]	1.330 [33.78]	.330 [8.38]	15 AU	15 AU
146508	1.200 [30.48]	.120 [3.05]	1.430 [36.32]	.110 [2.79]	TIN	TIN
146509	1.000 [25.40]	.100 [2.54]	1.430 [36.32]	.330 [8.38]	TIN	15 AU
146510	.770 [19.55]	.330 [8.38]	1.430 [36.32]	.330 [8.38]	15 AU	15 AU

Note: All Part Numbers are RoHS compliant.

MOD II ACTION PIN BREAKAWAY PIN HEADERS

STRAIGHT 0.63mm SQUARE POST

Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

Plating A
-Contact Zone (Area F) 0.1 µm gold, over 0.7 µm palladium alloy, over 1.27 µm nickel

-Action Pin Zone 2 µm min. tin over 1.27 µm nickel

Plating B- Tin over 1.27 µm nickel



Mating Connectors:

HV100 PCB Receptacles - Page 104, Page 107, Page 117, Page 120, Page 123

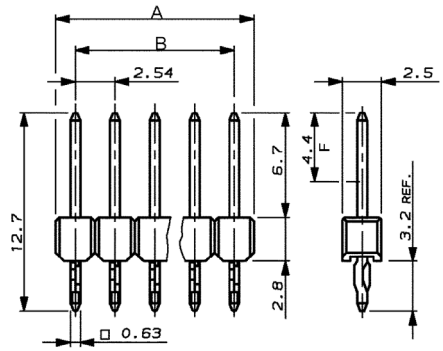
HV190 PCB Receptacles - Page 92, Page 95

MOD IV Receptacle Housings- Page 170

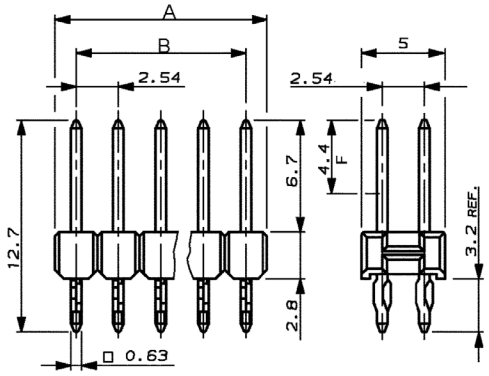
Technical Documents:

Product Specification- 108-18012

SINGLE ROW



DOUBLE ROW



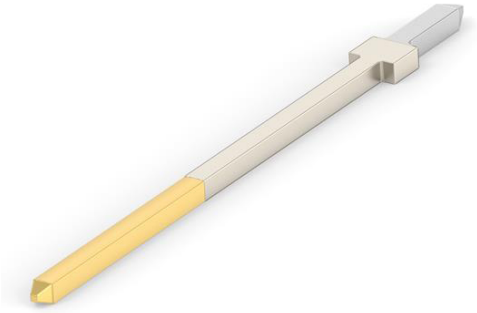
PRODUCT INFORMATION

No. of Positions	Dimensions: in(mm)		Part Numbers
	A	B	Plating B
3	7.62 (0.30)	5.08 (0.20)	966573-3
4	10.16 (0.40)	7.62 (0.30)	966573-4

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II ACTION PIN POSTS

0.64mm SQUARE POST



Specification:

Posts- Phosphor bronze

Plating A - Contact Zone (Area F) 0.8 µm gold, over 1.2 µm nickel
-Action Pin Zone 1.3 µm min. tin over 1.2 µm nickel

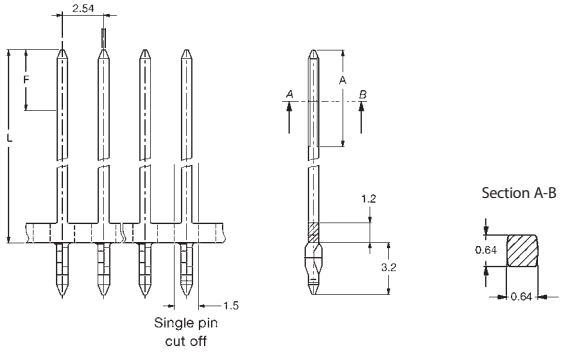
Plating B- Contact Zone (Area F) 1 µm min. tin over 1.2 µm nickel
-Action Pin Zone 5 µm min. tin over 1.2 µm nickel

Technical Documents:

Product Specification- 108-18012

Application Specification - 114-25011

Dimensions: in(mm)

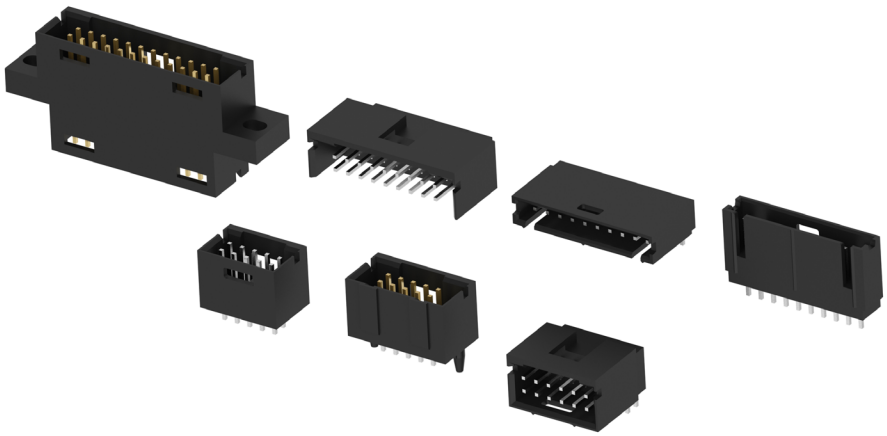


PRODUCT INFORMATION

Dimensions: in(mm)			Plating	Part Numbers Strip Form
A	F	L		
4.8 (0.19)	4.8 (0.19)	6.8 (0.27)	Plating A	1-928776-5
8.5 (0.33)	8.5 (0.33)	10 (0.39)	Plating A	1-928776-4
8 (0.31)	8 (0.31)	12 (0.47)	Plating A	1-928776-3
6.7 (0.26)	6.7 (0.26)	8.25 (0.32)	Plating B	3-928776-2
8.5 (0.33)	6 (0.24)	10 (0.39)	Plating B	3-928776-4

Other post lengths and finishes on request

STANDARD PROFILE HEADERS-SHROUDED



PRODUCT FACTS

- Available in several styles- right-angle with three- and four-sided pin protection, and straight post with pin protection and mounting ears
- Post retention feature available
- Can be used for feed-to and feed-thru applications
- Housings are black thermoplastic, flame retardant 94V-0 rated
- Contacts are copper alloy
- Available in gold duplex, gold over nickel and tin over nickel platings
- Headers with .066 [1.68] and .150 [3.81] end dimensions are available in select sizes up to 60 positions
- Can be select loaded, consult TE
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189 R R

PERFORMANCE CHARACTERISTICS

Electrical

Insulation Resistance - 5,000 megohms minimum initial

Dielectric Withstanding Voltage - 750 RMS at sea level

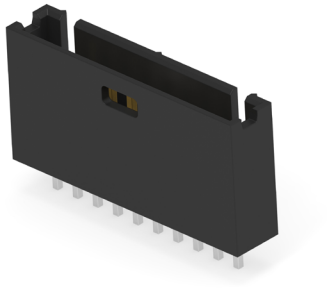
Environmental

Operating Temperature - -65°C to +105°C (black thermoplastic Housings)

Current - 3 amperes maximum per contact

STANDARD PROFILE HEADERS-SHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POSTS (WITH STANDOFFS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

Tin - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel entire post

15Au - .000015 [0.00038] gold over .000050 [0.00127] nickel entire post

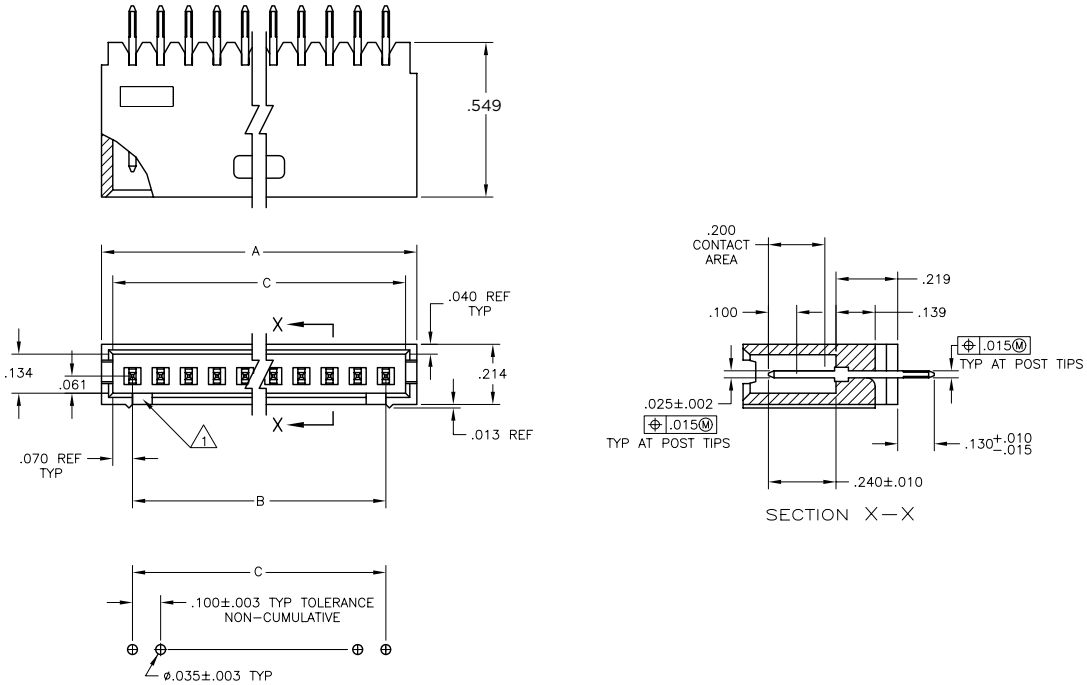
Related Product Data

Mateable Connectors - AMPMODU Wire-Applied Receptacles **-** Page 76

AMPMODU MTE Receptacles - Page 189

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)

*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

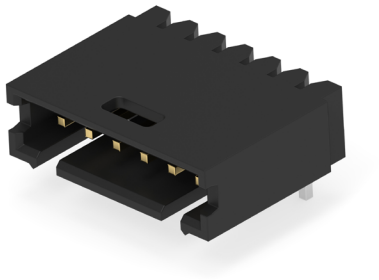
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Post Plating/Part Numbers		
	A	B	C	Plating A	Plating B	Plating A
3	.420 [10.67]	.340 [8.64]	.200 [5.08]	5-103414-1	8-102202-4	5-103080-1
4	.520 [13.21]	.440 [11.18]	.300 [7.62]	5-103414-2	5-102202-1	5-103080-2
5	.620 [15.75]	.540 [13.72]	.400 [10.16]	5-103414-3	5-102202-2	5-103080-3
6	.720 [18.29]	.640 [16.26]	.500 [12.70]	5-103414-4	5-102202-3	5-103080-4
7	.820 [20.83]	.740 [18.80]	.600 [15.24]	5-103414-5	5-102202-4	5-103080-5
8	.920 [23.37]	.840 [21.34]	.700 [17.78]	5-103414-6	5-102202-5	5-103080-6
9	1.020 [25.91]	.940 [23.88]	.800 [20.32]	5-103414-7	5-102202-6	5-103080-7
10	1.120 [28.45]	1.040 [26.42]	.900 [22.86]	5-103414-8	5-102202-7	5-103080-8
11	1.220 [30.99]	1.140 [28.96]	1.000 [25.40]	5-103414-9	5-102202-8	5-103080-9
12	1.320 [33.53]	1.240 [31.50]	1.100 [27.94]	6-103414-0	5-102202-9	6-103080-0
13	1.420 [36.07]	1.340 [34.04]	1.200 [30.48]	6-103414-1	6-102202-0	6-103080-1
14	1.520 [38.61]	1.440 [36.58]	1.300 [33.02]	6-103414-2	6-102202-1	6-103080-2
15	1.620 [41.15]	1.540 [39.12]	1.400 [35.56]	-	6-102202-2	-
16	1.720 [43.69]	1.640 [41.66]	1.500 [38.10]	6-103414-4	6-102202-3	-
18	1.920 [48.77]	1.840 [46.74]	1.700 [43.18]	-	6-102202-5	-
20	2.120 [53.85]	2.040 [51.82]	1.900 [48.26]	6-103414-8	6-102202-7	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH STANDOFFS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

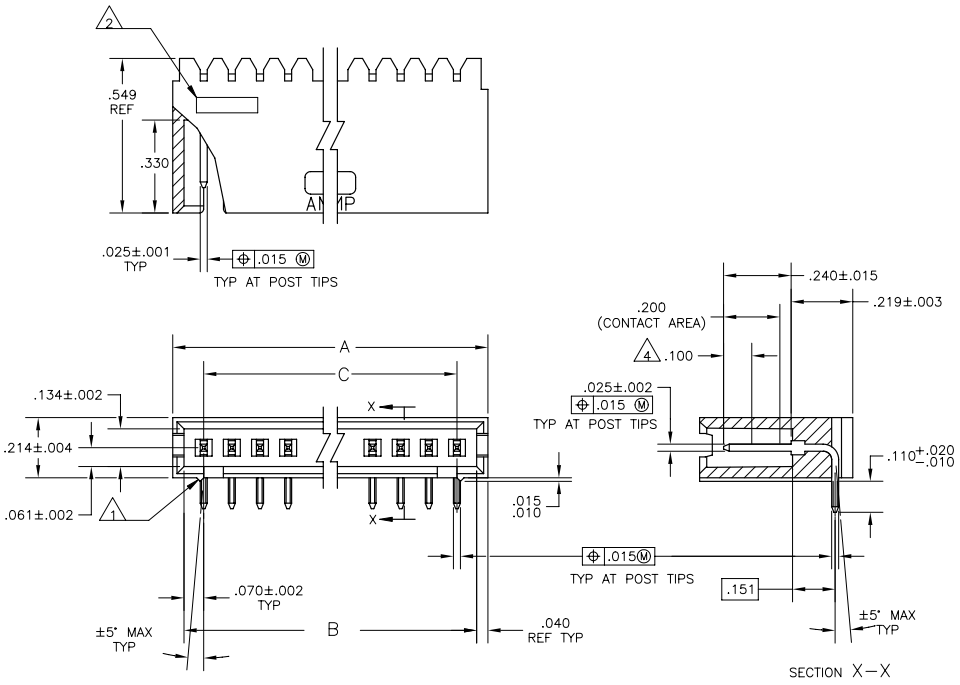
Related Product Data

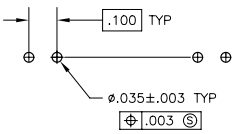
Mateable Connectors - AMPMODU Wire-Applied Receptacles **-** Page 76

AMPMODU MTE Receptacles - Page 189

Technical Documents - Page 243
See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)





Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

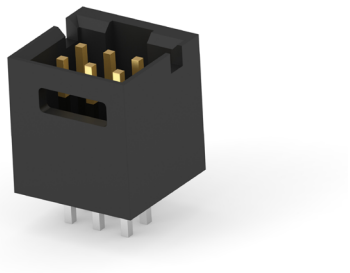
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Post Plating/Part Numbers		
	A	B	C	Plating A	Plating B	Plating A
3	.420 [10.67]	.340 [8.64]	.200 [5.08]	5-103361-1	8-102203-4	5-102523-1
4	.520 [13.21]	.440 [11.18]	.300 [7.62]	5-103361-2	5-102203-1	5-102523-2
5	.620 [15.75]	.540 [13.72]	.400 [10.16]	5-103361-3	5-102203-2	5-102523-3
6	.720 [18.29]	.640 [16.26]	.500 [12.70]	5-103361-4	5-102203-3	5-102523-4
7	.820 [20.83]	.740 [18.80]	.600 [15.24]	5-103361-5	5-102203-4	5-102523-5
8	.920 [23.37]	.840 [21.34]	.700 [17.78]	5-103361-6	5-102203-5	5-102523-6
9	1.020 [25.91]	.940 [23.88]	.800 [20.32]	5-103361-7	-	-
10	1.120 [28.45]	1.040 [26.42]	.900 [22.86]	5-103361-8	5-102203-7	5-102523-8
11	1.220 [30.99]	1.140 [28.96]	1.000 [25.40]	-	5-102203-8	-
12	1.320 [33.53]	1.240 [31.50]	1.100 [27.94]	6-103361-0	5-102203-9	6-102523-0
13	1.420 [36.07]	1.340 [34.04]	1.200 [30.48]	-	6-102203-0	-
14	1.520 [38.61]	1.440 [36.58]	1.300 [33.02]	6-103361-2	6-102203-1	6-102523-2
15	1.620 [41.15]	1.540 [39.12]	1.400 [35.56]	-	6-102203-2	-
16	1.720 [43.69]	1.640 [41.66]	1.500 [38.10]	6-103361-4	6-102203-3	6-102523-4
20	2.120 [53.85]	2.040 [51.82]	1.900 [48.26]	6-103361-8	6-102203-7	-
24	2.520 [64.01]	2.440 [61.98]	2.300 [58.42]	7-103361-2	-	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS - SHROUDED, WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors - AMPMODU Board Mount **-** Page 105

AMPMODU Wire-Applied Receptacles - Page 76

AMPMODU MTE Receptacles - Page 189

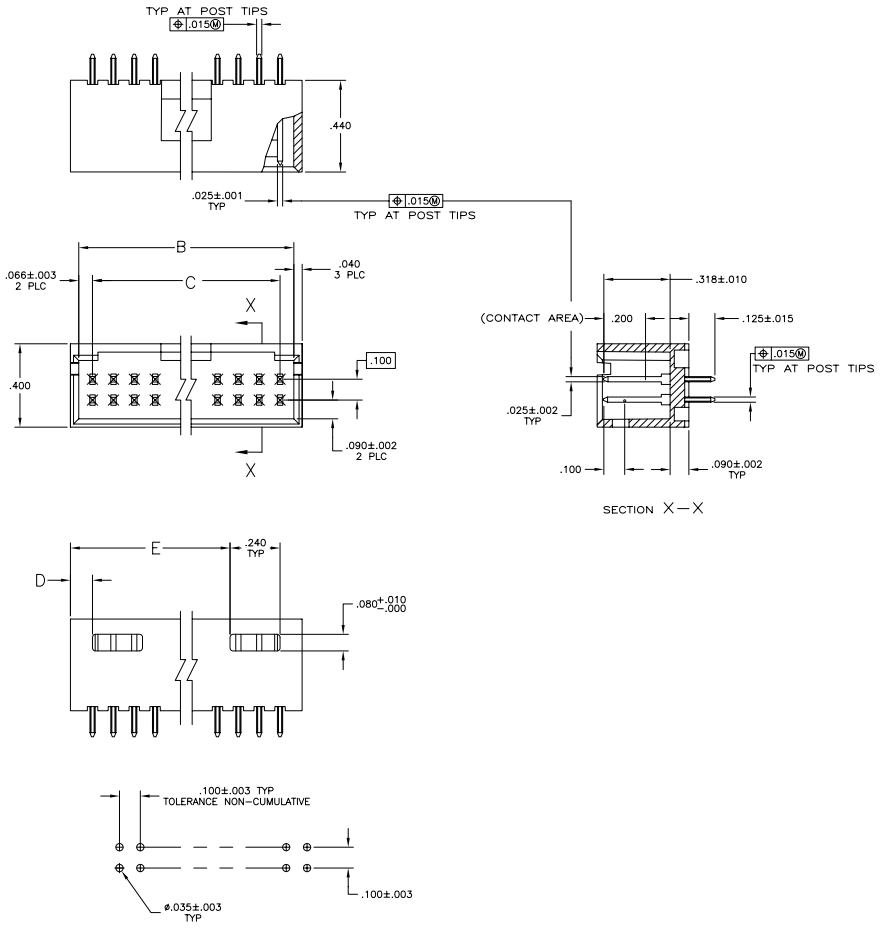
Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Accessories

Barrier Insert - page 126

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

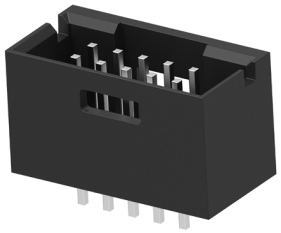
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Post Plating/Part Numbers		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	.106 [2.69]	-	5-103168-1	5-102618-1	8-87589-6
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	.106 [2.69]	-	5-103168-2	5-102618-2	8-87589-5
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	.206 [5.23]	-	5-103168-3	5-102618-3	5-87589-1
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	.206 [5.23]	-	5-103168-4	5-102618-4	5-87589-2
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	.306 [7.77]	-	5-103168-5	5-102618-5	5-87589-3
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	.306 [7.77]	-	5-103168-6	5-102618-6	5-87589-4
18	1.012 [25.70	.932 [23.67]	.800 [20.32]	.406 [10.31]	-	5-103168-7	5-102618-7	5-87589-5
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	.106 [2.69]	.806 [20.47]	5-103168-8	5-102618-8	5-87589-6
22	1.212 [30.78]	1.132 [28.75]	1.000 [25.40]	.106 [2.69]	.906 [23.01]	5-103168-9	5-102618-9	-
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	.106 [2.69]	1.006 [25.55]	6-103168-0	6-102618-0	5-87589-8
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	.106 [2.69]	1.106 [28.09]	6-103168-1	6-102618-1	5-87589-9
28	1.512 [38.40]	1.432 [36.37]	1.300 [33.02]	.106 [2.69]	1.206 [30.63]	6-103168-2	6-102618-2	-
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	.106 [2.69]	1.306 [33.17]	6-103168-3	6-102618-3	6-87589-1
32	1.712 [43.48]	1.632 [41.45]	1.500 [38.10]	.106 [2.69]	1.406 [35.71]	6-103168-4	-	-
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	.106 [2.69]	1.506 [38.25]	6-103168-5	6-102618-5	6-87589-3
36	1.912 [48.56]	1.832 [46.53]	1.700 [43.18]	.106 [2.69]	1.606 [40.79]	6-103168-6	-	6-87589-4
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	.106 [2.69]	1.806 [45.87]	6-103168-8	6-102618-8	6-87589-6
44	2.312 [58.72]	2.232 [56.69]	2.100 [53.34]	.106 [2.69]	2.006 [50.95]	7-103168-0	-	-
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	.106 [2.69]	2.306 [58.57]	7-103168-3	7-102618-3	7-87589-1
60	3.112 [79.04]	3.032 [77.01]	2.900 [73.66]	.106 [2.69]	2.806 [71.27]	7-103168-8	7-102618-8	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

Related Product Data

AMPMODU MTE Receptacles - Page 189 (used with coupling shroud)

AMPMODU Wire-Applied Receptacles - Page 76

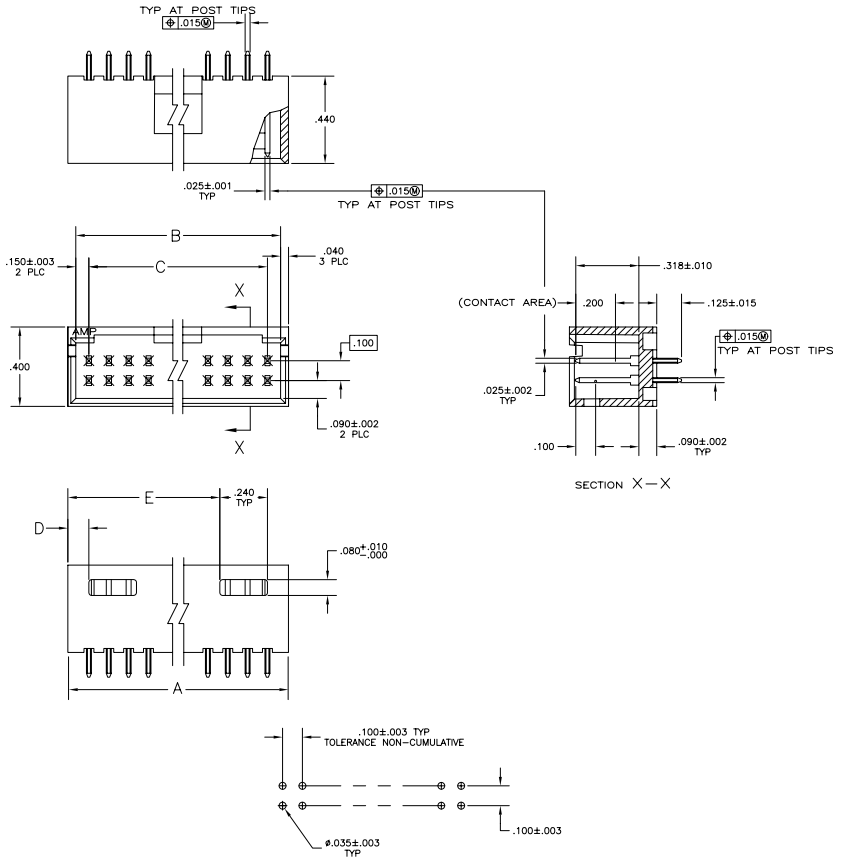
Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Accessories

Barrier Insert - page 126

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

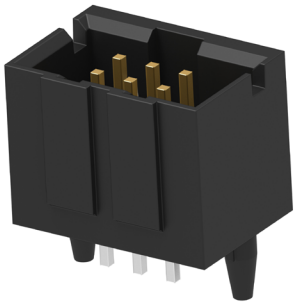
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Post Plating/Part Numbers		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.580 [14.73]	.500 [12.70]	.200 [5.08]	.190 [4.83]	-	5-103169-1	5-102619-1	-
8	.680 [17.27]	.600 [15.24]	.300 [7.62]	.190 [4.83]	-	5-103169-2	5-102619-2	-
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	.290 [7.37]	-	5-103169-3	5-102619-3	5-87587-1
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	.290 [7.37]	-	5-103169-4	5-102619-4	-
14	.980 [24.89]	.900 [22.86]	.600 [15.24]	.390 [9.91]	-	5-103169-5	5-102619-5	-
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	.390 [9.91]	-	5-103169-6	5-102619-6	-
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	.490 [12.45]	-	5-103169-7	-	-
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	.190 [4.83]	.890 [22.61]	5-103169-8	5-102619-8	5-87587-6
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	.190 [4.83]	1.090 [27.69]	6-103169-0	6-102619-0	-
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	.190 [4.83]	1.190 [30.23]	-	6-102619-1	-
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	.190 [4.83]	1.390 [35.31]	-	6-102619-3	-
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	.190 [4.83]	1.490 [37.85]	6-103169-4	-	-
34	1.980 [50.29]	1.900 [48.26]	1.600 [40.64]	.190 [4.83]	1.590 [40.39]	-	6-102619-5	-
36	2.080 [52.83]	2.000 [50.80]	1.700 [43.18]	.190 [4.83]	1.690 [42.93]	6-103169-6	-	-
38	2.180 [55.37]	2.100 [53.34]	1.800 [45.72]	.190 [4.83]	1.790 [45.47]	6-103169-7	-	-
40	2.280 [57.91]	2.200 [55.88]	1.900 [48.26]	.190 [4.83]	1.890 [48.01]	-	6-102619-8	-
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	.190 [4.83]	2.390 [60.71]	7-103169-3	7-102619-3	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH PLASTIC HOLDDOWNS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Related Product Data

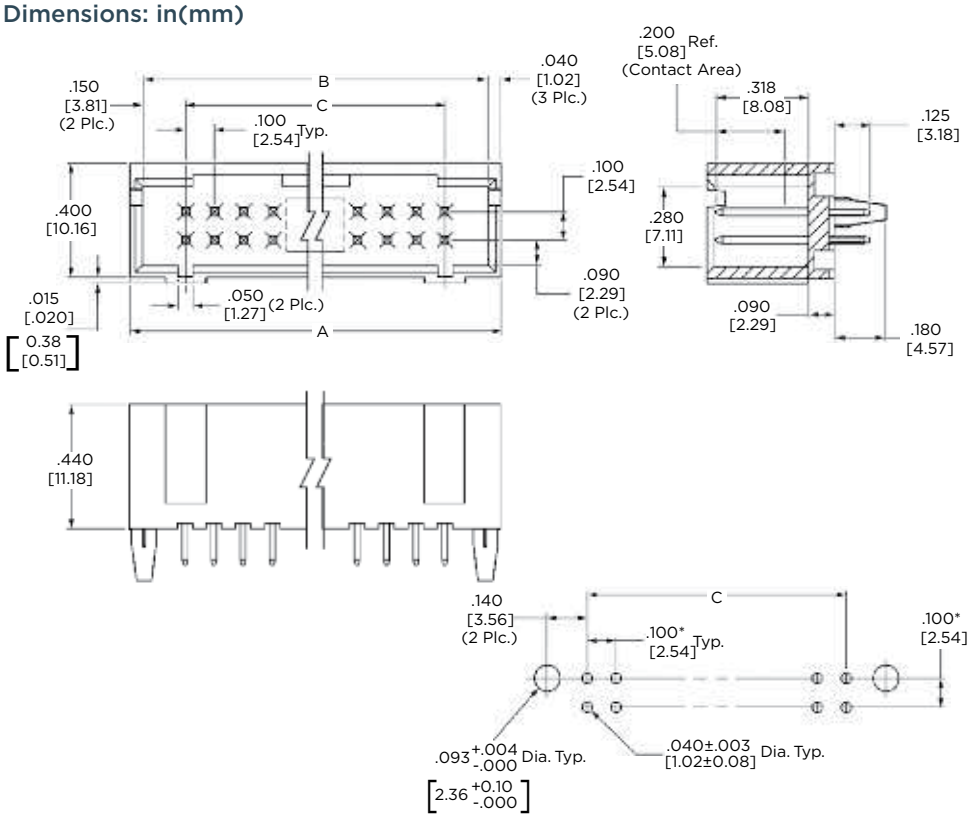
Mateable Connectors
AMPMODU MTE Receptacles - Page 189
AMPMODU Wire-Applied Receptacles **-** Page 76

Accessories

Barrier Insert - page 126

Technical Documents - Page 243, See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

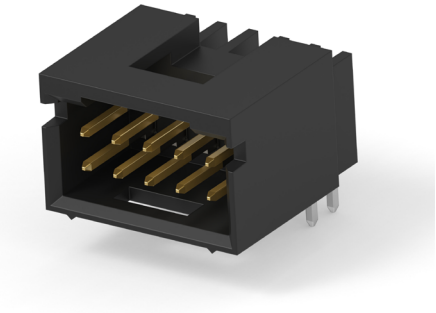
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers Plating A
	A	B	C	
6	.580 [14.73]	.500 [12.70]	.200 [5.08]	5-104317-1
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	5-104317-2
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	5-104317-3
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	6-104317-6
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	5-104317-5
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	5-104317-6
22	1.380 [35.05]	1.300 [33.02]	1.000 [25.40]	5-104317-7
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	5-104317-9
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	6-104317-0
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	6-104317-1
42	2.380 [60.45]	2.300 [58.42]	2.000 [50.80]	6-104317-5

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH DETENT WINDOWS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

Related Product Data

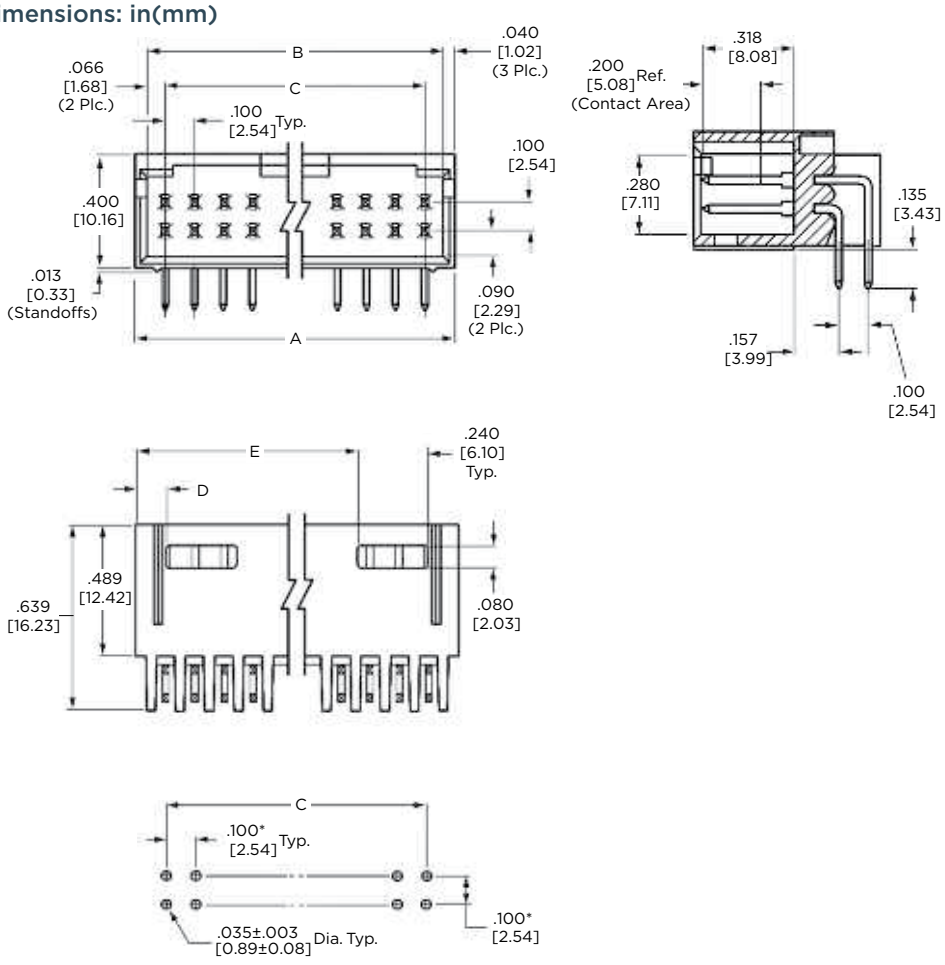
Mateable Connectors AMPMODU Board Mount Receptacles - Page 166

AMPMODU MTE Receptacles - Page 189

AMPMODU Wire-Applied Receptacles - Page 76

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

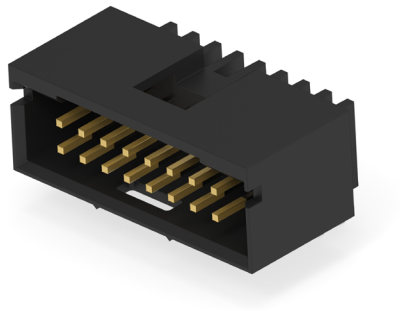
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Post Plating/Part Numbers		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	.106 [2.69]	-	5-103166-1	5-102617-1	8-87579-5
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	.106 [2.69]	-	5-103166-2	5-102617-2	5-87579-1
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	.206 [5.23]	-	5-103166-3	5-102617-3	5-87579-2
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	.206 [5.23]	-	5-103166-4	5-102617-4	5-87579-3
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	.306 [7.77]	-	5-103166-5	5-102617-5	5-87579-4
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	.306 [7.77]	-	5-103166-6	5-102617-6	5-87579-5
18	1.012 [25.70]	.932 [23.67]	.800 [20.32]	.406 [10.31]	-	5-103166-7	5-102617-7	5-87579-6
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	.106 [2.69]	.806 [20.47]	5-103166-8	5-102617-8	5-87579-7
22	1.212 [30.78]	1.132 [28.75]	1.000 [25.40]	.106 [2.69]	.906 [23.01]	-	-	5-87579-8
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	.106 [2.69]	1.006 [25.55]	6-103166-0	6-102617-0	5-87579-9
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	.106 [2.69]	1.106 [28.09]	6-103166-1	-	6-87579-0
28	1.512 [38.40]	1.432 [36.37]	1.300 [33.02]	.106 [2.69]	1.206 [30.63]	6-103166-2	-	-
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	.106 [2.69]	1.306 [33.17]	6-103166-3	6-102617-3	6-87579-2
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	.106 [2.69]	1.506 [38.25]	6-103166-5	6-102617-5	-
36	1.912 [48.56]	1.832 [46.53]	1.700 [43.18]	.106 [2.69]	1.606 [40.79]	6-103166-6	-	-
38	2.012 [51.10]	1.932 [49.07]	1.800 [45.72]	.106 [2.69]	1.706 [43.33]	-	-	-
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	.106 [2.69]	1.806 [45.87]	6-103166-8	6-102617-8	6-87579-7
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	.106 [2.69]	2.306 [58.57]	7-103166-3	-	7-87579-2
60	3.112 [79.04]	3.032 [77.01]	2.900 [73.66]	.106 [2.69]	2.806 [71.27]	-	7-102617-8	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH DETENT WINDOWS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel Plating

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

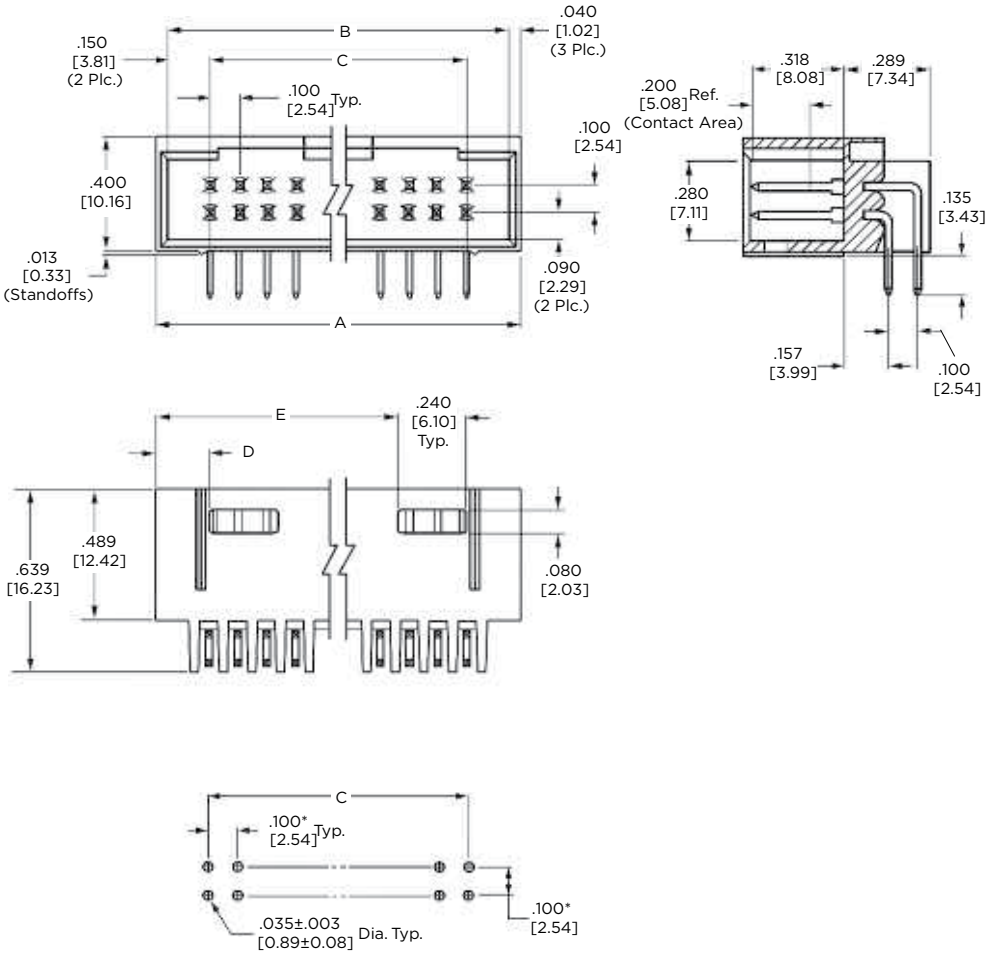
Related Product Data

Mateable Connectors AMPMODU MTE Receptacles - Page 189

AMPMODU Wire-Applied Receptacles - Page 76

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

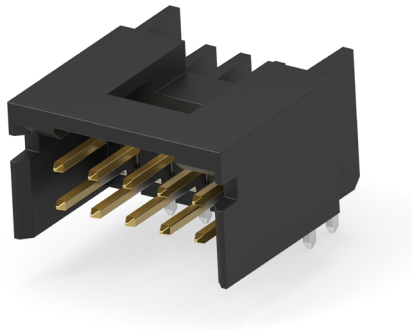
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Post Plating/Part Numbers		
	A	B	C	D	E	Plating A	Plating B	Plating A
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	.290 [7.37]	-	5-103167-2	5-102570-3	-
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	.290 [7.37]	-	5-103167-3	5-102570-4	-
14	.980 [24.89]	.900 [22.86]	.600 [15.24]	.390 [9.91]	-	5-103167-4	5-102570-5	5-87577-4
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	.390 [9.91]	-	5-103167-5	5-102570-6	-
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	.490 [12.45]	-	5-103167-6	-	-
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	.190 [4.83]	.890 [22.61]	5-103167-7	5-102570-8	-
22	1.380 [35.05]	1.300 [33.02]	1.000 [25.40]	.190 [4.83]	.990 [25.15]	5-103167-8	5-102570-9	-
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	.190 [4.83]	1.090 [27.69]	5-103167-9	-	-
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	.190 [4.83]	1.190 [30.23]	6-103167-0	6-102570-1	-
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	.190 [4.83]	1.390 [35.31]	6-103167-2	-	-
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	.190 [4.83]	1.490 [37.85]	-	6-102570-4	-
34	1.980 [50.29]	1.900 [48.26]	1.600 [40.64]	.190 [4.83]	1.590 [40.39]	6-103167-4	6-102570-5	-
40	2.280 [57.91]	2.200 [55.88]	1.900 [48.26]	.190 [4.83]	1.890 [48.01]	6-103167-7	5-102570-1	-
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	.190 [4.83]	2.390 [60.71]	-	7-102570-2	-
60	3.280 [83.31]	3.200 [81.28]	2.900 [73.66]	.190 [4.83]	2.890 [73.41]	7-103167-7	-	-
68	3.680 [93.47]	3.600 [91.44]	3.300 [83.82]	.190 [4.83]	3.290 [83.57]	8-103167-1	-	-

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH PIN PROTECTION ON 3 SIDES)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

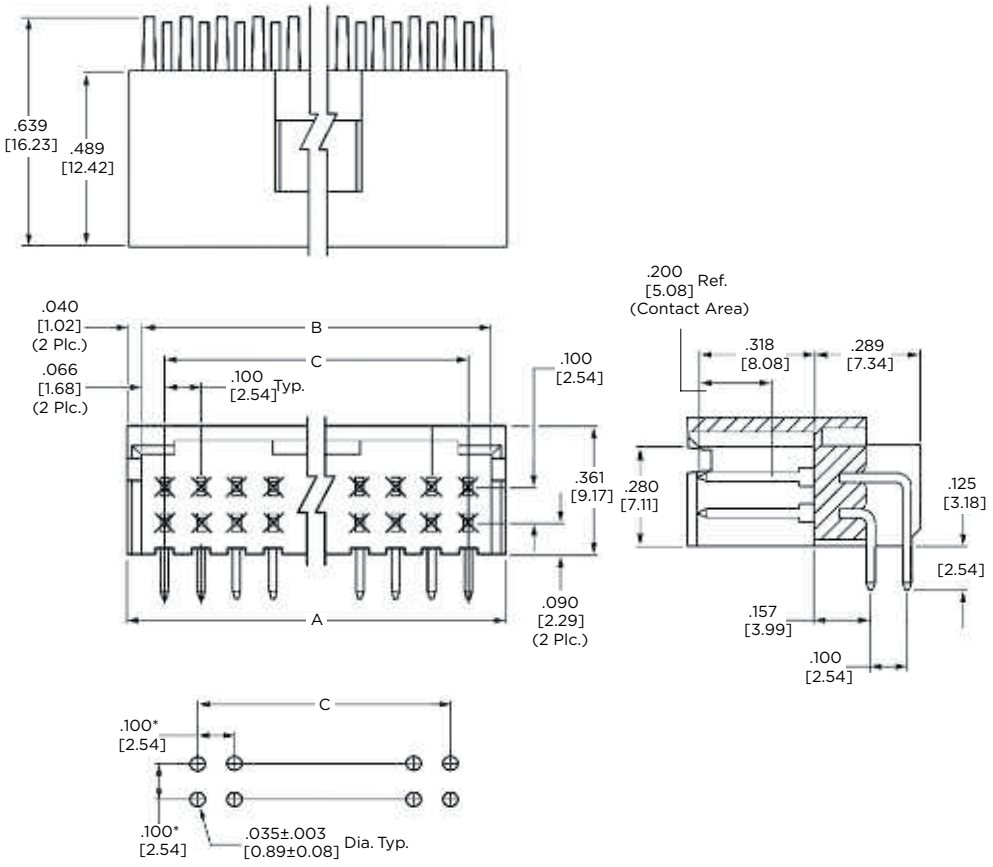
Related Product Data

Mateable Connectors
AMPMODU MTE Receptacles - Page 189

AMPMODU Wire-Applied Receptacles - Page 76

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

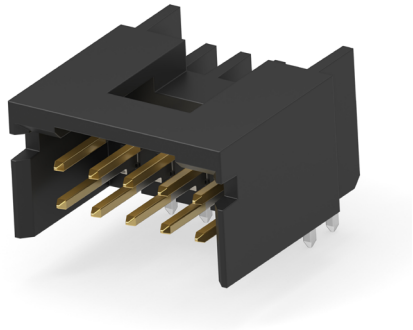
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Post Plating/Part Numbers
	A	B	C	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	5-103164-1
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	5-103164-2
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	5-103164-3
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	5-103164-4
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	5-103164-5
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	5-103164-6
18	1.012 [25.70]	.932 [23.67]	.800 [20.32]	5-103164-7
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	-
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	-
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	6-103164-1
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	-
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	6-103164-5

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH PIN PROTECTION ON 3 SIDES)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

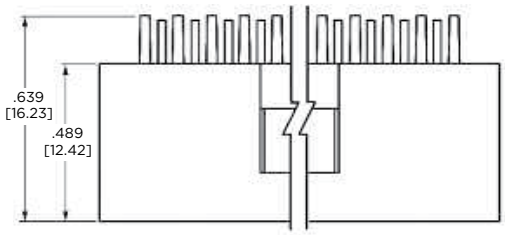
Plating C - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

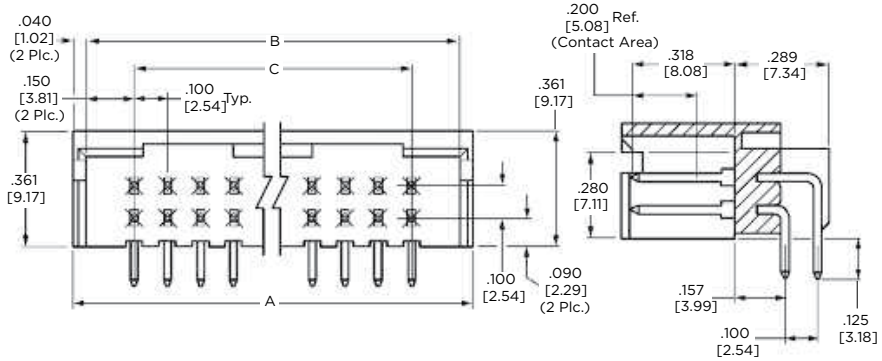
Related Product Data

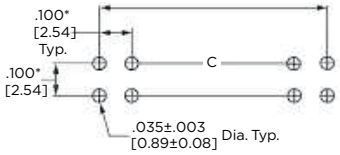
Mateable Connectors
AMPMODU Wire-Applied Receptacles - Page 76

Technical Documents - Page 243
See mating connector for applicable product and application specifications.

Dimensions: in(mm)







Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH PLASTIC HOLDDOWNS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

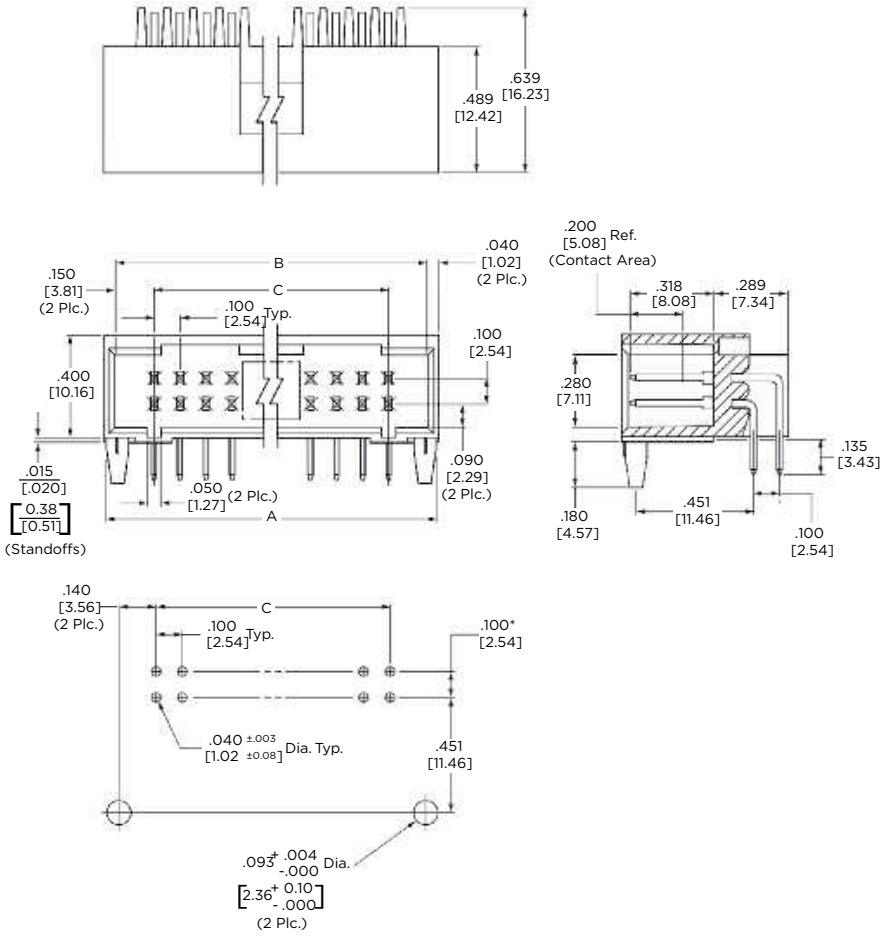
Posts - Phosphor bronze, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Mateable Connectors
AMPMODU MTE Receptacles - Page 189
AMPMODU Wire-Applied Receptacles - Page 76

Technical Documents - Page 243
See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

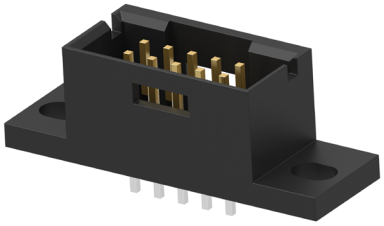
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers
	A	B	C	
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	5-104319-7
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	5-104319-8
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	5-104319-1
20	1.280 [32.51]	1.200 [30.48]	.900 [20.86]	5-104319-2
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	5-104319-3

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH DETENT WINDOWS AND MOUNTING EARS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors
AMPMODU MTE Receptacles - Page 189

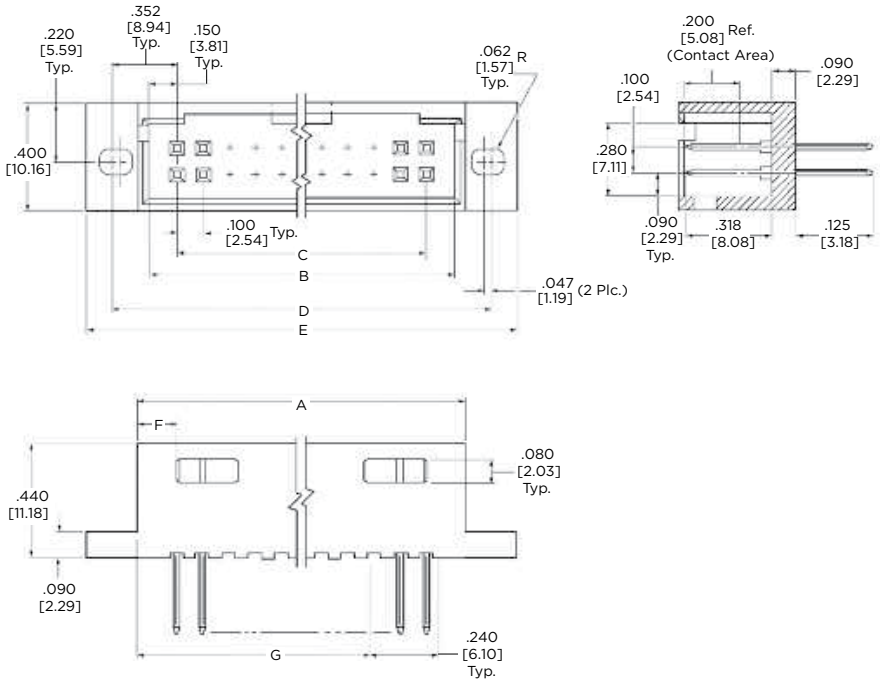
AMPMODU Wire-Applied Receptacles - Page 76

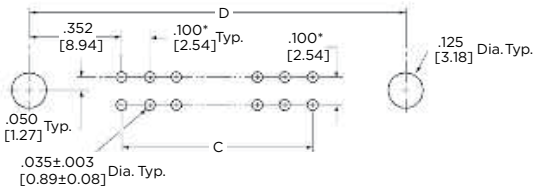
Accessories

Barrier Insert - page 126

Technical Documents - Page 243
See mating connector for applicable product and **application specification**s.

Dimensions: in(mm)





Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

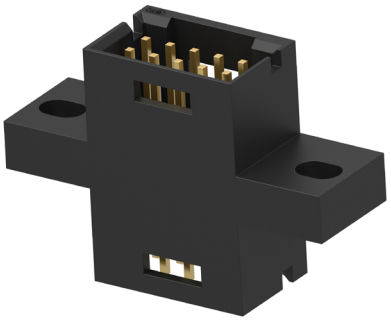
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)							Part Numbers
	A	B	C	D	E	F	G	
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	1.104 [28.04]	1.304 [33.12]	.290 [7.37]	-	87474-1
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	1.604 [40.74]	1.804 [45.82]	.190 [4.83]	.890 [22.61]	87474-2

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors
AMPMODU Board Mount Receptacles - Page 166

AMPMODU MTE Receptacles - Page 189

AMPMODU Wire-Applied Receptacles - Page 76

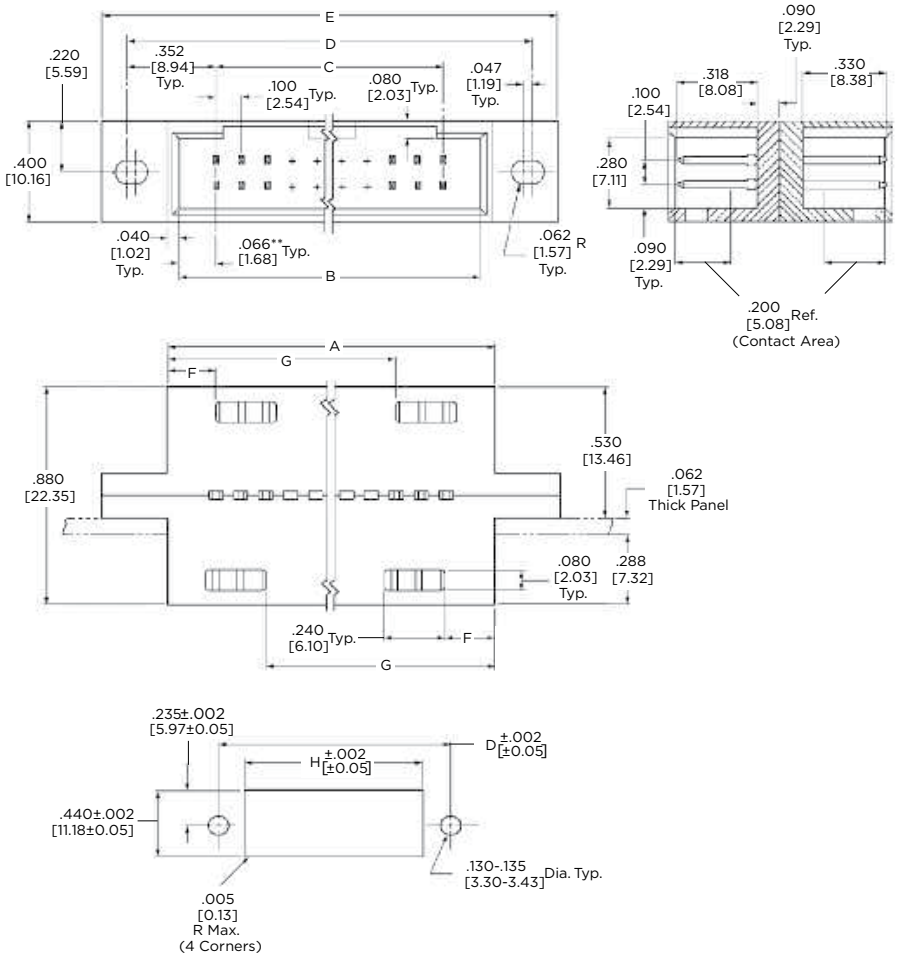
AMPMODU MT Receptacles - Page 189

Accessories

Barrier Insert - page 126

Technical Documents - Page 243
See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended Panel Cutout

**Both mating faces have same end dimension.

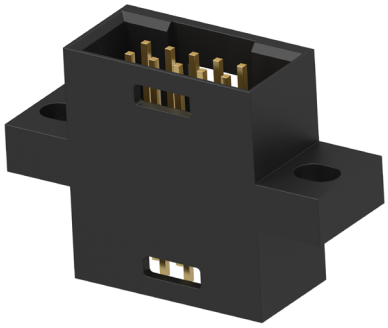
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)								Part Numbers
	A	B	C	D	E	F	G	H	
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	1.104 [28.04]	1.304 [33.12]	.206 [5.23]	-	.632 [16.05]	87608-1
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	1.204 [30.58]	1.404 [35.66]	.206 [5.23]	-	.732 [18.59]	87608-2
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	1.604 [40.74]	1.804 [45.82]	.106 [2.69]	.806 [20.47]	1.132 [28.75]	87608-6
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	2.304 [58.52]	2.504 [63.60]	.106 [2.69]	1.506 [38.25]	1.832 [46.53]	1-87608-3
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	2.604 [66.14]	2.804 [71.22]	.106 [2.69]	1.806 [45.87]	2.132 [54.15]	1-87608-6
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	3.104 [78.84]	3.304 [83.92]	.106 [2.69]	2.306 [58.57]	2.632 [66.85]	2-87608-1

Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors
AMPMODU MTE Receptacles - Page 189

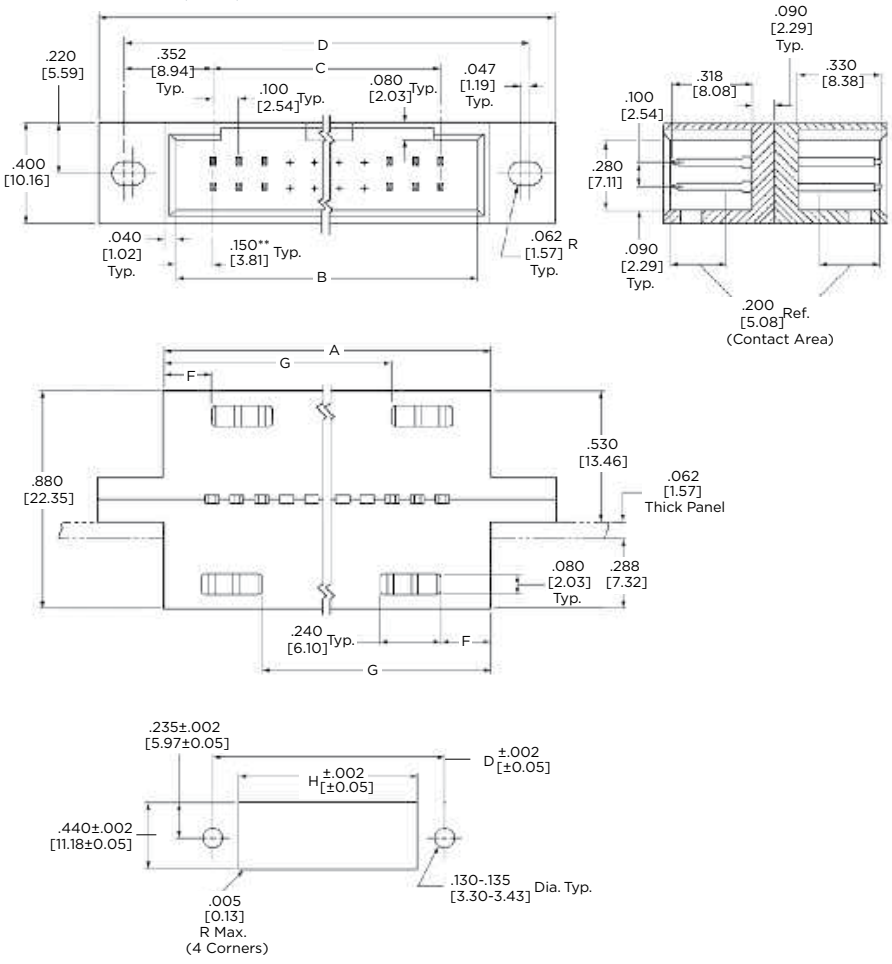
AMPMODU Wire-Applied Receptacles - Page 76

Accessories

Barrier Insert - page 126

Technical Documents - Page 243
See mating connector for applicable product and application specifications.

Dimensions: in(mm)



Recommended Panel Cutout

**Both mating faces have same end dimension.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)								Part Numbers
	A	B	C	D	E	F	G	H	
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	1.104 [28.04]	1.304 [33.12]	.290 [7.37]	-	.800 [20.32]	87605-1
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	1.904 [48.36]	2.104 [53.44]	.190 [4.83]	1.190 [30.23]	1.600 [40.64]	87605-9
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	3.104 [78.84]	3.304 [83.92]	.190 [4.83]	2.390 [60.71]	2.800 [71.12]	2-87605-1

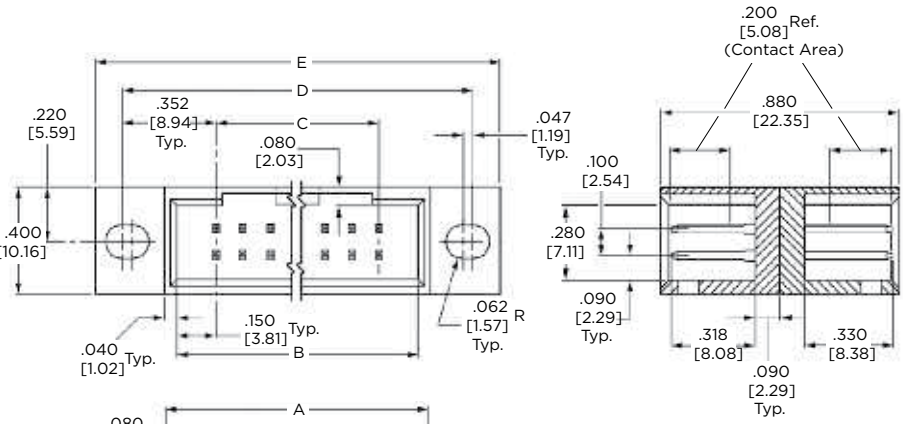
Note: All Part Numbers are RoHS compliant.

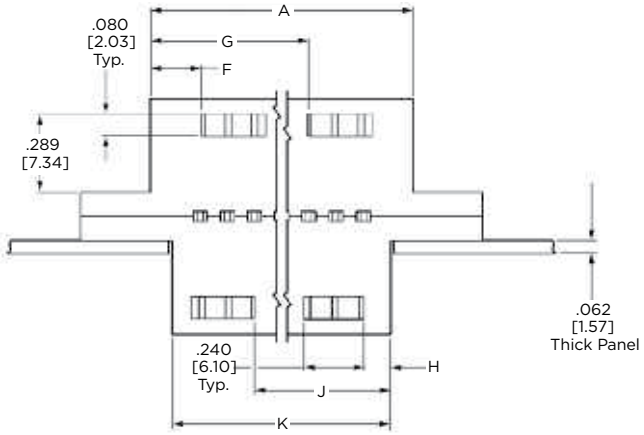
STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .066/.150 [1.68/3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

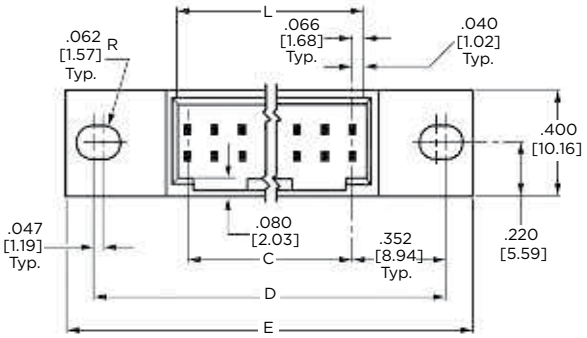
.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)

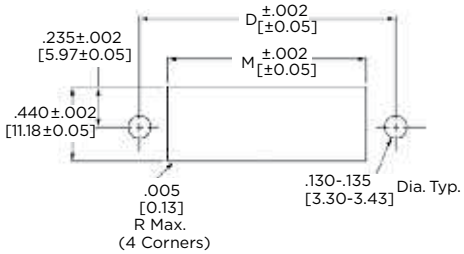


Dimensions: in(mm)









Recommended Panel Cutout

MATERIAL AND FINISH

Housing - Black thermoplastic, 94V-0 rated

Posts - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors with .066 [1.68] End Dimension AMPMODU Board Mount Receptacles - Page 166

AMPMODU MTE Receptacles - Page 189

AMPMODU Wire-Applied Receptacles - Page 76

Mateable Connectors with .150 [3.81] End Dimension - AMPMODU MTE Receptacles - Page 189 (used with coupling shroud)

Accessories

Barrier Insert - page 126

Technical Documents - Page 243, See mating connector for applicable product and application specifications.

PRODUCT INFORMATION

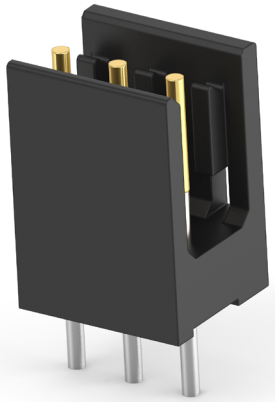
No. of Pos.	Dimensions: in(mm)						Part Number
	A	B	C	D	E	F	
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	1.804 [45.82]	2.004 [50.90]	.190 [4.83]	87496-9

No. of Pos.	Dimensions: in(mm)						Part Number
	G	H	J	K	L	M	
24	1.090 [27.69]	.106 [2.69]	1.006 [25.55]	1.312 [33.32]	1.232 [31.29]	1.332 [33.83]	87496-9

Note: All Part Numbers are RoHS compliant.

MOD II HIGH TEMPERATURE SHROUDED HEADERS

STRAIGHT, SINGLE ROW 0.63mm ROUND POST



Specification:

Housing- Polyester for high operating temp. (PCT), black, glass fibre filled

Posts- Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

Plating A- Contact Zone (Area F) 0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

-Soldering Zone 2 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel

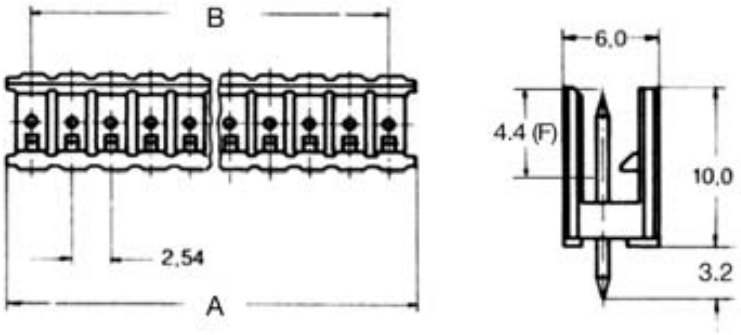
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating A
3	7.62	5.08	826467-3
4	10.16	7.62	826467-4
5	12.70	10.16	826467-5
6	15.24	12.70	826467-6
7	17.78	15.24	826467-7
8	20.32	17.78	826467-8
9	22.86	20.32	826467-9
10	25.40	22.86	1-826467-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II HIGH TEMPERATURE SHROUDED HEADERS

STRAIGHT, DOUBLE ROW 0.63mm ROUND POST

Specification:

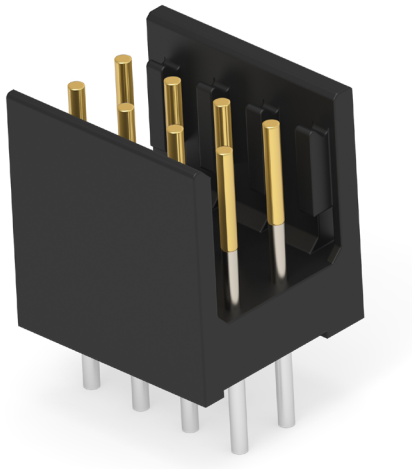
Housing- Polyester for high operating temp. (PCT), black, glass fibre filled

Posts- Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

Plating A- Contact Zone (Area F) 0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

-Soldering Zone 2 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



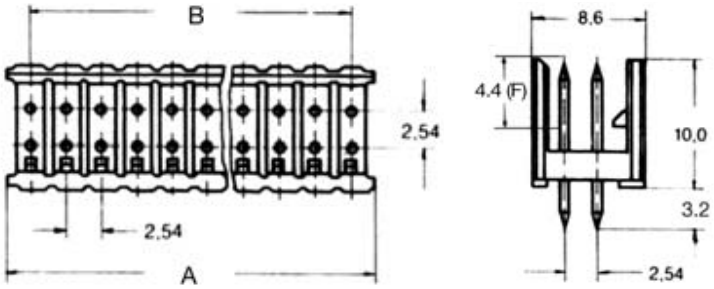
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating A
2x3	7.62	5.08	826469-3
2x4	10.16	7.62	826469-4
2x5	12.70	10.16	826469-5
2x6	15.24	12.70	826469-6
2x7	17.78	15.24	826469-7
2x8	20.32	17.78	826469-8
2x9	22.86	20.32	826469-9
2x10	25.40	22.86	1-826469-0
2x50	127.00	124.46	5-826469-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II HIGH TEMPERATURE SHROUDED HEADERS

RIGHT ANGLE, SINGLE ROW 0.63mm ROUND POST

Specification:

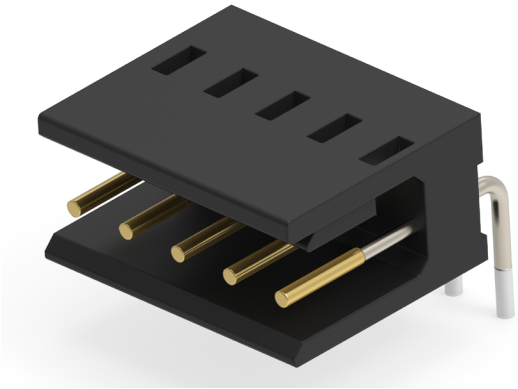
Housing- Polyester for high operating temp. (PCT), black, glass fibre filled

Posts- Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

Plating A- Contact Zone (Area F) 0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

-Soldering Zone 2 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel



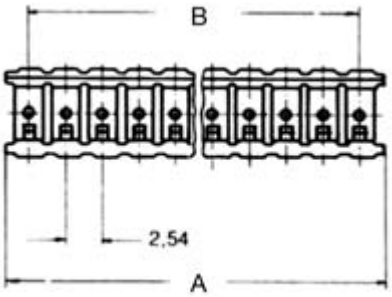
Mating Connectors:

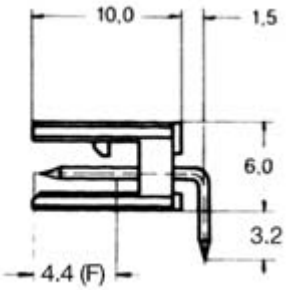
MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-18012

Dimensions: in(mm)





PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating A
3	7.62	5.08	826468-3
4	10.16	7.62	826468-4
5	12.70	10.16	826468-5
6	15.24	12.70	826468-6
8	20.32	17.78	826468-8
10	25.40	22.86	1-826468-0
50	127.00	124.46	5-826468-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II HIGH TEMPERATURE SHROUDED HEADERS

RIGHT ANGLE, DOUBLE ROW 0.63mm ROUND POST

Specification:

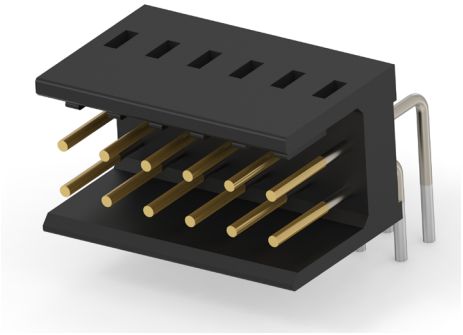
Housing- Polyester for high operating temp. (PCT), black, glass fibre filled

Posts- Phosphor bronze, (Plating A) or brass (Plating B) plated as follows:

Plating A- Contact Zone (Area F) 0.1 µm gold over 0.7 µm palladium alloy, over 1.3 µm nickel

-Soldering Zone 2 µm min. tin over 1.3 µm nickel

Plating B- 2 µm min. tin over 1.3 µm nickel

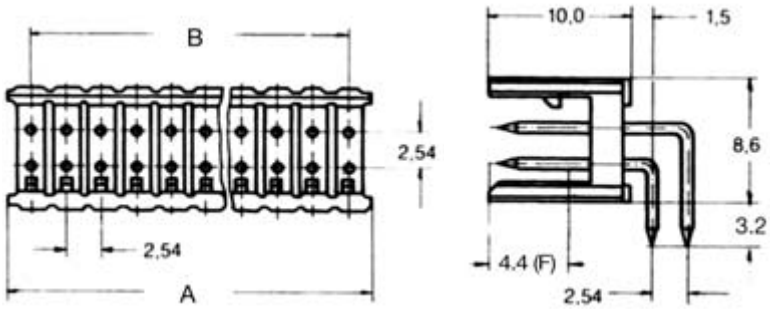


Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-18012

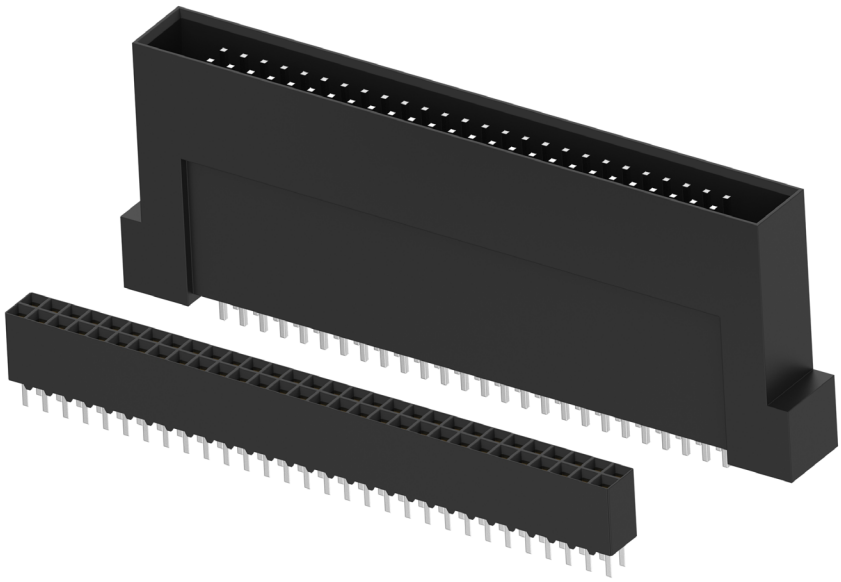


PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating A
2x3	7.62	5.08	826470-3
2x4	10.16	7.62	826470-4
2x5	12.70	10.16	826470-5
2x6	15.24	12.70	826470-6
2x8	20.32	17.78	826470-8
2x9	22.86	20.32	826470-9
2x10	25.40	22.86	1-826470-0
2x50	127.00	124.46	5-826470-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

AMPMODU STACKING CONNECTORS-SHROUDED, .025 X .025 [0.64 X 0.64] POSTS



INTRODUCTION

AMPMODU stacking connectors are a two-piece interconnection system designed for parallel stacking printed circuit boards, without the use of mother boards.

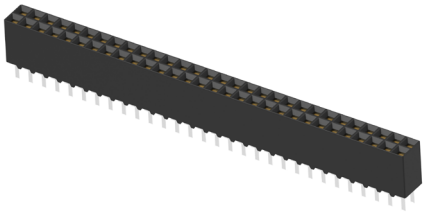
Vertical mount headers and receptacle assemblies feature duplex plated posts and receptacle contacts on a double-row, .100 x .100 [2.54 x 2.54] grid. The .025 [0.64] sq. header posts are more protected, and the top-entry receptacle contacts utilize the proven AMPMODU receptacle contact design; dual cantilever beams with builtin overstress protection.Headers are available in two heights: .785 [19.94] and 1.200 [30.48]. This allows the customer to use the height of the header to keep wire-to-board connections up and away from other board components, particularly if the components are densely packaged around the header.

PRODUCT FACTS

- Parallel PC board stacking without use of mother boards
- Provides space between boards for interference-free routing of wire-to-board connections
- Two header heights available: .785 [19.94] and 1.200 [30.48]
- Vertical mount headers are fully shrouded
- Receptacle contacts have dual cantilever beams with built-in overstress protection
- .025 [0.64] sq. posts and receptacle contacts on double-row, .100 x .100 [2.54 x 2.54] centers
- Header posts and receptacle contacts are phosphor bronze, duplex plated
- Housings are made of flame retardant, glass-filled thermoplastic

RECEPTACLE ASSEMBLIES, DOUBLE-ROW BOARD MOUNTED

VERTICAL MOUNT, TOP ENTRY, HIGH PROFILE, SELECTIVELY LOADED (WITH STANDOFFS)

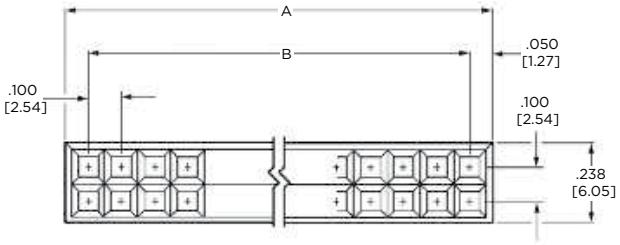


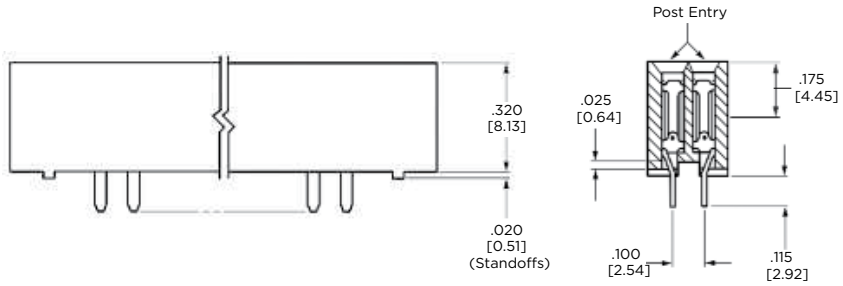
Material and Finish

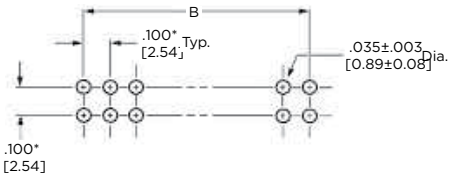
Housing - Glass-filled thermoplastic, black, 94V-0 rated

Contacts - Phosphor bronze, plated .000010 [0.000254] min. gold on mating area, .000150-.000300 [0.00381- 0.00762] matte tin on solder area, with entire contact underplated .000050- .000100 [0.00127-0.00254] nickel

Dimensions: in(mm)







Recommended PC Board Hole Layout
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Receptacle Assembly Part Number
	A	B	
60* (52 Active)	3.000 [76.2]	2.900 [73.66]	5-102766-4

*In addition to the active positions, each receptacle has four cavities on each end that are not loaded with contacts. These empty cavities aid in aligning the receptacle with header posts during mating.

Notes:
1. Part Numbers and date code stamped on Housing where size permits.

2. These receptacle assemblies mate with headers of the same size as the active positions listed above. Refer to pages 134 and 136.

Note: All Part Numbers are RoHS compliant.

.025 [0.64] SQUARE POSTS

BANDOLIER POSTS (UNINSULATED)

Material and Finish

Bandolier - Brass

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100- .000200 [0.00254- 0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100- .000200 [0.00254- 0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable Connectors
Refer to the Mating Post Selection Guide - Page 10

Accessories

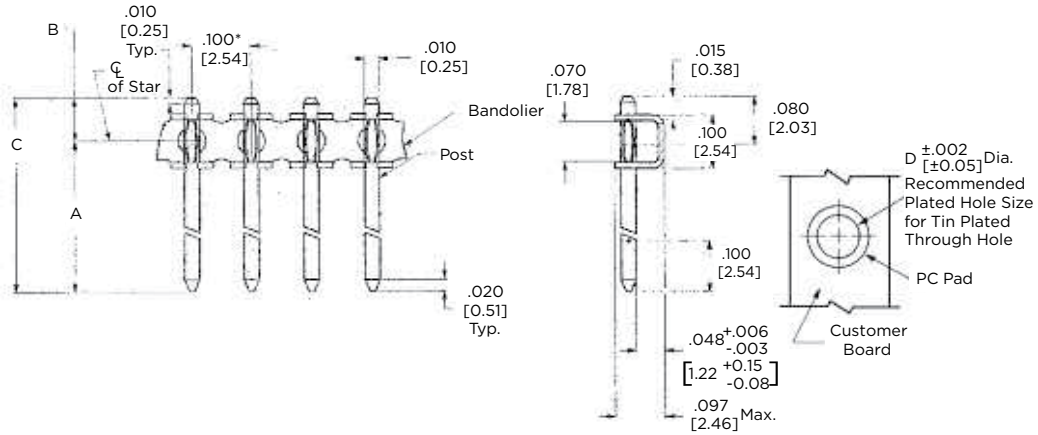
End Shrouds - page 125

Technical Documents - Page 243

See mating connector for applicable product and application specifications.



Dimensions: in(mm)



PRODUCT INFORMATION

Dimensions: in(mm)				Post Plating/Part Numbers		
A	B	C	D	Plating A	Plating B	Plating C
.353 [8.97]	.071 [1.80]	.424 [10.77]	.034 [0.86]	5-103577-1	-	-
.318 [8.08]	.071 [1.80]	.389 [9.88]	.034 [0.86]	5-103577-3	6-103577-5	-
.270 [6.86]	.071 [1.80]	.341 [8.66]	.034 [0.86]	-	6-103577-7	6-103577-1

Note:
1. Posts can be applied using Hand Tool 91419-1.
2. Approximate posts per reel-30,000.
3. The Bandolier Insertion head can be used on the Comp-U-Sertor II machine or the Modular Insertion System Bench machine (see page 153).
4. For PCB finishes other than tin, contact TE.

*Point of measurement for plating thickness.

.025 [0.64] SQUARE POSTS

STRIP FORM POSTS (UNINSULATED)



Material and Finish

Posts — Phosphor bronze, plated as follows:

Plating A — Duplex plated .000030

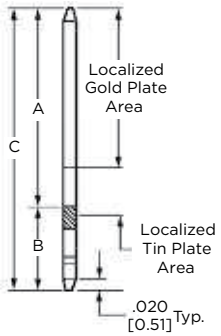
[0.00076] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

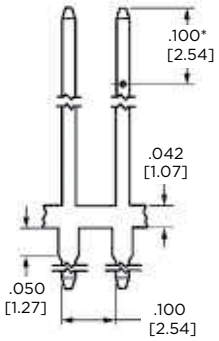
Plating B — Duplex plated .000015 [0.00038] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

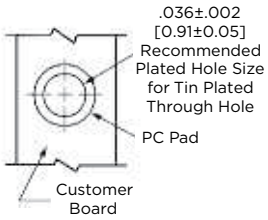
Plating C — .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Plating D — .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel on entire post

Dimensions: in(mm)





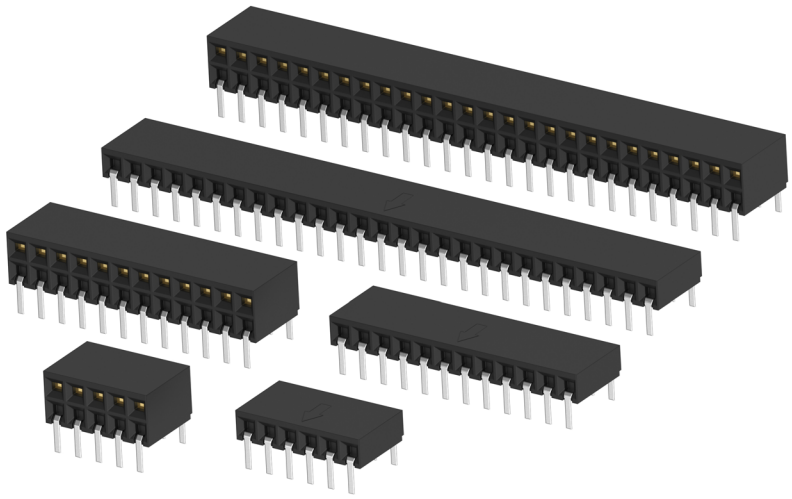


PRODUCT INFORMATION

Dimensions: in(mm)			Post Plating/Part Numbers	
A	B	C	Plating C	Plating D
.278 [7.06]	.165 [4.19]	.443 [11.25]	1-87022-1	1-87022-0
.318 [8.08]	.165 [4.19]	.483 [14.27]	4-87022-1	-

Note:
1. Approximate Posts per reel - 20,000.
2. Other post lengths are available, consult TE.
3. The Post/Tab Insertion Head can be used on the Comp-U-Sertor II machine or the Modular Insertion System Bench machine (see page 144).
4. For PCB finishes other than tin, contact TE.

RECEPTACLE ASSEMBLIES, HORIZONTAL MOUNT



Horizontal Mount receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry, generally for applications using the mother/daughter board arrangement. This product line is offered in both single and double row configurations. The .100 [2.54] centerline assemblies are available in a wide range of position sizes.

They have end stacking capability which gives the added advantage of flexibility.

The **Housing**s are made of high temperature, surface mount compatible thermoplastic Material that is 94V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design with a fully enclosed, one-piece "box" to protect the contact area. In addition, the receptacle contact has dual cantilever beams with a built-in anti-overstress feature. Standard solder tails accommodate a board thickness of .062 [1.57].

PRODUCT FACTS

- All receptacle assemblies are end stackable
- Contact design employs dual cantilever beams with built-in anti-overstress feature
- Closed entry Housings help prevent post stubbing
- Wide range of sizes available
- Other versions available upon request
- Housings made of high temperature, surface mount compatible thermoplastic Material, 94V-O rated
- Duplex gold and matte tin plated contacts have full nickel underplate
- Housings feature PC board standoffs
- Solder tails accommodate a PC board thickness of .062 [1.57]
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

PERFORMANCE CHARACTERISTICS

Mechanical Characteristics

Mating Force - 6.0 oz. [1.67N] per contact (max.)

Unmating Force - .75 oz. [0.21N] per contact (min.) during third mating cycle

Durability - 200 cycles

Environmental Characteristics

Operating Temperature - -65°C to +125°C

Electrical Characteristics

Current Rating - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

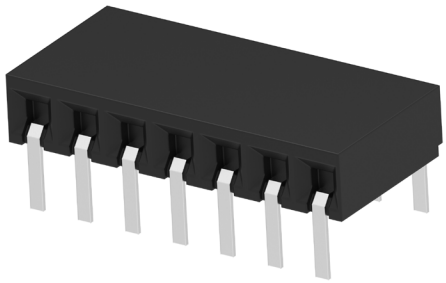
Contact Resistance - 12 milliohms (max.)

Insulation Resistance - 5000 megohms (min.) between adjacent contacts

Dielectric Withstanding Voltage (at sea level) - 750 V rms

MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts **-** Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers Refer to the Mating Post Selection Guide **-** Page 10

Performance Characteristics - page 74

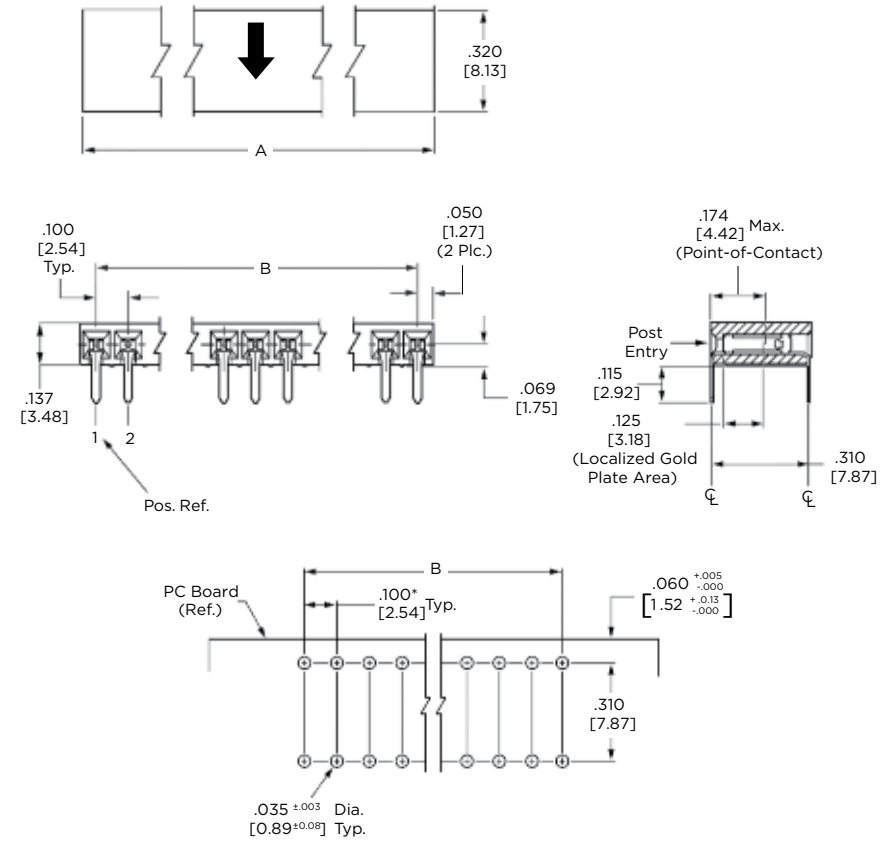
Technical Documents - Page 243

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .062 [1.57] thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

KEYING PLUG



Part Number 86286-1
(Plugs into receptacle contact)
Material **-** Natural color nylon

PRODUCT INFORMATION

No. of Pos.			Contact Plating/Part Numbers
	A	B	Plating A
3	.300 [7.62]	.200 [5.08]	5535676-2
4	.400 [10.16]	.300 [7.62]	5535676-3
5	.500 [12.70]	.400 [10.16]	5535676-4
6	.600 [15.24]	.500 [12.70]	5535676-5
8	.800 [20.32]	.700 [17.78]	5535676-7
10	1.000 [25.40]	.900 [22.86]	5535676-9
14	1.400 [35.56]	1.300 [33.02]	1-5535676-3

Note 1: TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

Note: All Part Numbers are RoHS compliant.

HV-190 RECEPTACLES, HORIZONTAL PCB MOUNT

SINGLE ROW, SIDE ENTRY - END STACKABLE

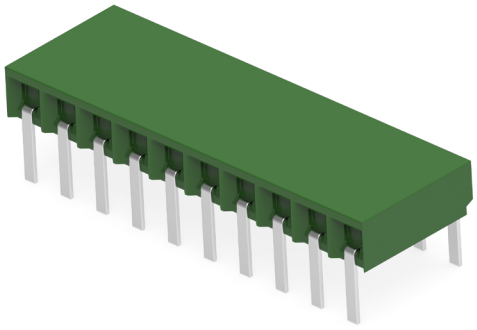
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin



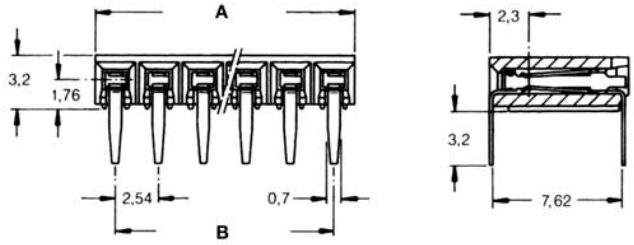
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19072

Dimensions: in(mm)



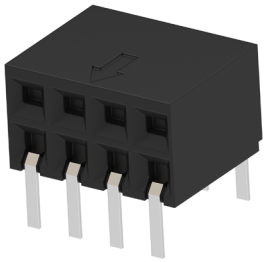
PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	216602-2	216601-2
3	7.62	5.08	216602-3	-
4	10.16	7.62	216602-4	216601-4
5	12.70	10.16	216602-5	-
6	15.24	12.70	216602-6	216601-6
7	17.78	15.24	216602-7	-
8	20.32	17.78	216602-8	-
10	25.40	22.86	1-216602-0	-
20	50.80	48.26	2-216602-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINES

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts **-** Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide **-** Page 10

Performance Characteristics - Page 89

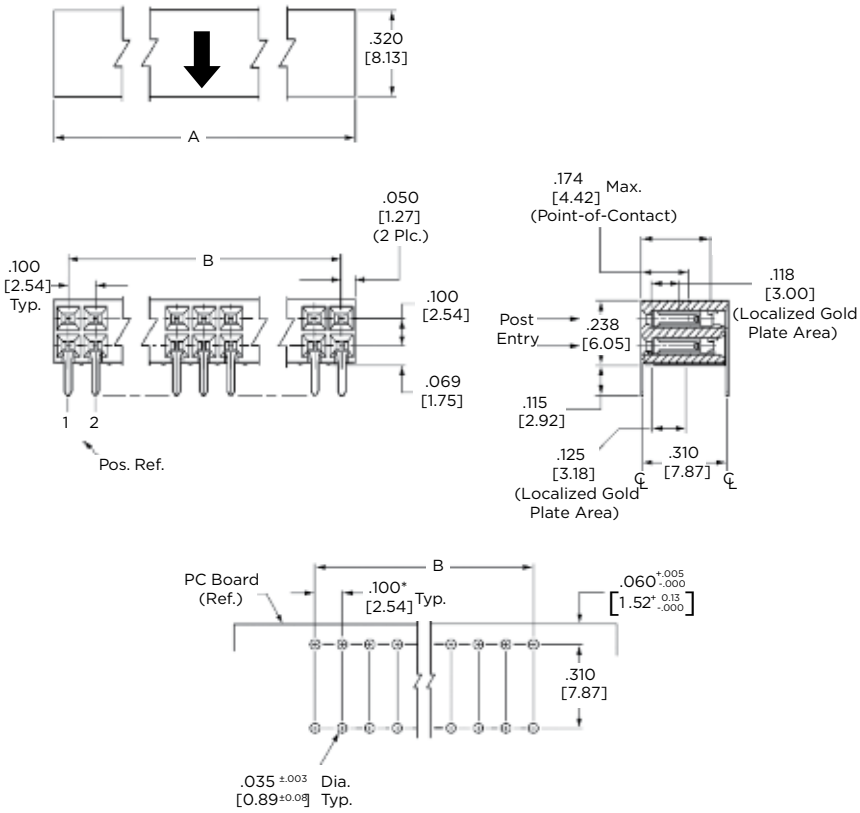
Technical Documents - Page 243

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .062 [1.57] thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers	
	A	B	Plating A	Plating B
4	.200 [5.08]	.100 [2.54]	6-5535512-1	-
6	.300 [7.62]	.200 [5.08]	6-5535512-2	-
8	.400 [10.16]	.300 [7.62]	6-5535512-3	5146140-3
10	.500 [12.70]	.400 [10.16]	6-5535512-4	5146140-4
12	.600 [15.24]	.500 [12.70]	5535512-1	5146140-5
14	.700 [17.78]	.600 [15.24]	1-5535512-7	-
16	.800 [20.32]	.700 [17.78]	1-5535512-8	-
18	.900 [22.86]	.800 [20.32]	1-5535512-6	5146140-8
20	1.000 [25.40]	.900 [22.86]	5535512-2	5146140-9
24	1.200 [30.48]	1.100 [27.94]	5535512-3	1-5146140-1
26	1.300 [33.02]	1.200 [30.48]	2-5535512-0	1-5146140-2
30	1.500 [38.10]	1.400 [35.56]	2-5535512-2	1-5146140-4
32	1.600 [40.64]	1.500 [38.10]	2-5535512-3	-

Note 1:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. .256 [6.50] minimum positive pin stop to prevent shorting between row.

Note: All Part Numbers are RoHS compliant.

HV-190 RECEPTACLES, HORIZONTAL PCB MOUNT

SINGLE ROW, SIDE ENTRY - END STACKABLE

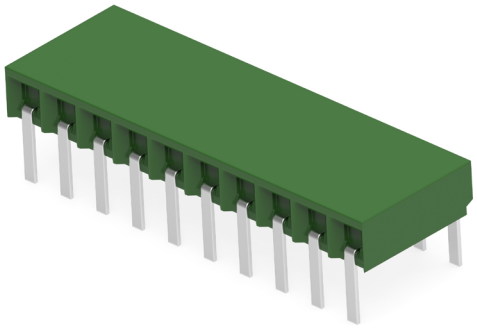
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin



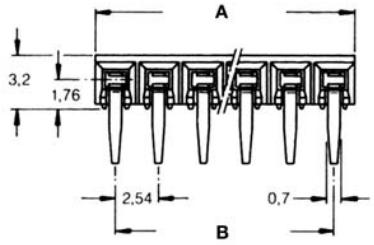
Mating Connectors:

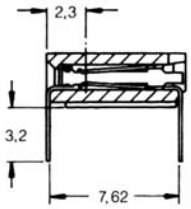
MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19072

Dimensions: in(mm)



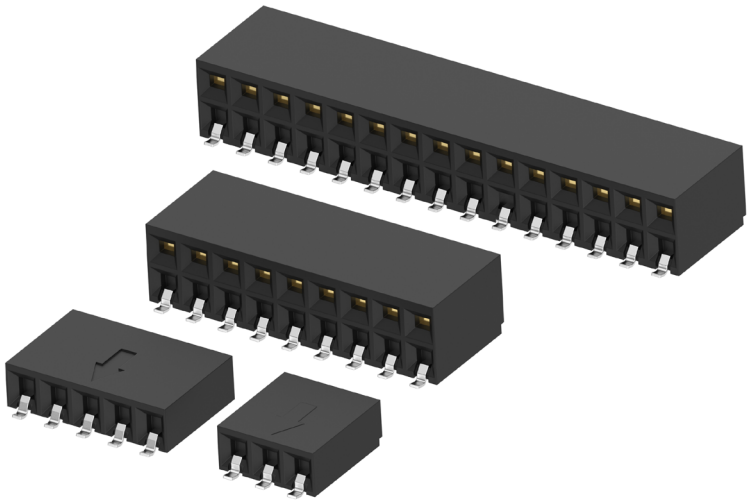


PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Plating A	Plating B
2	5.08	2.54	216602-2	216601-2
3	7.62	5.08	216602-3	-
4	10.16	7.62	216602-4	216601-4
5	12.70	10.16	216602-5	-
6	15.24	12.70	216602-6	216601-6
7	17.78	15.24	216602-7	-
8	20.32	17.78	216602-8	-
10	25.40	22.86	1-216602-0	-
20	50.80	48.26	2-216602-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II SURFACE MOUNT HORIZONTAL RECEPTACLE ASSEMBLIES, .100 X .100 [2.54 X 2.54] CENTERLINE



Horizontal surface mount receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry as process technologies evolve from wave soldering to surface mount processing.

This broad product line is offered in both single and double row configurations. The .100 [2.54] centerline assemblies are available in 2-40 (single row) positions and 4-80 (double row) positions. Housings are end stackable, which gives the advantage of added flexibility.

The Housings are made of high temperature Material that is 94V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design, with a fully enclosed one-piece "box" to protect the contact beams with built-in anti-overstress feature.

PRODUCT FACTS

- Surface mount leads
- All receptacle assemblies are end stackable
- Contact design employs dual cantilever beams with built-in anti-overstress feature
- Closed entry Housings help prevent post stubbing
- Housings made of high temperature, surface mount compatible thermoplastic Material, 94 V-0 rated
- Duplex gold and matte tin plated contacts have full nickel underplate
- Housings feature PC board standoffs
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

PERFORMANCE CHARACTERISTICS

Mechanical Characteristics

Mating Force - 6.0 oz. [1.67N] per contact (max.)

Unmating Force - .75 oz. [0.21N] per contact (min.) during third mating cycle

Durability - 200 cycles

Environmental Characteristics

Operating Temperature - -65°C to +125°C

Electrical Characteristics

Current Rating - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

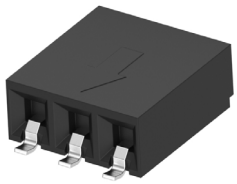
Contact Resistance - 12 milliohms (max.)

Insulation Resistance - 5000 megohms (min.) between adjacent contacts

Dielectric Withstanding Voltage (at sea level) - 750 V rms

MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT .100 [2.54] CENTERLINE

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts **-** Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide **-** Page 10

Performance Characteristics - Page 89

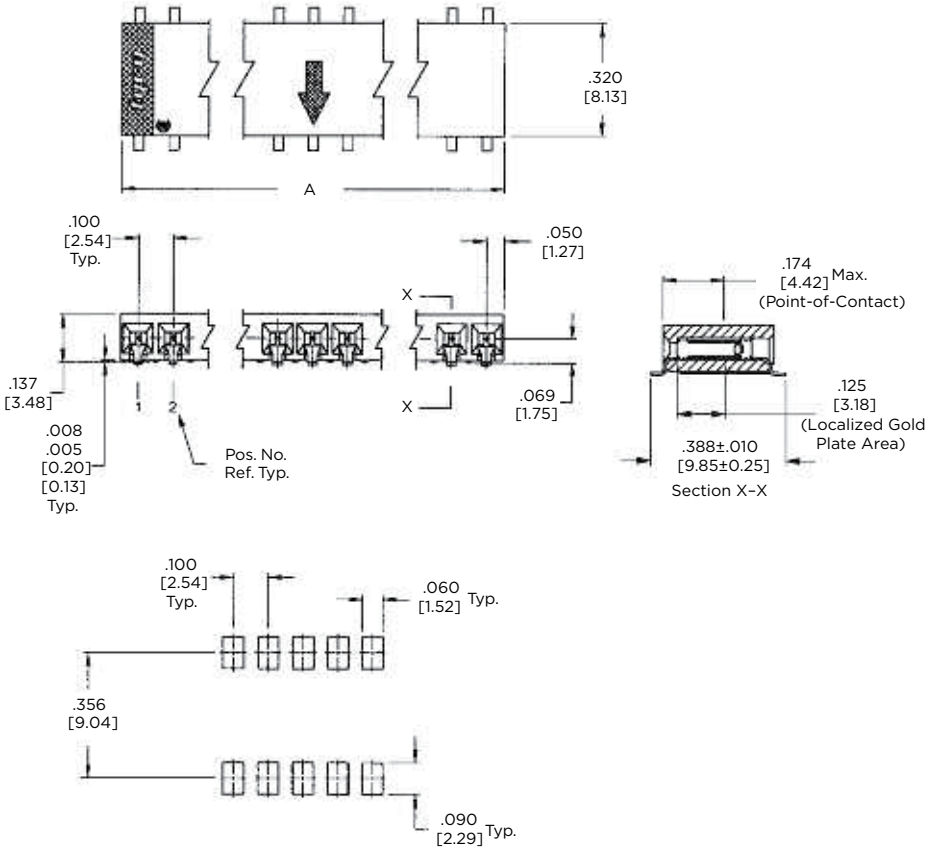
Technical Documents - Page 243

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended Etched Circuit Layout (for .040 [1.02] min. thick PC Board; .008 [0.20] thick stencil)

KEYING PLUG



Part Number 86286-1

(Plugs into receptacle contact)

Material **-** Natural color nylon

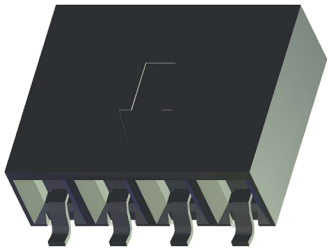
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)	Contact Plating/Part Numbers	
	A	Plating A	Plating C
3	.300 [7.62]	5147721-2	-
4	.400 [10.16]	-	5147733-3
5	.500 [12.70]	-	5147733-4

Note: All Part Numbers are RoHS compliant.

MOD II RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINES

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 89

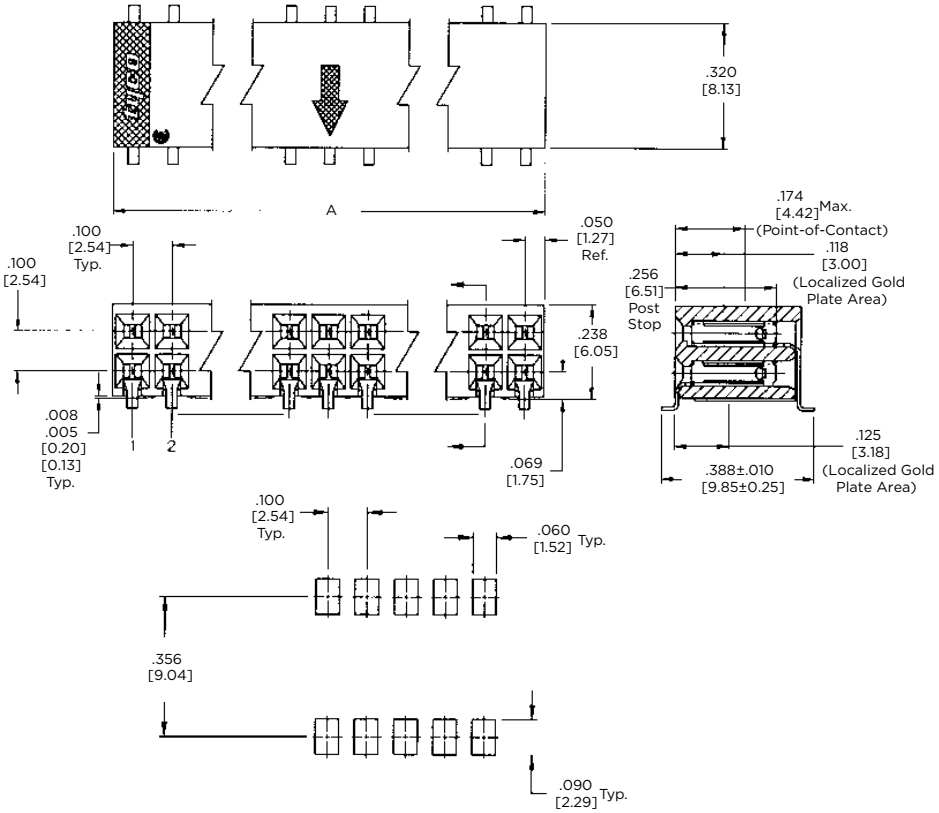
Technical Documents - Page 243

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended Etched Circuit Layout
(for .040 [1.02] min. thick PC Board;
.008 [0.20] thick stencil)

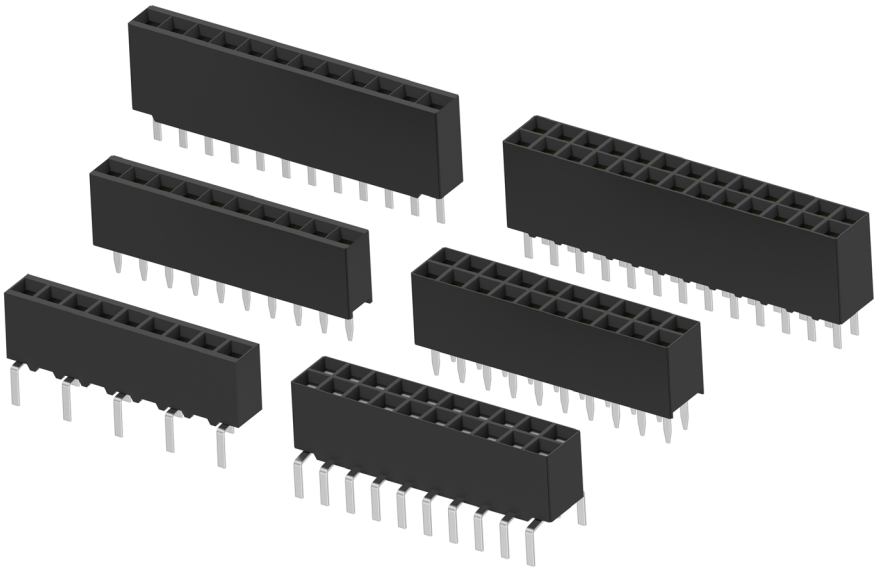
Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)	Contact Plating/Part Numbers	
	A	Plating A	Plating C
4	.200 [5.08]	-	5147733-3
8	.400 [10.16]	5147722-3	-
14	.700 [17.78]	5147722-6	-
18	.900 [22.86]	5147722-8	-

Note: All Part Numbers are RoHS compliant.

RECEPTACLE ASSEMBLIES, VERTICAL MOUNT



Vertical receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry. This broad product line offers a wide variety of assembly styles and features. They are available in dual entry style, in both single and double row configurations. The .100 [2.54] centerline assemblies are available in 3-40 (single row) positions and 2-80 (double row) positions.

Standard and low profile Housings which are end stackable also enhance the product line giving the advantage of added flexibility. The Housings are made of flame retardant Material that is 94 V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design, with a fully enclosed one-piece "box" to protect the contact beams. These assemblies are offered in .265 [6.73] (Mod IV) and .340[8.64] (Mod II) high profiles. Standard solder tails accommodate board thickness of .062 [1.57]. Product styles include single and dual tine variations. Outrigger tine styles are also available for bottom entry parallel board stacking applications.

PRODUCT FACTS

- Dual-cantilever beam contact with box design
- Single-row assemblies have .100 [2.54] centerline contact spacing; double-row assemblies have .100 x .100 [2.54 x 2.54] centerline contact spacing
- 3 through 40 positions in single-row assemblies; 2 through 80 positions in double-row assemblies
- Mod II Standard .340 [8.64] and Mod IV low .265 [6.73] profiles
- Mod II and Mod IV profiles available in dual entry
- Duplex gold and matte tin plated contacts have full nickel underplate
- Thermoplastic Housings, 94V-0 rated
- Standoffs for easy flux cleaning
- All through hole assemblies are end stackable
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

Performance Characteristics

Mechanical Characteristics

Mating Force - 9.0 oz. [2.5N] per contact (max.)

Unmating Force - .1.5 oz. [0.42N] per contact (min.)

Durability - 200 cycles

Environmental Characteristics

Operating Temperature - -65°C to +125°C

Electrical Characteristics

Current Rating - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

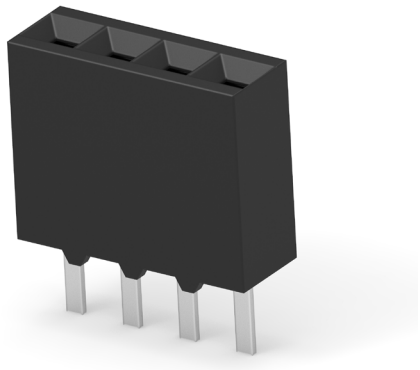
Contact Resistance - 12 milliohms (max.)

Insulation Resistance - 5000 megohms (min.) between adjacent contacts

Dielectric Withstanding Voltage (at sea level) - 750 V rms

MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

Closed Top Entry, End Stackable, with Single Tine Contacts



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 89

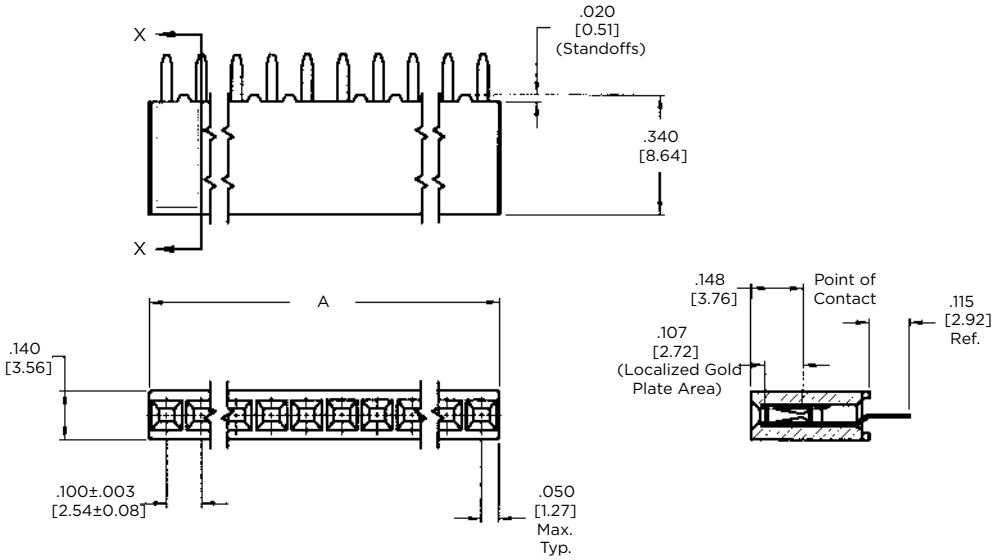
Technical Documents - Page 243

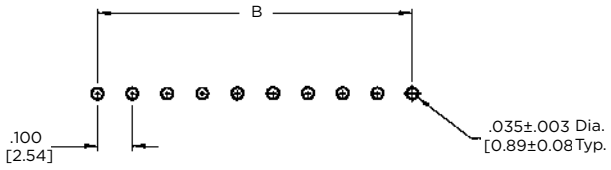
Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)





Recommended PC Board Hole Layout

KEYING PLUG



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-534237-1	5-146386-1	5-146763-5
4	.400 [10.16]	.300 [7.62]	5-534237-2	6-146386-9	5-146763-6
5	.500 [12.70]	.400 [10.16]	5-534237-3	5-146386-2	5-146763-7
6	.600 [15.24]	.500 [12.70]	5-534237-4	5-146386-3	5-146763-8
7	.700 [17.78]	.600 [15.24]	5-534237-5	5-146386-4	5-146763-1
8	.800 [20.32]	.700 [17.78]	5-534237-6	5-146386-5	5-146763-2
9	.900 [22.86]	.800 [20.32]	5-534237-7	5-146386-6	5-146763-9
10	1.000 [25.40]	.900 [22.86]	5-534237-8	5-146386-7	5-146763-3
11	1.100 [27.94]	1.000 [25.40]	5-534237-9	5-146386-8	6-146763-0
12	1.200 [30.48]	1.100 [27.94]	6-534237-0	5-146386-9	6-146763-1
13	1.300 [33.02]	1.200 [30.48]	6-534237-1	6-146386-0	6-146763-2
14	1.400 [35.56]	1.300 [33.02]	6-534237-2	6-146386-1	6-146763-3
15	1.500 [38.10]	1.400 [35.56]	6-534237-3	7-146386-0	6-146763-4
16	1.600 [40.64]	1.500 [38.10]	6-534237-4	7-146386-1	6-146763-5
17	1.700 [43.18]	1.600 [40.64]	6-534237-5	7-146386-2	6-146763-6
18	1.800 [45.72]	1.700 [43.18]	6-534237-6	7-146386-3	6-146763-7
19	1.900 [48.26]	1.800 [45.72]	6-534237-7	7-146386-4	6-146763-8
20	2.000 [50.80]	1.900 [48.26]	6-534237-8	6-146386-2	6-146763-9
30	3.000 [76.20]	2.900 [73.66]	7-534237-8	6-146386-8	7-146763-8
40	4.000 [101.60]	3.900 [99.06]	8-534237-8	8-146386-8	8-146763-8

Notes:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Note: All Part Numbers are RoHS compliant.

HV-100 RECEPTACLES, VERTICAL PCB MOUNT

SINGLE ROW, KINKED LEGS WITH RETENTION FEATURE - TOP ENTRY

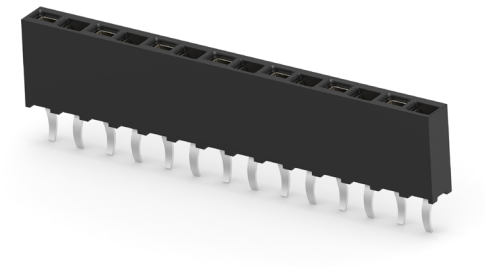
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm min. tin over 1.3 µm nickel

Plating B- 2.5 µm tin



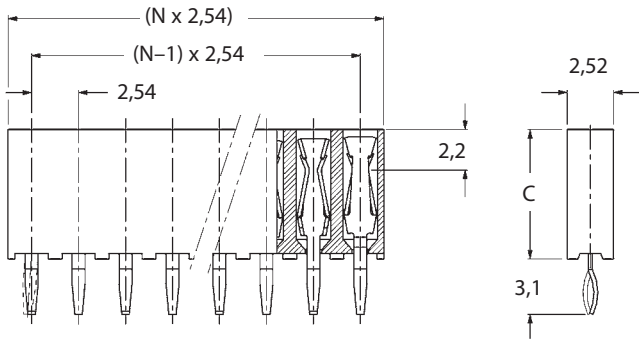
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



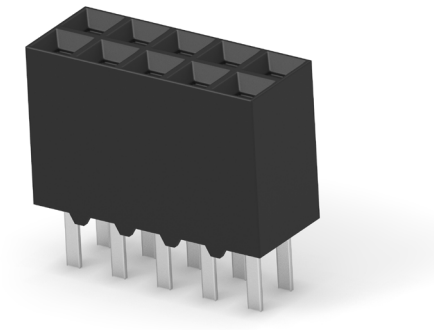
PRODUCT INFORMATION

No. of Positions	C=7.0 Part Numbers		C=8.5 Part Numbers	
	Plating A	Plating B	Plating A	Plating B
2	215297-2	215298-2	215299-2	215300-2
3	215297-3	-	215299-3	215300-3
4	215297-4	215298-4	215299-4	215300-4
5	215297-5	215298-5	215299-5	215300-5
6	215297-6	215298-6	215299-6	215300-6
7	215297-7	215298-7	-	-
8	215297-8	215298-8	215299-8	215300-8
9	215297-9	-	-	-
10	1-215297-0	-	1-215299-0	1-215300-0
20	2-215297-0	2-215298-0	2-215299-0	2-215300-0
50	3-215297-6	3-215298-6	-	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CLOSED TOP ENTRY, SIDE AND END STACKABLE .100 X .100 [2.54 X 2.54] CENTERLINE, .100 [2.54] TINE SPACING



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers - Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 89

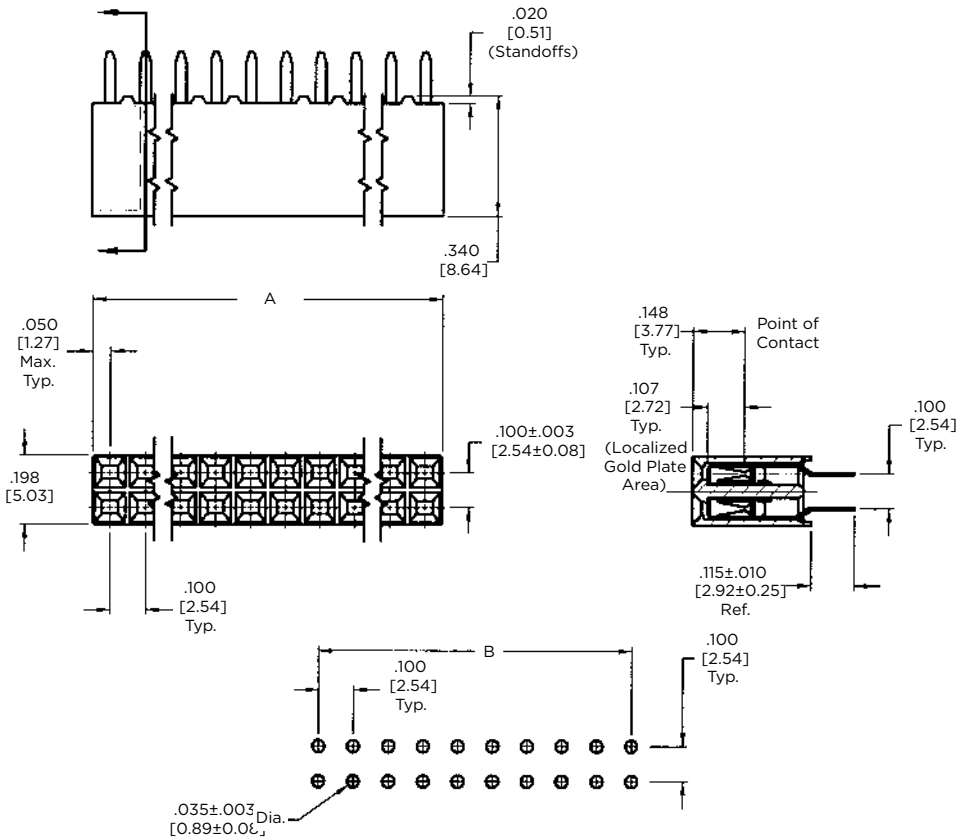
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .062 [1.57] thick PC board)

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
2	.100 [2.54]	-	5-534206-1	-	-
4	.200 [5.08]	.100 [2.54]	5-534206-2	5-147424-2	5-146762-9
6	.300 [7.62]	.200 [5.08]	5-534206-3	5-147424-3	6-146762-0
8	.400 [10.16]	.300 [7.62]	5-534206-4	5-147424-4	5-146762-1
10	.500 [12.70]	.400 [10.16]	5-534206-5	5-147424-5	5-146762-2
12	.600 [15.24]	.500 [12.70]	5-534206-6	5-147424-6	6-146762-1
14	.700 [17.78]	.600 [15.24]	5-534206-7	5-147424-7	6-146762-2
16	.800 [20.32]	.700 [17.78]	5-534206-8	5-147424-8	6-146762-3
18	.900 [22.86]	.800 [20.32]	5-534206-9	5-147424-9	5-146762-3
20	1.000 [25.40]	.900 [22.86]	6-534206-0	6-147424-0	5-146762-7
22	1.100 [27.94]	1.000 [25.40]	6-534206-1	6-147424-1	6-146762-4
24	1.200 [30.48]	1.100 [27.94]	6-534206-2	6-147424-2	6-146762-5
26	1.300 [33.02]	1.200 [30.48]	6-534206-3	6-147424-3	6-146762-6
28	1.400 [35.56]	1.300 [33.02]	6-534206-4	6-147424-4	6-146762-7
30	1.500 [38.10]	1.400 [35.56]	6-534206-5	6-147424-5	5-146762-4
32	1.600 [40.64]	1.500 [38.10]	6-534206-6	6-147424-6	6-146762-8
34	1.700 [43.18]	1.600 [40.64]	6-534206-7	6-147424-7	6-146762-9
36	1.800 [45.72]	1.700 [43.18]	6-534206-8	6-147424-8	7-146762-0
38	1.900 [48.26]	1.800 [45.72]	6-534206-9	6-147424-9	7-146762-1
40	2.000 [50.80]	1.900 [48.26]	7-534206-0	7-147424-0	5-146762-5

Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Note: All Part Numbers are RoHS compliant.

HV-100 RECEPTACLES, VERTICAL PCB MOUNT

DOUBLE ROW, KINKED LEGS WITH RETENTION FEATURE - TOP ENTRY

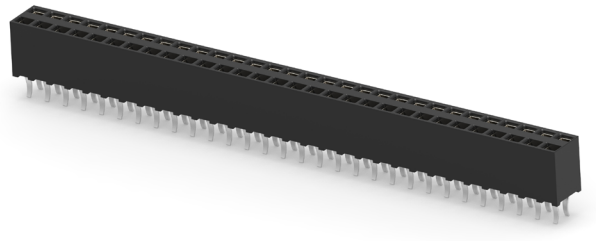
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone (Area F) 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm min. tin over 1.3 µm nickel

Plating B- 2.5 µm tin



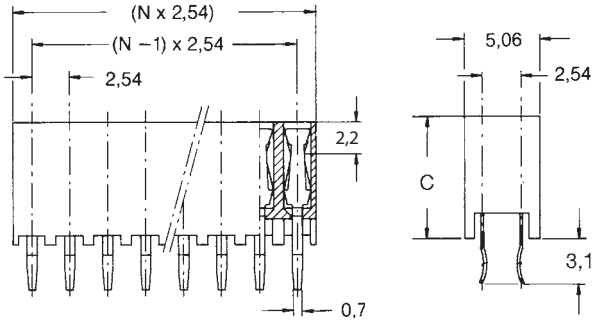
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	C=6.2 Part Numbers		C=7.0 Part Numbers		C=8.5 Part Numbers	
	Plating A	Plating B	Plating A	Plating B	Plating A	Plating B
2	-	-	215307-2	-	215309-2	215310-2
3	-	829410-3	215307-3	-	215309-3	-
4	-	-	215307-4	215308-4	215309-4	215310-4
5	-	829410-5	215307-5	215308-5	215309-5	215310-5
6	-	-	215307-6	-	215309-6	-
7	-	829410-7	215307-7	215308-7	215309-7	215310-7
8	-	829410-8	215307-8	215308-8	215309-8	-
9	-	829410-9	215307-9	215308-9	215309-9	-
10	-	-	1-215307-0	-	1-215309-0	-
20	-	-	2-215307-0	2-215308-0	2-215309-0	2-215310-0
50	-	-	3-215307-6	3-215308-6	3-215309-6	3-215310-6

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

DUAL ENTRY, END STACKABLE, LOW PROFILE WITH DUAL TINE CONTACTS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:
Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 89

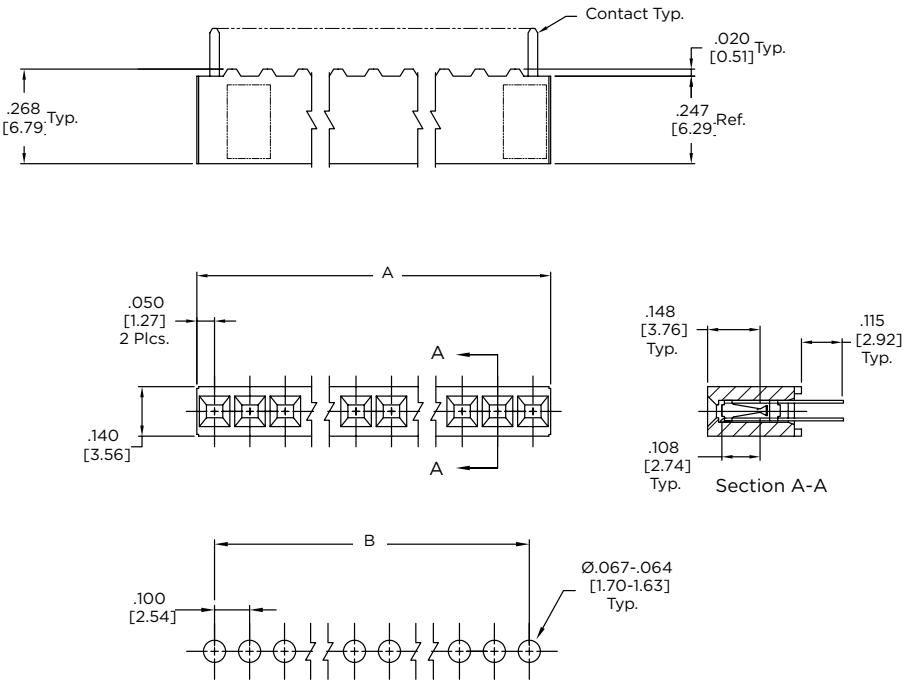
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

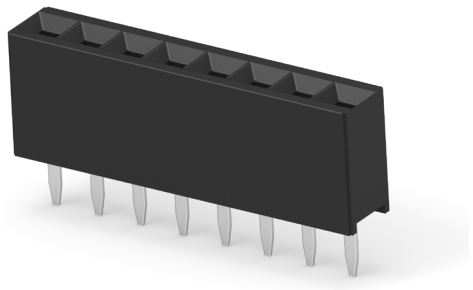
No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers
	A	B	Plating A
3	.300 [7.62]	.200 [5.08]	8-87879-7

Notes:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 for recommended board thickness.

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

CLOSED TOP ENTRY, END STACKABLE, LOW PROFILE WITH SINGLE TINE CONTACTS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 101

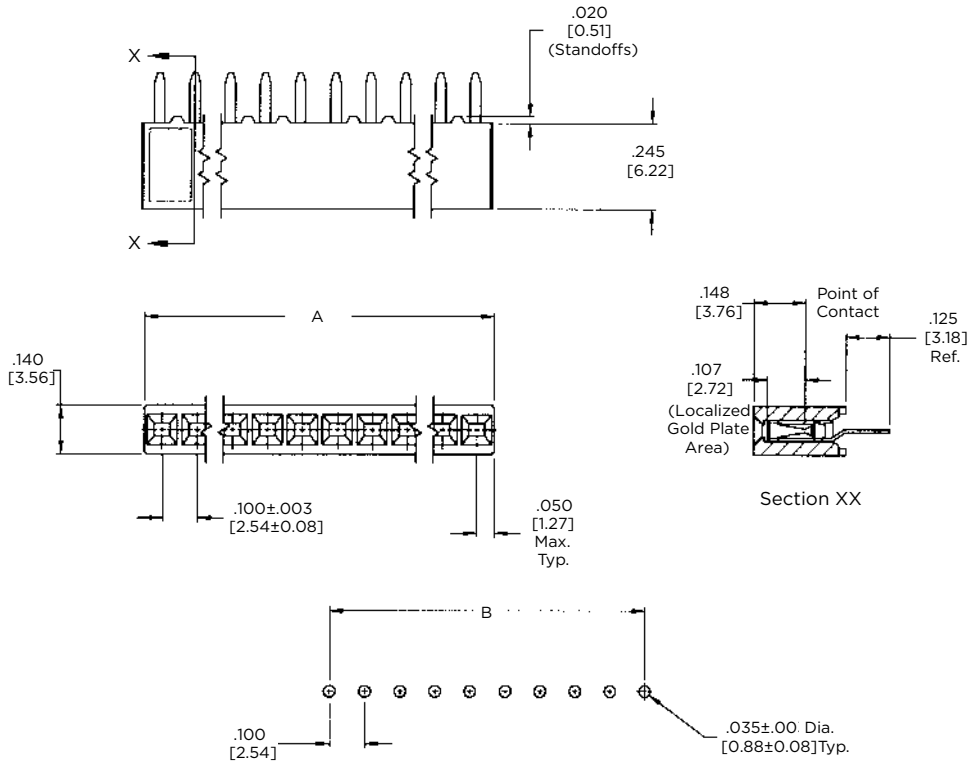
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .062 [1.57] thick PC board)

PRODUCT INFORMATION

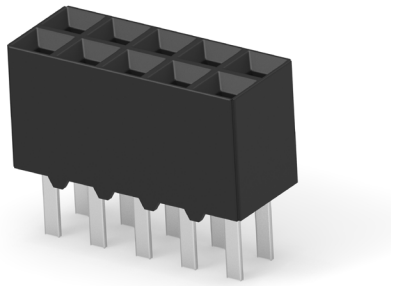
No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-535541-1	5-146138-1	5-535584-3
4	.400 [10.16]	.300 [7.62]	5-535541-2	5-146138-2	5-535584-4
5	.500 [12.70]	.400 [10.16]	5-535541-3	5-146138-3	5-535584-5
6	.600 [15.24]	.500 [12.70]	5-535541-4	5-146138-4	5-535584-1
7	.700 [17.78]	.600 [15.24]	5-535541-5	5-146138-5	5-535584-6
8	.800 [20.32]	.700 [17.78]	5-535541-6	5-146138-6	5-535584-7
9	.900 [22.86]	.800 [20.32]	5-535541-7	5-146138-7	5-535584-8
10	1.000 [25.40]	.900 [22.86]	5-535541-8	5-146138-8	5-535584-9
11	1.100 [27.94]	1.000 [25.40]	5-535541-9	5-146138-9	6-535584-0
12	1.200 [30.48]	1.100 [27.94]	6-535541-0	6-146138-0	6-535584-1
13	1.300 [33.02]	1.200 [30.48]	6-535541-1	6-146138-1	6-535584-2
14	1.400 [35.56]	1.300 [33.02]	6-535541-2	6-146138-2	6-535584-3
15	1.500 [38.10]	1.400 [35.56]	6-535541-3	6-146138-3	6-535584-4
16	1.600 [40.64]	1.500 [38.10]	6-535541-4	6-146138-4	6-535584-5
17	1.700 [43.18]	1.600 [40.64]	6-535541-5	6-146138-5	6-535584-6
18	1.800 [45.72]	1.700 [43.18]	6-535541-6	6-146138-6	5-535584-2
19	1.900 [48.26]	1.800 [45.72]	6-535541-7	6-146138-7	6-535584-7
20	2.000 [50.80]	1.900 [48.26]	6-535541-8	6-146138-8	6-535584-8
30	3.000 [76.20]	2.900 [73.66]	7-535541-9	7-146138-9	6-535584-9
40	4.000 [101.60]	3.900 [99.06]	-	-	7-535584-0

Notes:
1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CLOSED TOP ENTRY, END AND SIDE STACKABLE, LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .100 [2.54] TINE SPACING



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 101

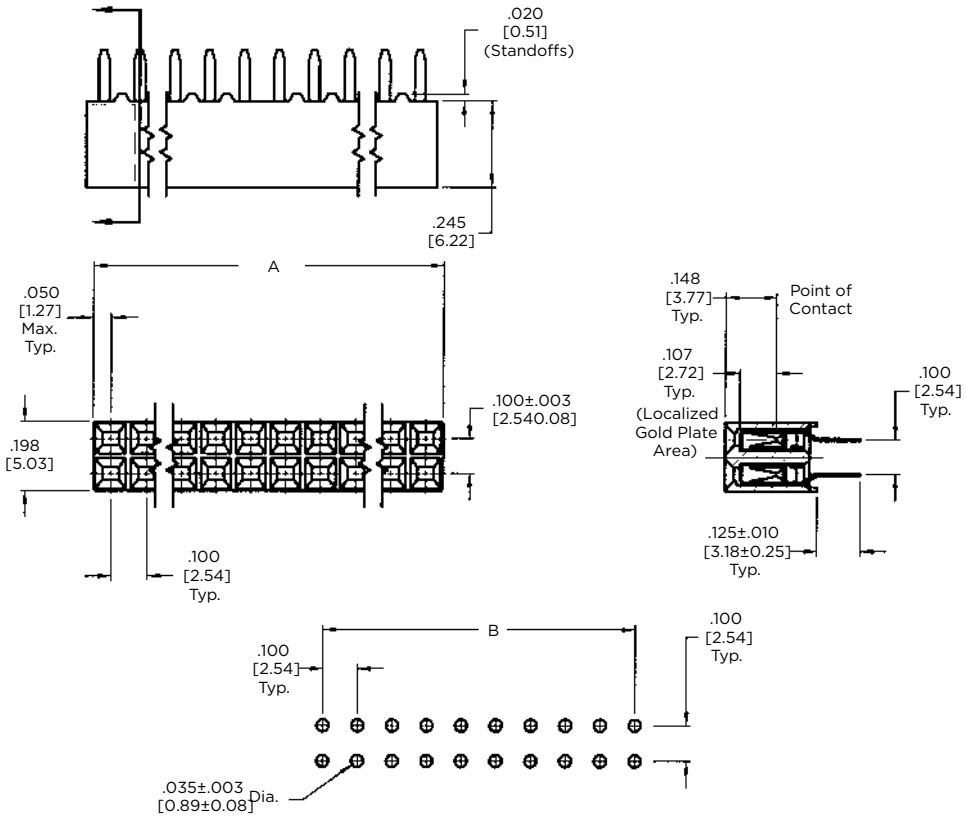
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
2	.100 [2.54]	-	5-534998-1	-	5-535585-3
4	.200 [5.08]	.100 [2.54]	5-534998-2	5-535598-3	5-535585-4
6	.300 [7.62]	.200 [5.08]	5-534998-3	5-535598-4	5-535585-5
8	.400 [10.16]	.300 [7.62]	5-534998-4	5-535598-5	5-535585-6
10	.500 [12.70]	.400 [10.16]	5-534998-5	5-535598-6	5-535585-1
12	.600 [15.24]	.500 [12.70]	5-534998-6	5-535598-7	5-535585-2
14	.700 [17.78]	.600 [15.24]	5-534998-7	5-535598-1	5-535585-7
16	.800 [20.32]	.700 [17.78]	5-534998-8	5-535598-8	5-535585-8
18	.900 [22.86]	.800 [20.32]	5-534998-9	5-535598-9	5-535585-9
20	1.000 [25.40]	.900 [22.86]	6-534998-0	6-535598-0	6-535585-0
22	1.100 [27.94]	1.000 [25.40]	6-534998-1	6-535598-1	6-535585-1
24	1.200 [30.48]	1.100 [27.94]	6-534998-2	6-535598-2	6-535585-2
26	1.300 [33.02]	1.200 [30.48]	6-534998-3	6-535598-3	6-535585-3
28	1.400 [35.56]	1.300 [33.02]	6-534998-4	6-535598-4	6-535585-4
30	1.500 [38.10]	1.400 [35.56]	6-534998-5	6-535598-5	6-535585-5
32	1.600 [40.64]	1.500 [38.10]	6-534998-6	6-535598-6	6-535585-6
34	1.700 [43.18]	1.600 [40.64]	6-534998-7	6-535598-7	6-535585-7
36	1.800 [45.72]	1.700 [43.18]	6-534998-8	6-535598-8	6-535585-8
38	1.900 [48.26]	1.800 [45.72]	6-534998-9	6-535598-9	6-535585-9
40	2.000 [50.80]	1.900 [48.26]	7-534998-0	7-535598-0	7-535585-0

Notes:
1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of- contact dimension.

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION

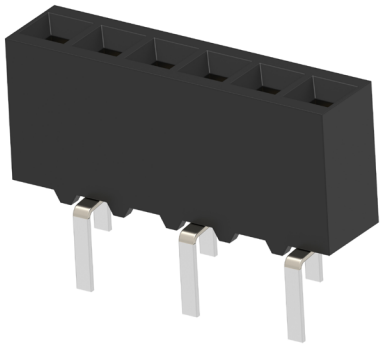
No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
42	2.100 [53.34]	2.000 [50.80]	7-534998-1	7-535598-4	7-535585-4
44	2.200 [55.88]	2.100 [53.34]	7-534998-2	7-535598-5	7-535585-5
46	2.300 [58.42]	2.200 [55.88]	7-534998-3	7-535598-6	7-535585-6
48	2.400 [60.96]	2.300 [58.42]	7-534998-4	7-535598-7	7-535585-7
50	2.500 [63.50]	2.400 [60.96]	7-534998-5	7-535598-1	7-535585-1
52	2.600 [66.04]	2.500 [63.50]	7-534998-6	7-535598-8	7-535585-8
54	2.700 [68.58]	2.600 [66.04]	7-534998-7	7-535598-9	7-535585-9
56	2.800 [71.12]	2.700 [68.58]	7-534998-8	8-535598-0	8-535585-0
58	2.900 [73.66]	2.800 [71.12]	7-534998-9	8-535598-1	8-535585-1
60	3.000 [76.20]	2.900 [73.66]	8-534998-0	7-535598-2	7-535585-2
62	3.100 [78.74]	3.000 [76.20]	8-534998-1	8-535598-2	8-535585-2
64	3.200 [81.28]	3.100 [78.74]	8-534998-2	8-535598-3	8-535585-3
66	3.300 [83.82]	3.200 [81.28]	8-534998-3	-	8-535585-4
68	3.400 [86.36]	3.300 [83.82]	8-534998-4	8-535598-5	8-535585-5
70	3.500 [88.90]	3.400 [86.36]	8-534998-5	8-535598-6	8-535585-6
72	3.600 [91.44]	3.500 [88.90]	8-534998-6	-	8-535585-7
74	3.700 [93.98]	3.600 [91.44]	8-534998-7	8-535598-8	8-535585-8
76	3.800 [96.52]	3.700 [93.98]	8-534998-8	8-535598-9	8-535585-9
78	3.900 [99.06]	3.800 [96.52]	8-534998-9	9-535598-0	9-535585-0
80	4.000 [101.60]	3.900 [99.06]	9-534998-0	7-535598-3	7-535585-3

Notes:
1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, OUTRIGGER DESIGN .100 X .100 [2.54 X 2.54] CENTERLINE, END TO END STACKABLE

DUAL ENTRY, END STACKABLE, LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .200 [5.08] TINE SPACING



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 101

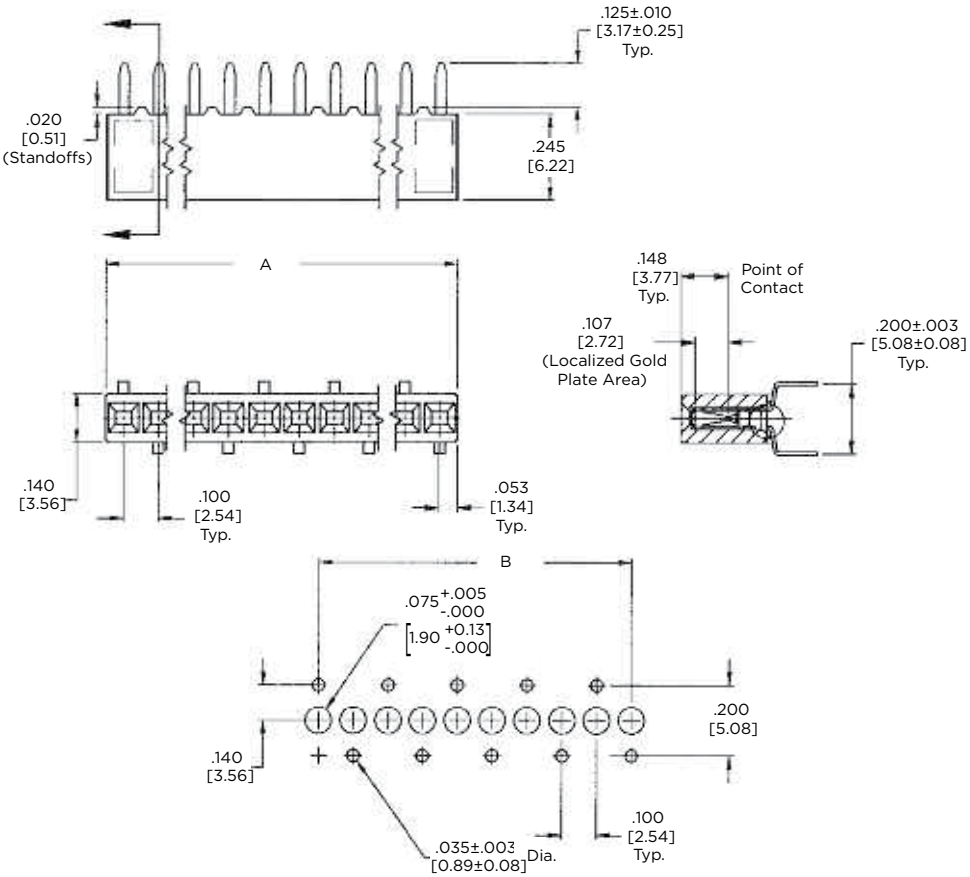
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

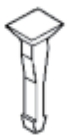
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers	
	A	B	Plating B	Plating C
7	.700 [17.78]	.600 [15.24]	5-147726-6	-
9	.900 [22.86]	.800 [20.32]	-	5-147727-8
10	1.000 [25.40]	.900 [22.86]	5-147726-9	-
16	1.600 [40.64]	1.500 [38.10]	6-147726-5	-

Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

Note: All Part Numbers are RoHS compliant.

HV-100 RECEPTACLES, VERTICAL PCB MOUNT

SINGLE ROW, TOP OR BOTTOM ENTRY

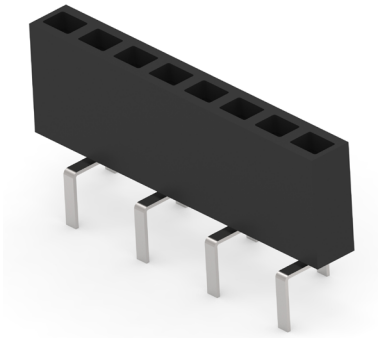
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin



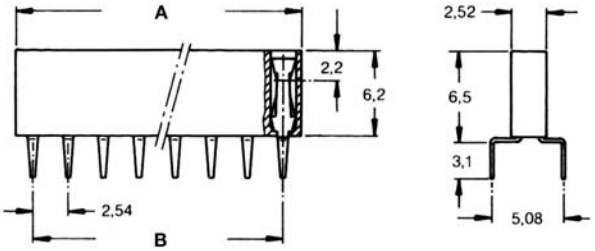
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



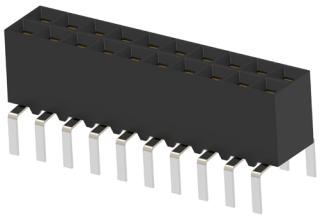
PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating A
3	7.62	5.08	829265-3
5	12.70	10.16	829265-5
8	20.32	17.78	829265-8
10	25.40	22.86	1-829265-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD IV RECEPTACLE ASSEMBLIES, DOUBLE-ROW, OUTRIGGER DESIGN, .100 X .100 [2.54 X 2.54] CENTERLINE, END TO END STACKABLE

DUAL ENTRY, END STACKABLE, LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .300 [7.62] TINE SPACING



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating C - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 101

Technical Documents - Page 243

Product Specification - 108-25022

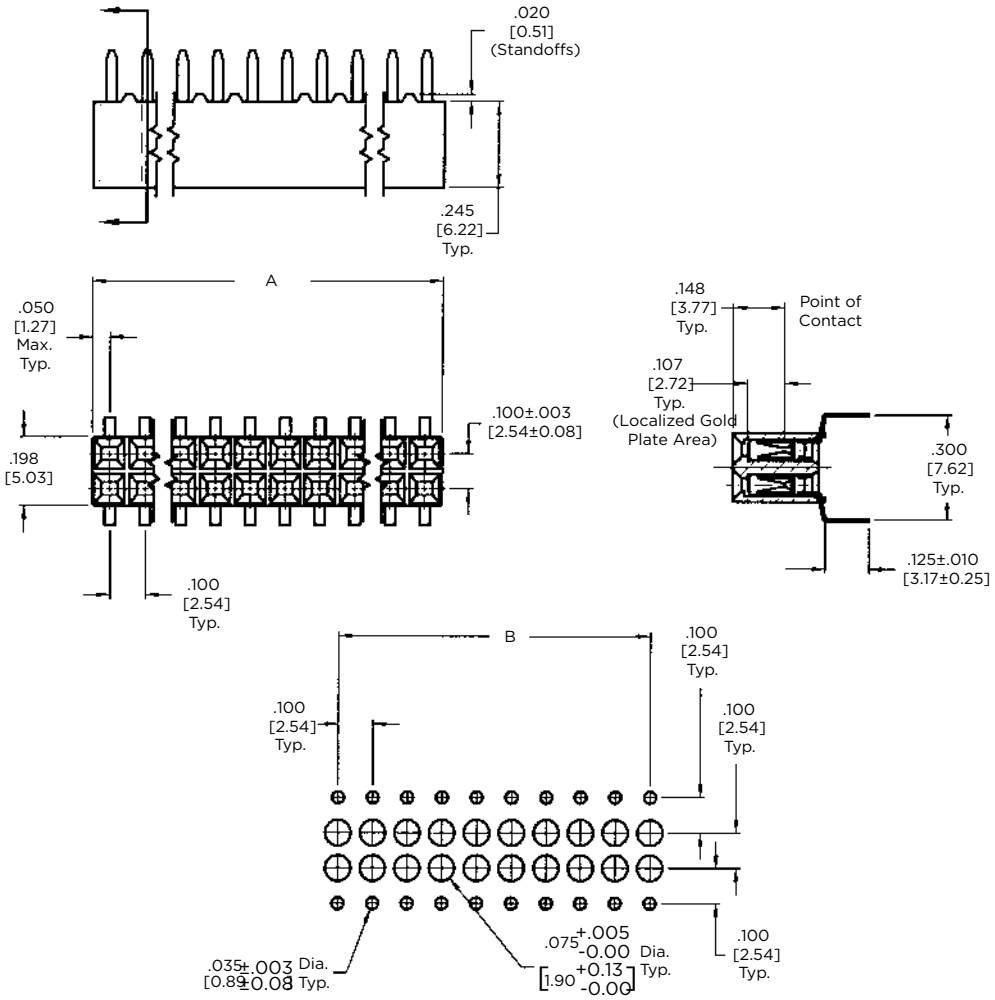
Application Specification - 114-25018
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

Dimensions: in(mm)



Recommended PC Board Hole Layout

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers		
	A	B	Plating A	Plating B	Plating C
4	.200 [5.08]	.100 [2.54]	6-534267-7	-	9-147100-0
6	.300 [7.62]	.200 [5.08]	6-534267-4	5-147099-3	5-147100-1
8	.400 [10.16]	.300 [7.62]	5-534267-5	-	5-147100-2
14	.700 [17.78]	.600 [15.24]	5-534267-1	-	5-147100-5
18	.900 [22.86]	.800 [20.32]	6-534267-0	5-147099-9	5-147100-7
20	1.000 [25.40]	.900 [22.86]	5-534267-2	-	5-147100-8
24	1.200 [30.48]	1.100 [27.94]	5-534267-9	-	6-147100-0
30	1.500 [38.10]	1.400 [35.56]	6-534267-2	-	6-147100-3
36	1.800 [45.72]	1.700 [43.18]	6-534267-5	-	6-147100-6
40	2.000 [50.80]	1.900 [48.26]	5-534267-7	-	6-147100-8
48	2.400 [60.96]	2.300 [58.42]	6-534267-1	-	7-147100-2
50	2.500 [63.50]	2.400 [60.96]	6-534267-8	-	7-147100-3
60	3.000 [76.20]	2.900 [73.66]	5-534267-8	-	7-147100-8
76	3.800 [96.52]	3.700 [93.98]	6-534267-6	-	8-147100-6
80	4.000 [101.60]	3.900 [99.06]	5-534267-4	-	8-147100-8

Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

Note: All Part Numbers are RoHS compliant.

HV-100 RECEPTACLES, VERTICAL PCB MOUNT

DOUBLE ROW, TOP OR BOTTOM ENTRY

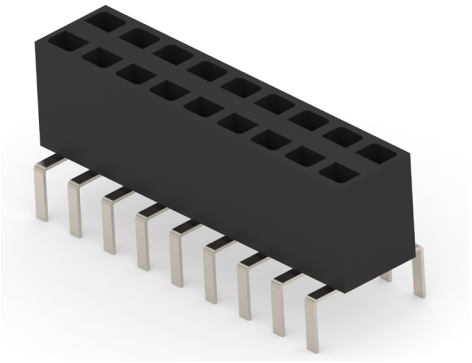
Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin



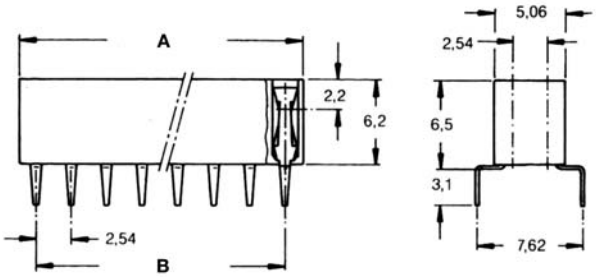
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



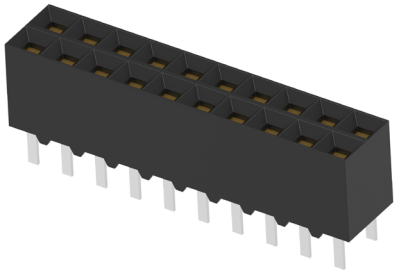
PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	829264-2	-
2x3	7.62	5.08	829264-3	-
2x4	10.16	7.62	829264-4	-
2x5	12.70	10.16	829264-5	-
2x6	15.24	12.70	829264-6	-
2x7	17.78	15.24	829264-7	-
2x8	20.32	17.78	829264-8	-
2x9	22.86	20.32	829264-9	-
2x10	25.40	22.86	1-829264-0	1-829576-0
2x20	50.80	48.26	-	2-829576-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD. IV RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CLOSED DUAL ENTRY, SIDE AND END STACKABLE LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .150 [3.81] TINE SPACING



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers Refer to the Mating Post Selection Guide - Page 10

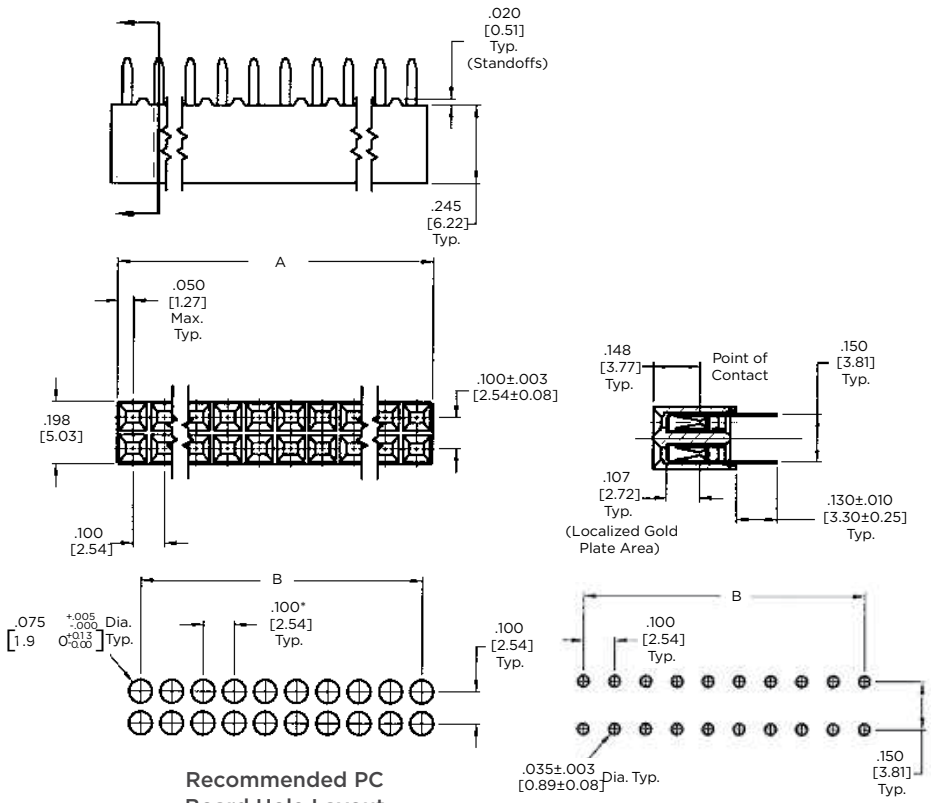
Performance Characteristics - Page 101

Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Dimensions: in(mm)



Recommended PC Board Hole Layout for Bottom Entry or Pass Through Applications
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

Recommended PC Board Hole Layout for Top Entry

PRODUCT INFORMATION

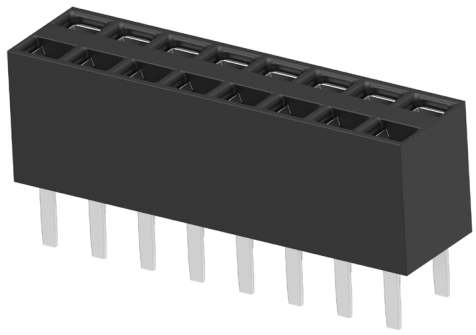
No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers
	A	B	Plating A
2	.100 [2.54]	-	5-535542-1
4	.200 [5.08]	.100 [2.54]	5-535542-2
6	.300 [7.62]	.200 [5.08]	5-535542-3
8	.400 [10.16]	.300 [7.62]	5-535542-4
10	.500 [12.70]	.400 [10.16]	5-535542-5
12	.600 [15.24]	.500 [12.70]	5-535542-6
14	.700 [17.78]	.600 [15.24]	5-535542-7
16	.800 [20.32]	.700 [17.78]	5-535542-8
18	.900 [22.86]	.800 [20.32]	5-535542-9
20	1.000 [25.40]	.900 [22.86]	6-535542-0
22	1.100 [27.94]	1.000 [25.40]	6-535542-1
24	1.200 [30.48]	1.100 [27.94]	6-535542-2
26	1.300 [33.02]	1.200 [30.48]	6-535542-3
28	1.400 [35.56]	1.300 [33.02]	6-535542-4
30	1.500 [38.10]	1.400 [35.56]	6-535542-5
32	1.600 [40.64]	1.500 [38.10]	6-535542-6
34	1.700 [43.18]	1.600 [40.64]	6-535542-7
36	1.800 [45.72]	1.700 [43.18]	6-535542-8
38	1.900 [48.26]	1.800 [45.72]	6-535542-9
40	2.000 [50.80]	1.900 [48.26]	7-535542-0

Notes:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

Note: All Part Numbers are RoHS compliant.

HV-100 RECEPTACLES, VERTICAL PCB MOUNT

DOUBLE ROW, TOP OR BOTTOM ENTRY



Specification:

Housing- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel
-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin

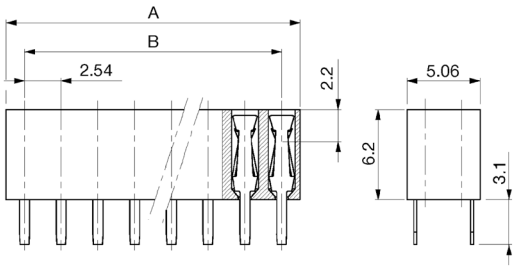
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	Plating B
2x2	5.08	2.54	215316-2
2x3	7.62	5.08	215316-3
2x6	15.24	12.70	215316-6

For Part Numbers of positions not shown, please combine dash numbers appropriately

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)		Contact Plating/Part Numbers
	A	B	Plating A
42	2.100 [53.34]	2.000 [50.80]	7-535542-1
44	2.200 [55.88]	2.100 [53.34]	7-535542-2
46	2.300 [58.42]	2.200 [55.88]	7-535542-3
48	2.400 [60.96]	2.300 [58.42]	7-535542-4
50	2.500 [63.50]	2.400 [60.96]	7-535542-5
52	2.600 [66.04]	2.500 [63.50]	7-535542-6
54	2.700 [68.58]	2.600 [66.04]	7-535542-7
56	2.800 [71.12]	2.700 [68.58]	7-535542-8
58	2.900 [73.66]	2.800 [71.12]	7-535542-9
60	3.000 [76.20]	2.900 [73.66]	8-535542-0
62	3.100 [78.74]	3.000 [76.20]	8-535542-1
64	3.200 [81.28]	3.100 [78.74]	8-535542-2
66	3.300 [83.82]	3.200 [81.28]	8-535542-3
68	3.400 [86.36]	3.300 [83.82]	8-535542-4
70	3.500 [88.90]	3.400 [86.36]	8-535542-5
72	3.600 [91.44]	3.500 [88.90]	8-535542-6
74	3.700 [93.98]	3.600 [91.44]	8-535542-7
76	3.800 [96.52]	3.700 [93.98]	8-535542-8
78	3.900 [99.06]	3.800 [96.52]	8-535542-9
80	4.000 [101.60]	3.900 [99.06]	9-535542-0

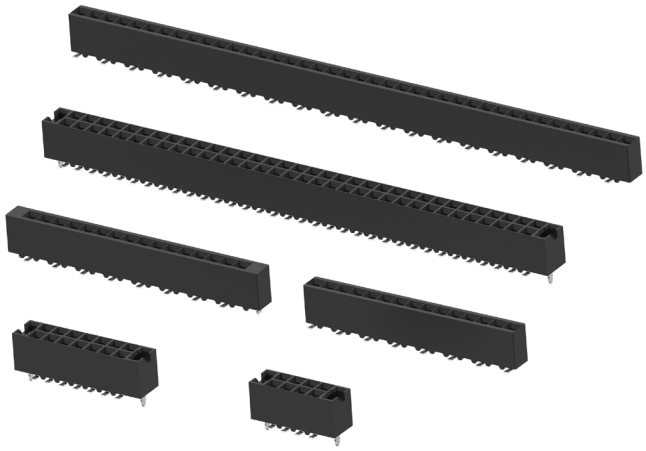
Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

Note: All Part Numbers are RoHS compliant.

MOD IV SURFACE MOUNT VERTICAL RECEPTACLE ASSEMBLIES, .100 X .100 [2.54 X 2.54] CENTERLINE



The AMPMODU 0.025 [0.64] square interconnection system is an industry standard that has provided level III and IV thru-hole interconnections to almost every industry and marketplace for years. As technology advances, so has the AMPMODU product line. Surface mount vertical receptacle assemblies are available to meet your level II packaging needs as process technologies evolve from wave soldering to surface mount reflow (infrared and vapor-phase) processes. AMPMODU surface mount receptacle assemblies are offered in vertical dual entry configurations. These receptacles are available in single-row and double-row configurations with a contact centerline spacing of .100 x .100 [2.54 x 2.54].

AMPMODU surface mount vertical receptacle assemblies continue to provide the proven features and benefits of their thru-hole counterparts in the AMPMODU product family. Closed-entry style Housing design provides a lead-in ramp for positive mating of contacts, virtually eliminating the possibility of stubbing. The dual-beam receptacle contact design, coupled with gold plating in the contact area, provides a reliable interface. Tin plating on the solder tails also enhances solderability. The incorporation of compliant metallic hold downs on receptacle assemblies offers multiple benefits. The hold downs provide for proper lead-topad registration and provide retention to the PC board prior to and during processing.

Used with a plated thru-hole, the hold downs are soldered during the reflow process and serve as a strain relief for the solder joints during mating/unmating. The design of the hold downs results in an excellent ratio of insertion/extraction forces (into the PC board); 20 lb. [89 N] maximum insertion force per pair and 10 lb. [44.5 N] minimum extraction force per pair (unsoldered). No tools are required for insertion.

PRODUCT FACTS

- Surface Mount Leads
- Contact Material: phosphor bronze
- High temperature, black thermoplastic Housings, 94V-0 rated, capable of withstanding IR or vaporphase reflow
- Gold/tin duplex plating for reliable mating interconnection and solder interface
- Metallic hold downs provide retention in the PC board prior to and during the reflow process ... and strain relief after soldering
- Hold downs provide for proper lead-to-pad registration
- Closed-entry receptacle Housings provide lead-in ramp for positive mating
- Receptacle contacts employ dual cantilever beams for reliable connections
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

PERFORMANCE SPECIFICATIONS

Voltage Rating: 250 VAC

Current Rating: 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

Operating Temperature Range (Receptacle Assemblies): –65°C to +125°C

Operating Temperature Range (Headers): -65°C to +105°C

Dielectric Withstanding Voltage: 750 VAC

Termination Resistance: 12 milliohms (max.)

Insulation Resistance: 5000 megohms (min.)

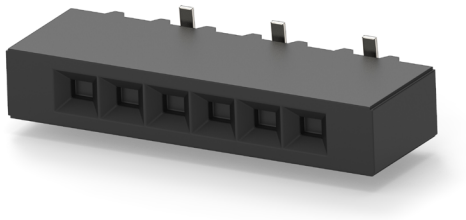
Mating Force (Receptacle Assemblies): 9.0 oz. [2.50N] (max.) per contact

Unmating Force (Receptacle Assemblies): 1.5 oz. [0.42N] (min.) per contact

Durability: Tested to 200 cycles (min.) for .000030 [0.00076] gold plated contacts

MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT, .100 [2.54] CENTERLINE WITH COMPLIANT PIN HOLD DOWNS

SURFACE MOUNT, SINGLE-ROW, DUAL ENTRY WITH COMPLIANT PIN HOLDDOWNS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

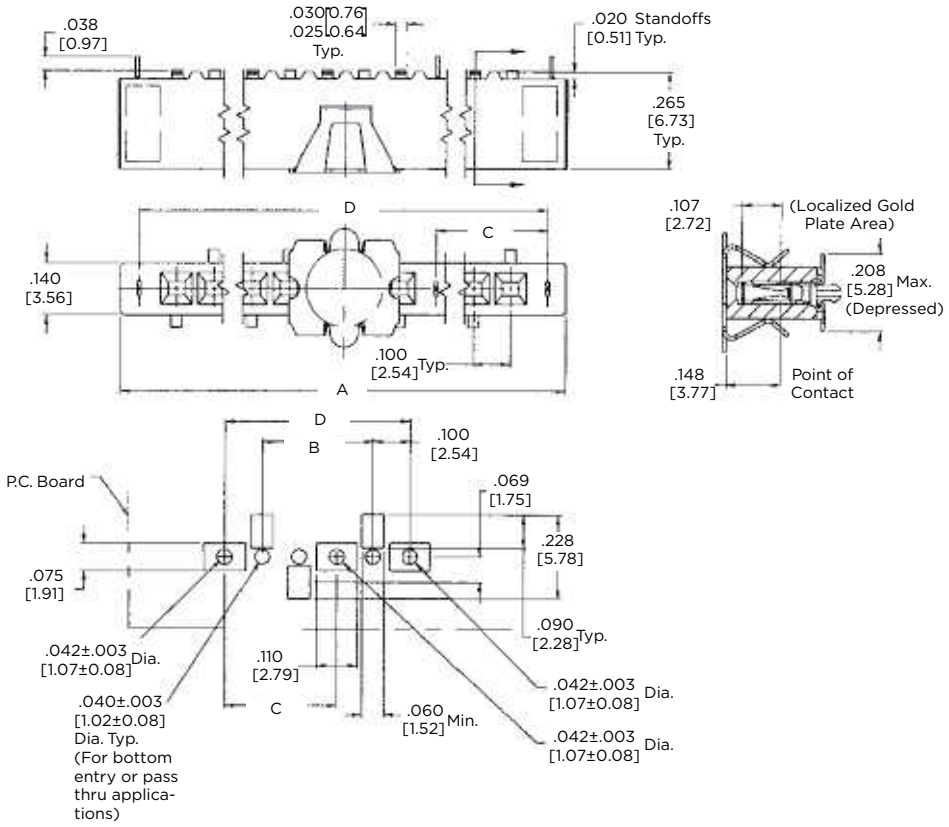
Plating C- .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Specifications- page 103

Dimensions: in(mm)



Recommended PC Board Pad Pattern
(.008 [0.20] thick stencil)

PRODUCT INFORMATION

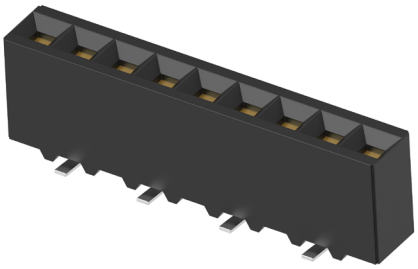
No. of Pos.	Dimensions: in(mm)				Packaged in Tape & Reel	
					Contact Plating/ Part Numbers	
	A	B	C	D	Plating A	Plating C
3	.500 [12.70]	.200 [5.08]	See note 3	.400 [10.16]	5-147724-1	5-147731-1
4	.600 [15.24]	.300 [7.62]	See note 3	.500 [12.70]	5-147724-2	-
5	.700 [17.78]	.400 [10.16]	See note 3	.600 [15.24]	5-147724-3	-
6	.800 [20.32]	.500 [12.70]	See note 3	.700 [17.78]	5-147724-4	-
7	.900 [22.86]	.600 [15.24]	See note 3	.800 [20.32]	5-147724-5	-
8	1.000 [25.40]	.700 [17.78]	See note 3	.900 [22.86]	5-147724-6	-
9	1.100 [27.94]	.800 [20.32]	See note 3	1.000 [25.40]	5-147724-7	-
10	1.200 [30.48]	.900 [22.86]	See note 3	1.100 [27.94]	5-147724-8	-
11	1.300 [33.02]	1.000 [25.40]	See note 3	1.200 [30.48]	5-147724-9	-
12	1.400 [35.56]	1.100 [27.94]	See note 3	1.300 [33.02]	6-147724-0	-
13	1.500 [38.10]	1.200 [30.48]	See note 3	1.400 [35.56]	6-147724-1	-
14	1.600 [40.64]	1.300 [33.02]	See note 3	1.500 [38.10]	6-147724-2	-
15	1.700 [43.18]	1.400 [35.56]	See note 3	1.600 [40.64]	6-147724-3	-
16	1.800 [45.72]	1.500 [38.10]	See note 3	1.700 [43.18]	6-147724-4	-
17	1.900 [48.26]	1.600 [40.64]	See note 3	1.800 [45.72]	6-147724-5	-
18	2.000 [50.80]	1.700 [43.18]	See note 3	1.900 [48.26]	6-147724-6	-
19	2.100 [53.34]	1.800 [45.72]	See note 3	2.000 [50.80]	6-147724-7	-
20	2.200 [55.88]	1.900 [48.26]	See note 3	2.100 [53.34]	6-147724-8	-
30	3.200 [81.28]	2.900 [73.66]	See note 3	3.100 [78.74]	7-147724-8	-

Notes:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension, and .062 [1.57] for recommended board thickness if used in bottom entry application.
3. No center hold down.

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT, .100 [2.54] X .100 [2.54] CENTERLINE END TO END STACKABLE WITHOUT COMPLIANT PIN HOLDDOWNS

SURFACE MOUNT, SINGLE-ROW, DUAL ENTRY, END TO END STACKABLE



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A- Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B- Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

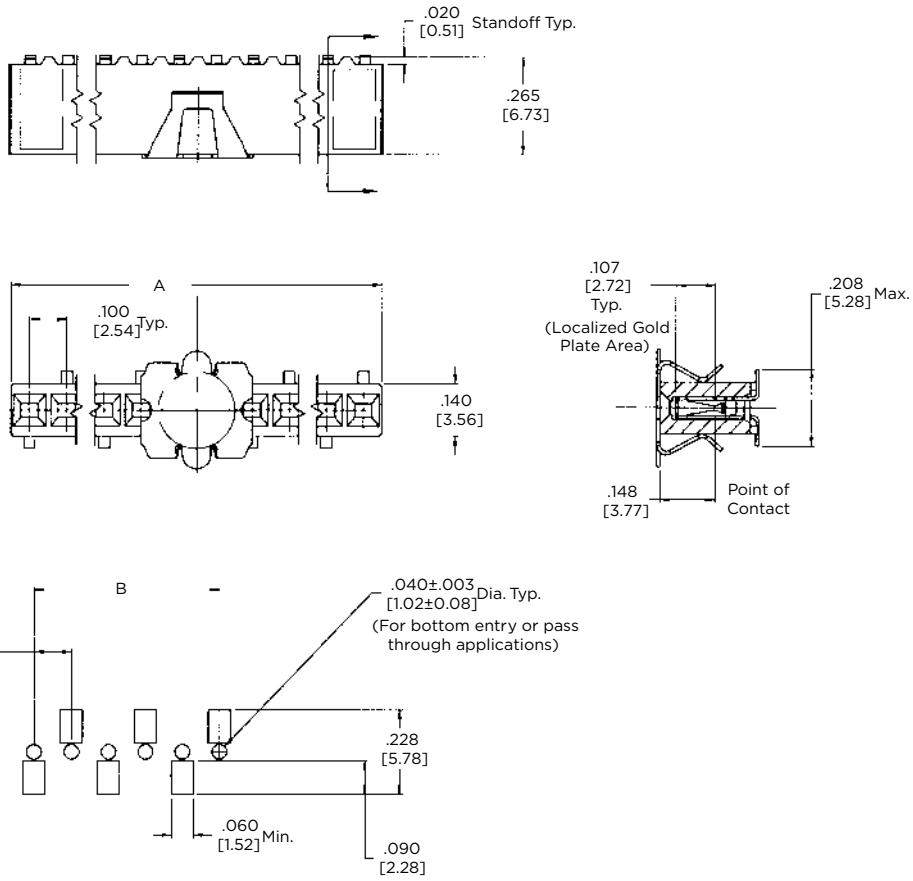
Plating C- .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Specifications - Page 125

Dimensions: in(mm)



Recommended PC Board Pad Pattern
(.008 [0.20] thick stencil)

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Packaged in Tape & Reel		
			Contact Plating/ Part Numbers		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-147723-2	5-147728-2	5-147729-2
4	.400 [10.16]	.300 [7.62]	5-147723-3	5-147728-3	5-147729-3
5	.500 [12.70]	.400 [10.16]	5-147723-4	5-147728-4	5-147729-4
6	.600 [15.24]	.500 [12.70]	5-147723-5	5-147728-5	5-147729-5
7	.700 [17.78]	.600 [15.24]	5-147723-6	5-147728-6	5-147729-6
8	.800 [20.32]	.700 [17.78]	5-147723-7	5-147728-7	5-147729-7
9	.900 [22.86]	.800 [20.32]	5-147723-8	5-147728-8	5-147729-8
10	1.000 [25.40]	.900 [22.86]	5-147723-9	5-147728-9	5-147729-9
11	1.100 [27.94]	1.000 [25.40]	6-147723-0	6-147728-0	6-147729-0
12	1.200 [30.48]	1.100 [27.94]	6-147723-1	6-147728-1	6-147729-1
13	1.300 [33.02]	1.200 [30.48]	6-147723-2	6-147728-2	6-147729-2
14	1.400 [35.56]	1.300 [33.02]	6-147723-3	6-147728-3	6-147729-3
15	1.500 [38.10]	1.400 [35.56]	6-147723-4	6-147728-4	6-147729-4
16	1.600 [40.64]	1.500 [38.10]	6-147723-5	6-147728-5	6-147729-5
17	1.700 [43.18]	1.600 [40.64]	6-147723-6	6-147728-6	6-147729-6
18	1.800 [45.72]	1.700 [43.18]	6-147723-7	6-147728-7	6-147729-7
19	1.900 [48.26]	1.800 [45.72]	6-147723-8	6-147728-8	6-147729-8
20	2.000 [50.80]	1.900 [48.26]	6-147723-9	6-147728-9	6-147729-9
30	3.000 [76.20]	2.900 [73.66]	7-147723-9	7-147728-9	7-147729-9
40	4.000 [101.60]	3.900 [99.06]	8-147723-9	8-147728-9	8-147729-9

Notes:
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension, and .062 [1.57] for recommended board thickness if used in bottom entry application.

Note: All Part Numbers are RoHS compliant.

HV-100 SURFACE MOUNT RECEPTACLES, VERTICAL PCB MOUNT

SINGLE ROW, TOP OR BOTTOM ENTRY - END STACKABLE

Specification:

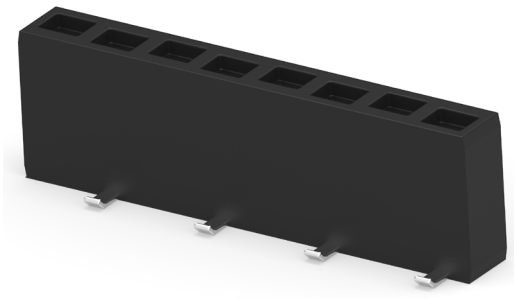
Housing and pick & place cap- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel

-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin



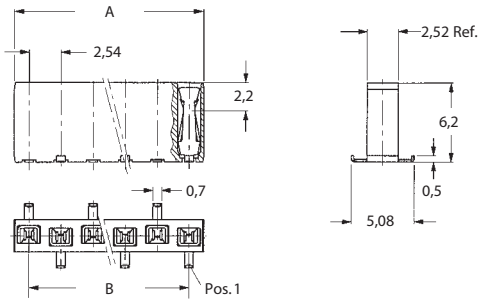
Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056

Dimensions: in(mm)



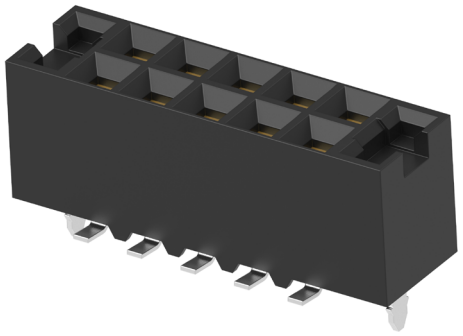
PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Plating A	Plating B
3	7.62	5.08	1241152-3	-
4	10.16	7.62	1241152-4	-
5	12.70	10.16	1241152-5	1355344-5
6	15.24	12.70	1241152-6	-
7	17.78	15.24	1241152-7	-
8	20.32	17.78	1241152-8	1355344-8
9	22.86	20.32	1241152-9	-
10	25.40	22.86	1-1241152-0	-
11	27.94	25.40	1-1241152-1	-
12	30.48	27.94	1-1241152-2	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD IV SURFACE MOUNT RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERS

SURFACE MOUNT,DOUBLE ROW, DUAL ENTRY WITH HOLDDOWNS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Specifications - Page 125

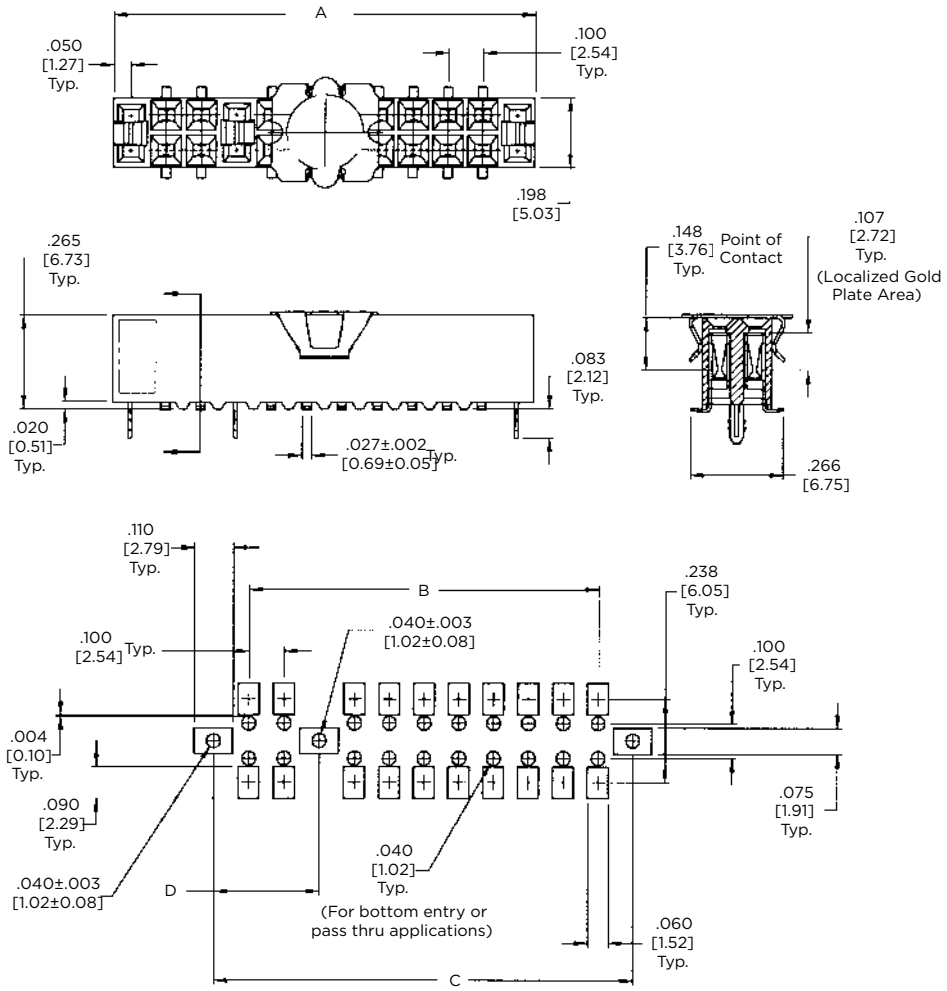
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Pad Pattern
(.008 [0.20] thick stencil)

KEYING PLUG



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)				Packaged in Tubes	Packaged in Tape & Reel
					Contact Plating/ Part Numbers	Contact Plating/ Part Numbers
	A	B	C	D	Plating A	Plating A
10	.700 [17.78]	.400 [10.16]	.600 [15.24]	See Note 1	5-147102-5	5-147747-5
14	.900 [22.86]	.600 [15.24]	.800 [20.32]	See Note 1	5-147102-7	5-147747-7
20	1.200 [30.48]	.900 [22.86]	1.100 [27.94]	See Note 1	6-147102-0	6-147747-0
22	1.300 [33.02]	1.000 [25.40]	1.200 [30.48]	See Note 1	6-147102-1	6-147747-1
26	1.500 [38.10]	1.200 [30.48]	1.400 [35.56]	See Note 1	6-147102-3	6-147747-3
30	1.700 [43.18]	1.400 [35.56]	1.600 [40.64]	See Note 1	6-147102-5	6-147747-5
34	1.900 [48.26]	1.600 [40.64]	1.800 [45.72]	See Note 1	6-147102-7	6-147747-7
36	2.000 [50.08]	1.700 [43.18]	1.900 [48.26]	See Note 1	6-147102-8	6-147747-8
40	2.200 [55.88]	1.900 [48.26]	2.100 [53.34]	See Note 1	7-147102-0	7-147747-0
46	2.500 [63.50]	2.200 [55.88]	2.400 [60.96]	See Note 1	7-147102-3	7-147747-3
50	2.700 [68.58]	2.400 [60.96]	2.600 [66.04]	See Note 1	7-147102-5	7-147747-5
62	3.300 [83.82]	3.000 [76.20]	3.200 [81.28]	See Note 1	8-147102-1	8-147747-1
64	3.400 [86.36]	3.100 [78.74]	3.300 [83.82]	See Note 1	8-147102-2	8-147747-2
66	3.500 [88.90]	3.200 [81.28]	3.400 [86.36]	See Note 1	8-147102-3	8-147747-3
70	3.700 [95.98]	3.400 [86.36]	3.600 [91.44]	See Note 1	8-147102-5	8-147747-5
80	4.300 [109.22]	3.900 [99.06]	4.200 [106.68]	2.100 [53.34]	9-147102-0	9-147747-0

Notes:

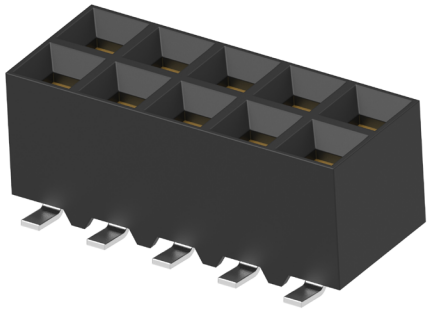
1. No center holddown

2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 [1.57] for recommended board thickness in bottom entry applications.

Note: All Part Numbers are RoHS compliant.

MOD IV SURFACE MOUNT RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

SURFACE MOUNT,DOUBLE ROW, DUAL ENTRY END TO END STACKABLE



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated
Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Plating B - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

Related Product Data

Mateable Headers
Refer to the Mating Post Selection Guide - Page 10

Performance Specifications - Page 125

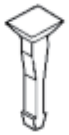
Technical Documents - Page 243

Product Specification - 108-25022

Application Specification - 114-25018

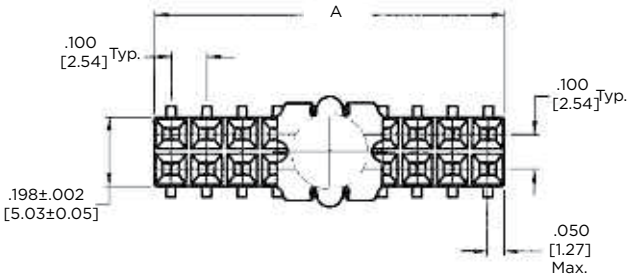
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

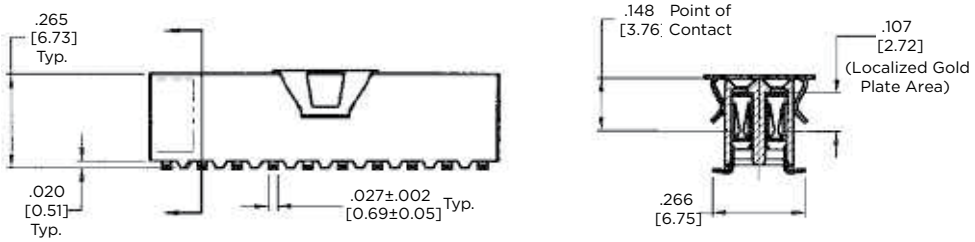
Keying Plug

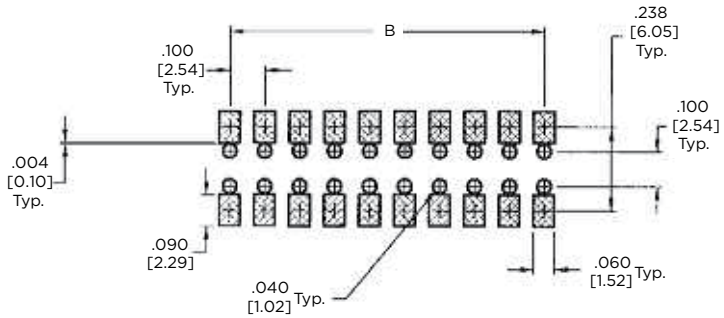


Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

Dimensions: in(mm)







Recommended PC Board Pad Layout
(.008 [0.20] thick stencil)
(for Bottom Entry and Pass Through applications)

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Packaged in Tubes			Packaged in Tape & Reel	
			Contact Plating/ Part Numbers			Contact Plating/ Part Numbers	
	A	B	Plating A	Plating B	Plating C	Plating A	Plating B
10	.500 [12.70]	.400 [10.16]	5-147741-5	5-147740-5	5-147739-5	5-147105-5	-
14	.700 [17.78]	.600 [15.24]	5-147741-7	5-147740-7	5-147739-7	5-147105-7	-
20	1.000 [25.40]	.900 [22.86]	6-147741-0	6-147740-0	6-147739-0	6-147105-0	6-147104-0
22	1.100 [27.94]	1.000 [25.40]	6-147741-1	6-147740-1	6-147739-1	6-147105-1	-
26	1.300 [33.02]	1.200 [30.48]	6-147741-3	6-147740-3	6-147739-3	6-147105-3	-
30	1.500 [38.10]	1.400 [35.56]	6-147741-5	6-147740-5	6-147739-5	6-147105-5	-
34	1.700 [43.18]	1.600 [40.64]	6-147741-7	6-147740-7	6-147739-7	6-147105-7	-
36	1.800 [45.72]	1.700 [43.18]	6-147741-8	6-147740-8	6-147739-8	6-147105-8	-
40	2.000 [50.80]	1.900 [48.26]	7-147741-0	7-147740-0	7-147739-0	7-147105-0	-
46	2.300 [58.42]	2.200 [55.88]	7-147741-3	7-147740-3	7-147739-3	7-147105-3	-
50	2.500 [63.50]	2.400 [60.96]	7-147741-5	7-147740-5	7-147739-5	7-147105-5	-
62	3.100 [78.74]	3.000 [76.20]	8-147741-1	8-147740-1	8-147739-1	8-147105-1	-
64	3.200 [81.28]	3.100 [78.74]	8-147741-2	8-147740-2	8-147739-2	8-147105-2	-
66	3.300 [83.82]	3.200 [81.28]	8-147741-3	8-147740-3	8-147739-3	8-147105-3	-
70	3.500 [88.90]	3.400 [86.36]	8-147741-5	8-147740-5	8-147739-5	8-147105-5	-
80	4.000 [101.60]	3.900 [99.06]	9-147741-0	9-147740-0	9-147739-0	9-147105-0	-

Notes:
1. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 [1.57] for recommended board thickness in bottom entry applications.

Note: All Part Numbers are RoHS compliant.

HV-100 SURFACE MOUNT RECEPTACLES, VERTICAL PCB MOUNT

DOUBLE ROW, TOP OR BOTTOM ENTRY - END STACKABLE

Specification:

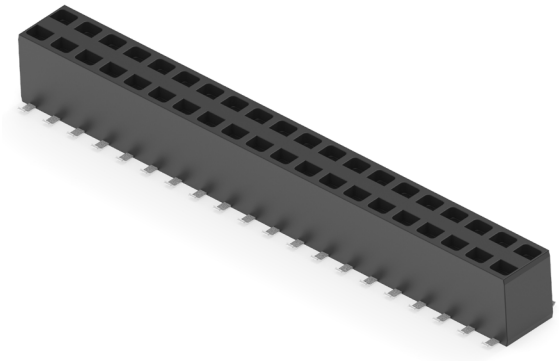
Housing and pick & place cap- Polyester, glass filled, green UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Contact Zone 0.8 µm gold over 1.3 µm nickel

-Soldering Zone 2.5 µm tin over 1.3 µm nickel

Plating B- 2.5 µm tin

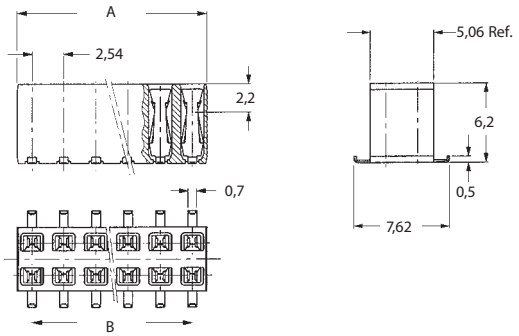


Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Product Specification- 108-19056



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Plating A	Plating B
2x2	5.08	2.54	969973-2	-
2x3	7.62	5.08	969973-3	-
2x4	10.16	7.62	969973-4	-
2x5	12.70	10.16	969973-5	1355347-5
2x6	15.24	12.70	969973-6	-
2x7	17.78	15.24	969973-7	-
2x8	20.32	17.78	969973-8	-
2x9	22.86	20.32	969973-9	-
2x10	25.40	22.86	1-969973-0	-
2x20	50.80	48.26	2-969973-0	-

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD II PCB MOUNT RECEPTACLE CONTACTS

Specification:

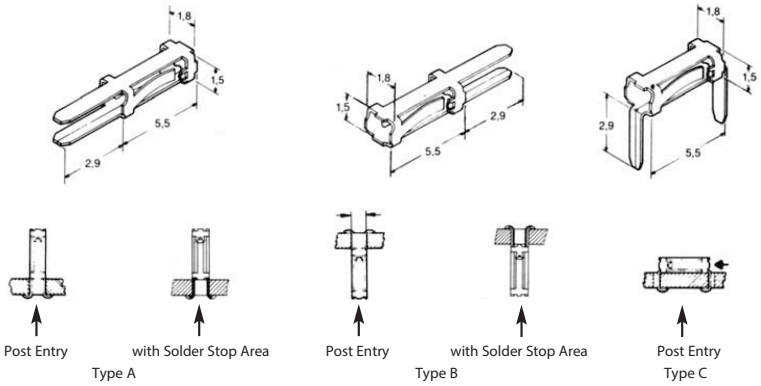
Material- Phosphor bronze

Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

Technical Documents:

Application Specification- 114-25004



PRODUCT INFORMATION

Part Numbers				Plating (Contact Zone)
Type A		Type B		
On Reel	Loose Piece	On Reel	Loose Piece	
-	–	167652-1	–	Tin plated with solder stop area
85861-4	–	–	-	0.8 µm Au over 1.3 µm Ni
–	–	–	–	Duplex 0.8 µm Au over 1.3 µm Ni*

* In the duplex gold plated version, the rest of the receptacle is nickel plated, the solder tabs are tin plated

Keying Plug	86286-1

MOD IV SHUNT CONNECTORS

Specification:

Housing- Thermoplastic Polyester UL 94V-0 rated

Contact- Beryllium Copper

Plating A- 0.4 µm gold over 1.3 µm nickel

Plating B- 1 µm gold over 1.3 µm nickel

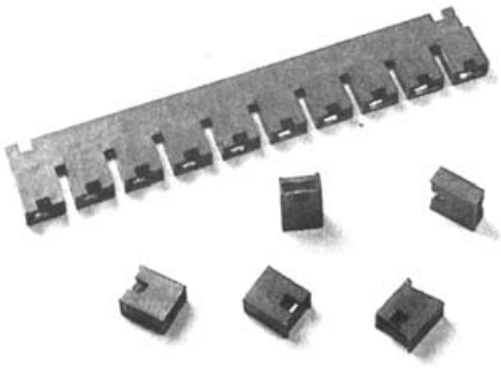
Plating C- 2.5 µm tin

Mating Connectors:

MODII Pin Headers- Page 28 & Page 47

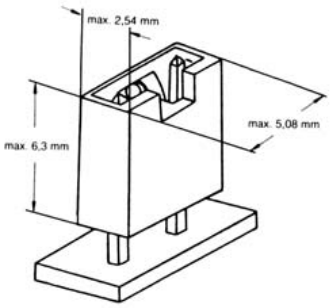
Technical Documents:

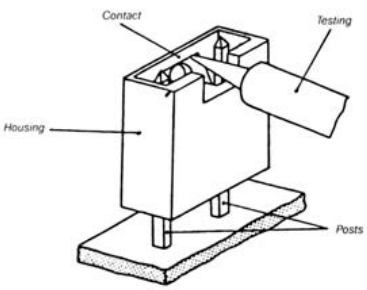
Application Specification- 114-25004



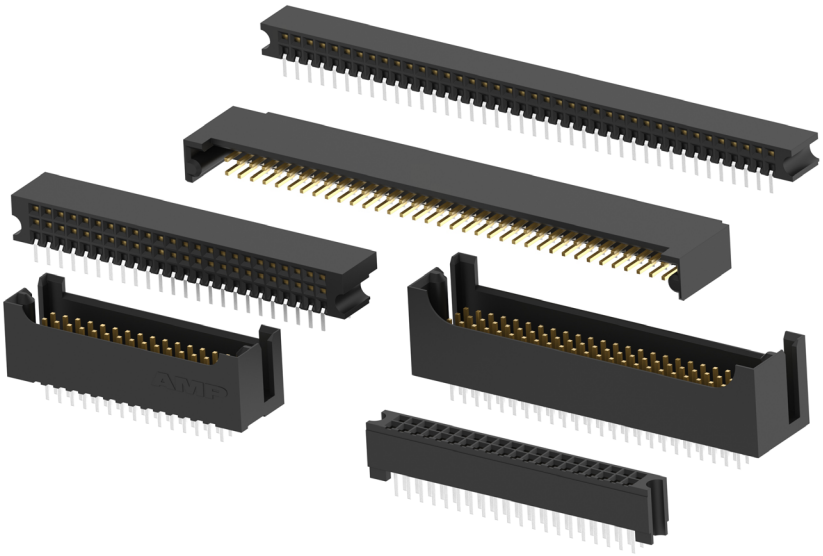
PRODUCT INFORMATION

	Part Numbers		
	Plating A Green	Plating B Green	Plating C Black
Strip Form	925370-2	142270-5	142270-3
Loose Piece	925370-3	–	827914-3





TWO-PIECE PRINTED CIRCUIT BOARD CONNECTORS



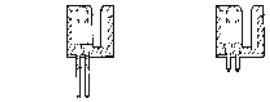
AMPMODU Two-Piece Printed Circuit Board connectors are designed to reliably and economically meet the packaging and interconnection requirements of today's sophisticated electronics. The double row system is produced in 10 thru 200 positions in the vertical headers and horizontal receptacles, and 10 thru 160 positions in the right angle headers and vertical receptacles.

The AMPMODU three-row connector system is produced in 30 through 300 positions (straight post headers and mating horizontal receptacles). Both two- and three-row vertical headers are available with press-fit ACTION PIN posts or standard .025 [0.64] square solder posts. There is a simple seating tool for headers with ACTION PIN posts.

A board retention feature is offered in the two-row horizontal receptacles, two-row right angle headers and two- and three-row vertical headers. Built-in guides assure accurate header and receptacle alignment before contact engagement. Closed entry receptacle **Housing**s provide a lead-in ramp for positive mating of contacts.

PRODUCT FACTS

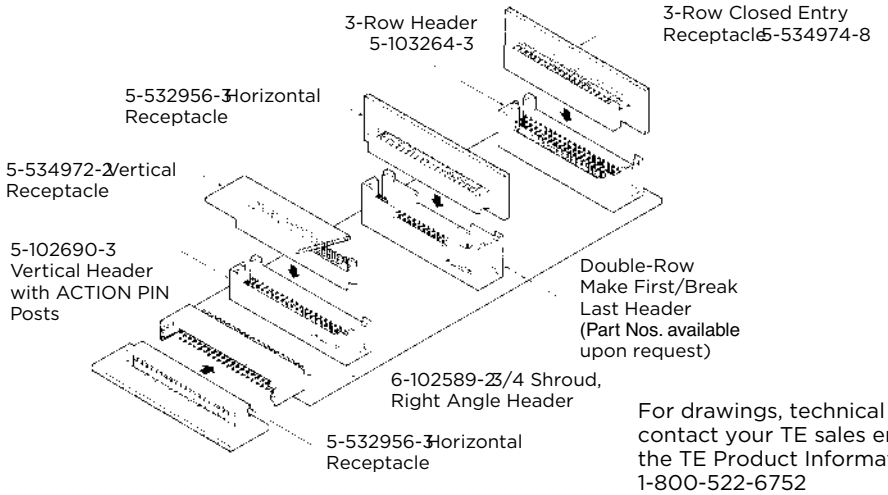
- Two-Piece reliability
- Two- and three-row systems available
- Short signal path for VLSI applications
- Receptacles employ dual cantilever beams and built-in anti-overstress to provide reliable connections
- Built-in guides provide alignment before contact engagement
- Closed entry receptacle Housings provide lead-in ramp for positive mating of contacts
- Shrouded headers provide full pin protection
- Polarized headers
- Vertical headers available with ACTION PIN posts or .025 [0.64] square solder posts
- Repairable ACTION PIN posts
- Simple seating tooling for headers with ACTION PIN posts
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189



ACTION PIN Posts Solder Posts



Receptacle Contact
(Double Beam with Anti-Overstress)
Board Retention Feature Available



For drawings, technical data or samples, contact your TE sales engineer or call the TE Product Information Center: 1-800-522-6752

Performance Characteristics

Current Rating - 3 amperes max. for single contact; 2 amperes max. per contact for fully energized connector

Voltage Rating - 250 VAC

Dielectric Rating - 750 VAC rms between contacts for one minute

Termination Resistance - 12 milliohms max. at 100 milliamperes test current, and 50 millivolts open circuit voltage

Insulation Resistance - 1000 megohms after temperature/ humidity cycling

Temperature Rating - Headers and Receptacles - –65°C to +125°C (black thermoplastic Housings, 94V-0 rated)

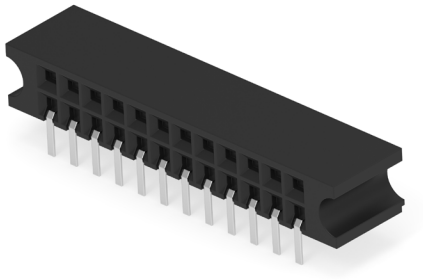
Durability (Tested to) - 200 cycles for .000030 [0.00076] gold plating; 75 cycles for .000015 [0.00038] gold plating

Mating Force - 8 oz. [2.22N] maximum per contact

Unmating Force - .75 oz. [0.2N] minimum per contact during third mating cycle

RECEPTACLE ASSEMBLIES, BOARD MOUNT, DOUBLE-ROW, CLOSED ENTRY, .100 X .100 [2.54 X 2.54] CENTERLINE

HORIZONTAL MOUNT (WITH GUIDE PIN SLOTS AND STANDOFFS)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Contacts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000050- .000100 [0.00127-0.00254] matte tin on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000050-.000100 [0.00127-0.00254] matte tin on solder area, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Headers - Page 143

Performance Specifications - Page 125

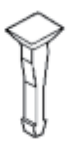
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

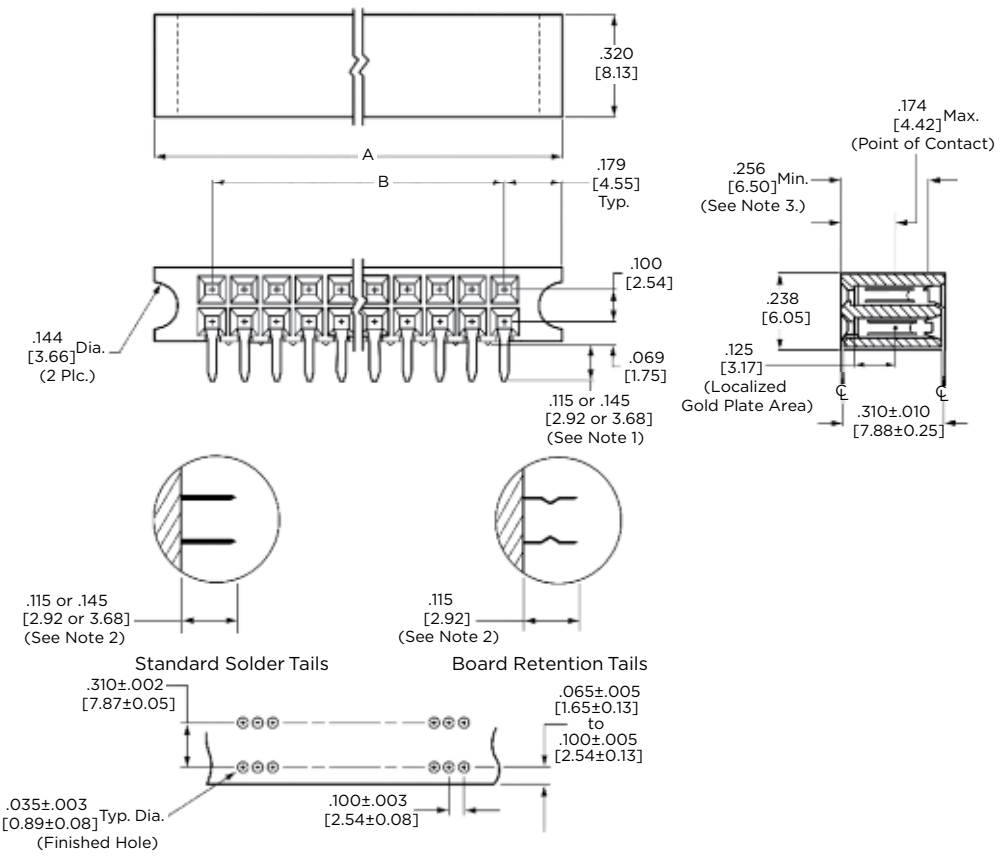
Additional receptacle assembly sizes and solder tail lengths are available; minimum order quantities may apply. Consult TE.

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

Dimensions: in(mm)



Recommended PC Board Hole Layout
(for .055 [1.40] min. thick PC board)
*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

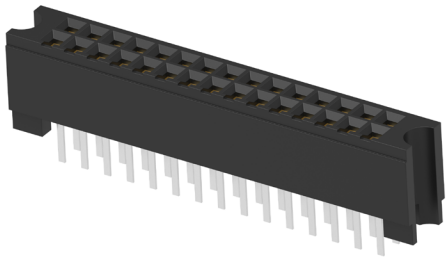
No. of Pos.	Dimensions: in(mm)		Receptacle Assembly Part Numbers with .115 [2.92] Solder Tail Lengths				Receptacle Assembly Part Numbers with .145 [3.68] Solder Tail Lengths
			Standard Solder Tails		Board Retention Tails		Standard Solder Tails
	A	B	Plating A	Plating B	Plating A	Plating B	Plating A
12	.858 [21.79]	.500 [12.70]	5-532956-1	5-532955-1	5-534204-2	5-534975-5	-
16	1.058 [26.87]	.700 [17.78]	5-532956-2	-	-	6-534975-5	-
20	1.258 [31.95]	.900 [22.86]	5-532956-3	5-532955-3	5-534204-9	-	-
24	1.458 [37.03]	1.100 [27.94]	5-532956-4	5-532955-4	6-534204-1	5-534975-7	-
30	1.758 [44.65]	1.400 [35.56]	5-532956-5	5-532955-5	5-534204-4	5-534975-8	-
36	2.058 [52.27]	1.700 [43.18]	5-532956-6	5-532955-6	-	-	-
40	2.258 [57.35]	1.900 [48.26]	5-532956-7	5-532955-7	-	-	-
50	2.758 [70.05]	2.400 [60.96]	5-532956-8	5-532955-8	5-534204-1	6-534975-1	5-533009-8
70	3.758 [95.45]	3.400 [86.36]	-	6-532955-0	-	6-534975-3	-
80	4.258 [108.15]	3.900 [99.06]	6-532956-2	6-532955-2	5-534204-8	-	-
110	5.758 [146.25]	5.400 [137.16]	6-532956-7	6-532955-7	6-534204-6	-	-
120	6.258 [158.95]	5.900 [149.86]	-	-	-	5-534975-2	-

Notes:
1. .115 [2.92] tail length is for use with .062 [1.57] PC boards; .145 [3.68] tail length is for use with .093 [2.36] PC boards.
2. Receptacle assemblies with low force contacts are available, consult TE
3. .256 [6.50] minimum positive pin stop to prevent shorting between rows

Note: All Part Numbers are RoHS compliant.

RECEPTACLE ASSEMBLIES, BOARD MOUNT, DOUBLE-ROW, CLOSED ENTRY, .100 X .100 [2.54 X 2.54] CENTERLINE

VERTICAL MOUNT (WITH GUIDE PIN SLOTS AND STANDOFFS)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Contacts - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] matte tin on solder area, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Headers - Page 143

Performance Specifications - Page 125

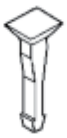
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

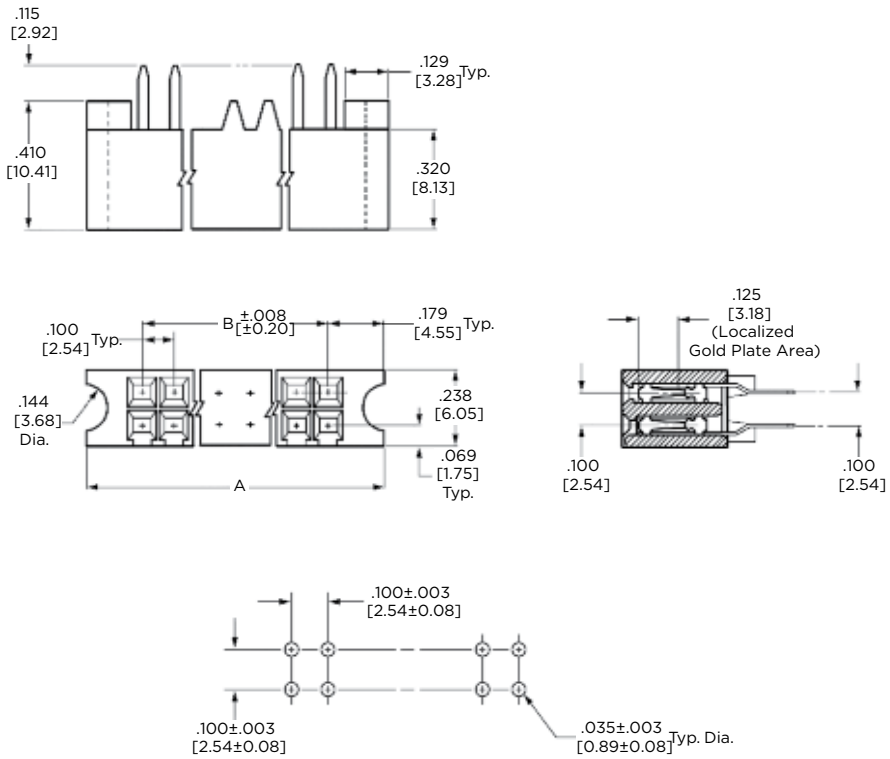
Additional receptacle assembly sizes and solder tail lengths are available; minimum order quantities may apply. Consult TE.

Keying Plug



Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
Tolerances not to accumulate within one connector pattern.

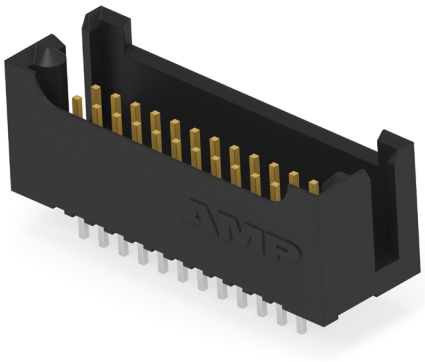
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Receptacle Assembly Part Numbers
	A	B	
40	2.258 [57.35]	1.900 [48.26]	5-534972-2
50	2.758 [70.05]	2.400 [60.96]	5-534972-3

Note: All Part Numbers are RoHS compliant.

HEADERS, STRAIGHT POST, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

SOLDER POSTS AND ACTION PIN POSTS (WITH PIN PROTECTION AND GUIDE PINS)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Mateable Receptacles - Page 141

ACTION PIN Posts - pages 88, 89

Application Tooling -Page 240

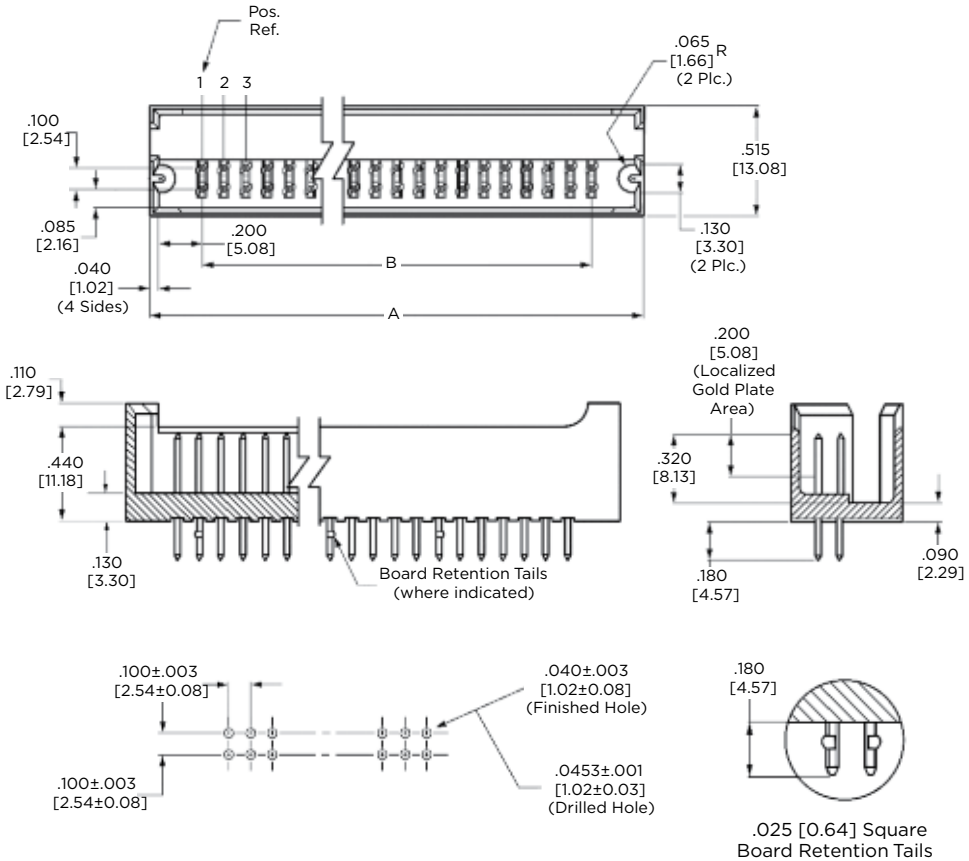
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

Additional receptacle assembly sizes and solder tail lengths are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



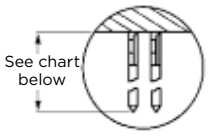
Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
tolerances not to accumulate within one connector pattern.

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Header Part Numbers with .180 [4.57] Tail Length		
			Standard Solder Tails		Board Retention Tails
	A	B	Plating A	Plating B	Plating A
12	.980 [24.89]	.500 [12.70]	5-102692-1	5-102567-1	-
14	1.080 [27.43]	.600 [15.24]	-	7-102567-3	-
16	1.180 [29.97]	.700 [17.78]	6-102692-5	-	-
20	1.380 [35.05]	.900 [22.86]	6-102692-6	6-102567-1	5-534978-3
24	1.580 [40.13]	1.100 [27.94]	5-102692-2	5-102567-2	5-534978-4
30	1.880 [47.75]	1.400 [35.56]	6-102692-7	6-102567-3	5-534978-5
36	2.180 [55.37]	1.700 [43.18]	5-102692-3	5-102567-3	-
40	2.380 [60.45]	1.900 [48.26]	6-102692-3	6-102567-2	-
50	2.880 [73.15]	2.400 [60.96]	5-102692-4	5-102567-6	-
60	3.380 [85.85]	2.900 [73.66]	5-102692-5	5-102567-4	-
70	3.880 [98.55]	3.400 [86.36]	-	6-102567-0	-
72	3.980 [101.09]	3.500 [88.90]	6-102692-8	-	-
80	4.380 [111.25]	3.900 [99.06]	-	5-102567-8	6-534978-1
100	5.380 [136.65]	4.900 [124.46]	5-102692-8	-	-
110	5.880 [149.35]	5.400 [137.16]	6-102692-0	6-102567-5	-

Notes:
1. .115 [2.92] tail length is for use with .062 [1.57] PC boards; .145 [3.68] tail length is for use with .093 [2.36] PC boards.
2. Receptacle assemblies with low force contacts are available, consult TE
3. .256 [6.50] minimum positive pin stop to prevent shorting between rows



.025 [0.64] Square ACTION PIN Tails

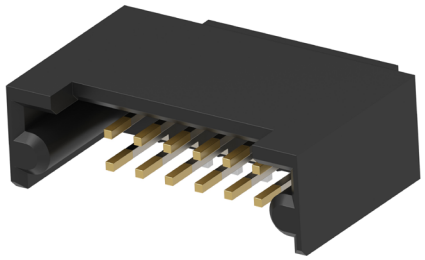
No. of Pos.	Dimensions: in(mm)		Header Part Numbers with ACTION PIN Posts
			.250 [6.35] Tail Length
	A	B	Plating A
12	.980 [24.89]	.500 [12.70]	5-102690-1
80	4.380 [111.25]	3.900 [99.06]	5-102690-6

Notes:
1. Other header sizes can be made available upon request Headers with ACTION PIN posts are for use with .093 [2.36] nominal or thicker PC boards
2. Application tooling for installing headers with ACTION PIN posts
3. Headers with .250 [6.35] tail length can be made available with make first/break last contacts, consult TE
4. Plated through holes to be prepared per recommendations found on Page 195

Note: All Part Numbers are RoHS compliant.

HEADERS, RIGHT-ANGLE POST, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CARD EXTENDER (WITH PIN PROTECTION AND GUIDE PINS)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Mateable Receptacles - Page 141

Performance Specifications - Page 125

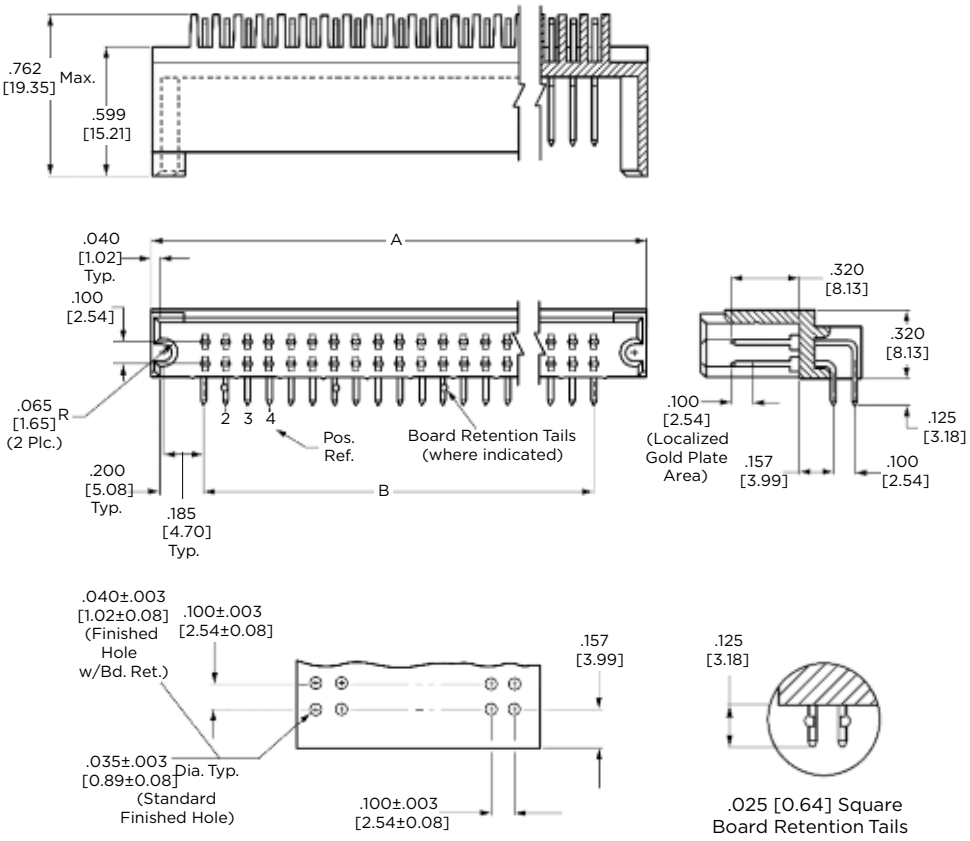
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

Additional header sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)
tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

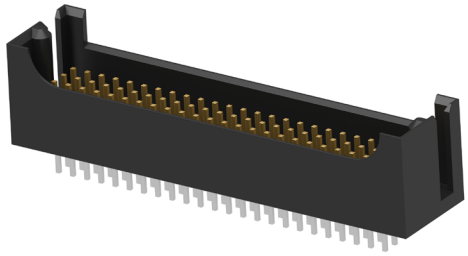
No. of Pos.	Dimensions: in(mm)		Header Part Numbers with .125 [3.18] Tail Length		
			Standard Solder Tails		Board Retention Tails
	A	B	Plating A	Plating B	Plating A
12	.980 [24.89]	.500 [12.70]	-	5-102589-8	-
16	1.180 [29.97]	.700 [17.78]	6-102802-4	-	-
20	1.380 [35.05]	.900 [22.86]	6-102802-5	6-102589-2	5-534245-6
24	1.580 [40.13]	1.100 [27.94]	-	5-102589-6	-
30	1.880 [47.75]	1.400 [35.56]	6-102802-6	5-102589-4	5-534245-2
36	2.180 [55.37]	1.700 [43.18]	-	5-102589-2	-
40	2.380 [60.45]	1.900 [48.26]	5-102802-8	6-102589-3	-
50	2.880 [73.15]	2.400 [60.96]	5-102802-4	5-102589-5	

Notes:
1. Headers with make first/break last posts can be made available, consult TE

Note: All Part Numbers are RoHS compliant.

HEADERS, STRAIGHT POST, TRIPLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

SOLDER POSTS (WITH PIN PROTECTION AND GUIDE PINS)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Posts - Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Mateable Receptacles - Page 141

Performance Specifications - Page 125

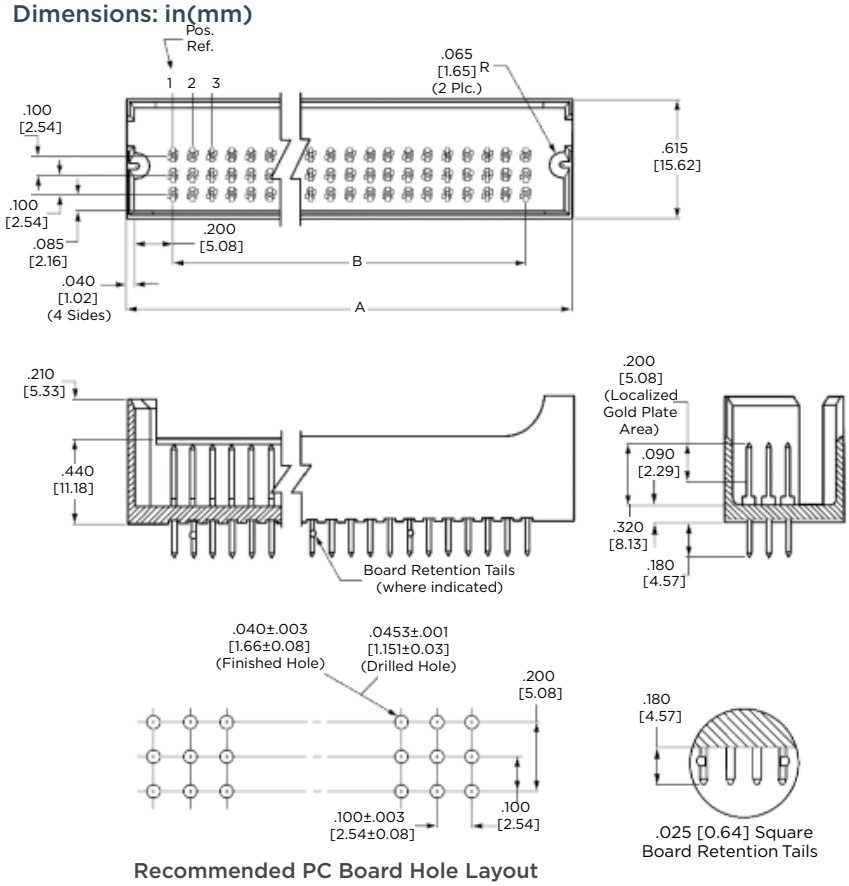
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

Additional header sizes are available; minimum order quantities may apply. Consult TE.

Dimensions: in(mm)



Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board) tolerances not to accumulate within one connector pattern.

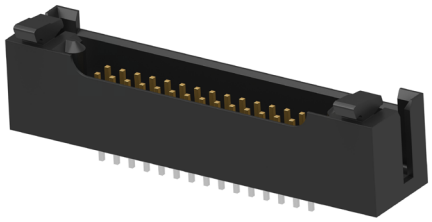
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Header Part Numbers with .125 [3.18] Tail Length
	A	B	Standard Solder Tails Plating A
150	5.380 [136.65]	4.900 [124.46]	5-103264-3

Note: All Part Numbers are RoHS compliant.

HEADERS, VRM (VOLTAGE REGULATOR MODULE), .100 X .100 [2.54 X 2.54] CENTERLINE

SOLDER POSTS AND ACTION PIN POSTS (WITH PIN PROTECTION, GUIDE RIBS, AND LATCHING)



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Posts - Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Performance Specifications - Page 125

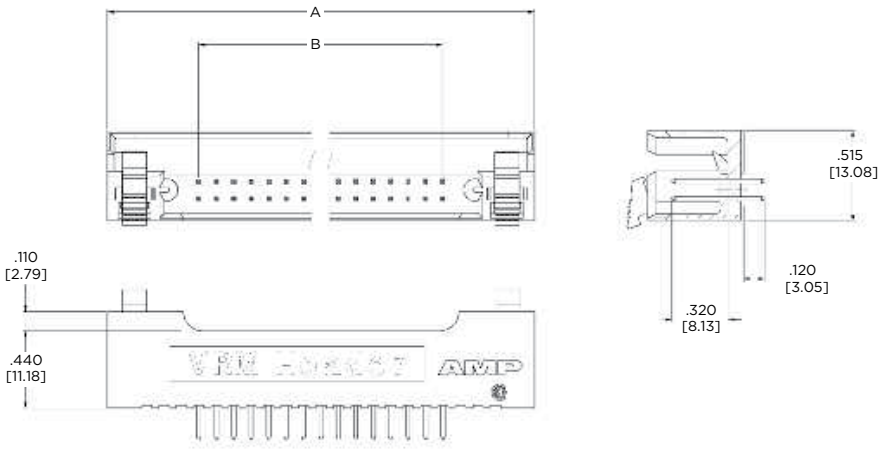
Application Tooling - Page 240

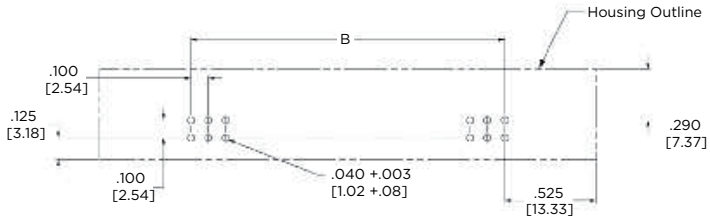
Technical Documents - Page 243

Product Specification 108-25017

Application Specification 114-9009

Dimensions: in(mm)





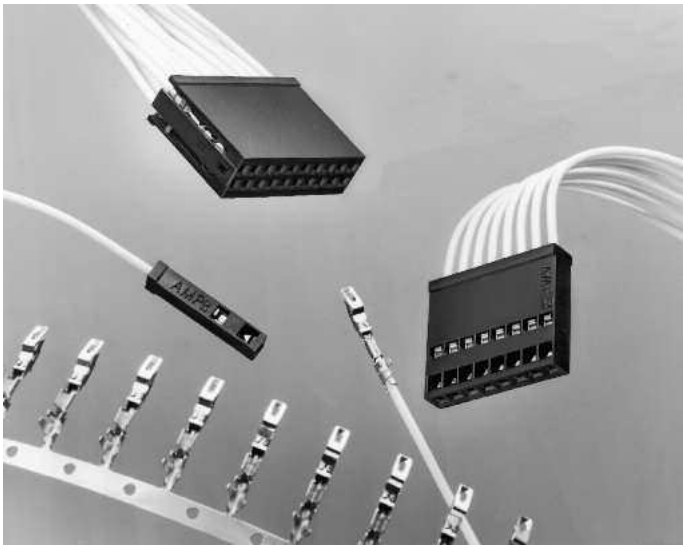
Recommended PC Board Hole Layout

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Header Part Numbers
	A	B	Standard Solder Tails
30	2.450 [62.23]	1.400 [35.56]	5-146205-1
40	3.100 [78.74]	1.900 [48.26]	5-146315-1

Note: All Part Numbers are RoHS compliant.

LOCKING CLIP CONTACTS AND HOUSINGS



PRODUCT FACTS

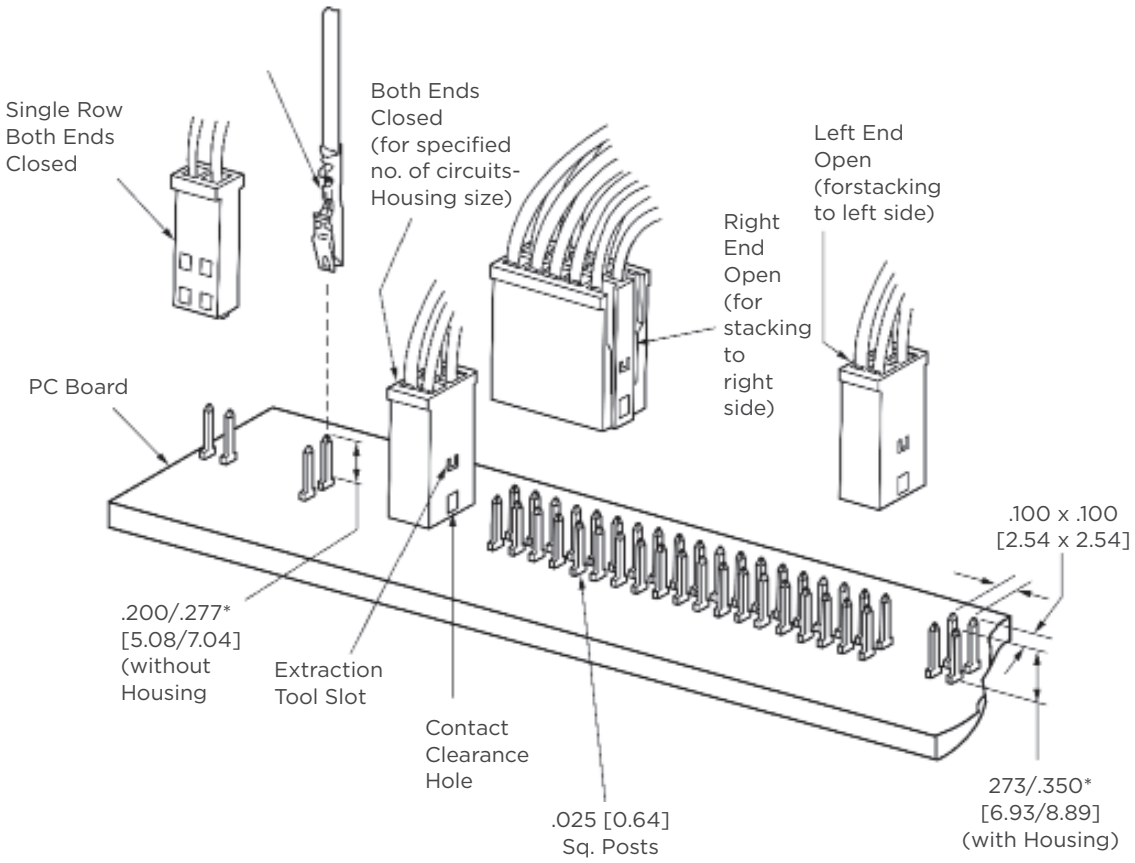
- Self-retaining contacts provide permanent connection with quick connect and disconnect
- Fast, easy installation with no additional locking hardware required
- Mates with .025 [0.64] square posts in a variety of configurations
- Single- and double-row configurations in up to 20 positions on .100 [2.54] centers
- Modular design permits end-to-end stacking (double- row only) for circuit grouping
- Choice of tin or select gold plating
- Housings made of 94V-0 rated glass-filled polyester
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

PERFORMANCE Characteristics

Contact Current Rating - 3 amperes

Termination Resistance - 12 milliohms (max.)**-** Gold plated contacts 16 milliohms (max.)**-** Tin plated contacts

Durability - Ref. **Product Specification** 108-36028 and 108-36028-1



*If post is longer than maximum specified, post tip may butt against wire ends.
Dimension defines .025 x .025 [0.64 x 0.64] portion of post.

LOCKING CLIP CONTACTS

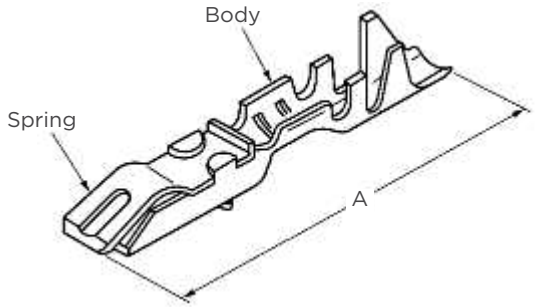
Material and Finish

Contact Spring - Stainless steel

Plating A - Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating C - .000100-.000200 [0.00254-0.00508] bright tin over .000050 [0.00127] nickel on entire contact



Wire Size Range		Ins. Dia. Range	Dimensions: in(mm) A	Finish	Part Numbers		Ocean Applicator PN*		Hand Tool PN
AWG	[mm²]				Strip Form	Loose Piece	Strip Form	Loose Piece	
30-28	0.05-0.09	.029-.039 [0.74 - 0.99]	.550 [13.97]	Plating B	87190-1	87191-1	2837095-1, 2837095-2		-
				Plating C	-	5-87191-2		2837095-1, 2837095-2	-
26-22	0.12-0.4	.038 - .062 [0.97 - 1.57]	.584 [14.83]	Plating A	87124-3	87165-3	2151639-1,2151639-2,5-2151639-2 2266021-1,2266021-2,5-2266021-2		91533-1
				Plating B	87124-1	87165-1			
				Plating C	5-87124-2	5-87165-2			
20	0.5-0.6	.038-.062 [0.97-1.57]	.584 [14.83]	Plating B	867052-2	-	2151639-1, 2151639-2, 5-2151639-2	-	1901798-1
				Plating C	5-867052-1	-		-	

* For more info please click to view: document 1 and document 2

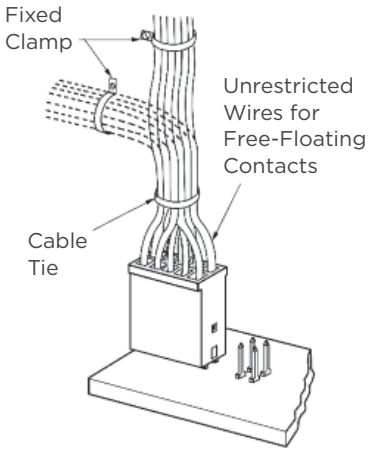
Notes:

1. These contacts must be crimped in accordance with TE Specification No. 114 25006 in order to function properly in a connector Housing.
2. Extraction Tool No. 91084-1 is used for removing individual contacts from connector Housings and for detaching contacts from mating posts.

WIRE HARNESSING

If necessary, wires can be grouped with cable ties and secured to a panel with fixed clamps. However, locking clip contacts must be free to float within the connector Housings to allow proper extraction. Therefore, harnessing hardware or the use of multiple terminations per contact must not restrict the free-floating action of contacts in the Housing.

For more information request Insulation and Bundling Products Catalogue 124132.



Related Product Data

Housings Used With - Page 149 - Page 179

Application Tooling - Page 240

Technical Documents - Page 243

Product Specification - 108-36028, 108-36028-1

Application Specification - 114-25006



Extraction Tool No. 2459141-1

Note: All Part Numbers are RoHS compliant.

LOCKING CLIP CRIMP SNAP-IN RECEPTACLE CONTACTS FOR 0.63mm SQUARE POSTS

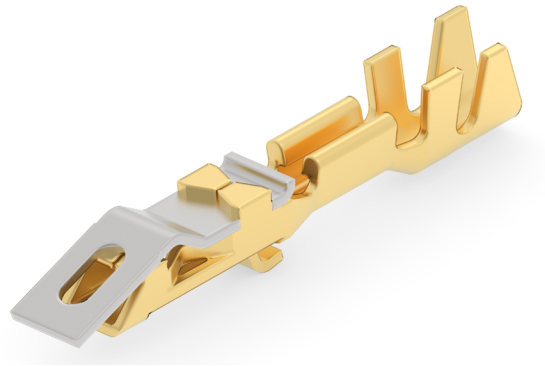
Specification:

Material- Phosphor bronze.

Spring- Stainless steel.

Plating A- Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

Plating B- 2.5 µm tin over 1.3 µm nickel on entire contact



For use with:

Locking Clip Receptacle Housings- Page 157

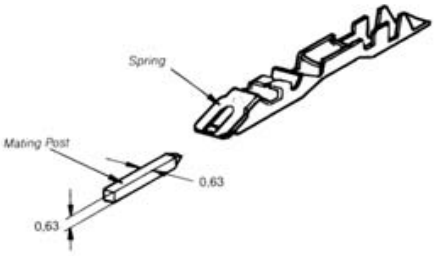
Related Products:

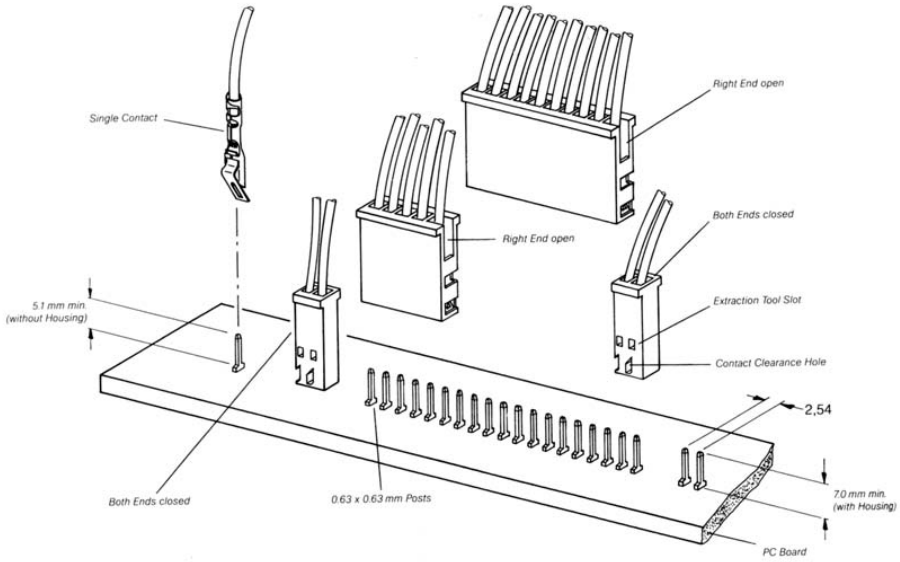
Extraction Tool- 91084-1

Technical Documents:

Product Specification- 108-36028 & 108-36028-1

Application Specification- 114-25006





PRODUCT INFORMATION

Wire Size Range mm²	AWG	Insulation Diameter mm	Finish	Part Numbers	
				On Reel	Loose Piece
0.05-0.09	30-28	0.7-1.0	Plating A	87190-1	87191-1
			Plating B	-	5-87191-2
0.12-0.40	26-22	1.0-1.6	Plating A	87124-1	87165-1
			Plating B	5-87124-2	5-87165-2
0.5-0.6	20	1.0-1.6	Plating A	867052-2	–
			Plating B	5-867052-1	–

For application tooling please see Page 240

WIRE-APPLIED HOUSINGS FOR LOCKING CLIP CONTACTS, SINGLE-ROW, .100 [2.54] CENTERLINE

SINGLE-ROW



Material

Glass-filled polyester, 94V-0 rated

Related Product Data

Contacts - Page 159

Mateable Headers and Posts **-** Refer to the Mating Post Selection Guide **-** Page 10

Technical Documents - Page 243
Product Specification 108-36028, 108-36028-1

Application Specification 114-25006
.125 [3.18] centerline single-row, 2 and 3 position Housings are available, Base Part Numbers 104905. They are designed to be stackable end-to-end and side-by-side. Consult TE.

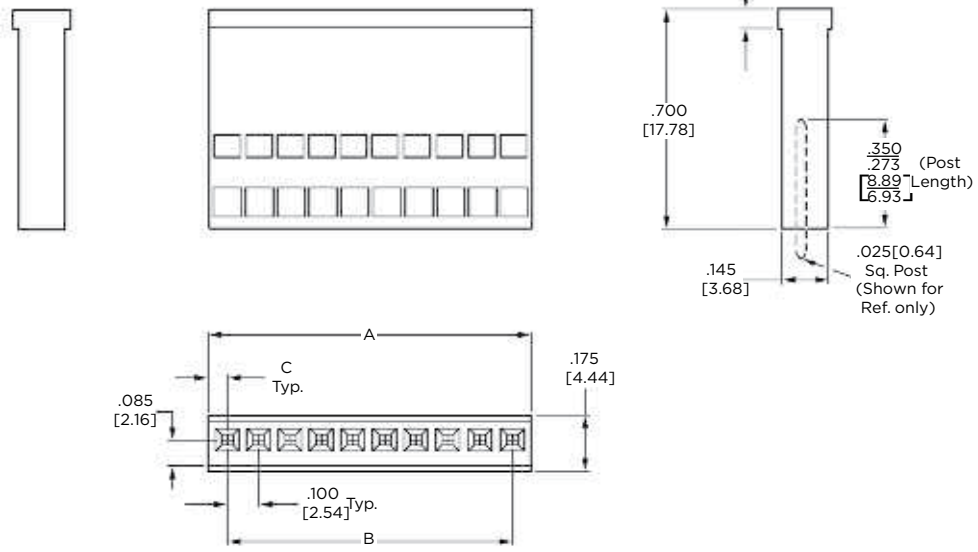
Keying Plug



Part Numbers 87179-1

(Plugs directly into Housings for .025 [0.64] square post contacts) Material **-** Yellow, nylon

Dimensions: in(mm)



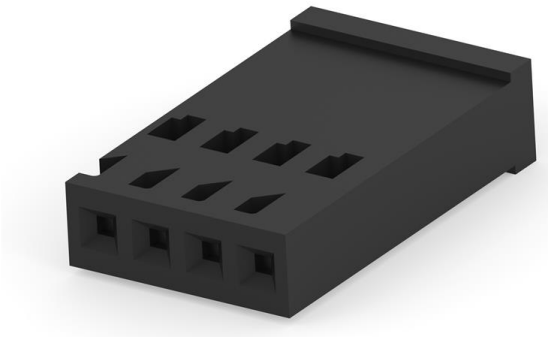
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Housing Part Numbers	
	A	B	C	Unstamped	Stamped
1	.108 [2.74]	-	.054 [1.37]	87175-2	-
2	.216 [5.49]	.100 [2.54]	.058 [1.47]	87175-6	-
3	.316 [8.03]	.200 [5.08]	.058 [1.47]	87175-8	-
4	.416 [10.57]	.300 [7.62]	.058 [1.47]	1-87175-0	-
5	.516 [13.11]	.400 [10.16]	.058 [1.47]	1-87175-2	-
6	.616 [15.65]	.500 [12.70]	.058 [1.47]	1-87175-4	1-87175-3
7	.716 [18.19]	.600 [15.24]	.058 [1.47]	1-87175-6	1-87175-5
8	.816 [20.73]	.700 [17.78]	.058 [1.47]	1-87175-8	1-87175-7
9	.916 [23.27]	.800 [20.32]	.058 [1.47]	2-87175-0	1-87175-9
10	1.016 [25.81]	.900 [22.86]	.058 [1.47]	2-87175-2	2-87175-1
11	1.116 [28.35]	1.000 [25.40]	.058 [1.47]	2-87175-4	2-87175-3
12	1.216 [30.89]	1.100 [27.94]	.058 [1.47]	2-87175-6	2-87175-5
13	1.316 [33.43]	1.200 [30.48]	.058 [1.47]	2-87175-8	2-87175-7
14	1.416 [35.97]	1.300 [33.02]	.058 [1.47]	3-87175-0	2-87175-9
15	1.516 [38.51]	1.400 [35.56]	.058 [1.47]	87175-4	87175-3

Note: All Part Numbers are RoHS compliant.

LOCKING CLIP RECEPTACLE HOUSINGS

SINGLE ROW, FOR 0.63mm SQUARE POSTS



Specification:

Housing- Thermoplastic Polyester GV, Black, UL 94V-0 Rated

Mating Connectors:

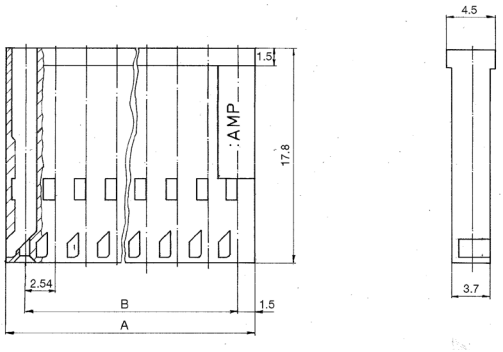
MODII Pin Headers - Page 28 & Page 47

Technical Documents:

Product Specification- 108-36028 & 108-36028-1

Application Specification-114-25006

Dimensions: in(mm)



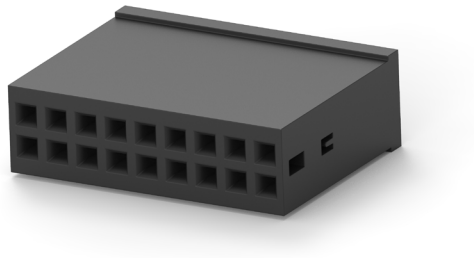
PRODUCT INFORMATION

Both Ends Closed Housings

No. of Positions	Dimensions: in		Part Numbers
	A	B	
1	2.9	–	926010-1
2	5.5	2.54	926657-2
3	8.1	5.08	926657-3
4	10.6	7.62	926657-4
5	13.2	10.16	926657-5
6	15.7	12.70	926657-6
7	18.3	15.24	926657-7
8	20.8	17.78	926657-8
9	23.3	20.32	926657-9
10	25.9	22.86	1-926657-0

WIRE-APPLIED HOUSINGS FOR LOCKING CLIP CONTACTS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

DOUBLE-ROW



Material

Glass-filled polyester, 94V-0 rated

Related Product Data

Contacts - page 175

Mateable Headers and Posts - Refer to the Mating Post Selection Guide - Page 10

Technical Documents - Page 243

Product Specification - 108-36028, 108-36028-1

Application Specification - 114-25006

Keying Plug

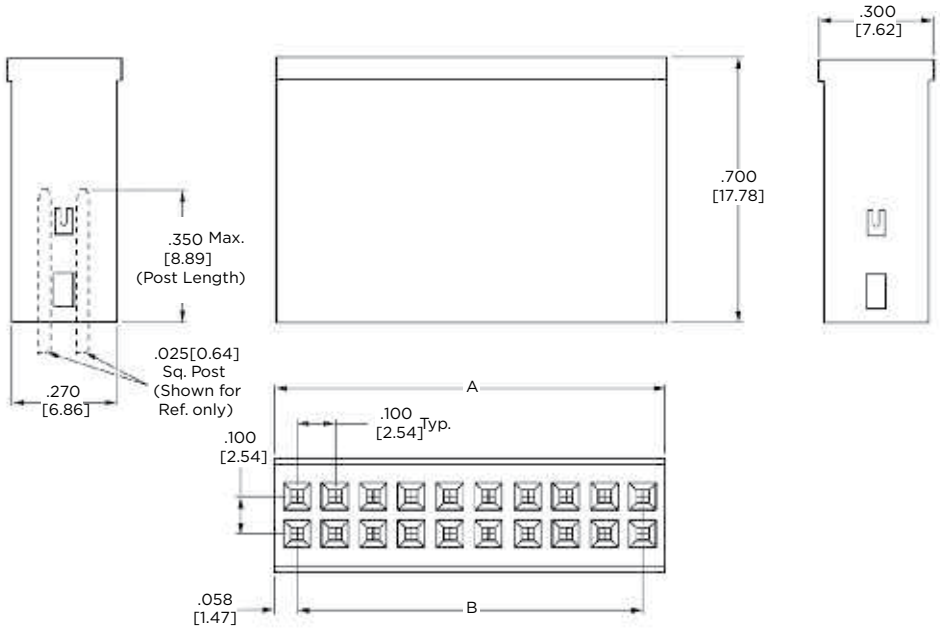


Part Numbers 87179-1

(Plugs directly into **Housing**s for .025 [0.64] square post contacts)

Material - Yellow, nylon

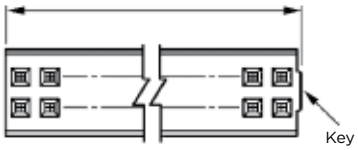
Dimensions: in(mm)



Note: Housing illustrated above is the "Both Ends Closed" version.



Both Ends Closed



Right End Open



Left End Open

PRODUCT INFORMATION

Housing Configuration	No. of Pos.	Dimensions: in(mm)		Housing Part Numbers	
		A	B	Unstamped	Stamped
Both Ends Closed	2	.116 [2.95]	-	87176-2	-
	4	.216 [5.49]	.100 [2.54]	87133-1	-
	6	.316 [8.03]	.200 [5.08]	87133-7	87133-8
	8	.416 [10.57]	.300 [7.62]	87133-9	1-87133-0
	10	.516 [13.11]	.400 [10.16]	87133-2	87133-5
	12	.616 [15.65]	.500 [12.70]	1-87133-1	1-87133-2
	16	.816 [20.73]	.700 [17.78]	1-87133-3	1-87133-4
	18	.916 [23.27]	.800 [20.32]	1-87133-5	1-87133-6
	20	1.016 [25.81]	.900 [22.86]	87133-3	87133-6

Note: All Part Numbers are RoHS compliant.

LOCKING CLIP RECEPTACLE HOUSINGS

DOUBLE ROW, FOR 0.63mm SQUARE POSTS

Specification:

Housing- Thermoplastic Polyester GV, Black, UL 94V-0 Rated

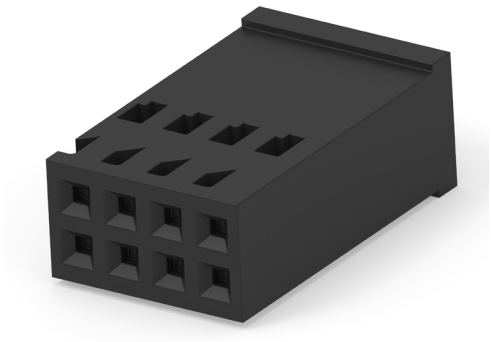
Mating Connectors:

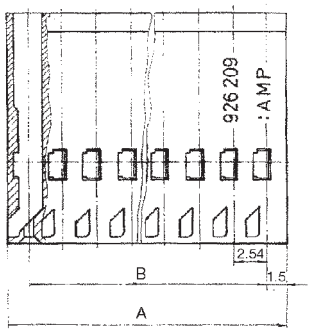
MODII Pin Headers - Page 28 & Page 47

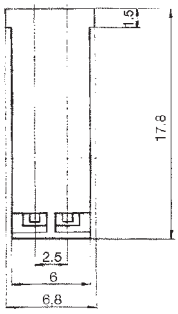
Technical Documents:

Product Specification- 108-36028 & 108-36028-1

Application Specification-114-25006







PRODUCT INFORMATION

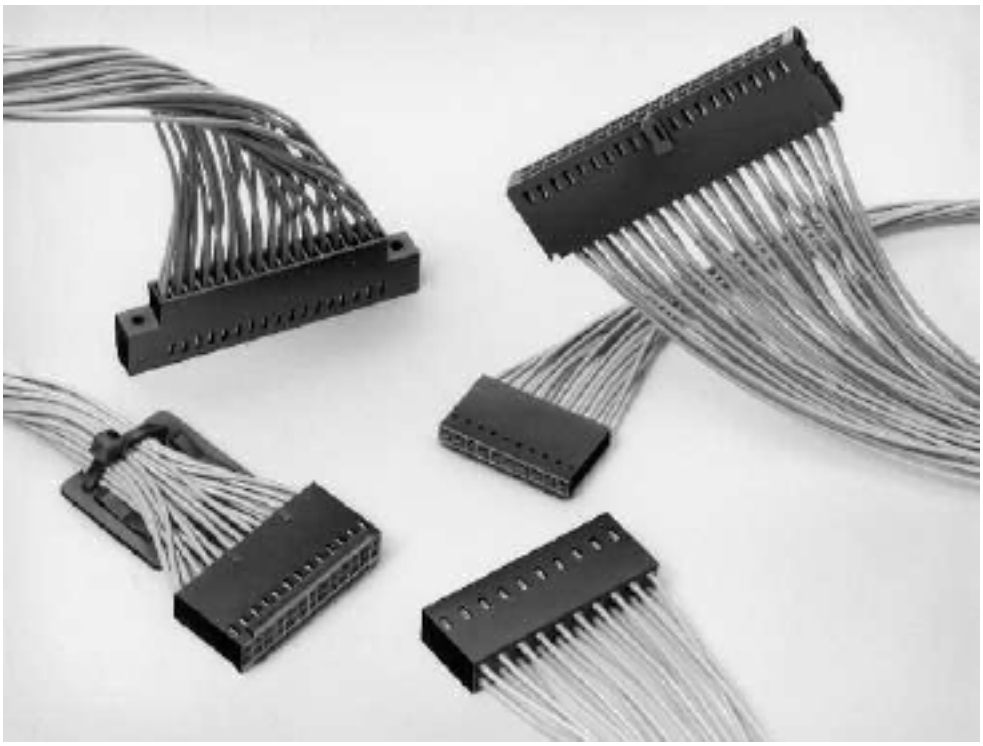
BOTH ENDS CLOSED HOUSINGS

No. of Cavities	Dimensions: in		Part Numbers
	A	B	
2x2	5.5	2.54	926209-2
2x3	8.1	5.08	926209-3
2x4	10.6	7.62	926209-4
2x5	13.2	10.16	926209-5
2x6	15.7	12.70	926209-6
2x7	18.3	15.24	926209-7
2x8	20.8	17.78	926209-8
2x10	25.9	22.86	1-926209-0

STACKABLE SIDE OPEN HOUSINGS

No. of Cavities	Dimensions: in B	Part Numbers
2x10	22.86	-

MOD IV WIRE-APPLIED CONTACTS AND HOUSINGS



PRODUCT FACTS

- Terminates 32-20 AWG [0.03-0.6mm²] discrete wire
- Contacts have insulation support
- Choice of three contact mating pressures
- Available in a variety of gold and tin platings
- Receptacles mate with .025 [0.64] square or round posts
- Dual cantilever contact beam with built-in anti-overstress feature for reliable matings
- Housings accept a variety of receptacle and pin contacts
- Housing sizes range up to 100 positions
- Housing configurations include single- and doublerows on .100 [2.54] centerlines
- Housing options include detent latching, polarization and bonded strain relief/ pull tabs
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

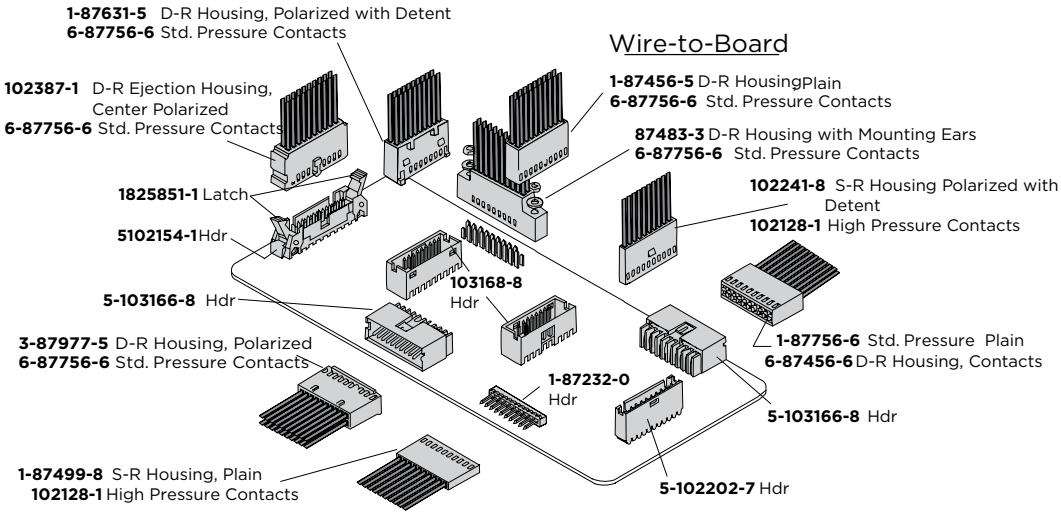
PERFORMANCE CHARACTERISTICS

Contact Current Rating - 3 amperes

Termination Resistance **-** 12 milliohms (max.) **-** Beryllium copper contacts

20 milliohms (max.) - Copper-tinphosphor bronze contacts

Durability - Ref. **Product Specification** 108-25020



MOD IV PIN AND RECEPTACLE CONTACTS

CRIMP SNAP-IN (NO-STRIP) RECEPTACLES AND CRIMP SNAP-IN PINS WITH INSULATION SUPPORT (STANDARD PRESSURE)

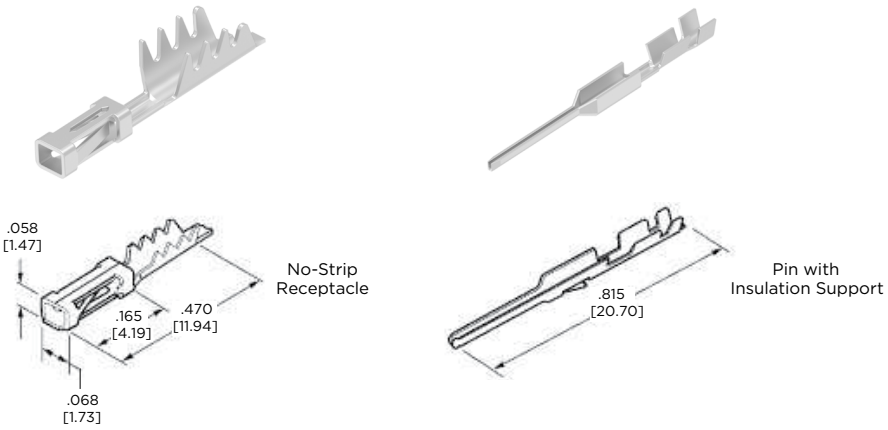
Material and Finish

Beryllium copper, phosphor bronze, or copper-tin-phosphor bronze (see charts), plated as follows:

Plating A - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating C - .000100-.000200 [0.00254-0.00508] tin over .000030 [0.00076] nickel on entire contact



Related Product Data

Housings Used With - Page 149 - Page 179

Performance Characteristics - Page 101

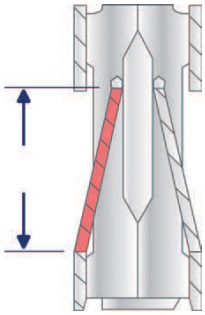
Application Tooling - Page 240

Technical Documents - Page 243

Product Specification 108-25007, 108-25019, 108-25020, 108-25021

Application Specification 114-25003, 114-25016

Additional header sizes are available; minimum order quantities may apply. Consult TE.



Crimp Snap-In (No-strip) Receptacles

Ins. Dia. Range	Finish	Part Numbers		Ocean applicator	Hand Tool Part Numbers
		Strip Form	Loose Piece		
.040-.055 [1.02-1.40]	Plating A	87107-5	102348-2	2837176-1, 2837176-2, 7-2837176-7	-
	Plating C	87107-6	102348-3		

Crimp Snap-In Pins with Insulation Support

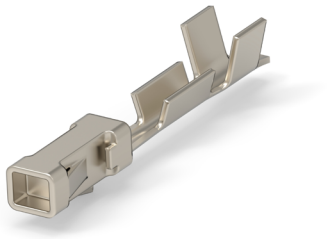
Wire Size Range		Ins. Dia. Range	Finish	Part Numbers		Ocean Applicator*	Hand Tool	
				Strip Form	Loose Piece			
AWG	[mm²]						Premium	Commercial
26-22	0.12-0.4	.061 [1.55]	Plating A	102095-3	102107-2	2836488-2	91517-1	58641-1
			Plating B	102095-2	102107-1			
			Plating C	5-102095-4	5-102107-3			

* For more info please click to view: document 1 and document 2

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE CONTACTS

CRIMP SNAP-IN RECEPTACLES WITH INSULATION SUPPORT (STANDARD, INTERMEDIATE AND HIGH PRESSURE)



Material and Finish

Beryllium copper, phosphor bronze or copper-tin-phosphor bronze (see charts, on following page), plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating D - Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating E - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating F - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating G - .000100-.000200 [0.00254-0.00508] tin over .000030 [0.00076] nickel on entire contact

Related Product Data

Housings Used With - Page 149 - Page 179

Performance Characteristics - Page 101

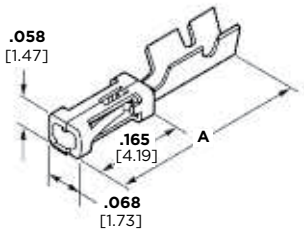
Application Tooling - Page 240

Technical Documents - Page 243

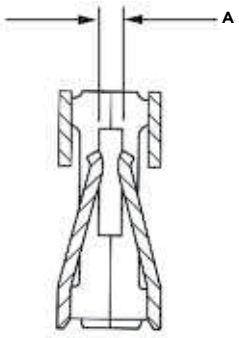
Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification 114-25003, 114-25016

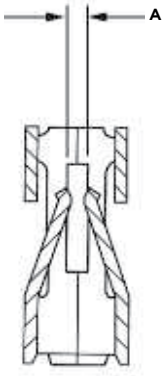
Dimensions: in(mm)



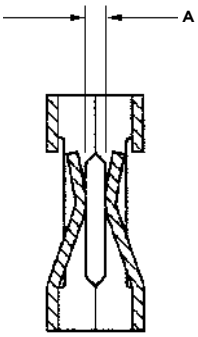
Standard Pressure



Intermediate Pressure



High Pressure



	Mating Force	Unmating Force	A-Gap Dimensions: in
Standard Pressure	9 oz. Max.	1.5 oz. Min.	.008/.014
Intermediate Pressure	16 oz. Max.	2 oz. Min.	.008/.014
High Pressure	20 oz. Max.	3 oz. Min.	.013±.002

PRODUCT INFORMATION

Standard Pressure (Mod IV)

Wire Size Range		Ins. Dia. (Max.)	Dimensions: in(mm) A	Material	Finish	Part Numbers		Ocean Applicator PN*		Hand Tool PN
AWG	[mm²]					Strip Form	Loose Piece	Strip Form	Loose Piece	
32-27	0.03-0.1	.040 [1.02]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-102316-8	6-102316-4	2836135-2	2836135-2	91541-1
				Cu-Sn-Ph Bz	Plating B	5-102316-6	6-102316-3	2836135-2	2836135-2	
				Be Cu	Plating E	102917-1	102917-2			
				Be Cu	Plating F	102917-5	102917-6			
				Cu-Sn-Ph Bz	Plating G	102316-5	1-102316-2	2836135-2	2836135-2	
26-22	0.12-0.4	.061 [1.55]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	6-87756-7	6-87756-8	2151307-2	2151307-2	91517-1, 58641-1
				Cu-Sn-Ph Bz	Plating B	6-87756-2	6-87756-6			
				Cu-Sn-Ph Br	Plating G	87756-6	87756-7			
				Be Cu	Plating D	-	87667-5			
				Be Cu	Plating E	87666-2	87667-2			
				Be Cu	Plating F	87666-5	87667-5		NA	91516-1
				Be Cu	Plating G	87666-3	87667-3		2151307-2	
24-20	0.2-0.6	.069 [1.75]	.470 [11.94]	Cu-Sn-Ph Bz	Plating A	6-87523-8	6-87523-9	2266308-2 2151020-2		
				Cu-Sn-Ph Bz	Plating B	2-87523-3	2-87523-4			
				Be Cu	Plating E	85969-8	86016-2	2151020-2	2266308-1	
				Be Cu	Plating F	85969-6	86016-5	2266308-2 2151020-2	2266308-1	
				Cu-Sn-Ph Br	Plating G	87523-5	87523-6	2266308-2 2151020-2	2266308-2 2151020-2	
				Be Cu	Plating G	85969-9	86016-3	2151020-2	2266308-1	

Intermediate Pressure (Mod IV.V)

Wire Size Range		Ins. Dia. (Max.)	Dimensions: in(mm) A	Material	Finish	Part Numbers		Ocean Applicator PN		Hand Tool PN
AWG	[mm²]					Strip Form	Loose Piece	Strip Form	Loose Piece	
32-27	0.03-0.1	.040 [1.02]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-102920-1	5-102920-2	-	-	91541-1
				Be Cu	Plating E	102918-1	102918-2		-	
26-22	0.12-0.4	.061 [1.55]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-103171-4	5-103171-5	2151307-1		91517-1, 58641-1
				Cu-Sn-Ph Bz	Plating B	5-103171-1	-			
				Be Cu	Plating E	102548-5	102548-6			
				Be Cu	Plating F	102548-1	102548-3			
24-20	0.2-0.6	.069 [1.75]	.470 [11.94]	Cu-Sn-Ph Bz	Plating A	2-87195-3	2-87195-6			
				Cu-Sn-Ph Bz	Plating B	2-87195-4	2-87195-5			
				Be Cu	Plating E	86492-6	87046-3	2151020-2	2151020-2	91516-1
				Be Cu	Plating F	86492-2	87046-1	2266308-2 2151020-2	2266308-2 2151020-2 2151020-2	
				Be Cu	Plating G	86492-9	87046-4	2151020-2		

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION

High Pressure (Mod V)**

Wire Size Range		Ins. Dia. (Max.)	Dimensions: in(mm) A	Material	Finish	Part Numbers		Ocean Applicator PN		Hand Tool PN
AWG	[mm²]					Strip Form	Loose Piece	Strip Form	Loose Piece	
32-27	0.03-0.1	0.03-0.1	.445 [11.30]	Ph Bz	Plating E	103455-1	103455-2			91541-1
26-22	0.12-0.4	0.12-0.4	.445 [11.30]	Ph Bz	Plating E	87809-1	102128-1	2151307-2		91517-1
				Ph Bz	Plating G	87809-2	102128-2			
24-20	0.2-0.6	0.2-0.6	.470 [11.94]	Ph Bz	Plating E	87309-9	1-87309-4	2266308-2		91516-1
				Ph Bz	Plating G	87309-8	1-87309-3			

* For more info please click to view: document 1 and document 2

Note: All Part Numbers are RoHS compliant.

MOD IV/V CRIMP SNAP-IN RECEPTACLE CONTACTS

WITH INSULATION SUPPORT

Specification:

Material- Phosphor bronze, plated as follows:

Plating A- Selectively plated 0.8 µm gold on contact area, gold flash on crimp area, with entire contact underplated 1.3 µm nickel

Plating B- Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

Plating C- Selectively plated 0.8 µm gold on contact area, tin plated on crimp area, with entire contact underplated 1.3 µm nickel

Plating D- Plated 2 µm tin

For use with:

MODIV Receptacle Housings- Page 170

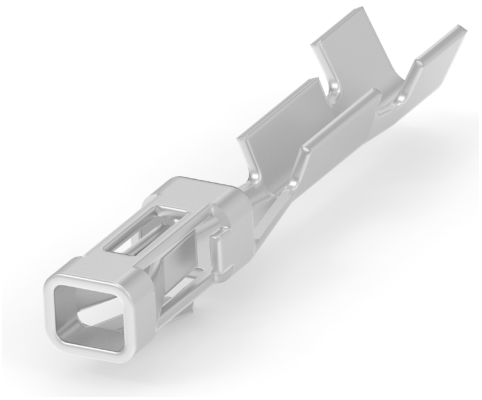
Technical Documents:

Product Specification-

108-25020 - MOD IV Standard Contact Pressure

108-25021 - MOD IV Intermediate Contact Pressure

108-25007 - MOD V High Contact Pressure



Related Products:

Extraction Tool- 843473-1

MOD IV RECEPTACLE CONTACTS WITH STANDARD CONTACT PRESSURE

Wire Size Range mm²	AWG	Insulation Diameter (Max) mm	Version	Part Numbers	
				Plating A	Plating B
0.032-0.09	32-28	1.2	Reel	167020-1	167020-2
			Loose Piece	167023-1	167023-2
0.2-0.56	24-20	1.4	Reel	167300-8	167300-6
0.14-0.12*	26		Loose Piece	141603-4	141603-3

* Consult Tyco Electronics for this wire size range

MOD IV RECEPTACLE CONTACTS WITH INTERMEDIATE CONTACT PRESSURE

Wire Size Range mm²	AWG	Insulation Diameter (Max) mm	Version	Part Numbers		
				Plating A	Plating B	Plating D
0.032-0.09	32-28	1.2	Reel	167021-1	167021-2	167021-3
			0.2-0.56	167024-1	167024-2	167024-3
0.14-0.12*	24-20	1.4	Reel	2-167301-4	167301-4	2-167301-2
0.14-0.12*	26		Loose Piece	1-141708-2	141708-1	1-141708-1

* Consult Tyco Electronics for this wire size range

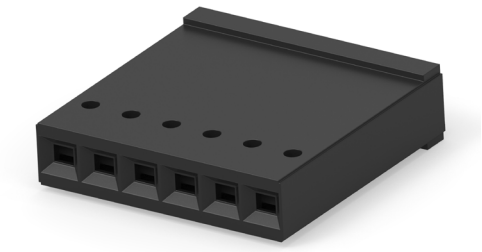
MOD IV RECEPTACLE CONTACTS WITH INTERMEDIATE CONTACT PRESSURE

Wire Size Range mm²	AWG	Insulation Diameter (Max) mm	Version	Part Numbers		
				Plating B	Plating C	Plating D
0.032-0.09	32-28	1.2	Reel	167022-2	167022-1	167022-3
			0.2-0.56	-	-	167025-3
0.14-0.12*	24-20	1.4	Reel	166309-2	–	166309-3
0.14-0.12*	26		Loose Piece	166310-2	–	166310-3

* Consult Tyco Electronics for this wire size range

MOD IV WIRE-APPLIED HOUSINGS, SINGLE-ROW, .100 [2.54] CENTERLINE

Non-Polarized



Material

Black thermoplastic, flame retardant

Related Product Data

Contacts - Page 159

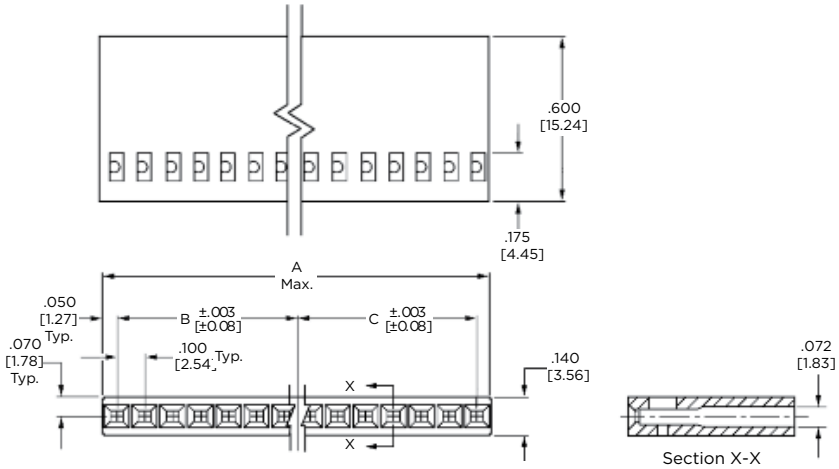
Mateable Headers and Posts **-** Page 14

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers	
	A	B	C	Stamped*	Unstamped**
1	.105 [2.67]	-	-	-	7-87499-2
2	.205 [5.21]	.100 [2.54]	-	87499-3	87499-4
3	.305 [7.75]	.100 [2.54]	.100 [2.54]	87499-5	87499-6
4	.405 [10.29]	.200 [5.08]	.100 [2.54]	87499-7	87499-8
5	.505 [12.83]	.200 [5.08]	.200 [5.08]	87499-9	1-87499-0
6	.605 [15.37]	.300 [7.62]	.200 [5.08]	1-87499-1	1-87499-2
7	.705 [17.91]	.300 [7.62]	.300 [7.62]	87499-1	87499-2
8	.805 [20.45]	.400 [10.16]	.300 [7.62]	1-87499-3	1-87499-4
9	.905 [22.99]	.400 [10.16]	.400 [10.16]	1-87499-5	1-87499-6
10	1.005 [25.53]	.500 [12.70]	.400 [10.16]	1-87499-7	1-87499-8
11	1.105 [28.01]	.500 [12.70]	.500 [12.70]	1-87499-9	2-87499-0
12	1.205 [30.61]	.600 [15.24]	.500 [12.70]	2-87499-1	2-87499-2
13	1.305 [33.15]	.600 [15.24]	.600 [15.24]	2-87499-3	2-87499-4
14	1.405 [35.69]	.700 [17.78]	.600 [15.24]	2-87499-5	2-87499-6
15	1.505 [38.23]	.700 [17.78]	.700 [17.78]	-	2-87499-8
16	1.605 [40.77]	.800 [20.32]	.700 [17.78]	2-87499-9	3-87499-0
17	1.700 [43.18]	.800 [20.32]	.800 [20.32]	-	3-87499-2
18	1.805 [45.85]	.900 [22.86]	.800 [20.32]	-	3-87499-4
19	1.900 [48.26]	.900 [22.86]	.900 [22.86]	-	3-87499-6
20	2.005 [50.93]	1.000 [25.40]	.900 [22.86]	3-87499-7	3-87499-8

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)			Part Numbers	
	A	B	C	Stamped*	Unstamped**
21	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	-	4-87499-0
22	2.205 [56.01]	1.100 [27.94]	1.000 [25.40]	-	4-87499-2
23	2.300 [58.42]	1.100 [27.94]	1.100 [27.94]	-	4-87499-4
24	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	-	4-87499-6
25	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	-	4-87499-8
26	2.605 [66.17]	1.300 [33.02]	1.200 [30.48]	-	5-87499-0
27	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	-	5-87499-2
28	2.800 [71.12]	1.400 [35.56]	1.300 [33.02]	-	5-87499-4
29	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	-	5-87499-6
30	3.005 [76.33]	1.500 [38.10]	1.400 [35.56]	-	5-87499-8

Cavity identification, Part Numbers and date code stamped on **Housing where size permits.
No marking on **Housing.

Notes:
1. Strain reliefs are available and may be purchased separately. Consult TE.
2.Contact Extraction/Lance Reset Tool No. 843996-3.

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

Material
Natural color nylon

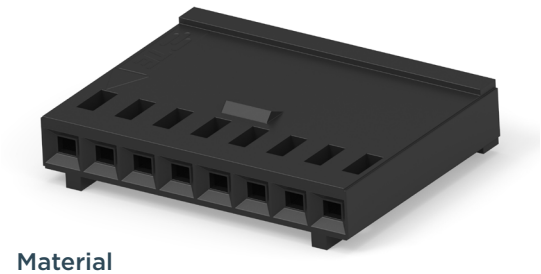


Part Numbers 87077-2
(Plugs directly into **Housing**)

Note: All Part Numbers are RoHS compliant.

MOD IV WIRE-APPLIED HOUSINGS, SINGLE-ROW, .100 [2.54] CENTERLINE

POLARIZED (WITH DETENT LATCHING)



Material

Black thermoplastic, flame retardant

Related Product Data

Contacts - Page 159

Mateable Headers and Posts **-** Page 60

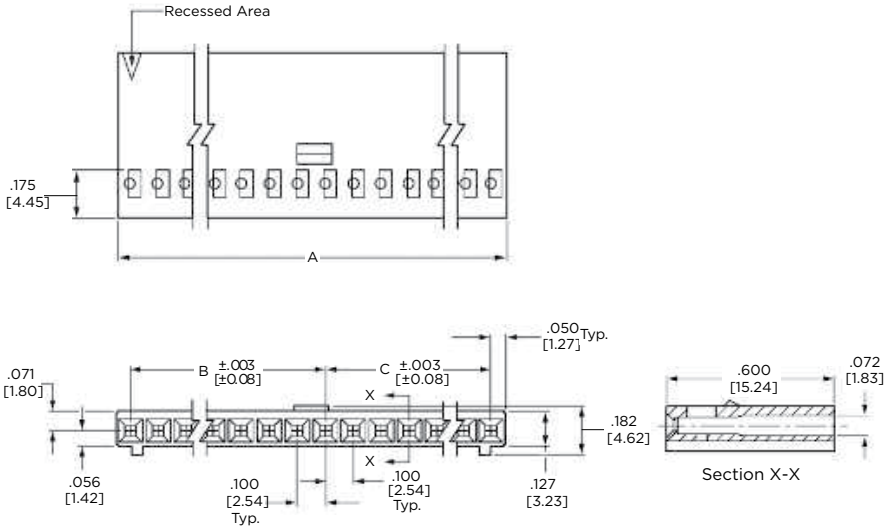
Flexible Film Connectors, Single-Row Pin Assemblies **-** Catalogue 82007

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers
	A	B	C	Unstamped*
3	.300 [7.62]	.100 [2.54]	.100 [2.54]	102241-1
4	.400 [10.16]	.200 [5.08]	.100 [2.54]	102241-2
5	.500 [12.70]	.200 [5.08]	.200 [5.08]	102241-3
6	.600 [15.24]	.300 [7.62]	.200 [5.08]	102241-4
7	.700 [17.78]	.300 [7.62]	.300 [7.62]	102241-5
8	.800 [20.32]	.400 [10.16]	.300 [7.62]	102241-6
9	.900 [22.86]	.400 [10.16]	.400 [10.16]	102241-7
10	1.000 [25.40]	.500 [12.70]	.400 [10.16]	102241-8
11	1.100 [27.94]	.500 [12.70]	.500 [12.70]	102241-9
12	1.200 [30.48]	.600 [15.24]	.500 [12.70]	1-102241-0
13	1.300 [33.02]	.600 [15.24]	.600 [15.24]	1-102241-1
14	1.400 [35.56]	.700 [17.78]	.600 [15.24]	1-102241-2
15	1.500 [38.10]	.700 [17.78]	.700 [17.78]	1-102241-3
16	1.600 [40.64]	.800 [20.32]	.700 [17.78]	1-102241-4
17	1.700 [43.18]	.800 [20.32]	.800 [20.32]	1-102241-5
18	1.800 [45.72]	.900 [22.86]	.800 [20.32]	1-102241-6
19	1.900 [48.26]	.900 [22.86]	.900 [22.86]	1-102241-7
20	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	1-102241-8

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)			Part Numbers
	A	B	C	Unstamped**
21	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	1-102241-9

*No marking on Housing

Note:
Contact Extraction/Lance Reset Tool No. 843996-3.

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

Material
Natural color nylon

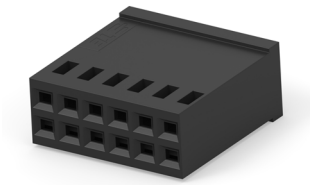


Part Numbers 87077-2
(Plugs directly into **Housing**)

Note: All Part Numbers are RoHS compliant.

MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

NON-POLARIZED



Material

Black thermoplastic, flame retardant

Related Product Data

Contacts - Page 159

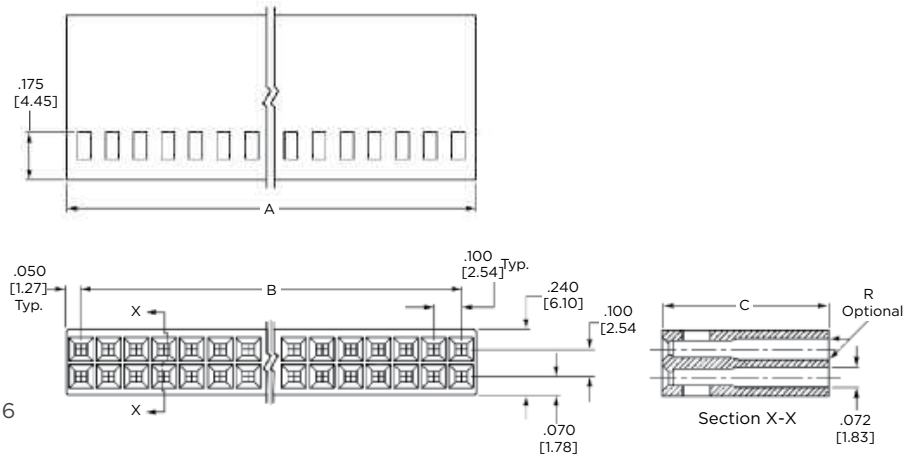
Mateable Headers and Posts **-** Page 21

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Part Numbers		
			C = .600 [15.24]		C = .645 [16.38]
	A	B	Stamped*	Unstamped**	Unstamped**
2	.100 [2.54]	-	-	5-87456-3	-
4	.200 [5.08]	.100 [2.54]	5-87456-0	4-87456-9	-
6	.300 [7.62]	.200 [5.08]	87456-2	87456-1	1-86177-8
8	.400 [10.16]	.300 [7.62]	87456-4	87456-3	-
10	.500 [12.70]	.400 [10.16]	87456-6	87456-5	1-86177-2
12	.600 [15.24]	.500 [12.70]	87456-8	87456-7	1-86177-3
14	.700 [17.78]	.600 [15.24]	1-87456-0	87456-9	1-86177-4
16	.800 [20.32]	.700 [17.78]	1-87456-2	1-87456-1	1-86177-5
18	.900 [22.86]	.800 [20.32]	1-87456-4	1-87456-3	-
20	1.000 [25.40]	.900 [22.86]	1-87456-6	1-87456-5	86177-1
22	1.100 [27.94]	1.000 [25.40]	-	1-87456-7	-
24	1.200 [30.48]	1.100 [27.94]	2-87456-0	1-87456-9	-
26	1.300 [33.02]	1.200 [30.48]	2-87456-2	2-87456-1	86177-4
28	1.400 [35.56]	1.300 [33.02]	2-87456-4	2-87456-3	-
30	1.500 [38.10]	1.400 [35.56]	2-87456-6	2-87456-5	-
32	1.600 [40.64]	1.500 [38.10]	-	2-87456-7	-
34	1.700 [43.18]	1.600 [40.64]	3-87456-0	2-87456-9	-
36	1.800 [45.72]	1.700 [43.18]	-	3-87456-1	-
38	1.900 [48.26]	1.800 [45.72]	-	3-87456-3	-
40	2.000 [50.80]	1.900 [48.26]	3-87456-6	3-87456-5	-

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)		Part Numbers		
			C = .600 [15.24]		C = .645 [16.38]
	A	B	Stamped*	Unstamped**	Unstamped**
42	2.100 [53.34]	2.000 [50.80]	-	4-87456-3	-
44	2.200 [55.88]	2.100 [53.34]	3-87456-8	3-87456-7	-
48	2.400 [60.96]	2.300 [58.42]	-	5-87456-9	-
50	2.500 [63.50]	2.400 [60.96]	4-87456-0	3-87456-9	-
52	2.600 [66.04]	2.500 [63.50]	-	4-87456-1	1-86177-9
54	2.700 [68.58]	2.600 [66.04]	-	4-87456-5	-
56	2.800 [71.12]	2.700 [68.58]	-	6-87456-1	-
58	2.900 [73.66]	2.800 [71.12]	-	6-87456-3	-
60	3.000 [76.20]	2.900 [73.66]	5-87456-2	5-87456-1	-
64	3.200 [81.28]	3.100 [78.74]	-	6-87456-5	-
72	3.600 [91.44]	3.500 [88.90]	4-87456-8	4-87456-7	-

Cavity identification, Part Numbers and date code stamped on **Housing where size permits
**No marking on Housing

Notes:
1. Strain reliefs are available and may be purchased separately. Consult TE
2.Contact Extraction/Lance Reset Tool No. 843996-3

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

Material
Natural color nylon



Part Numbers 87077-1
(for .645 high **Housing**s)

Part Numbers 87077-2
(Plugs directly into **Housing**)

Note: All Part Numbers are RoHS compliant.

MOD IV RECEPTACLE HOUSINGS

SINGLE ROW

Specification:

Housing- Polyester (PBT) black, glass fibre filled

Mating Connectors:

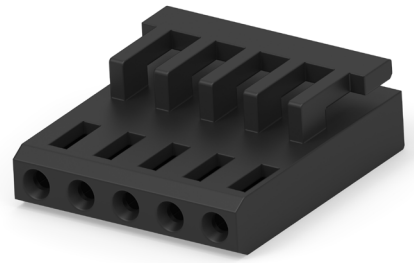
MODII High Temp Shrouded Headers - Page 81

Technical Documents:

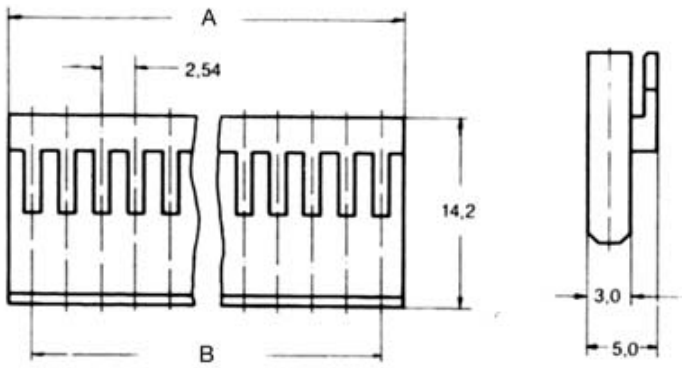
Product Specification:

- 108-25007
- 108-25020
- 108-25021

Application Specification-114-25003



Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	
3	7.62	5.08	926475-3
4	10.16	7.62	926475-4
5	12.70	10.16	926475-5
6	15.24	12.70	926475-6
7	17.78	15.24	926475-7
8	20.32	17.78	926475-8
10	25.40	22.86	1-926475-0
36	91.44	88.90	3-926475-6

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD IV RECEPTACLE HOUSINGS

DOUBLE ROW

Specification:

Housing- Polyester (PBT) black, glass fibre filled

Mating Connectors:

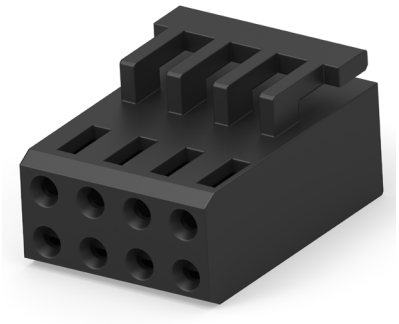
MODII High Temp Shrouded Headers - Page 81

Technical Documents:

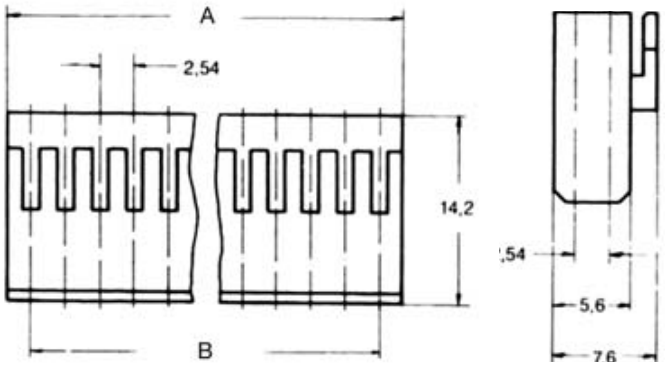
Product Specification:

- 108-25007
- 108-25020
- 108-25021

Application Specification-114-25003



Dimensions: in(mm)



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	
2x3	7.62	5.08	926476-3
2x4	10.16	7.62	926476-4
2x5	12.70	10.16	926476-5
2x6	15.24	12.70	926476-6
2x7	17.78	15.24	926476-7
2x8	20.32	17.78	926476-8
2x9	22.86	20.32	926476-9
2x10	25.40	22.86	1-926476-0
2x20	50.80	48.26	2-926476-0
2x36	91.44	88.90	3-926476-6

For Part Numbers of positions not shown, please combine dash numbers appropriately

MOD IV ACCESSORIES

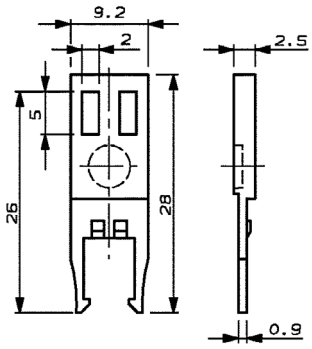
Specification:

Retention Plugs - Polycarbonate, glass fibre filled

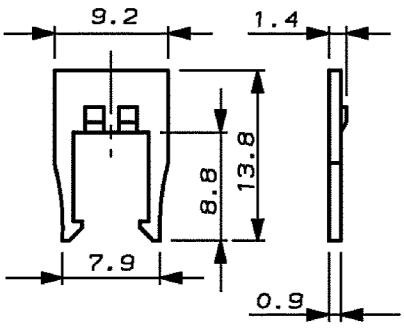
Keying Plug - Polyamide 6.6 glass fibre filled

For use with: MODIV Receptacle Housings - Page 170

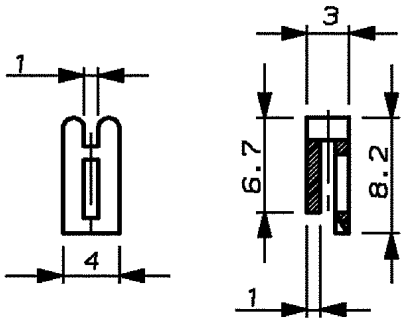
Retention Plug with Strain Relief



Retention Plug without Strain Relief



Keying Plug



PRODUCT INFORMATION

Colour	Part Numbers		
	Retention Plug with Strain Relief	Retention Plug without Strain Relief	Keying Plug
Black	926478-1	926477-1	926498-1
Green	-	-	926498-2
Red	-	-	926498-3

MOD IV RECEPTACLE HOUSINGS

SINGLE ROW, WITH AND WITHOUT STRAIN RELIEF

Specification:

Housing- Green polyamide, 6.6 UL 94V-HB rated

Mating Connectors:

With strain relief -

MODII Pin Headers - Page 29

Without strain relief -

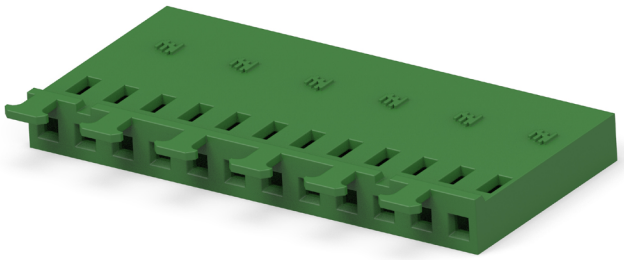
MODII Pin Headers- Page 28 & Page 47

Technical Documents:

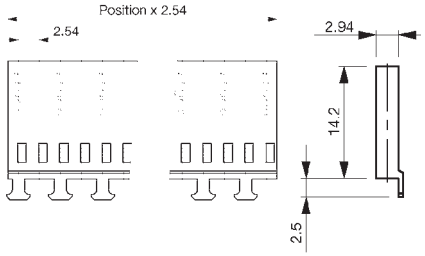
Product Specification:

- 108-25007
- 108-25020
- 108-25021

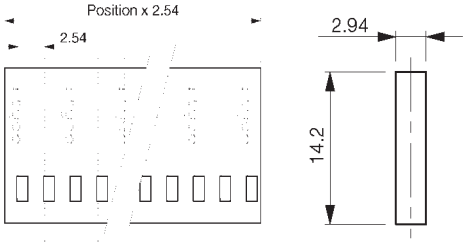
Application Specification-114-25003



WITH STRAIN RELIEF



WITHOUT STRAIN RELIEF



PRODUCT INFORMATION

No. of Positions	Part Numbers	
	With Strain Relief	Without Strain Relief
2	925369-2	925366-2
3	925369-3	925366-3
4	925369-4	925366-4
5	925369-5	925366-5
6	925369-6	925366-6
7	925369-7	925366-7
8	925369-8	925366-8
9	925369-9	-
10	1-925369-0	1-925366-0
50	5-925369-0	5-925366-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

Keying Plug - Green	926519-2

MOD IV RECEPTACLE HOUSINGS

SINGLE ROW, WITH AND WITHOUT STRAIN RELIEF

Specification:

Housing- Green polyamide, 6.6 UL 94V-HB rated

Mating Connectors:

With strain relief -

MODII Pin Headers - Page 29

Without strain relief -

MODII Pin Headers- Page 28 & Page 47

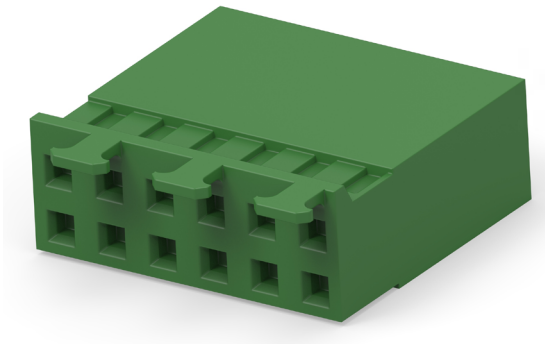
Technical Documents:

Product Specification- 108-25007

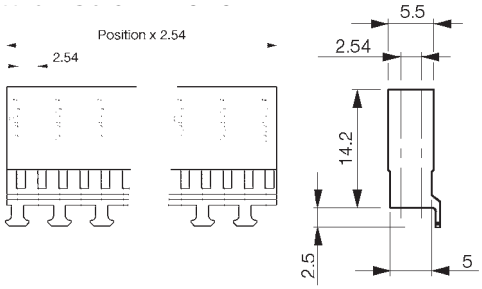
- 108-25020

- 108-25021

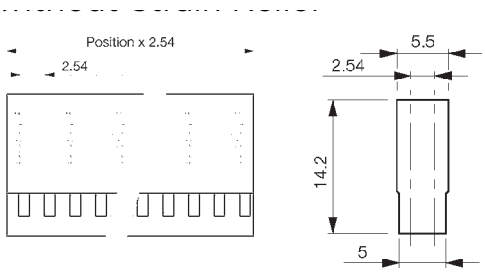
Application Specification-114-25003



WITH STRAIN RELIEF



WITHOUT STRAIN RELIEF



PRODUCT INFORMATION

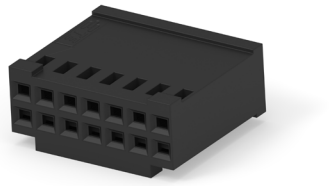
No. of Positions	Part Numbers	
	With Strain Relief	Without Strain Relief
2x2	925370-2	925367-2
2x3	925370-3	925367-3
2x4	925370-4	925367-4
2x5	925370-5	925367-5
2x6	925370-6	925367-6
2x7	925370-7	925367-7
2x8	925370-8	925367-8
2x9	925370-9	-
2x10	-	1-925367-0
2x20	-	2-925367-0
2x50	5-925370-0	5-925367-0

For Part Numbers of positions not shown, please combine dash numbers appropriately

Keying Plug - Green	926519-2

MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

POLARIZED



Material

Black thermoplastic, flame retardant

Related Product Data

Contacts - Page 159

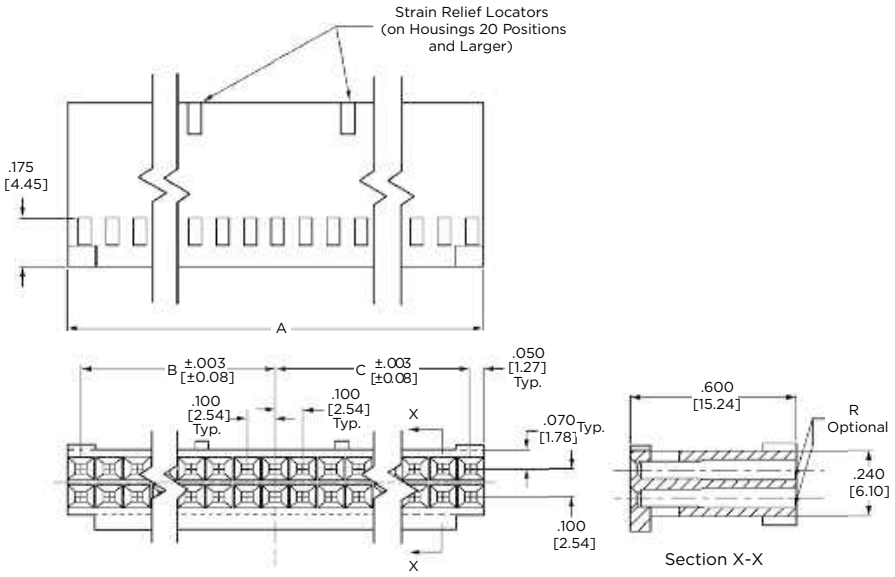
Mateable Headers and Posts **-** pages Page 10

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers	
	A	B	C	Stamped*	Unstamped**
6	.300 [7.62]	.100 [2.54]	.100 [2.54]	87977-1	2-87977-8
8	.400 [10.16]	.200 [5.08]	.100 [2.54]	87977-2	2-87977-9
10	.500 [12.70]	.200 [5.08]	.200 [5.08]	87977-3	3-87977-0
12	.600 [15.24]	.300 [7.62]	.200 [5.08]	87977-4	3-87977-1
14	.700 [17.78]	.300 [7.62]	.300 [7.62]	87977-5	3-87977-2
16	.800 [20.32]	.400 [10.16]	.300 [7.62]	87977-6	3-87977-3
18	.900 [22.86]	.400 [10.16]	.400 [10.16]	-	3-87977-4
20	1.000 [25.40]	.500 [12.70]	.400 [10.16]	87977-8	3-87977-5
22	1.100 [27.94]	.500 [12.70]	.500 [12.70]	-	3-87977-6
24	1.200 [30.48]	.600 [15.24]	.500 [12.70]	1-87977-0	3-87977-7
26	1.300 [33.02]	.600 [15.24]	.600 [15.24]	1-87977-1	3-87977-8
28	1.400 [35.56]	.700 [17.78]	.600 [15.24]	-	3-87977-9
30	1.500 [38.10]	.700 [17.78]	.700 [17.78]	-	4-87977-0
32	1.600 [40.64]	.800 [20.32]	.700 [17.78]	-	4-87977-1
34	1.700 [43.18]	.800 [20.32]	.800 [20.32]	-	4-87977-2
36	1.800 [45.72]	.900 [22.86]	.800 [20.32]	-	4-87977-3
38	1.900 [48.26]	.900 [22.86]	.900 [22.86]	-	4-87977-4
40	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	1-87977-8	4-87977-5

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)			Part Numbers	
	A	B	C	Stamped*	Unstamped**
42	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	-	4-87977-6
44	2.200 [55.88]	1.100 [27.94]	1.000 [25.40]	-	4-87977-7
48	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	-	5-87977-6
50	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	2-87977-1	4-87977-8
52	2.600 [66.04]	1.300 [33.02]	1.200 [30.48]	-	4-87977-9
54	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	-	5-87977-0
56	2.800 [71.12]	1.400 [35.56]	1.300 [33.02]	-	5-87977-8
58	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	-	6-87977-0
60	3.000 [76.20]	1.500 [38.10]	1.400 [35.56]	2-87977-4	5-87977-1
64	3.200 [81.28]	1.600 [40.64]	1.500 [38.10]	-	-
66	3.300 [83.82]	1.600 [40.64]	1.600 [40.64]	-	5-87977-2
70	3.500 [88.90]	1.700 [43.18]	1.700 [43.18]	-	5-87977-3
72	3.600 [91.44]	1.800 [45.72]	1.700 [43.18]	-	5-87977-4

*Cavity identification, Part Numbers and date code stamped on **Housing** where size permits
No marking on **Housing or strain relief
Notes:
1. Strain reliefs are available and may be purchased separately. Consult TE
2.Contact Extraction/Lance Reset Tool No. 843996-3

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

Material
Natural color nylon

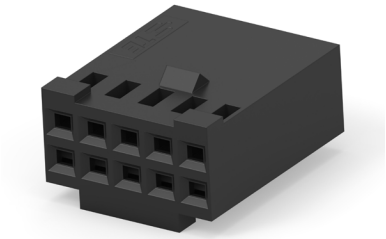


Part Numbers 87077-2
(Plugs directly into **Housing**)

Note: All Part Numbers are RoHS compliant.

MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

POLARIZED (WITH DETENT LATCHING, WITH AND WITHOUT STRAIN RELIEF/PULL TAB)



Material

Black thermoplastic, flame retardant

Related Product Data

Contacts - Page 159

Mateable Headers and Posts **-** Page 10

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

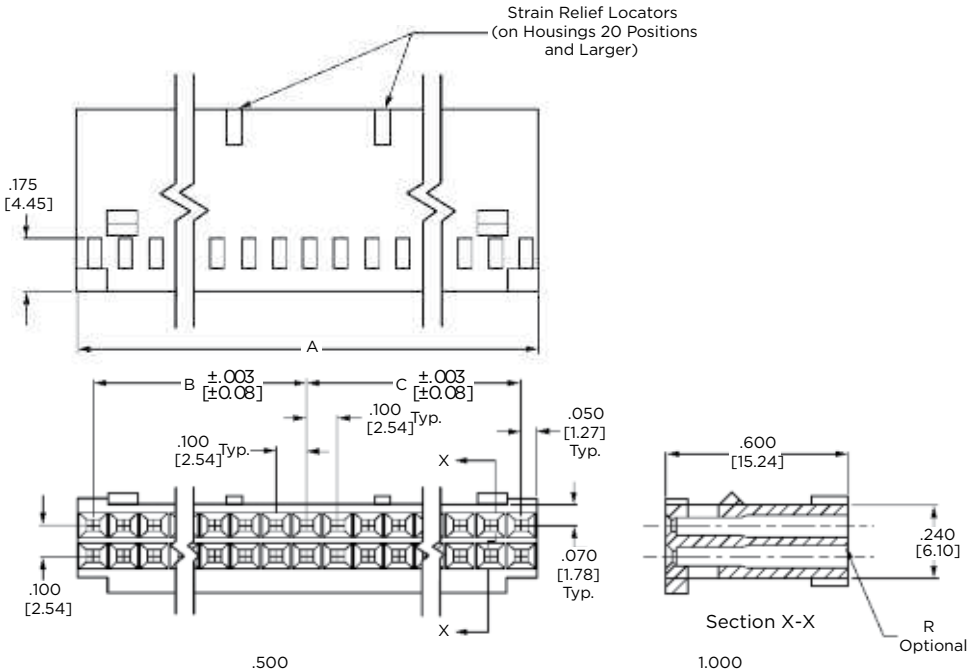
Material

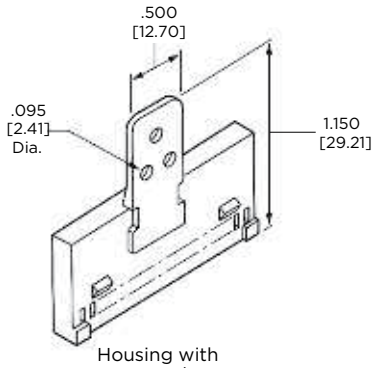
Natural color nylon



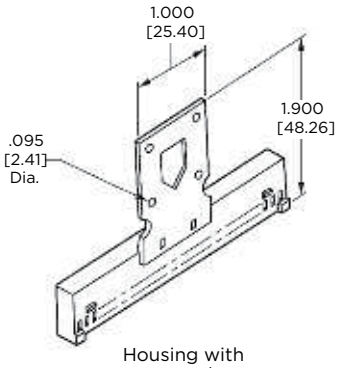
Part Numbers 87077-2
(Plugs directly into **Housing**)

Dimensions: in(mm)





Housing with
Strain Relief/Pull Tab
Strain Relief Part No. 87921-1
(10 thru 18 positions)



Housing with
Strain Relief/Pull Tab
Strain Relief Part No. 87710-1
(20 positions and larger)

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			No. of Detents	Part Numbers		
					Without Strain Relief		With Strain Relief
	A	B	C		Stamped*	Unstamped**	Stamped*
6	.300 [7.62]	.100 [2.54]	.100 [2.54]	1	87631-2	87631-1	-
8	.400 [10.16]	.200 [5.08]	.100 [2.54]	1	87631-4	87631-3	-
10	.500 [12.70]	.200 [5.08]	.200 [5.08]	1	87631-6	87631-5	87922-1
12	.600 [15.24]	.300 [7.62]	.200 [5.08]	1	87631-8	87631-7	87922-2
14	.700 [17.78]	.300 [7.62]	.300 [7.62]	1	1-87631-0	87631-9	87922-3
16	.800 [20.32]	.400 [10.16]	.300 [7.62]	1	1-87631-2	1-87631-1	87922-4
18	.900 [22.86]	.400 [10.16]	.400 [10.16]	1	1-87631-4	1-87631-3	87922-5
20	1.000 [25.40]	.500 [12.70]	.400 [10.16]	2	1-87631-6	1-87631-5	-
22	1.100 [27.94]	.500 [12.70]	.500 [12.70]	2	1-87631-8	1-87631-7	-
24	1.200 [30.48]	.600 [15.24]	.500 [12.70]	2	2-87631-0	1-87631-9	-
26	1.300 [33.02]	.600 [15.24]	.600 [15.24]	2	2-87631-2	2-87631-1	-
28	1.400 [35.56]	.700 [17.78]	.600 [15.24]	2	2-87631-4	2-87631-3	-
30	1.500 [38.10]	.700 [17.78]	.700 [17.78]	2	2-87631-6	2-87631-5	-
32	1.600 [40.64]	.800 [20.32]	.700 [17.78]	2	2-87631-8	2-87631-7	-
34	1.700 [43.18]	.800 [20.32]	.800 [20.32]	2	3-87631-0	2-87631-9	-
36	1.800 [45.72]	.900 [22.86]	.800 [20.32]	2	3-87631-2	3-87631-1	-
38	1.900 [48.26]	.900 [22.86]	.900 [22.86]	2	-	3-87631-3	-
40	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	2	3-87631-6	3-87631-5	-
42	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	2	3-87631-8	3-87631-7	-
44	2.200 [55.88]	1.100 [27.94]	1.000 [25.40]	2	4-87631-0	3-87631-9	-
48	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	2	-	5-87631-9	-
50	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	2	4-87631-2	4-87631-1	-
52	2.600 [66.04]	1.300 [33.02]	1.200 [30.48]	2	-	4-87631-3	-
54	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	2	4-87631-6	4-87631-5	-
58	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	2	-	6-87631-3	-
60	3.000 [76.20]	1.500 [38.10]	1.400 [35.56]	2	5-87631-2	5-87631-1	-
64	3.200 [81.28]	1.600 [40.64]	1.500 [38.10]	2	6-87631-6	6-87631-5	-
66	3.300 [83.82]	1.600 [40.64]	1.600 [40.64]	2	-	5-87631-3	-
70	3.500 [88.90]	1.700 [43.18]	1.700 [43.18]	2	-	5-87631-5	-
72	3.800 [96.52]	1.800 [45.72]	1.700 [43.18]	2	5-87631-8	5-87631-7	-

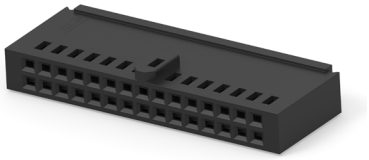
*Cavity identification, Part Numbers and date code stamped on Housing where size permits
**No marking on Housing or strain relief

Notes:
1. The Strain Relief/Pull Tab can be bonded to any thermoplastic connector Housing
2. Strain reliefs may be purchased separately
3. Contact Extraction/Lance Reset Tool No. 843996-3

Note: All Part Numbers are RoHS compliant.

MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CENTER POLARIZED



Material

Black thermoplastic, flame retardant

Related Product Data`

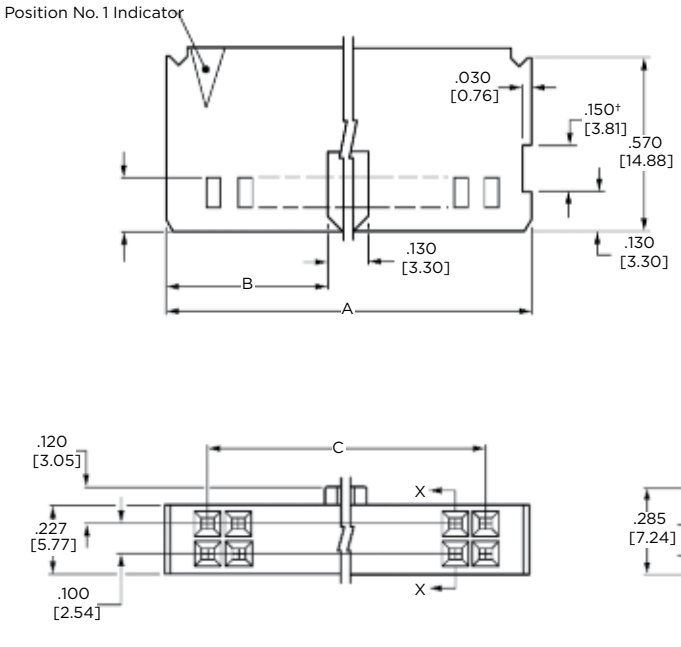
Contacts - Page 159

Technical Documents - Page 243

Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

Dimensions: in(mm)



Section X-X

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Part Numbers
	A	B	C	(Stamped*)
8	.580 [14.73]	.225 [5.72]	.300 [7.62]	1-102387-4
10	.680 [17.27]	.275 [6.98]	.400 [10.16]	102387-1
14	.880 [22.35]	.375 [9.53]	.600 [15.24]	102387-2
16	.980 [24.89]	.425 [10.80]	.700 [17.78]	102387-3
20	1.180 [29.97]	.525 [13.34]	.900 [22.86]	102387-4
22	1.280 [32.51]	.575 [14.61]	1.000 [25.40]	1-102387-5
24	1.380 [35.05]	.625 [15.88]	1.100 [27.94]	102387-5
26	1.480 [37.59]	.675 [17.15]	1.200 [30.48]	102387-6
30	1.680 [42.67]	.775 [19.69]	1.400 [35.56]	102387-7
34	1.880 [47.75]	.875 [22.23]	1.600 [40.64]	102387-8
40	2.180 [55.37]	1.025 [26.04]	1.900 [48.26]	102387-9
44	2.380 [60.45]	1.125 [28.58]	2.100 [53.34]	1-102387-3
50	2.680 [68.07]	1.275 [32.39]	2.400 [60.96]	1-102387-0
60	3.180 [80.77]	1.525 [38.74]	2.900 [73.66]	1-102387-1
64	3.380 [85.85]	1.625 [41.28]	3.100 [78.74]	1-102387-2

*Cavity identification, Part Numbers and date code stamped on **Housing** where size permits
†Non-functional slot is used for gating purposes during injection molding process. This gating feature is not inherent in all production molds. Therefore, the depicted slot will only be present on **Housing**s produced on mold tooling requiring this gating feature.
Note: Contact Extraction/Lance Reset Tool No. 843996-3

Note: All Part Numbers are RoHS compliant.

Keying Plugs

Part Number 86286-1
(Plugs into standard or intermediate pressure receptacle contact)

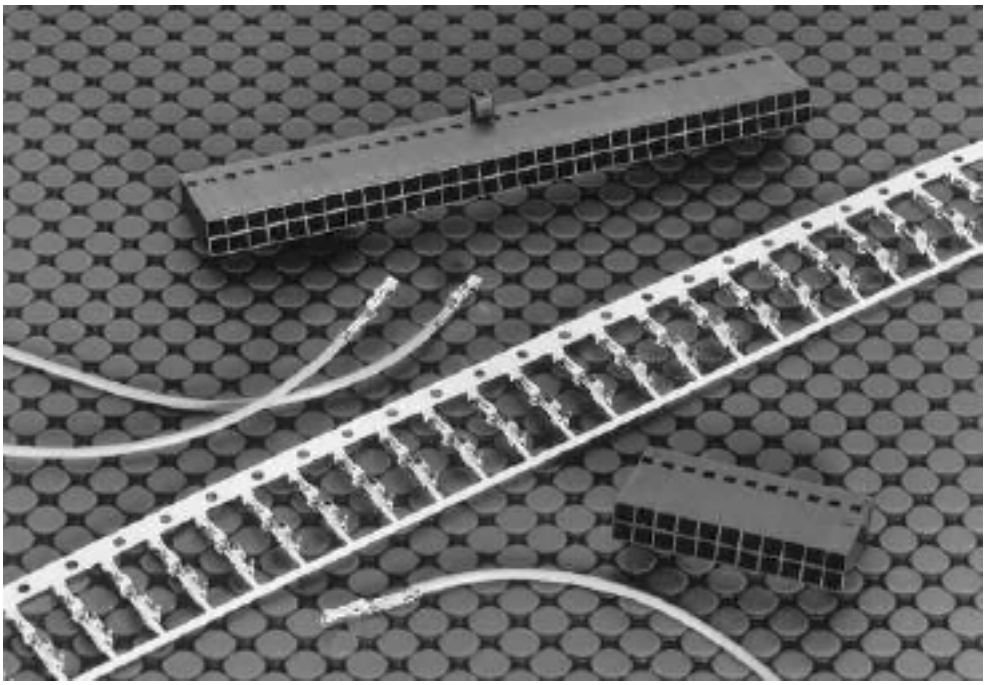
Material
Natural color nylon



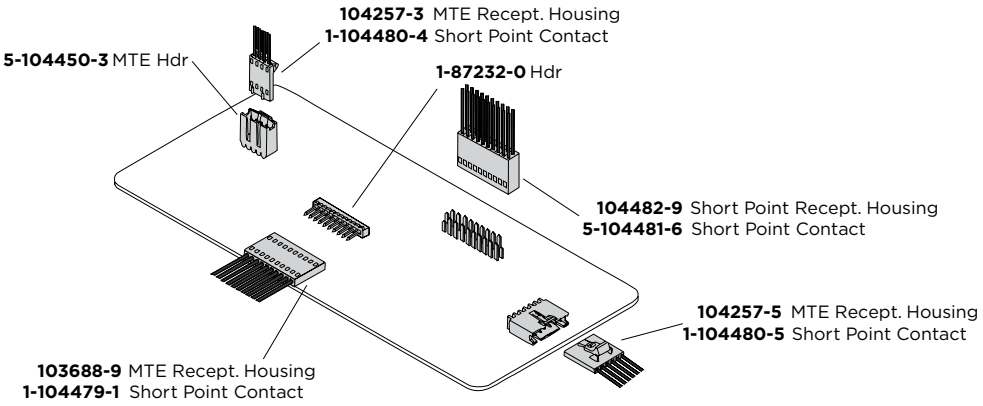
Part Numbers 87077-1
(for .645 high Housings)

Part Numbers 87077-2
(Plugs directly into Housing)

SHORT POINT, CRIMP SNAP-IN WIRE-APPLIED CONTACTS AND HOUSINGS



WIRE-TO-BOARD



AMPMODU Short Point receptacle contacts are designed to mate with .025 [0.64] square posts. They will mate with posts as short as .169 [4.29]. Short Point double-row **Housing**s are end-to-end and side-to-side stackable on .100 [2.54] centers. Contacts also can be used in single-row AMPMODU MTE **Housing**s to provide a complete wire-crimp system, or to serve as replacement contacts.

PERFORMANCE CHARACTERISTICS

Contact Current Rating - 3 amperes

Termination Resistance - 12 milliohms (max.)

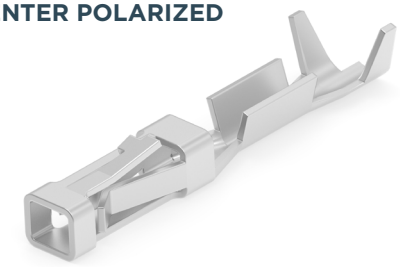
Durability - Ref. **Product Specification** 108-1472

PRODUCT FACTS

- Short point of contact mates with .169 [4.29] to .259 [6.58] long post
- Double-row **Housing**s are end-to-end and side-to-side stackable
- Terminates 32-20 AWG [0.03-0.6 mm^2] discrete wire
- Contacts have insulation support to accept a maximum insulation diameter of .060 [1.52]
- Available with .000015 [0.00038] or .000030 [0.00076] gold duplex, or tin plating
- Mates with .025 [0.64] square posts
- Dual cantilever contact beams for reliable matings
- Locking retention latch provides approximately 3 lb [13.34 N] of retention force
- Unique locking latch design helps prevent latch from protruding through latch window
- Contacts snap into AMPMODU MTE single-row **Housing**s
- Double-row **Housing** configurations include .100 [2.54] centerline, plain and polarized
- **Housing** sizes range from 4 to 52 positions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR7189
- Produced under a Quality Management System certified to ISO 9001

SHORT POINT CRIMP SNAP-IN RECEPTACLE CONTACTS

CENTER POLARIZED



Material and Finish

Copper alloy C7025, plated as follows:

Plating A - Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating B - Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating C - .000100 [0.00254] min. tin over .000050 [0.00127] min. nickel on entire contact

Related Product Data

Performance Characteristics - Page 101

Housings used in - Short Point - Page 183

AMPMODU MTE Unloaded Housings - Page 189

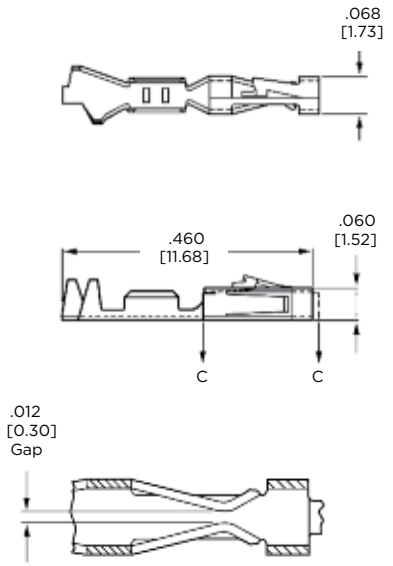
Application Tooling - Page 240

Technical Documents - Page 243

Product Specification - 108-1472

Application Specification - 114-25038

Dimensions: in(mm)



Section C - C



Keying Plug
Part No. 104072-1
Ten plugs are supplied per strip.
Order quantity reflects the number of strips required.



Extraction/Lance Reset Tool No. 843477-1

PRODUCT INFORMATION

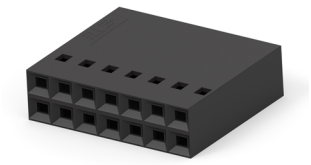
Wire Size Range		Ins. Dia. Range	Finish	Contact Part Numbers (Standard Pressure)		Ocean Applicator PN		Hand Tool PN
AWG	[mm²]			Strip Form	Loose Piece	Strip Form	Loose Piece	
32-28	0.03-0.08	.025-.060 [0.64-1.52]	Plating A	1-104481-1	1-104481-3	2836129-2		91518-1
			Plating B	1-104481-0	1-104481-2			
			Plating C	5-104481-2	5-104481-6			
26-22	0.13-0.3	.025-.060 [0.64-1.52]	Plating A	1-104480-3	1-104480-6	2234095-2		
			Plating B	1-104480-2	1-104480-5			
			Plating C	1-104480-7	1-104480-4			
24-20	0.2-0.5	.025-.060 [0.64-1.52]	Plating A	1-104479-0	1-104479-3			91601-1
			Plating B	104479-9	1-104479-2			
			Plating C	104479-8	1-104479-1	2266323-1, 2266323-2	-	

* For more info please click to view: document 1 and document 2.

Note: All Part Numbers are RoHS compliant.

SHORT POINT WIRE-APPLIED HOUSINGS, DOUBLE-ROW, NON-POLARIZED, .100 X .100 [2.54 X 2.54] CENTERLINE

CENTER POLARIZED



Material and Finish

Black thermoplastic, flame retardant, 94V-0 rated

Related Product Data

Performance Characteristics - Page 101

Contacts - Page 159

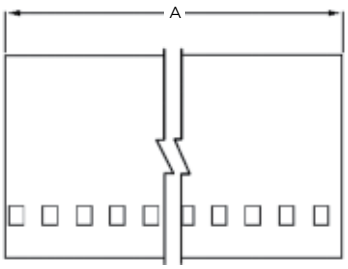
Mateable Headers - Page 10

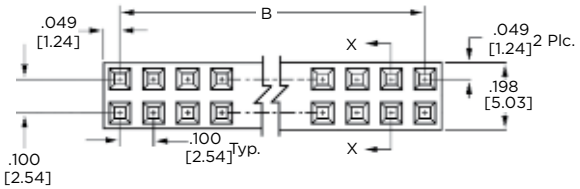
Technical Documents - Page 243

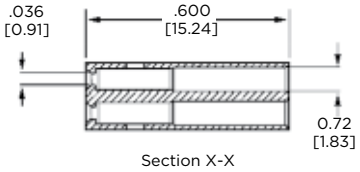
Product Specification - 108-1472

Application Specification - 114-25038

Dimensions: in(mm)





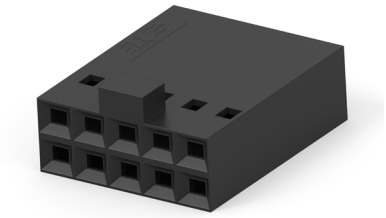


PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Part Numbers
	A	B	
4	.198 [5.03]	.100 [2.54]	104482-1
6	.298 [7.57]	.200 [5.08]	104482-2
8	.398 [10.11]	.300 [7.62]	104482-3
10	.498 [12.65]	.400 [10.16]	104482-4
12	.598 [15.19]	.500 [12.70]	104482-5
14	.698 [17.73]	.600 [15.24]	104482-6
16	.798 [20.27]	.700 [17.78]	104482-7
18	.898 [22.81]	.800 [20.32]	104482-8
20	.998 [25.35]	.900 [22.86]	104482-9
22	1.098 [27.89]	1.000 [25.40]	1-104482-0
26	1.298 [32.97]	1.200 [30.48]	1-104482-1
28	1.398 [35.51]	1.300 [33.02]	1-104482-2
30	1.498 [38.05]	1.400 [35.56]	1-104482-3
32	1.598 [40.59]	1.500 [38.10]	1-104482-4
34	1.698 [43.13]	1.600 [40.64]	1-104482-5
36	1.798 [45.67]	1.700 [43.18]	1-104482-6
38	1.898 [48.21]	1.800 [45.72]	1-104482-7
40	1.998 [50.75]	1.900 [48.26]	1-104482-8
44	2.198 [55.83]	2.100 [53.34]	1-104482-9
52	2.598 [65.99]	2.500 [63.50]	2-104482-0

Note: All Part Numbers are RoHS compliant.

SHORT POINT WIRE-APPLIED HOUSINGS, DOUBLE-ROW, POLARIZED, .100 X .100 [2.54 X 2.54] CENTERLINE



Material

Black thermoplastic, flame retardant, 94V-0 rated

Related Product Data

Performance Characteristics - Page 101

Contacts **-** Page 159

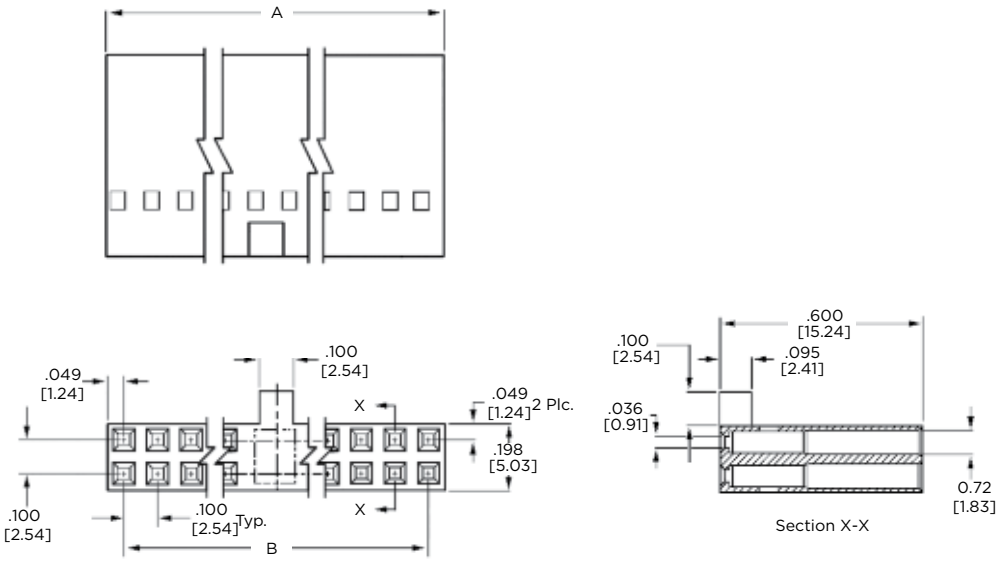
Mateable Headers - Page 10

Technical Documents - Page 243

Product Specification - 108-1472

Application Specification - 114-25038

Dimensions: in(mm)

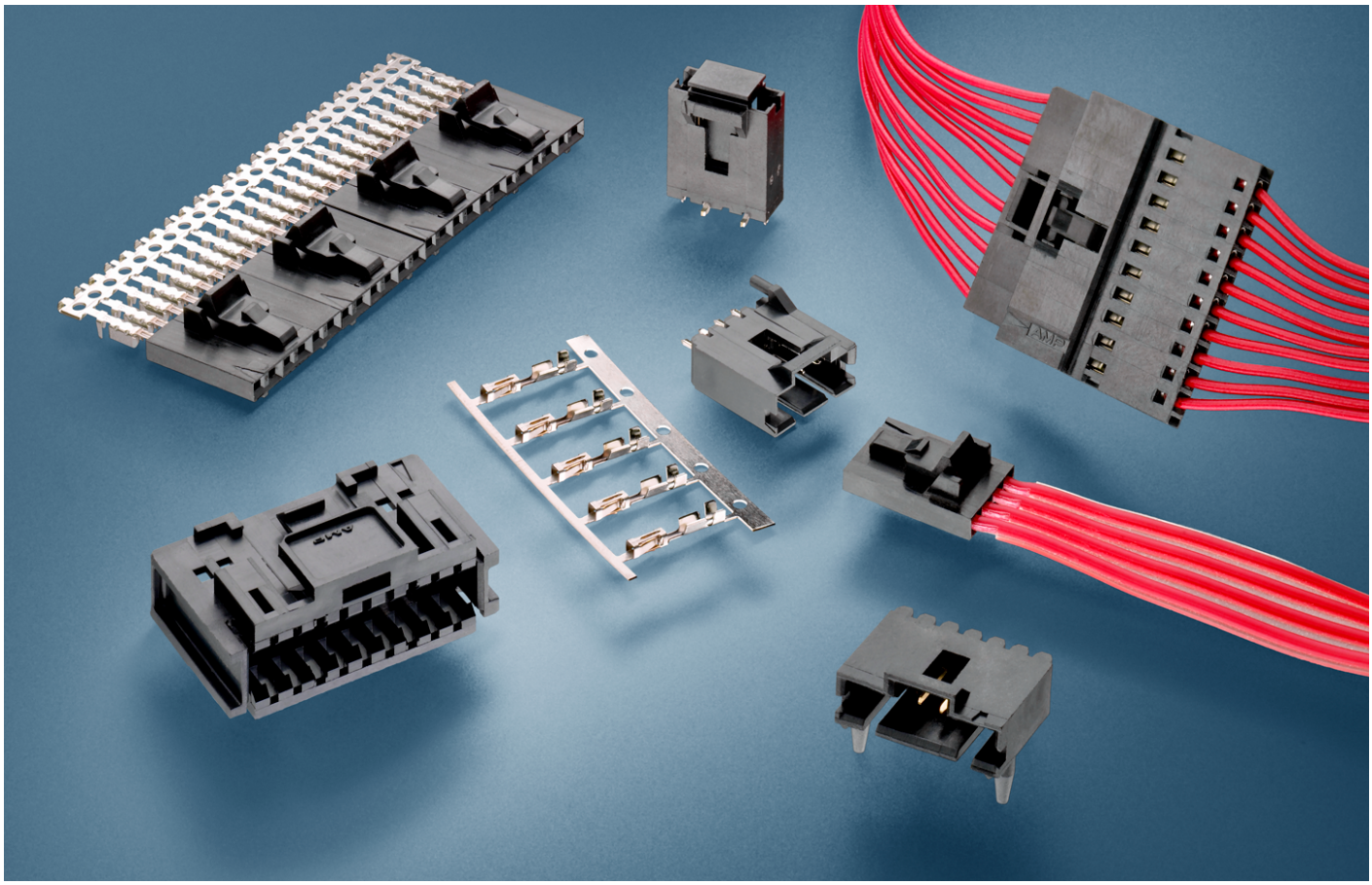


PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Part Numbers
	A	B	
8	.398 [10.11]	.300 [7.62]	104483-1
10	.498 [12.65]	.400 [10.16]	1-104483-1
12	.598 [15.19]	.500 [12.70]	1-104483-2
14	.698 [17.73]	.600 [15.24]	104483-9
18	.898 [22.81]	.800 [20.32]	104483-2
20	.998 [25.35]	.900 [22.86]	104483-3
26	1.298 [32.97]	1.200 [30.48]	104483-4
30	1.498 [38.05]	1.400 [35.56]	104483-5
38	1.898 [48.21]	1.800 [45.72]	104483-6
50	2.498 [63.45]	2.400 [60.96]	1-104483-3
52	2.598 [65.99]	2.500 [63.50]	1-104483-0
54	2.698 [68.53]	2.600 [66.04]	104483-7
64	3.198 [81.23]	3.100 [78.74]	104483-8

Note: All Part Numbers are RoHS compliant.

MTE INTERCONNECTION SYSTEM



The AMPMODU MTE Interconnection System offers both wire-to-board and wire-to-wire connectors using .025 [0.64] sq. post technology.

The AMPMODU MTE Interconnection System consists of single-row Housings with contact preloaded on .100 [2.54] centers. Housings are furnished with contacts partially inserted, leaving the termination areas exposed. Final contact insertion can be accomplished automatically with Tyco Electronics application equipment, and manually when terminated with the Tyco Electronics pistol grip hand tool.

The heart of the system is the insulation displacement contact design, featured in both pin and receptacle contacts. The receptacle contact, available in either standard or high-pressure, features dual cantilever beams in an enclosed “box.” The post stop helps prevent a mating post from disturbing the wire termination and also limits the mating depth of a long post to protect a wrap-type termination at the base of the post. The forward contact stop helps prevent contact overinsertion prior to termination. All contacts are furnished on carrier strips which are interlocked for stability and positive location during termination.

Single-row Housings are available in sizes 2 through 25 positions. Included are three styles of receptacle Housings-plain, polarized/ latching and ribbed and two styles of pin Housings, shrouded with polarizing/ latching feature and ribbed.

MTE INTERCONNECTION SYSTEM

FEATURES

- Receptacle assemblies mate with .025 [0.64] sq. posts; mating post length is .200 [5.08] min., .250 [6.35] max.
- Proven AMPMODU receptacle contact design; dual cantilever beams, built-in anti-overstress, completely enclosed “box” design, standard or high-pressure
- Insulation displacement technology
- Two contact sizes for terminating 30-22 AWG [0.05- 0.3 mm^2] wire range; .054 [1.37] max. insulation diameter with an insulation wall thickness of .015 [0.38] max.
- Choice of gold duplex or tinplated contacts
- Interchangeable crimp snap-in pin and receptacle contacts available
- **Housing** sizes 2 through 25 positions, single-row .100 [2.54] centers
- Plain **Housing**s are end-to-end and/or back-to-back stackable for open pin field applications
- Optional header with “swaged tail” feature helps prevent movement prior to flow soldering
- Integral latch provides positive retention between header and receptacle **Housing**
- Coupling shrouds permit ganging of smaller connectors with guide ribs to form larger single- or double-row latching connectors
- Mass terminating tooling provides lowest applied cost for most production needs
- SMT and SMT compatible, high-temp headers available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR7189

APPLICATIONS

- Medical Instruments
- Automotive Controls
- Copiers
- Appliances
- Commercial Printers
- Vending
- Computers
- Instrumentation & Test Equipment
- Telecommunications
- Storage Equipment

PERFORMANCE SPECIFICATIONS

Electrical Characteristics

Contact Current Rating: 3 amperes for single contact in free air (Amperage could vary due to ambient temperature, wire size and duty cycles.)

Contact Termination

Resistance: 15 milliohms (max.)

Dielectric Withstanding Voltage :

- @ Sea Level–600 VAC, rms
- @ 70,000 Ft. [21 336 m]–225 VAC, rms

Insulation Resistance : 5,000 megohms (min.)

Environmental Characteristics

Operating Temperature : -65°C to +105°C

Vibration : 15 G’s (gold), 10 G’s (tin)

Physical Shock : 50 G’s

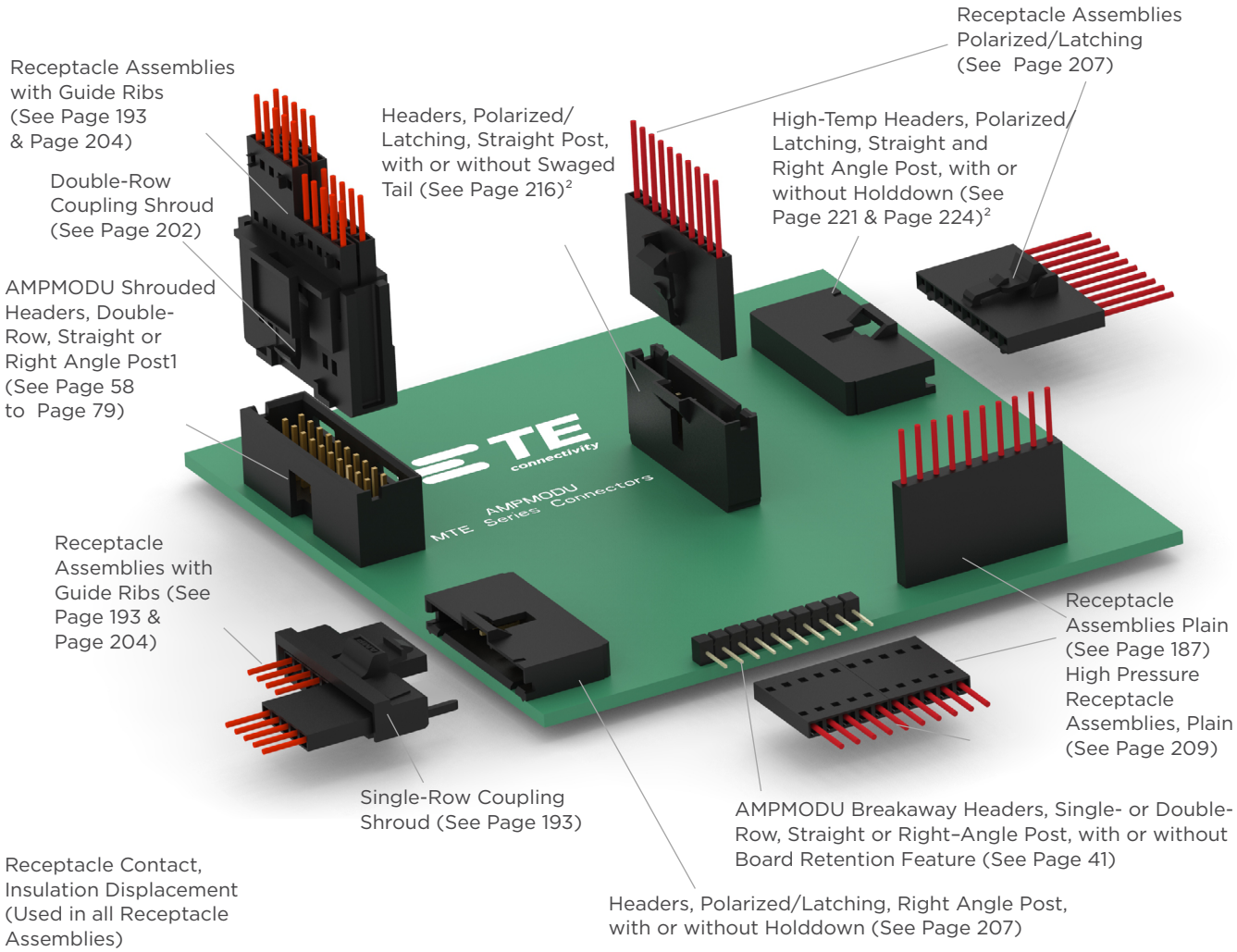
Industrial Mixed Flow Gasing : Class 1 (20 days) (gold)

Product Specification : 108-25034

Application Specification : 114-25026

MTE INTERCONNECTION SYSTEM

WIRE-TO-BOARD

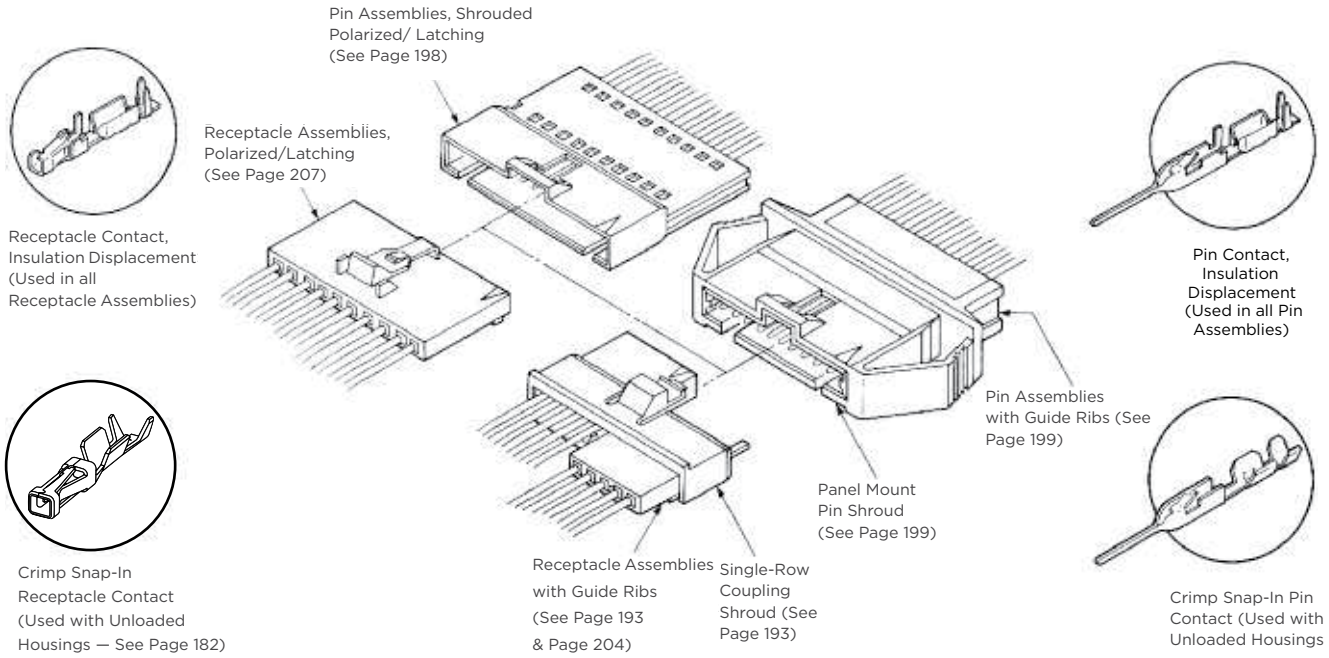


Note:

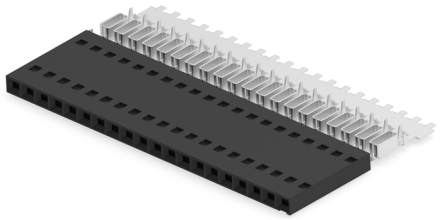
1. Mating AMPMODU Double-Row Shrouded Header Assemblies must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last 1post to inside of end shroud wall.
2. Surface Mount Right-Angle and Vertical Headers are also available (see Page 224 and Page 224)

MTE INTERCONNECTION SYSTEM

WIRE-TO-WIRE



MTE RECEPTACLE ASSEMBLIES—PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, plated as follows:

Plating A : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Note:

Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded **Housing**s is .200 [5.08] min., .250 [6.35] max.

Related Product Data

Mateable AMPMODU Products Breakaway Headers : Page 26 (with .230 mating length)

Reeled Breakaway Headers:
Page 44 (with .230 mating length)

Machine Applied Bandolier Posts : Page 88
Single-Row Shrouded Headers with .066 [1.68] End Dimension **-** Page 60

Interchangeable Crimp Contacts (Short Point) : Page 220

Application Tooling : Page 240

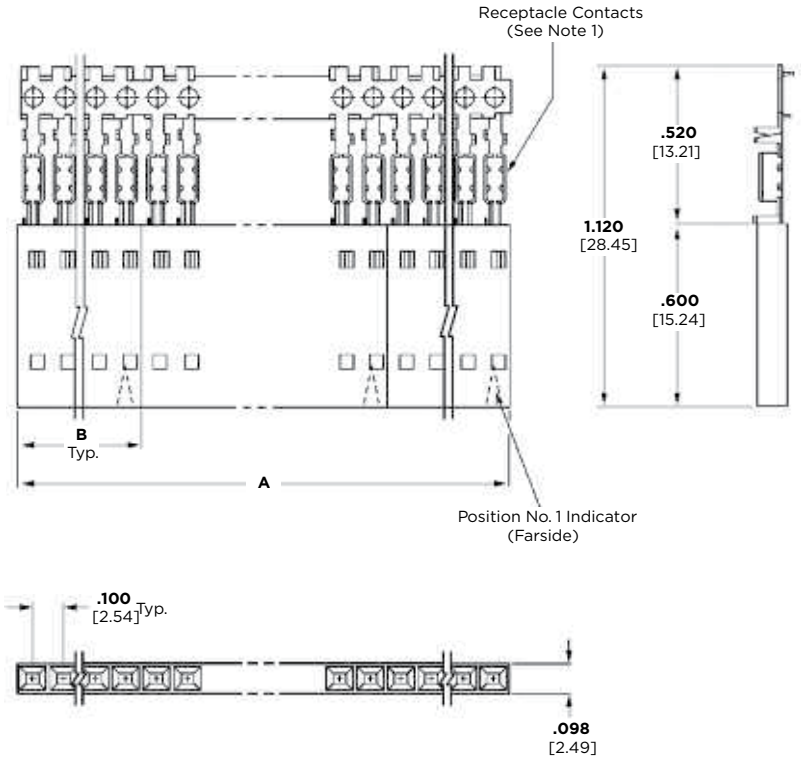
Performance Specifications : Page 125

Technical Documents : Page 243

Product Specification : 108-25034

Application Specification : 114-25026

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103976-1	5-103975-1	5-103974-1	103688-1
3	2.400 [60.96]	.298 [7.57]	8	-	-	-	103688-2
4	1.990 [50.55]	.398 [10.11]	5	5-103976-3	-	5-103974-3	103688-3
5	1.990 [50.55]	.498 [12.65]	4	5-103976-4	5-103975-4	5-103974-4	103688-4
6	2.390 [60.71]	.598 [15.19]	4	5-103976-5	-	-	103688-5
7	1.400 [35.56]	.698 [17.73]	2	-	-	-	103688-6
8	1.600 [40.64]	.798 [20.27]	2	-	-	5-103974-7	103688-7
9	1.800 [45.72]	.898 [22.81]	2	-	-	-	103688-8
10	2.000 [50.80]	.998 [23.35]	2	-	5-103975-9	-	103688-9
11	2.200 [55.88]	1.098 [27.89]	2	-	-	-	1-103688-0

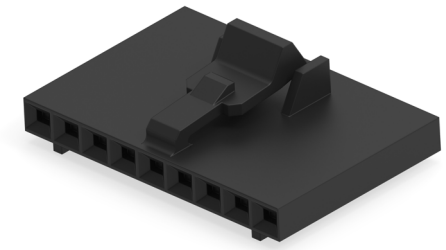
MTE RECEPTACLE ASSEMBLIES-INDIVIDUAL FORM PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions: in(mm)	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire	Unloaded Housings
	B	Plating C	
13	1.298 [32.96]		1-103688-2
16	1.598 [40.59]	6-103687-5	1-103688-5

Notes:

1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
3. Keying plugs are available, see page 225.

MTE RECEPTACLE ASSEMBLIES - POLARIZED/ LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, plated as follows

Plating A : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded **Housings** is .200 [5.08] min., .250 [6.35] max.

Related Product Data

Mateable AMPMODU Products

Pin Assemblies (Polarized/|Latching) - Page 197

Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud) - Page 199

Headers (Polarized/Latching) - Page 205

Interchangeable Crimp Contacts (Short Point) - Page 220

Application Tooling - Page 240

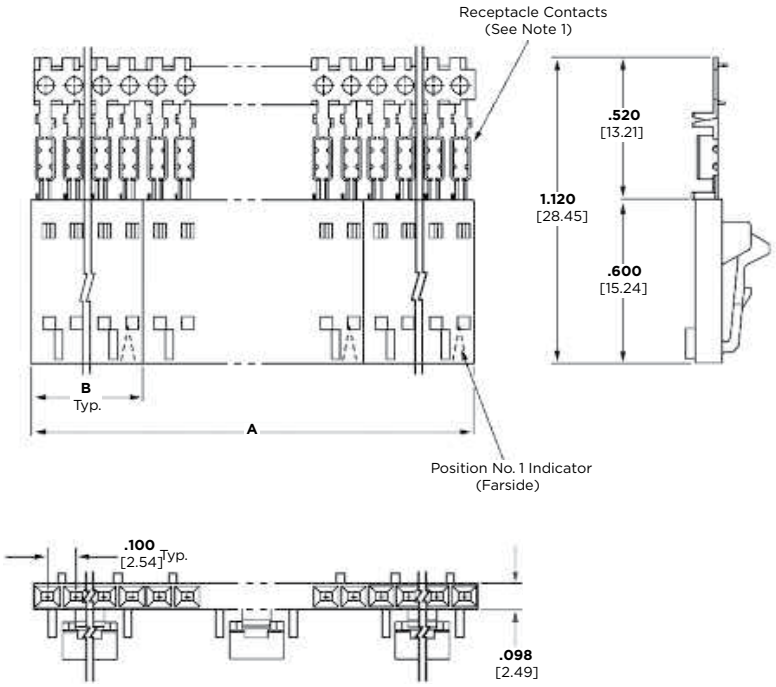
Performance Specifications - Page 125

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm²] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103961-1	5-103960-1	5-103959-1	5-103958-1	5-103957-1	5-103956-1	104257-1
3	2.400 [60.96]	.298 [7.57]	8	5-103961-2	5-103960-2	5-103959-2	5-103958-2	5-103957-2	5-103956-2	104257-2
4	1.990 [50.55]	.398 [10.11]	5	5-103961-3	5-103960-3	5-103959-3	5-103958-3	5-103957-3	5-103956-3	104257-3
5	1.990 [50.55]	.498 [12.65]	4	5-103961-4	5-103960-4	5-103959-4	5-103958-4	5-103957-4	5-103956-4	104257-4
6	2.390 [60.71]	.598 [15.19]	4	5-103961-5	5-103960-5	-	5-103958-5	5-103957-5	5-103956-5	104257-5
7	1.400 [35.56]	.698 [17.73]	2	5-103961-6	5-103960-6	-	5-103958-6	5-103957-6	5-103956-6	104257-6
8	1.600 [40.64]	.798 [20.27]	2	5-103961-7	5-103960-7	5-103959-7	5-103958-7	5-103957-7	5-103956-7	104257-7
9	1.800 [45.72]	.898 [22.81]	2	5-103961-8	-	-	5-103958-8	5-103957-8	5-103956-8	104257-8
10	2.000 [50.80]	.998 [23.35]	2	5-103961-9	5-103960-9	-	5-103958-9	5-103957-9	5-103956-9	104257-9
11	2.200 [55.88]	1.098 [27.89]	2	-	-	-	6-103958-0	-	6-103956-0	1-104257-0
12	2.400 [60.96]	1.198 [30.43]	2	-	-	-	6-103958-1	6-103957-1	6-103956-1	1-104257-1

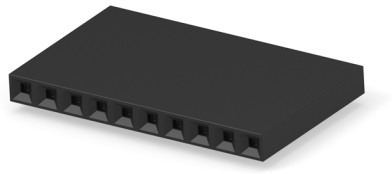
MTE RECEPTACLE ASSEMBLIES - INDIVIDUAL FORM POLARIZED/LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions: in(mm)	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire			Unloaded Housings
	B	Plating A	Plating B	Plating C	
13	1.298 [32.96]	-	-	-	1-104257-2
14	1.398 [35.51]	6-103734-3	6-103644-3	6-103645-3	1-104257-3
15	1.498 [38.05]	-	-	-	1-104257-4
16	1.598 [40.59]	6-103734-5	6-103644-5	-	1-104257-5
17	1.698 [43.13]	-	-	-	1-104257-6
18	1.798 [45.67]	6-103734-7	6-103644-7	-	1-104257-7
19	1.898 [48.20]	-	-	-	1-104257-8
20	1.998 [50.75]	-	6-103644-9	-	1-104257-9
21	2.098 [53.29]	-	7-103644-0	-	2-104257-0
22	2.198 [55.83]	-	-	-	2-104257-1
23	2.298 [58.37]	-	-	-	2-104257-2
24	2.398 [60.91]	-	-	-	2-104257-3
25	2.498 [63.45]	-	-	-	2-104257-4

Notes:

1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
3. Keying plugs are available, see page 225.

MTE RECEPTACLE ASSEMBLIES - GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, plated as follows:

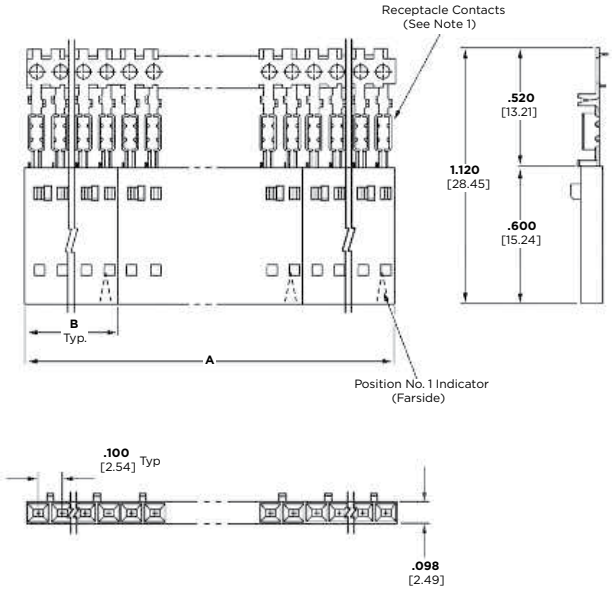
Plating A : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded Housings is .200 [5.08] min., .250 [6.35] max.

Dimensions: in(mm)



Related Product Data

Coupling Shrouds used with - Single-Row - Page 201

Double-Row **-** Page 201

Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds)

Pin Assemblies (Polarized/ Latching) - Page 197

Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud) - Page 199

Headers (Polarized/Latching) - Page 205

Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds)

Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension) - Page 76

Interchangeable Crimp Contacts - (Short Point) - Page 220

Application Tooling - Page 240

Performance Specifications - Page 125

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

PRODUCT INFORMATION

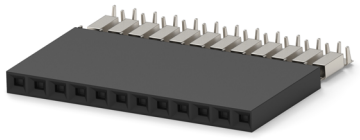
No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm²] Wire		Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	-	-	5-103970-1	5-103969-1	-	103648-1
3	2.400 [60.96]	.298 [7.57]	8	-	-	-	5-103969-2	5-103968-2	103648-2
4	1.990 [50.55]	.398 [10.11]	5	-	5-103972-3	-	5-103969-3	5-103968-3	103648-3
5	1.990 [50.55]	.498 [12.65]	4	-	-	-	5-103969-4	-	103648-4
6	2.390 [60.71]	.598 [15.19]	4	-	-	-	5-103969-5	5-103968-5	103648-5
8	1.600 [40.64]	.798 [20.27]	2	-	-	-	-	-	103648-7
9	1.800 [45.72]	.898 [22.81]	2	-	-	-	-	-	103648-8
10	2.000 [50.80]	.998 [23.35]	2	5-103973-9	-	-	-	-	103648-9

MTE RECEPTACLE ASSEMBLIES-INDIVIDUAL FORM WITH GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions: in(mm)	Unloaded Housings
	B	
16	1.598 [40.59]	1-103648-5
18	1.798 [45.67]	1-103648-7
21	2.098 [53.29]	2-103648-0
22	2.198 [55.83]	2-103648-1
23	2.298 [58.37]	2-103648-2
24	2.398 [60.91]	2-103648-3
25	2.498 [63.45]	2-103648-4

Notes:
1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing-**contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
3. Keying plugs are available, see page 213.

MTE HIGH PRESSURE RECEPTACLE ASSEMBLIES - PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded **Housing**s is .200 [5.08] min., .250 [6.35] max.

Related Product Data

Coupling Shrouds used with -Single-Row - page 201

Double-Row - page 202

Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds)

Pin Assemblies (Polarized/ Latching) - Page 197

Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud) - Page 199

Headers (Polarized/Latching) - Page 205

Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds)

Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension) - Page 76

Interchangeable Crimp Contacts - (Short Point) - Page 220

Application Tooling - Page 240

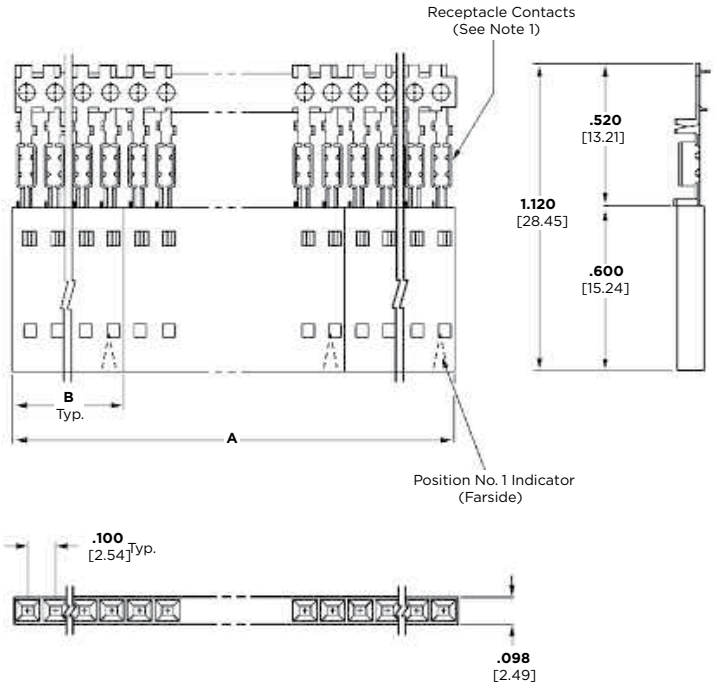
Performance Specifications - Page 101

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)

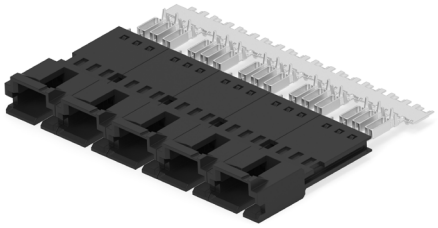


PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm^2] Wire
	A	B		
2	1.980 [50.29]	.198 [5.03]	10	5-104439-1
6	2.390 [60.71]	.598 [15.19]	4	5-104439-5

Notes:
1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing-**contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. High pressure receptacle contacts can be made available in other **Housing** styles and position sizes. Contact your Tyco Electronics sales representative.

Note: All Part Numbers are RoHS compliant.



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, plated as follows:

Plating A : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating C : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

Related Product Data

Mateable AMPMODU Products - Receptacle Assemblies (Polarized/Latching) - Page 191

Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Interchangeable Crimp Contacts - Page 220

Application Tooling - Page 240

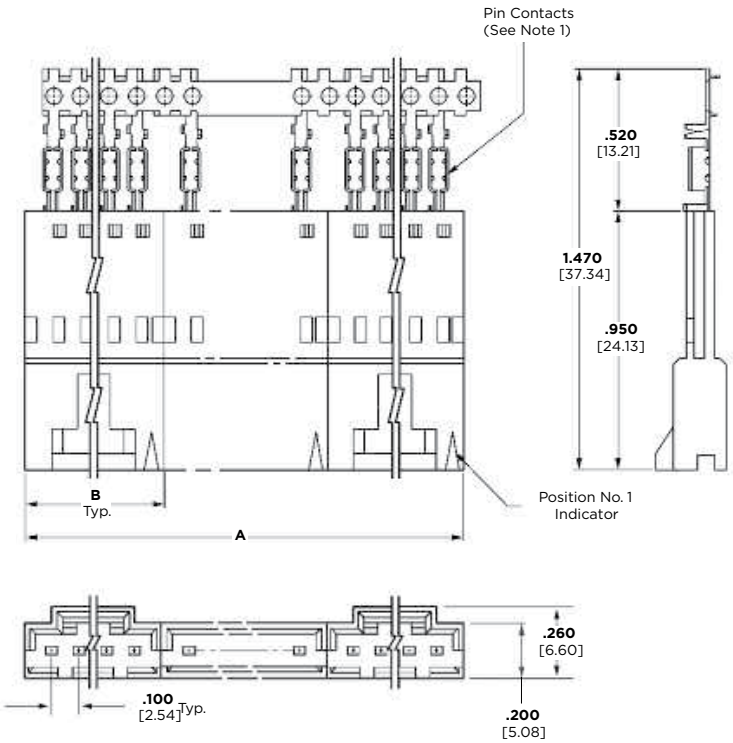
Performance Specifications - Page 125

Technical Documents - Page 243

Product Specification 108-25034

Application Specification 114-25026

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm²] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.360 [59.94]	.295 [7.49]	8	5-103949-1	5-103948-1	5-103947-1	5-103946-1	5-103945-1	5-103944-1	103653-1
3	1.980 [50.29]	.395 [10.03]	5	5-103949-2	5-103948-2	5-103947-2	5-103946-2	5-103945-2	5-103944-2	103653-2
4	1.980 [50.29]	.495 [12.57]	4	5-103949-3	5-103948-3	5-103947-3	5-103946-3	5-103945-3	5-103944-3	103653-3
5	2.380 [60.45]	.595 [15.11]	4	5-103949-4	5-103948-4	-	5-103946-4	5-103945-4	5-103944-4	103653-4
6	1.390 [35.31]	.695 [17.65]	2	5-103949-5	5-103948-5	-	5-103946-5	5-103945-5	-	103653-5
7	2.390 [60.71]	.795 [20.19]	3	5-103949-6	-	-	5-103946-6	5-103945-6	5-103944-6	103653-6
8	1.790 [45.47]	.895 [22.73]	2	-	5-103948-7	-	5-103946-7	5-103945-7	-	103653-7
9	1.990 [50.57]	.995 [25.27]	2	5-103949-8	-	-	5-103946-8	5-103945-8	-	103653-8
10	2.190 [55.63]	1.095 [27.81]	2	5-103949-9	-	-	5-103946-9	5-103945-9	-	103653-9
11	2.390 [60.71]	1.195 [30.35]	2	-	-	-	-	6-103945-0	-	1-103653-0
12	2.590 [65.79]	1.295 [32.89]	2	-	-	-	-	-	-	1-103653-1

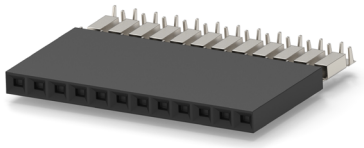
MTE PIN ASSEMBLIES, SHROUDED-INDIVIDUAL FORM POLARIZED/LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions: in(mm)	Unloaded Housings
	B	
13	1.395 [35.43]	1-103653-2
14	1.495 [37.97]	1-103653-3
15	1.595 [40.51]	1-103653-4
16	1.695 [43.05]	1-103653-5
17	1.795 [45.59]	1-103653-6
18	1.895 [48.13]	1-103653-7
19	1.995 [50.67]	1-103653-8
20	2.095 [53.21]	1-103653-9
21	2.195 [55.75]	2-103653-0
22	2.295 [58.29]	2-103653-1
23	2.395 [60.83]	2-103653-2
24	2.495 [63.37]	2-103653-3
25	2.595 [65.91]	2-103653-4

Notes:
1. Pin assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove pin contacts.

Note: All Part Numbers are RoHS compliant.

MTE PIN ASSEMBLIES-GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

Material and Finish

Housing : Black thermoplastic, 94V-0 rated

Contacts : Phosphor Bronze, plated as follows:

Plating A : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

Related Product Data

Mateable AMPMODU MTE Products (with Pin Assembly Installed in Panel Mount Pin Shroud) - Page 204

Receptacle Assemblies (Polarized/ Latching) - Page 191

Receptacle Assemblies with Guide Ribs (installed in Single Row Coupling Shroud) - Page 193

Interchangeable Crimp Contacts - Page 220

Application Tooling - Page 240

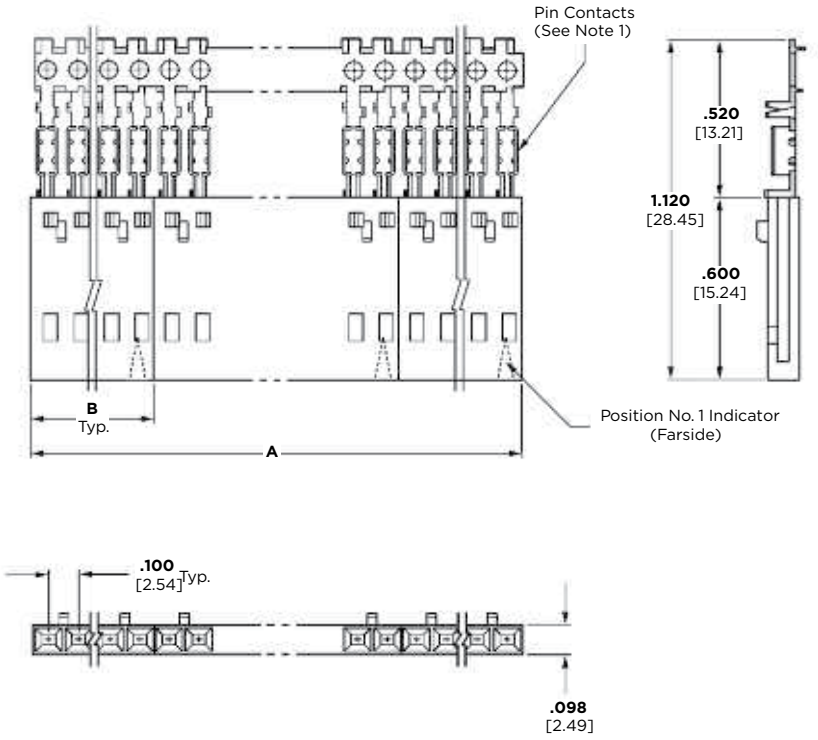
Performance Specifications - Page 220

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire		Unloaded Housings
	A	B		Plating A	Plating B	
2	1.980 [50.29]	0.198 [5.03]	10	-	5-103951-1	104503-1
3	1.490 [37.85]	0.298 [7.57]	5	5-103952-2	5-103951-2	104503-2
4	1.990 [50.55]	0.398 [10.11]	5	-	5-103951-3	104503-3
5	1.990 [50.55]	0.498 [12.65]	4	-	5-103951-4	104503-4
7	1.400 [35.56]	0.698 [17.73]	2	-	-	104503-6
8	1.600 [40.64]	0.798 [20.27]	2	-	-	104503-7
10	2.000 [50.80]	0.998 [25.35]	2	-	-	104503-9
12	2.400 [60.96]	1.198 [30.43]	2	-	-	1-104503-1

MTE PIN ASSEMBLIES-INDIVIDUAL FORM WITH GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions: in(mm)	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm²] Wire
	B	Plating A
13	1.398 [35.51]	6-103895-2
19	1.998 [50.75]	6-103895-8

Notes:
1. Pin assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into "preload" windows. Contacts are fully inserted into **Housing**s automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove pin contacts.

Note: All Part Numbers are RoHS compliant.

COUPLING SHROUDS FOR MTE RECEPTACLE ASSEMBLIES WITH GUIDE RIBS

SINGLE-ROW



Material

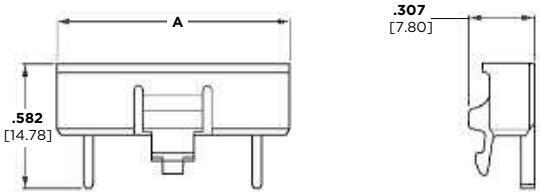
Black thermoplastic, 94V-0 rated

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

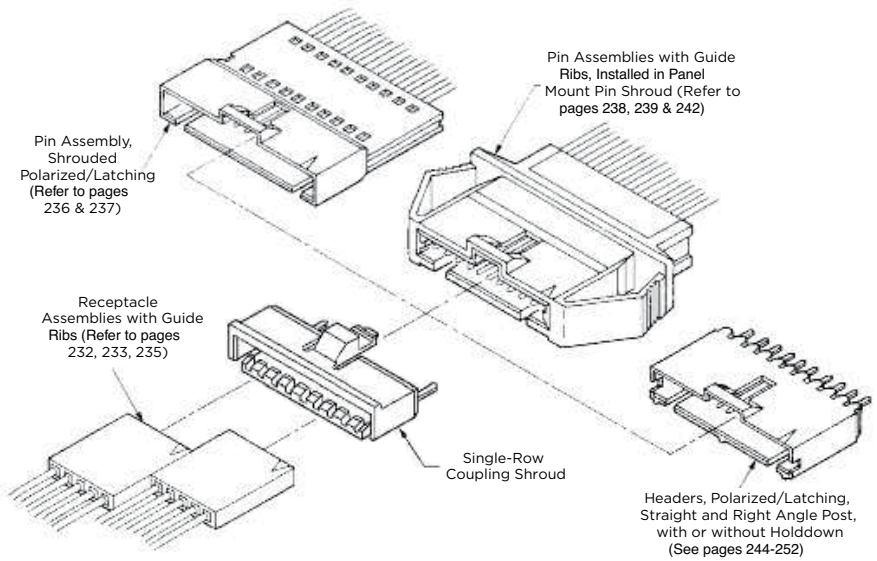
Dimensions: in(mm)



PRODUCT INFORMATION

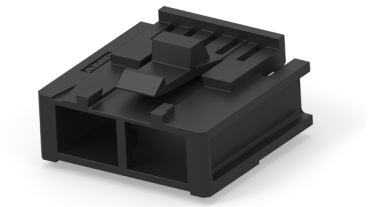
No. of Pos.	Dimensions: in(mm)	Single-Row Coupling Shroud
	A	
4	.485 [12.32]	103680-1
7	.785 [19.94]	103680-4
8	.885 [22.48]	103680-5
9	.985 [25.02]	103680-6
11	1.185 [30.10]	103680-8
14	1.485 [37.72]	1-103680-1
17	1.785 [45.34]	1-103680-4
18	1.885 [47.88]	1-103680-5
21	2.185 [55.50]	1-103680-8
22	2.285 [58.04]	1-103680-9
23	2.385 [60.58]	2-103680-0

TYPICAL APPLICATION OF SINGLE-ROW COUPLING SHROUD AND MATING AMPMODU MTE PRODUCTS

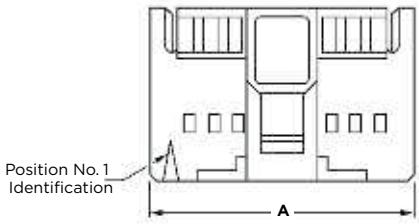


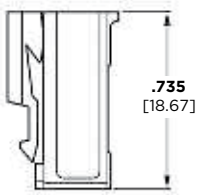
COUPLING SHROUDS FOR MTE RECEPTACLE ASSEMBLIES WITH GUIDE RIBS (Continued)

DOUBLE-ROW



Dimensions: in(mm)





Material

Black thermoplastic, 94V-0 rated

Technical Documents - Page 243

Product Specification - 108-25034

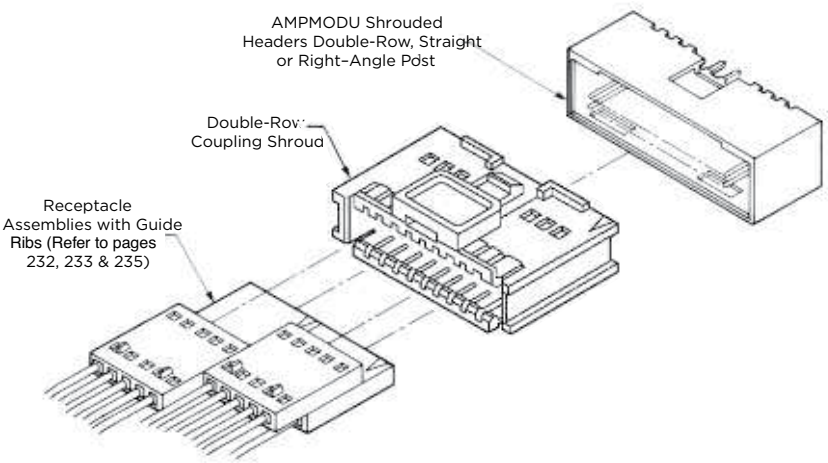
Application Specification - 114-25026

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)	Single-Row Coupling Shroud
	A	
10	.685 [17.40]	103681-2
12	.785 [19.94]	103681-3
16	.985 [25.02]	103681-5
20	1.185 [30.10]	104500-2
32	1.785 [45.34]	104500-8
50	2.685 [68.20]	1-104500-1

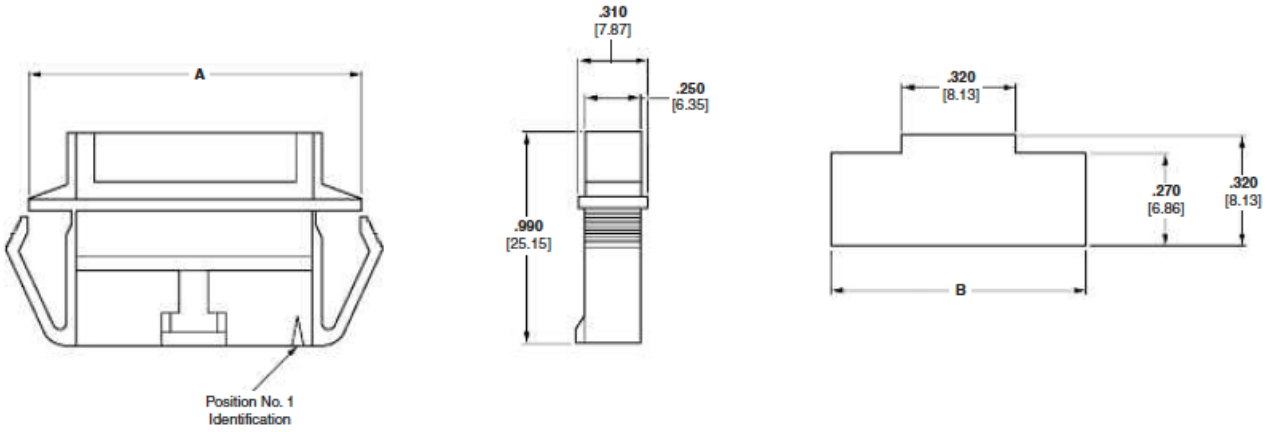
Note: All Part Numbers are RoHS compliant.

TYPICAL APPLICATION OF DOUBLE-ROW COUPLING SHROUD AND MATING AMPMODU PRODUCTS



1. Mating AMPMODU Double-Row Shrouded Headers must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

PANEL MOUNT PIN SHROUDS FOR MTE PIN ASSEMBLIES WITH GUIDE RIBS, SINGLE-ROW



Material

Black thermoplastic, 94V-0 rated

Technical Documents - Page 243

Product Specification - 108-25034

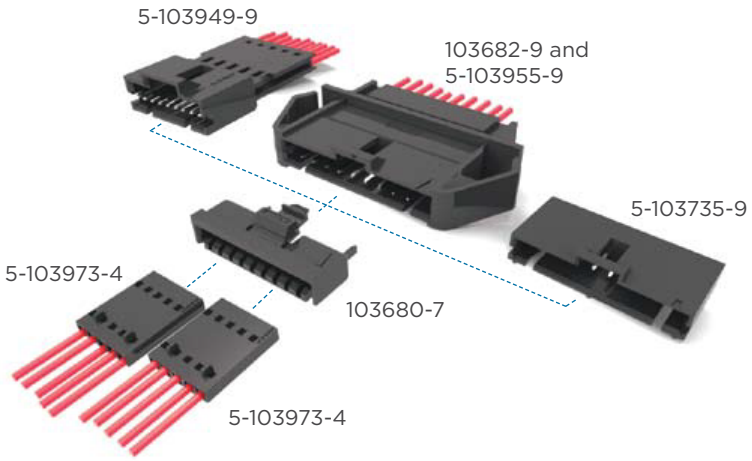
Application Specification - 114-25026

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Panel Mount Pin Shroud
	A	B	
2	.735 [18.67]	.625 [15.88]	103682-1
3	.835 [21.21]	.725 [18.42]	103682-2
4	.935 [23.75]	.825 [20.96]	103682-3
5	1.035 [26.29]	.925 [23.50]	103682-4
6	1.135 [28.83]	1.025 [26.04]	103682-5
7	1.235 [31.37]	1.125 [28.58]	103682-6
9	1.435 [36.45]	1.325 [33.66]	103682-8
10	1.535 [38.99]	1.425 [36.20]	103682-9
14	1.935 [49.15]	1.825 [46.36]	1-103682-3
16	2.135 [54.23]	2.025 [51.44]	1-103682-5

Note: All Part Numbers are RoHS compliant.

PANEL MOUNT PIN SHROUDS FOR MTE PIN ASSEMBLIES WITH GUIDE RIBS, SINGLE-ROW



Typical Application of Panel Mount Pin Shroud and Mating AMPMODU Products

Material

Black thermoplastic, 94V-0 rated

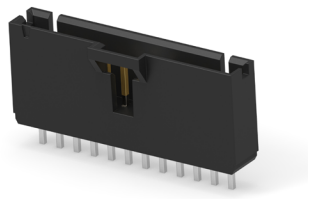
Technical Documents - pages 208-210

Product Specification - 108-25034

Application Specification - 114-25026

MTE HEADERS, SHROUDED POLARIZED/LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH OR WITHOUT SWAGED TAIL)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Brass, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C - .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable AMPMODU MTE

Products - Receptacle Assemblies (Polarized/Latching) - Page 191

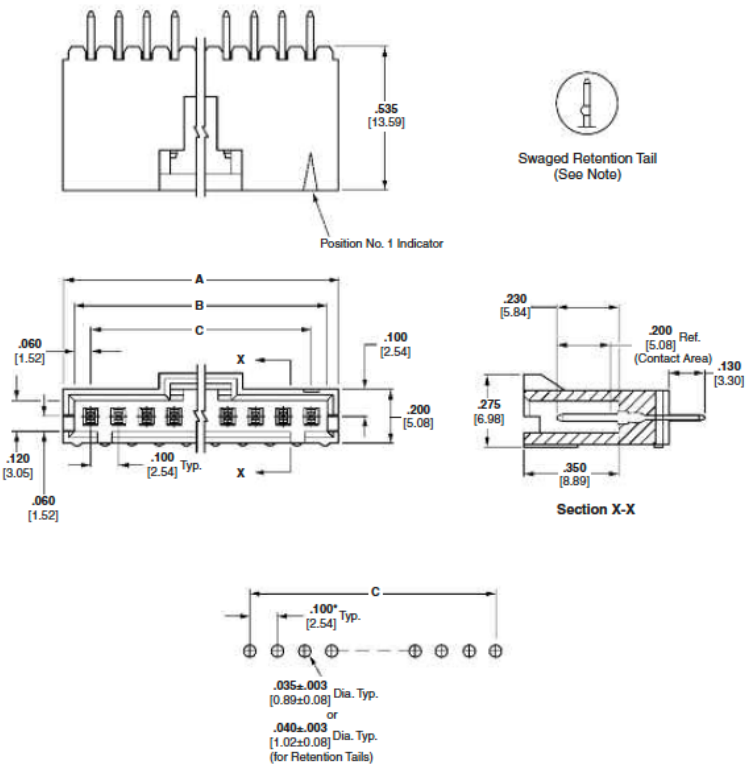
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-250266

Dimensions: in(mm)



Recommended PC Board Hole Layout

*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

Note: Swaged retention tails are provided in a minimum of two locations per header.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Polarized/Latching Header With Swage			Polarized/Latching Header Without Swage		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103908-1	5-104362-1	5-103669-1	5-103735-1	5-104363-1	5-103639-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103908-2	5-104362-2	5-103669-2	5-103735-2	5-104363-2	5-103639-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103908-3	5-104362-3	5-103669-3	5-103735-3	5-104363-3	5-103639-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103908-4	5-104362-4	5-103669-4	5-103735-4	5-104363-4	5-103639-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103908-5	5-104362-5	5-103669-5	5-103735-5	5-104363-5	5-103639-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103908-6	5-104362-6	5-103669-6	5-103735-6	5-104363-6	5-103639-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103908-7	5-104362-7	5-103669-7	5-103735-7	5-104363-7	5-103639-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103908-8	5-104362-8	5-103669-8	5-103735-8	5-104363-8	5-103639-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103908-9	5-104362-9	5-103669-9	5-103735-9	5-104363-9	5-103639-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	-	-	6-103669-0	6-103735-0	6-104363-0	6-103639-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103908-1	-	-	6-103735-1	6-104363-1	6-103639-1

Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

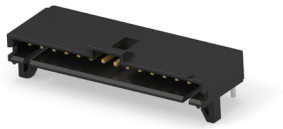
No. of Pos.	Dimensions: in(mm)			Polarized/Latching Header With Swage			Polarized/Latching Header Without Swage		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	-	-	6-103669-2	-	6-104910-2	6-103639-2
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103908-3	6-104909-3	6-103669-3	6-103735-3	6-104910-3	6-103639-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	-	6-104909-4	-	6-103735-4	6-104910-4	6-103639-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-103908-5	6-104909-5	-	6-103735-5	6-104910-5	6-103639-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-103908-6	6-104909-6	-	6-103735-6	6-104910-6	6-103639-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-103908-7	6-104909-7	-		6-104910-7	6-103639-7
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-103908-9	6-104909-9		6-103735-9	6-104910-9	6-103639-9
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	-	-	-	-	-	7-103639-1
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	-	-	-	-	7-104910-3	-
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	-	7-104909-4	-	7-103735-4	-	-

Notes:
1. Selectively loaded headers are available, consult TE.
2. Use Keying Tool No. 91417-1 to remove post for keying.

Note: All Part Numbers are RoHS compliant.

MTE HEADERS, SHROUDED LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts - Brass, plated as follows:

Plating A- Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating B- Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

Plating C- .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable AMPMODU MTE Products - Receptacle Assemblies (Latching) - Page 191

Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

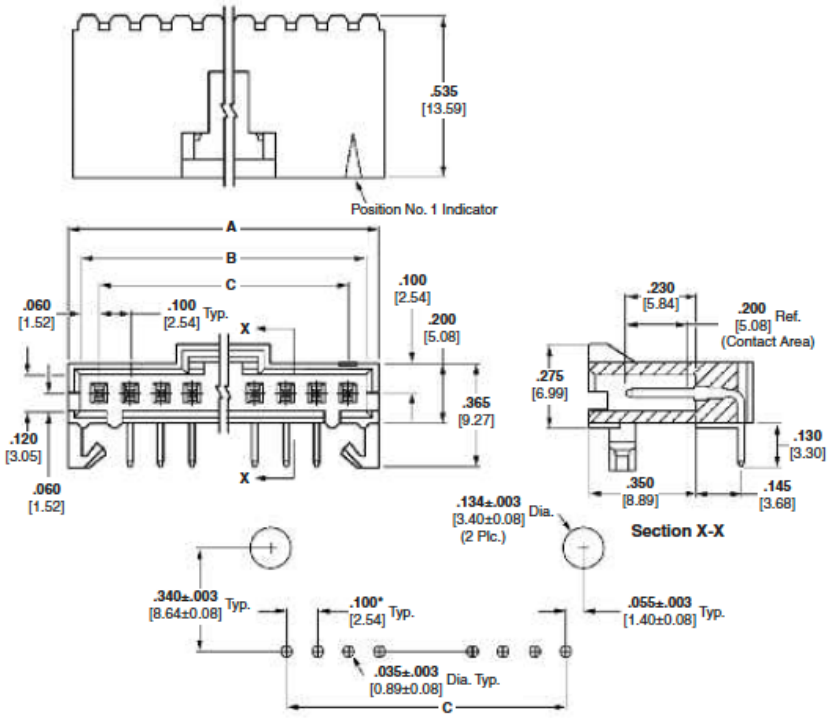
Product Specification - 108-25034

Application Specification - 114-250266



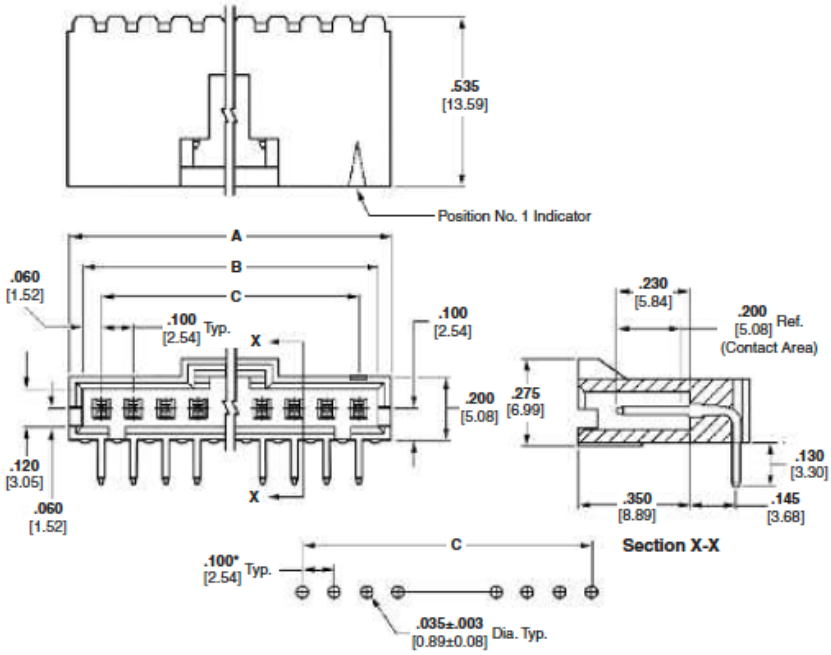
Dimensions: in(mm)

With Holddown



Recommended PC Board Hole Layout
(PC board thickness (for Holddown Feature) is .062±.008 [1.57±0.20])
*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

Without Holddown



Recommended PC Board Hole Layout
*±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

PRODUCT INFORMATION

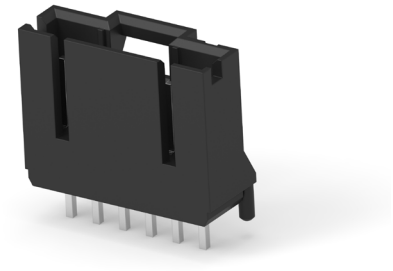
No. of Pos.	Dimensions: in(mm)			Latching Header With Hold Down			Latching Header Without Hold Down		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103904-1	5-103673-1	5-103672-1	5-104935-5	5-103635-1	5-103634-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103904-2	5-103673-2	5-103672-2	5-104935-3	5-103635-2	5-103634-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103904-3	5-103673-3	5-103672-3	5-104935-1	5-103635-3	5-103634-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103904-4	5-103673-4	5-103672-4	5-104935-6	5-103635-4	5-103634-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103904-5	5-103673-5	5-103672-5	5-104935-7	5-103635-5	5-103634-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103904-6	5-103673-6	5-103672-6	5-104935-8	5-103635-6	5-103634-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103904-7	5-103673-7	5-103672-7	5-104935-2	5-103635-7	5-103634-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103904-8	5-103673-8	-	5-104935-9	5-103635-8	5-103634-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103904-9	5-103673-9	5-103672-9	6-104935-0	5-103635-9	5-103634-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	-	6-103673-0	-	6-104935-1	6-103635-0	6-103634-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103904-1	6-103673-1	6-103672-1	5-104935-4	6-103635-1	6-103634-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	-	6-103673-2	-	-	-	-
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103904-3	6-103673-3	-	6-104935-3	6-103635-3	6-103634-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-103904-4	6-103673-4	-	-	6-103635-4	6-103634-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	-	6-103673-5	6-103672-5	-	6-103635-5	6-103634-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	-	6-103673-6	-	-	6-103635-6	-
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	-		-	-	6-103635-7	-
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	-	6-103673-9	-	6-104935-9	6-103635-9	6-103634-9
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	-	7-103673-3	-	7-104935-3	7-103635-3	7-103634-3

Note:
1. Selectively loaded headers are available, consult TE
2. Use Keying Tool No. 91417-1 to remove post for keying

Note: All Part Numbers are RoHS compliant.

MTE HEADERS, SHROUDED LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH SWAGED TAILS AND PC BOARD ORIENTATION)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts- Brass, plated .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 191

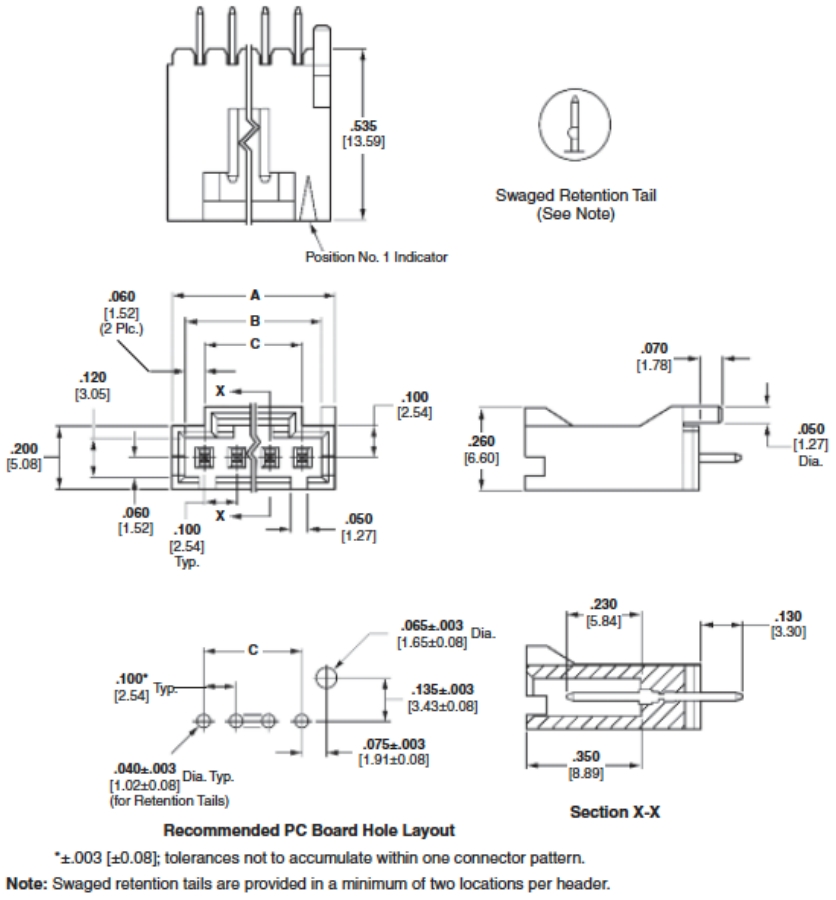
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)



*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

Note: Swaged retention tails are provided in a minimum of two locations per header.

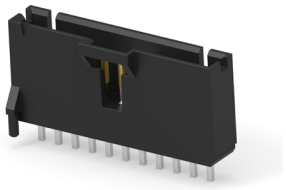
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Panel Mount Pin Shroud
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104450-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104450-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104450-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104450-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104450-5
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104450-9

Note: All Part Numbers are RoHS compliant.

MTE HEADERS, THROUGH-HOLE, SURFACE MOUNT COMPATIBLE, SHROUDED POLARIZED/LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH SWAGED TAILS AND PC BOARD ORIENTATION)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts- Brass, plated .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 191

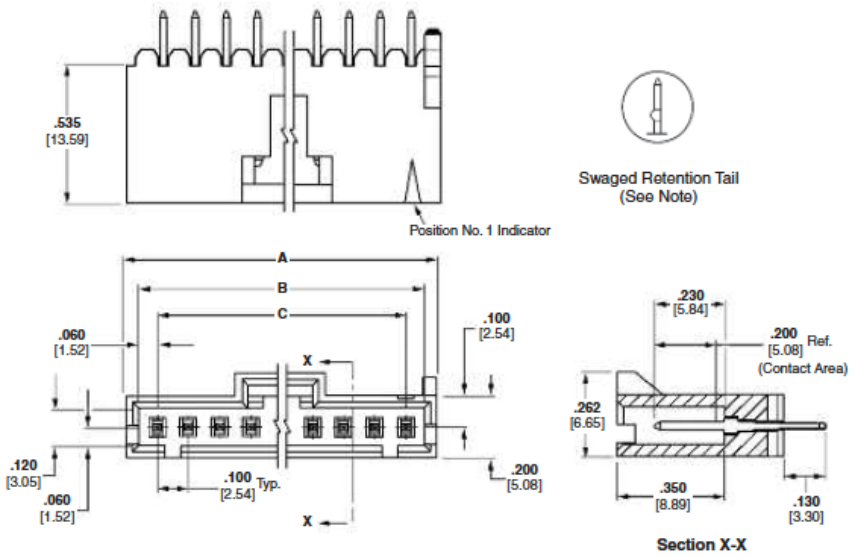
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

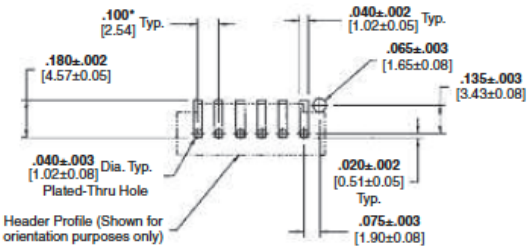
Technical Documents - Page 193

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)





Recommended PC Board Hole Layout
(Stencil Thickness = .010 [0.25])

*±.003 [±0.08] tolerance not to accumulate within one connector pattern

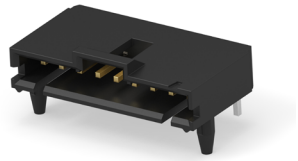
PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)			Panel Mount Pin Shroud
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104809-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104809-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104809-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104809-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104809-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104809-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104809-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104809-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104809-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-104809-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-104809-1

Note: All Part Numbers are RoHS compliant.

MTE HEADERS, POLARIZED/LATCHING, THROUGH-HOLE, SURFACE MOUNT COMPATIBLE, SINGLE-ROW, .100 [2.54] CENTERLINE

.025 [0.64] SQUARE RIGHT-ANGLE POST (WITH HOLDDOWN)



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts- Brass, duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder tail, with entire post underplated .000050 [0.00127] nickel

Related Product Data

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 191

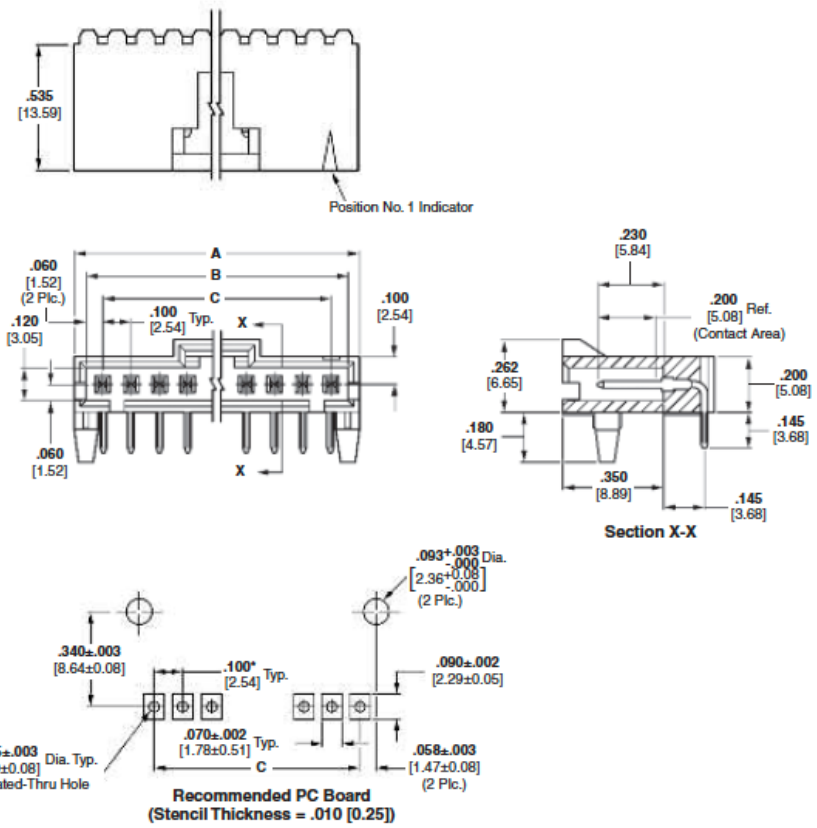
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)

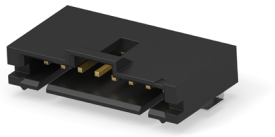


PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions: in(mm)			Right-Angle Header with Hold Down
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104361-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104361-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104361-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104361-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104361-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104361-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104361-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104361-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104361-9
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-104361-9

Note: All Part Numbers are RoHS compliant.

MTE HEADERS, RIGHT-ANGLE, POLARIZED/LATCHING, SURFACE MOUNT



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts- Brass, plated as follows:

Plating A- Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

Plating B- Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

Plating C- .000100 [.00254] tin over .000050 [.00127] nickel on entire post

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

Related Product Data

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 191

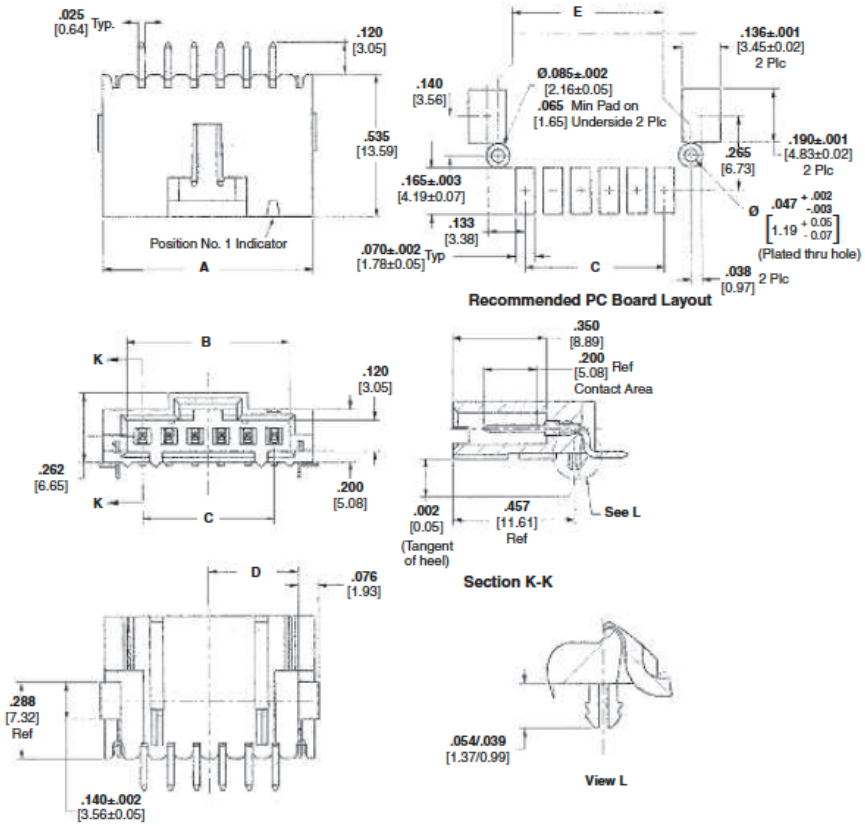
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

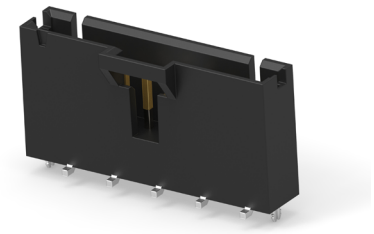
Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Right-Angle Latching SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.400 [10.16]	.220 [5.59]	.100 [2.54]	.140 [3.56]	.290 [7.37]	5-147323-1	5-147278-1	5-147324-1
3	.500 [12.70]	.320 [8.13]	.200 [5.08]	.190 [4.83]	.390 [9.91]	5-147323-2	5-147278-2	5-147324-2
4	.600 [15.24]	.420 [10.67]	.300 [7.62]	.240 [6.10]	.490 [12.45]	5-147323-3	5-147278-3	5-147324-3
5	.700 [17.78]	.520 [13.21]	.400 [10.16]	.290 [7.37]	.590 [14.99]	5-147323-4	5-147278-4	5-147324-4
6	.800 [20.32]	.620 [15.75]	.500 [12.70]	.340 [8.64]	.690 [17.53]	5-147323-5	5-147278-5	-
8	1.000 [25.40]	.820 [20.83]	.700 [17.78]	.440 [11.18]	.890 [22.61]	5-147323-7	5-147278-7	5-147324-7
9	1.100 [27.94]	.920 [23.37]	.800 [20.32]	.490 [12.45]	.990 [25.15]	5-147323-8	5-147278-8	5-147324-8
10	1.200 [30.48]	1.020 [25.91]	.900 [22.86]	.540 [13.72]	1.090 [27.69]	5-147323-9	5-147278-9	-
11	1.300 [33.02]	1.120 [28.45]	1.000 [25.40]	.590 [14.99]	1.190 [30.23]	-	-	6-147324-0
12	1.400 [35.56]	1.220 [30.99]	1.100 [27.94]	.640 [16.26]	1.290 [32.77]	6-147323-1	6-147278-1	6-147324-1
15	1.700 [43.18]	1.520 [38.61]	1.400 [35.56]	.790 [20.07]	1.590 [40.39]	6-147323-4	6-147278-4	-
16	1.800 [45.72]	1.620 [41.15]	1.500 [38.10]	.840 [21.34]	1.690 [42.93]	-	6-147278-5	-

MTE HEADERS, VERTICAL, POLARIZED/LATCHING, SURFACE MOUNT



Material and Finish

Housing - Black thermoplastic, 94V-0 rated

Posts- Brass, plated as follows:

Plating A- Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

Plating B- Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

Plating C- .000100 [.00254] tin over .000050 [.00127] nickel on entire post

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

Related Product Data

Mateable AMPMODU MTE Products - Receptacle **Assemblies (Polarized/Latching)** - Page 191

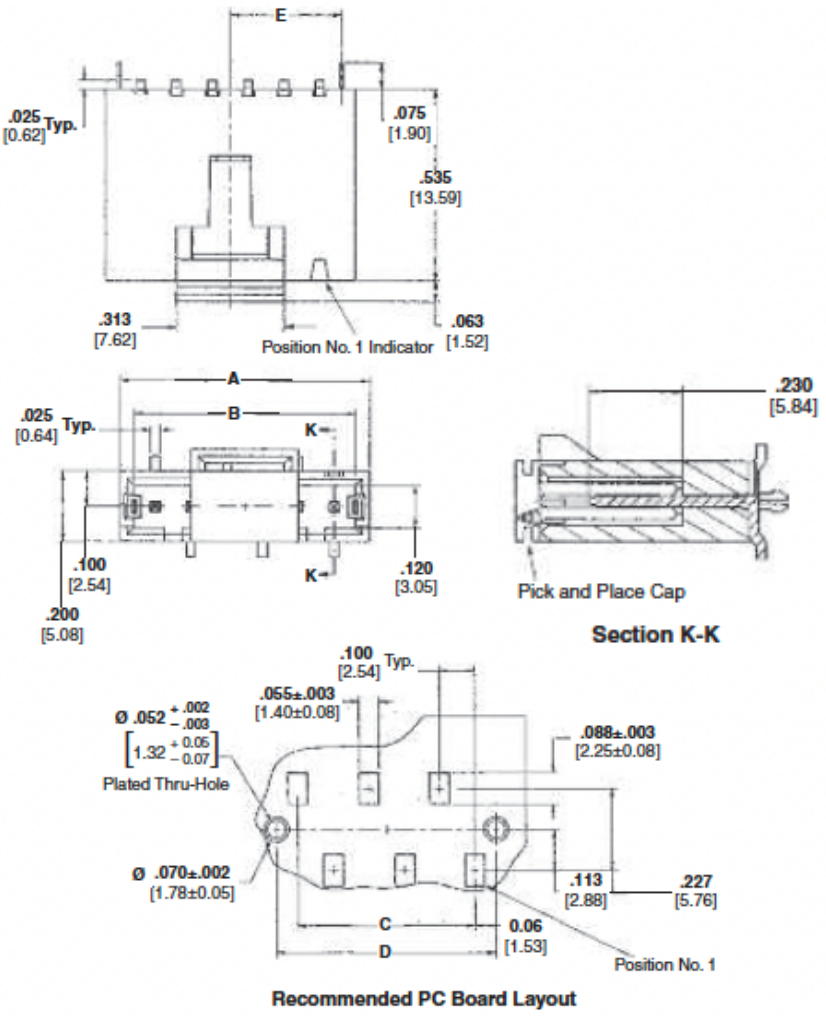
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 193

Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

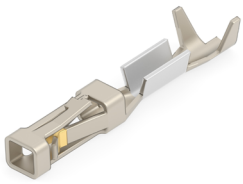
Dimensions: in(mm)



PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)					Vertical SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.300[7.62]	.220[5.59]	.100[2.54]	.220[5.60]	.110[2.80]	5-1375583-1	5-1375582-1	5-1375549-1
3	.400[10.16]	.320[8.13]	.200[5.08]	.320[8.14]	.160[4.07]	5-1375583-2	5-1375582-2	5-1375549-2
4	.500[12.70]	.420[10.67]	.300[7.62]	.420[10.68]	.210[5.34]	5-1375583-3	5-1375582-3	5-1375549-3
5	.600[15.24]	.520[13.21]	.400[10.16]	.520[13.22]	.260[6.61]	5-1375583-4	5-1375582-4	5-1375549-4
6	.700[17.78]	.620[15.75]	.500[12.70]	.620[15.76]	.310[7.88]	-	5-1375582-5	-
7	.800[20.32]	.720[18.29]	.600[15.24]	.720[18.30]	.360[9.15]	5-1375583-6	5-1375582-6	5-1375549-6
8	.900[22.86]	.820[20.83]	.700[17.78]	.820[20.84]	.410[10.42]	5-1375583-7	5-1375582-7	5-1375549-7
9	1.000[25.40]	.920[23.37]	.800[20.32]	.920[23.38]	.460[11.69]	5-1375583-8	-	-
10	1.100[27.94]	1.020[25.91]	.900[22.86]	1.020[25.92]	.510[12.96]	5-1375583-9	5-1375582-9	-
11	1.200[30.48]	1.120[28.45]	1.000[25.40]	1.120[28.46]	.560[14.23]	-	-	6-1375549-0

INTERCHANGEABLE CONTACTS, WIRE CRIMP (SNAP-IN)



Material and Finish

Copper alloy C7025, plated as follows:

Plating A - Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating B - Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

Plating C - .000100 [0.00254] min. tin over .000050 [0.00127] min. nickel on entire contact

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

Related Product Data

Performance Characteristics - Page 101

Housings used in - Short Point - Page 183

AMPMODU MTE Unloaded Housings - Page 189

Application Tooling - Page 240

Technical Documents - Page 243

Product Specification - 108-1472, 108-1472-1

Application Specification - 114-25038

Keying Plug

Part Numbers 104072-1

Ten plugs are supplied per strip. Order quantity reflects the number of strips required.

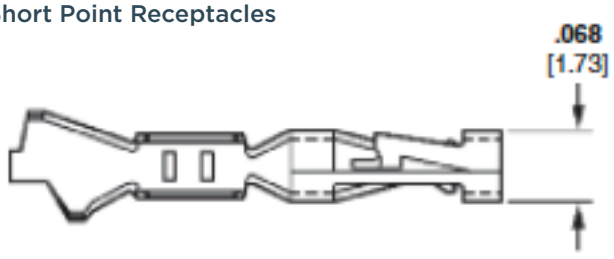


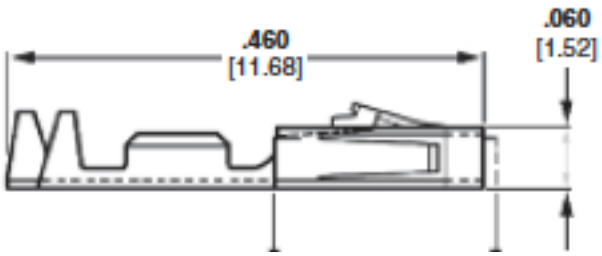
Extraction/Lance Reset

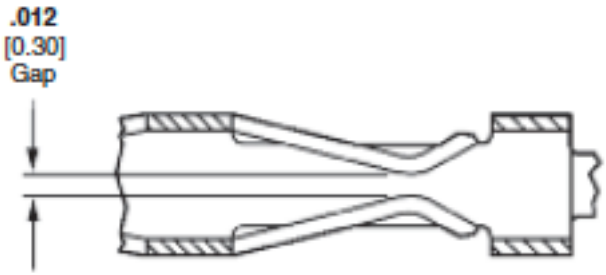
Tool No. 843477-1



Short Point Receptacles







Section C - C

PRODUCT INFORMATION

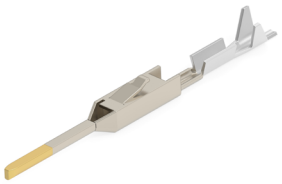
Wire Size Range		Ins. Dia. Range	Finish	Contact Part Numbers (Standard Pressure)		Ocean Applicator PN		Hand Tool Nos.
AWG	[mm²]			Strip Form	Loose Piece	Strip Form	Loose Piece	
32-28	0.03-0.08	.025-.060 0.64-1.52	Plating A	1-104481-1	1-104481-3	2836129-2		-
			Plating B	1-104481-0	1-104481-2			
			Plating C	5-104481-2	5-104481-6			
26-22	0.13-0.3	.025-.060 0.64-1.52	Plating A	1-104480-3	1-104480-6	2234095-2		91518-1
			Plating B	1-104480-2	1-104480-5			
			Plating C	1-104480-7	1-104480-4			
24-20	0.2-0.5	.025-.060 0.64-1.52	Plating A	1-104479-0	1-104479-3			91551-1
			Plating B	104479-9	1-104479-2			
			Plating C	104479-8	1-104479-1	2266323-1, 2266323-2	-	

* For more info please click to view: document 1 and document 2
Note: These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

Note: All Part Numbers are RoHS compliant.

INTERCHANGEABLE CONTACTS, WIRE CRIMP (SNAP-IN)

PINS



Material and Finish

Phosphor bronze, plated as follows:

Plating A - Duplex plated .000030 [0.00076] gold on contact area, .000030 [0.00076] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Plating B - Duplex plated .000015 [0.00038] gold on contact area, .000030 [0.00076] min. tin on solder area, with entire contact underplated .000050 [0.00127] nickel

Plating C - .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Related Product Data

Performance Characteristics - Page 101

AMPMODU MTE Unloaded **Housing**s - pages 159

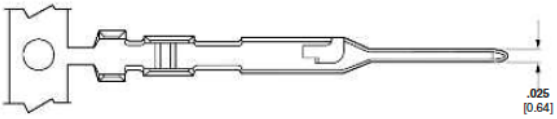
Application Tooling - Page 240

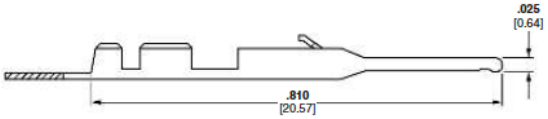
Technical Documents - Page 243

Product Specification - 108-25034

Application Specification - 114-25026

Dimensions: in(mm)







Extraction/Lance Reset

Tool No. 843477-1

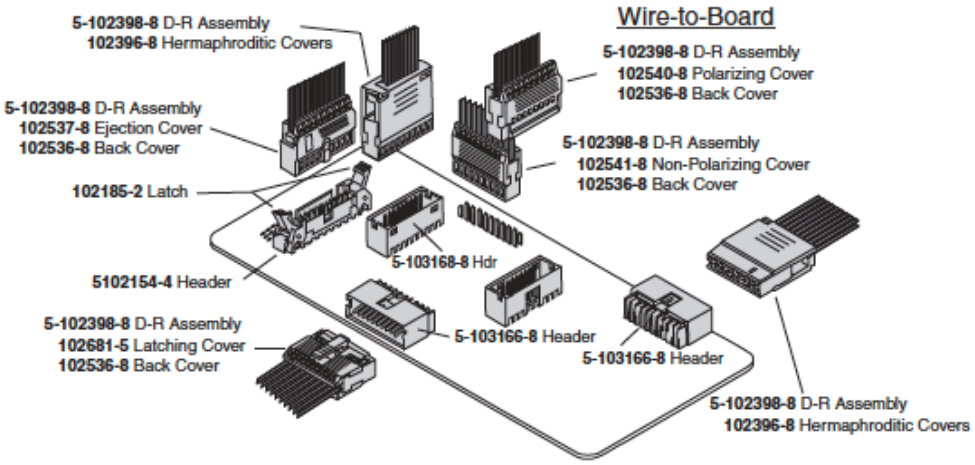
PRODUCT INFORMATION

Wire Size Range		Ins. Dia. Range	Finish	Contact Part Numbers (Standard Pressure)		Ocean Applicator PN	Hand Tool Nos.
AWG	[mm²]			Strip Form	Loose Piece		
32-28	0.03-0.08	.025-.054 0.64-1.37	Plating A	5-104506-6	5-104506-7	2151863-2	-
			Plating B	5-104506-4	5-104506-5		
			Plating C	-	5-104506-3		
26-22	0.14-0.32	.036-.054 0.91-1.37	Plating A	5-104505-6	5-104505-7	2151236-2	91531-1
			Plating B	5-104505-4	5-104505-5		
			Plating C	5-104505-2	5-104505-3		

* For more info please click to view: document 1 and document 2
Note: These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

Note: All Part Numbers are RoHS compliant.

MT AND SHIELDED MT INTERCONNECTION SYSTEM



The AMPMODU MT and Shielded MT Interconnection System offers labor and cost savings through mass termination technology, while maintaining the timeproven reliability of the AMPMODU product family. The MT system is comprised of preloaded, double-row receptacle assemblies with snap-on covers and a variety of shielding hardware and accessories. The system is supported by a full line of mass termination tooling to meet virtually most production needs.

The insulation displacement contact, the heart of the MT system, features a mating interface that is the same as the conventional AMPMODU crimp, snap-in contact, featuring dual cantilever beams, built-in overstress protection and a completely enclosed "box" design.

To reduce EMI/ESD (electromagnetic interference/ electrostatic discharge) at the input-output interface, add-on metal shields can be used to convert standard MT connectors to shielded MT connectors.

PERFORMANCE Characteristics

Contact Current Rating - 3 amperes for single contact in free air.(Amperage could vary due to ambient temperature, wire size and duty cycles.)

Operating Temperature - -65°C to +105°C

Termination Resistance - 12 milliohms max.

Max. Mating Force -
High pressure - 26 oz. [7.23 N]
Standard pressure - 9 oz. [2.50 N]

Min. Unmating Force -
High pressure - 5 oz. [1.39 N]
Standard pressure - 1.5 oz. [0.417 N]

Contact Retention in Housing -
5 lb. [22.24 N] per contact min.

PRODUCT FACTS

- Full line of mass termination tooling offers lowest installed cost for most production needs
- Dual cantilever beams with anti-overstress features provide redundant contact of mating post and limit beam deflection, preventing permanent deformation
- Redundant insulation displacement slots provide for maximum reliability
- Integral wire strain relief on contact can prevent wire motion from being transmitted to wire termination areas
- Built-in contact post stop can protect terminated wire from being disturbed by over-insertion of mating post, prevents wire from entering contact area and positively limits mating connector depth
- Insulation displacement contacts and crimp, snap-in contacts are interchangeable
- Complete serviceability with replacement contacts Cover styles include low profile (polarized, non-polarized, latching and ejection) and standard profile (hermaphroditic and ejection)
- Connector **Housing**s may be stacked end-to-end within one pair of covers. All varieties of covers in this catalogue are suitable for multiple **Housing** stacking applications similar to the example illustrated in the photograph to the right
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E247738
- Certified by Canadian Standards Association, File No. LR 7189

MT RECEPTACLE ASSEMBLIES, DOUBLE-ROW .100 X .100 [2.54 X 2.54] CENTERLINE

HOUSINGS PRE-LOADED WITH STANDARD PRESSURE CONTACTS



Housing - Glass-filled thermoplastic, black, 94V-0 rated

Contacts- Copper alloy, duplex plated .000030 [0.00076] gold in mating area, .000050 [0.00127] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Connectors - Page 72

Cable Insulation Wall Thickness - .015 [0.39] max.

Cable Insulation Diameter - .050 [1.27] max.

Mating Post Length - .222-.273 [5.64-6.94] max.

Performance Characteristics - Page 101

Replacement Contacts - page 201

Connector Covers - Page 225

Application Tooling - Page 240

Technical Documents - Page 243

Product Specification 108-25015, 108-25018, 108-25030

Application Specification - 114-25032

Instruction Sheet - 408-6532

Keying Plugs

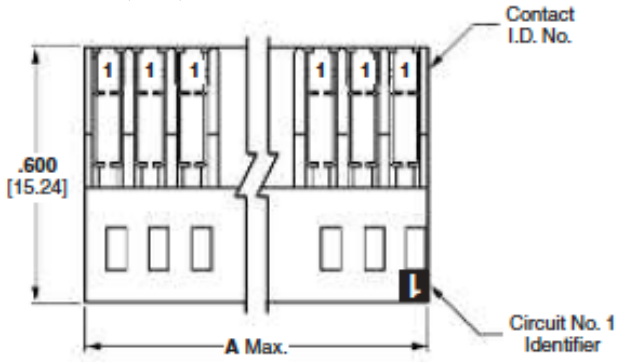


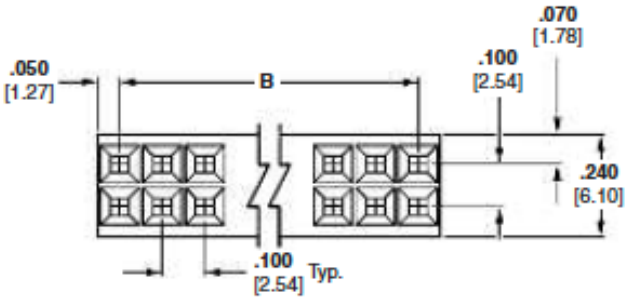
Part Number 86286-1
(Plugs into receptacle contact)

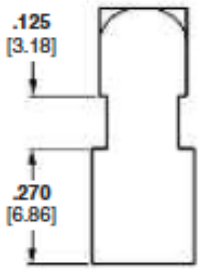


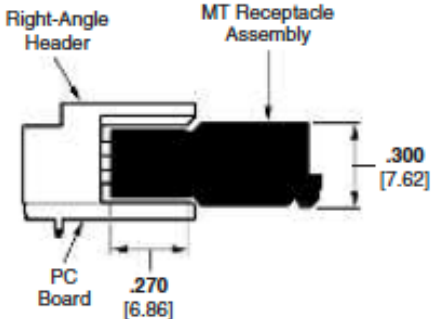
Part Numbers 87077-2
(Plugs directly into Housing)

Dimensions: in(mm)









Note: All Part Numbers are RoHS compliant.

PRODUCT INFORMATION

No. of Pos.	Dimensions: in(mm)		Part Numbers (Stamped)			Unloaded Housings
			Wire Size Range			
	A	B	30-26 AWG [0.05-0.15 mm²]	26-22 AWG [0.12-0.3 mm²]	22-20 AWG [0.3-0.6 mm²]	
6	.300 [7.62]	.200 [5.08]	5-102393-1	5-102398-1	-	102394-1
8	.400 [10.16]	.300 [7.62]	5-102393-2	5-102398-2	-	102394-2
10	.500 [12.70]	.400 [10.16]	5-102393-3	5-102398-3	5-102448-3	102394-3
12	.600 [15.24]	.500 [12.70]	5-102393-4	5-102398-4	5-102448-4	102394-4
14	.700 [17.78]	.600 [15.24]	5-102393-5	5-102398-5	5-102448-5	102394-5
16	.800 [20.32]	.700 [17.78]	5-102393-6	5-102398-6	-	102394-6
18	.900 [22.86]	.800 [20.32]	5-102393-7	5-102398-7	5-102448-7	102394-7
20	1.000 [25.40]	.900 [22.86]	5-102393-8	5-102398-8	-	102394-8
22	1.100 [27.94]	1.000 [25.40]	5-102393-9	-	-	102394-9
24	1.200 [30.48]	1.100 [27.94]	6-102393-0	6-102398-0	6-102448-0	1-102394-0
26	1.300 [33.02]	1.200 [30.48]	6-102393-1	6-102398-1	-	1-102394-1
28	1.400 [35.56]	1.300 [33.02]	6-102393-2	-	-	1-102394-2
30	1.500 [38.10]	1.400 [35.56]	6-102393-3	6-102398-3	-	1-102394-3
32	1.600 [40.64]	1.500 [38.10]	6-102393-4	-	-	1-102394-4
34	1.700 [43.18]	1.600 [40.64]	6-102393-5	6-102398-5	-	1-102394-5
40	2.000 [50.80]	1.900 [48.26]	6-102393-8	6-102398-8	6-102448-8	1-102394-8
50	2.500 [63.50]	2.400 [60.96]	7-102393-3	7-102398-3	7-102448-3	2-102394-3
60	3.000 [76.20]	2.900 [73.66]	7-102393-8	7-102398-8	-	-
64	3.200 [81.28]	3.100 [78.74]	8-102393-0	-	-	-

Note: Contact Extraction/Lance Reset Tool No. 843477-3, see page 245

For use with AMP-O-LECTRIC Model “K” machines. Call Technical Support Center (1-800-522-6752) for Part Numbers of applicators for use with the AMP-O-LECTRIC Model “G” machines (shown on page 255), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

Note: These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

Note: All Part Numbers are RoHS compliant.

MT RECEPTACLE ASSEMBLIES, DOUBLE-ROW .100 X .100 [2.54 X 2.54] CENTERLINE

HOUSINGS PRE-LOADED WITH STANDARD PRESSURE CONTACTS



Material and Finish

Housing - Glass-filled thermoplastic, black, 94V-0 rated

Contacts - Copper alloy, duplex plated .000030 [0.00076] gold in mating area, .000050 [0.00127] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Connectors - Page 10

Cable Insulation Wall Thickness - .015 [0.39] max.

Cable Insulation Diameter - .050 [1.27] max.

Mating Post Length - .200-.273 [5.64-6.94] max.

Performance Characteristics - Page 101

Replacement Contacts - page 201

Connector Covers - pages 195, 196

Application Tooling - Page 240

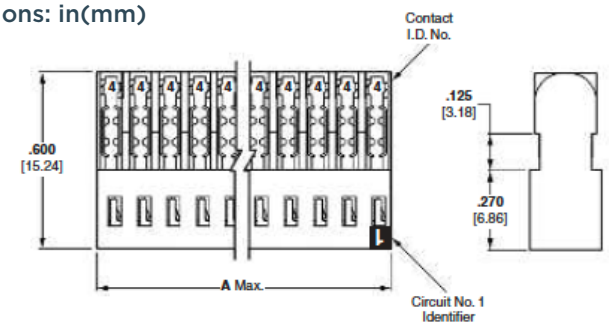
Technical Documents - Page 243

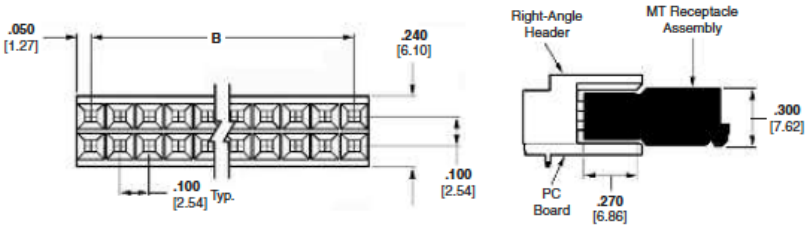
Product Specification 108-25015, 108-25018, 108-25030

Application Specification - 114-25032

Instruction Sheet - 408-6532

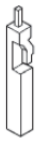
Dimensions: in(mm)







Part Number 86286-1
(Plugs into receptacle contact)
Material - Natural color nylon



Part Numbers 87077-2
(Plugs directly into **Housing**)

No. of Pos.	Dimensions: in(mm)		Part Numbers (Stamped*)	
			Wire Size Range	
	A	B	30-26 AWG [0.05-0.15 mm²]	26-22 AWG [0.12-0.3 mm²]
6	.300 [7.62]	.200 [5.08]	5-102693-1	5-102694-1
8	.400 [10.16]	.300 [7.62]	5-102693-2	5-102694-2
10	.500 [12.70]	.400 [10.16]	5-102693-3	-
12	.600 [15.24]	.500 [12.70]	5-102693-4	-
14	.700 [17.78]	.600 [15.24]	5-102693-5	-
16	.800 [20.32]	.700 [17.78]	5-102693-6	-
18	.900 [22.86]	.800 [20.32]	5-102693-7	-
20	1.000 [25.40]	.900 [22.86]	5-102693-8	-

Note:
*Cavity identification - first cavity (one side); TE Part Numbers and date code stamped on **Housing** where size permits.
Contact Extraction/Lance Reset Tool No. 843477-3, see page 250.
All Part Numbers are RoHS compliant.

LOW PROFILE COVERS FOR DOUBLE-ROW MT RECEPTACLE ASSEMBLIES

FRONT COVERS

Material

Black thermoplastic, flame retardant

Related Product Data

For use on Double-Row MT Receptacle

Assemblies - Page 224

Technical Documents - Page 243

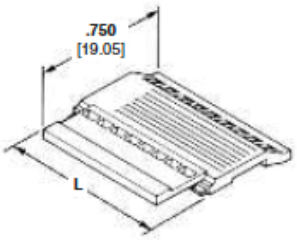
Product Specification - 108-25015, 108-25018, 108-25030

Application Specification - 114-25032

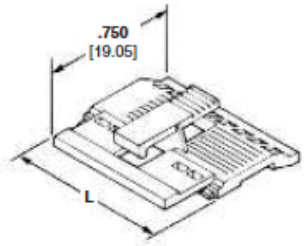
Instruction Sheet - 408-6532

Note: See Page 226 for Low Profile Cover Part Numbers

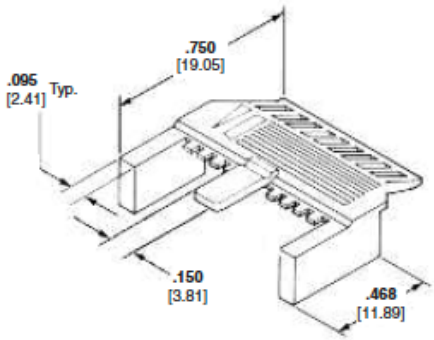
A - Polarizing Cover
(Mates with AMPMODU 4-sided shrouded headers. Refer to pages 117, 122, 126, 130.)



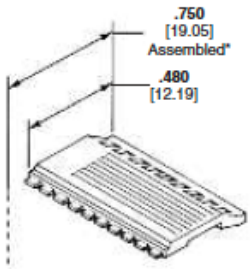
B - Latching Cover
(Mates with AMPMODU 4-sided shrouded headers with extraction slot. Refer to pages 117, 122, 126, 130.)



C - Ejection Cover
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see TE Catalog 82012.



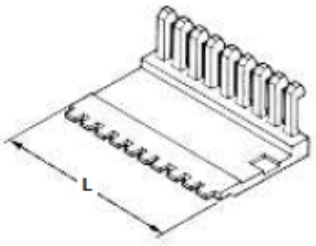
D - Non-Polarizing Cover
(Designed for use with shielded connectors, pages 261 & 262; or for non-polarizing applications.)



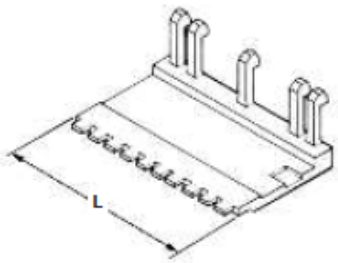
*Dimension applies to cover when installed on connector housing.

Back Covers

E - For Shielding and Non-Shielding Applications
(For use with any low profile cover.)



F - For Shielding Applications
(For use with Non-Polarizing Cover only.)



Note: All Part Numbers are RoHS compliant.

STANDARD PROFILE COVERS FOR DOUBLE-ROW MT RECEPTACLE ASSEMBLIES

Material

Black thermoplastic, flame retardant

Related Product Data

For use on Double-Row MT Receptacle Assemblies - Page 224

Technical Documents - Page 243

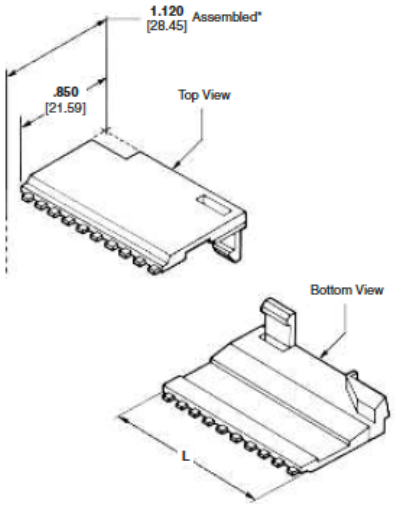
Product Specification - 108-25015, 108-25018, 108-25030

Application Specification - 114-25032

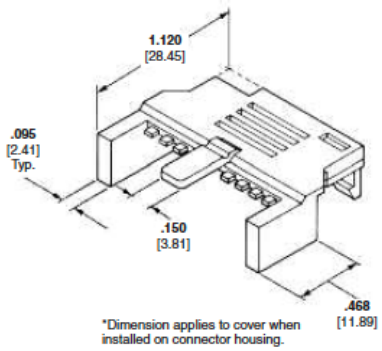
Instruction Sheet - 408-6532

Dimensions: in(mm)

G - Hermaphroditic Cover
(Two hermaphroditic covers can be used or one hermaphroditic cover can be used with an H Ejection Cover.)



H - Ejection Cover
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see TE Catalog 82012.



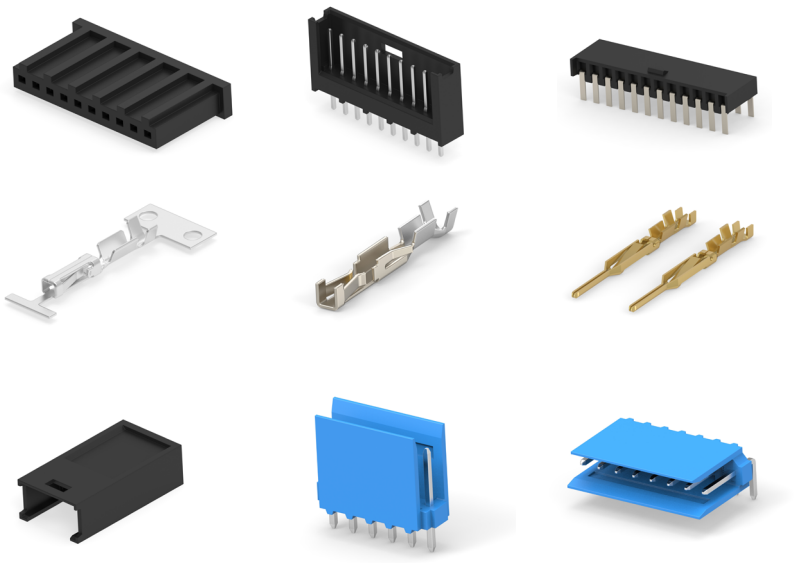
*Dimension applies to cover when installed on connector housing.

PRODUCT INFORMATION

No. of Pos.	Dimensions L	Vertical SMT Headers				
		Front Covers				Back Covers
		A Polarizing	B Latching	C Ejection	D Non-Polarizing	E Shielding and Non-Shielding Applications
6	.300 [7.62]	102540-1	-	-	102541-1	102536-1
8	.400 [10.16]	102540-2	-	-	102541-2	102536-2
10	.500 [12.70]	102540-3	-	102537-3	102541-3	102536-3
12	.600 [15.24]	102540-4	102681-1	-	-	102536-4
14	.700 [17.78]	-	102681-2	102537-5	102541-5	102536-5
16	.800 [20.32]	102540-6	102681-3	102537-6	102541-6	102536-6
18	.900 [22.86]	-	102681-4	-	-	102536-7
20	1.000 [25.40]	-	102681-5	102537-8	102541-8	102536-8
24	1.200 [30.48]	-	102681-7	1-102537-0	1-102541-0	1-102536-0
26	1.300 [33.02]	-	102681-8	-	1-102541-1	1-102536-1
30	1.500 [38.10]	-	1-102681-0	-	-	1-102536-3
34	1.700 [43.18]	-	1-102681-2	-	1-102541-5	1-102536-5
40	2.000 [50.80]	-	1-102681-5	1-102537-8	1-102541-8	1-102536-8
50	2.500 [63.50]	-	2-102681-0	2-102537-3	2-102541-3	2-102536-3
60	3.000 [76.20]	-	-	2-102537-8	2-102541-8	2-102536-8

Note: All Part Numbers are RoHS compliant.

AMPMODU 2.54mm CENTRELINE INTERCONNECTION SYSTEM - ITALIAN RANGE



- Single and double row connector system featuring 0.63mm square posts with mating receptacles
- Current rating 3 amps max per contact
- Available for board-to-board, wire-to-board and wire-to-wire applications
- Contacts available in both tin and gold plating
- Flame retardant thermoplastic housings UL 94V-1 and UL 94V-0 rated
- Shrouded pin headers feature polarisation and detent latching

Specification:

Current Rating - 3 A max

Operating Temperature - -40°C to +80°C

Engaging Force - 1.8 N per contact max (standard pressure contacts)

Separating Force - 0.4 N per contact min (standard pressure contacts)

Durability - 0.4 µm gold— 100 cycles

0.8 µm gold - 200 cycles (standard pressure contacts)

Contact Resistance - 15 mΩ max

Insulation Resistance - 5000 MΩ min

A range of fully intermateable products on a 2.54 mm centreline for board-to-board, wire-to-board and wire-to-wire applications. A very flexible range, ideal where a number of system connection methods are required, the MOD II Italian range provides reliable and dependable connection for a wide range of applications.

MOD II RECEPTACLES

Receptacle products are offered in vertical and horizontal pcb mounting and as cable mount housings for crimp snap-in contacts with insulation support. Both pcb and cable mount receptacles feature polarisation and detent latching giving a positive click when used with the corresponding header variants. Crimp contacts for receptacle housings accommodate a wire size range of 20-30 AWG (0.04 mm^2 to 0.5 mm^2) and are available with a number of different plating options.

MOD II SHROUDED HEADERS AND PIN HOUSINGS

Available as both shrouded pcb headers with 0.63mm posts or as cable mount housings to accept crimp snap-in pin contacts with insulation support. Shrouded headers feature gold or tin plating in straight or right angle and will mate with both pcb and cable mount receptacles. Cable mount pin housings also mate with both pcb and cable mount receptacles. Crimp contacts for pin housings allow termination to wire size ranges 22-30AWG (0.04 mm^2 to 0.32 mm^2) with a choice of plating finishes.

MOD II RECEPTACLE HOUSINGS

SINGLE AND DOUBLE ROW

Specification:

Housing- Black thermoplastic, UL 94V-1 rated

Mating Connectors:

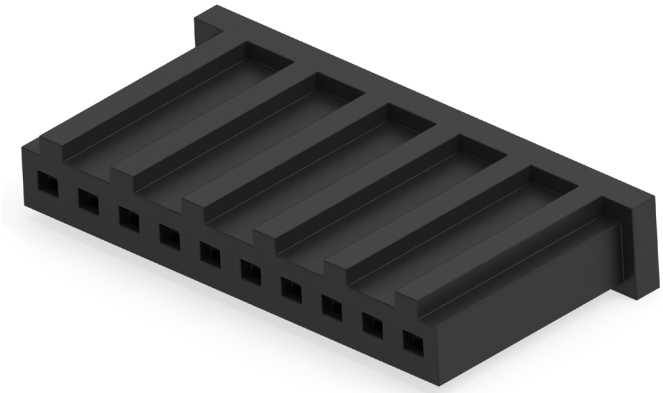
MODII Shrouded Headers - Page 172

MODII Pin Housings - Page 173

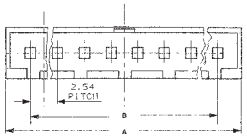
Technical Documents:

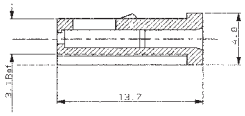
Product Specification- 108-20025

Application Specification- 114-20004

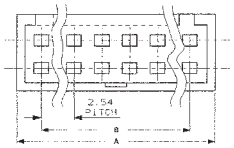


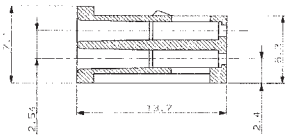
SINGLE ROW





DOUBLE ROW





PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
2	7.1	2.54	280358
4	12.2	7.62	280359
6	17.3	12.70	280360
8	22.3	17.78	280361
9	24.9	20.32	280512
10	27.4	22.86	280362
12	32.5	27.94	280514
15	40.1	35.56	280363
22	57.9	53.34	280364

Keying Plug	87077-2

PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
2x4	12.2	7.62	280365
2x5	14.7	10.16	284123-1
2x8	22.3	17.78	280366
2x9	24.9	20.32	280513
2x12	32.5	27.94	280515
2x15	40.1	35.56	280368
2x18	47.8	43.18	281018
2x22	57.9	53.34	280369

Keying Plug	87077-2

MOD II CRIMP SNAP-IN RECEPTACLE CONTACTS

WITH INSULATION SUPPORT

Specification:

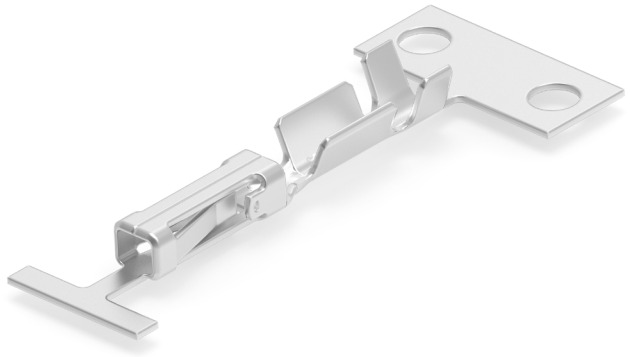
Material- Phosphor bronze, plated as follows:

Plating A- Pre-tin plated 0.8 µm

Plating B- Selectively plated 0.4 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

Plating C- Selectively plated 0.4 µm gold on contact area, over 1.3 µm nickel on entire contact

Plating D- Selectively plated 0.8 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact



Technical Documents:

Product Specification- 108-20025

Application Specification- 114-20004

PRODUCT INFORMATION

Wire Size Range mm²	AWG	Insulation Diameter mm	Plating	Part Numbers	
				Strip Form	Loose Piece
0.5-0.2	20-24	1.60 max	Plating D	281999-1	–
			Plating A	281556-2*	–
0.32-0.13	22-28	0.90-1.55	Plating B	280530-1	181270-1
			Plating C	280530-3	181270-3
			Plating D	280530-4	181270-4
			Plating A	280708-2*	182206-2*
0.08-0.04	28-30	0.64-1.27	Plating B	280422-1	181271-1
			Plating A	-	182207-2*

* With high contact pressure

For application tooling please see Page 82

MOD II PIN HOUSINGS

SINGLE AND DOUBLE ROW

Specification:

Housing- Black thermoplastic, UL 94V-1 rated

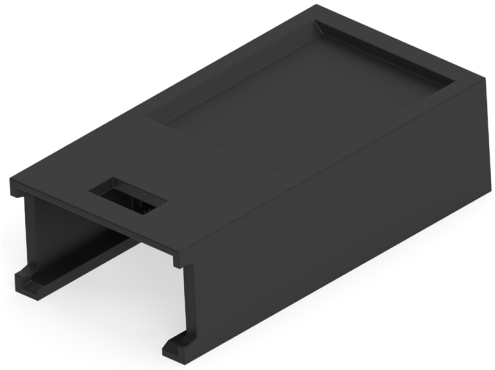
Mating Connectors:

MODII Receptacle Housings - Page 228

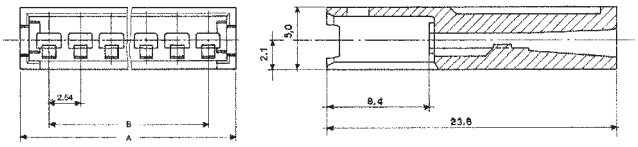
MOD II PCB Receptacles - Page 174

Technical Documents:

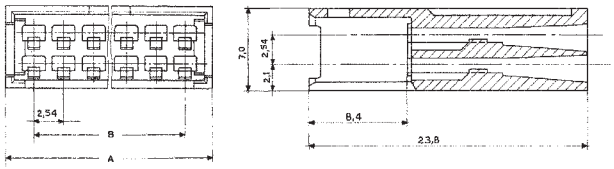
Product Specification- 108-20025



SINGLE ROW



DOUBLE ROW



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	
2	7.4	2.54	280628
4	12.5	7.62	280629
6	17.5	12.70	280630
8	22.6	17.78	280631
10	27.7	22.86	280633
12	32.8	27.94	280634
15	40.4	35.56	280635

PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers
	A	B	
2x4	12.5	7.62	280637
2x8	22.6	17.78	280638
2x12	32.8	27.94	280640

MOD II CRIMP SNAP-IN PIN CONTACTS

WITH INSULATION SUPPORT

Specification:

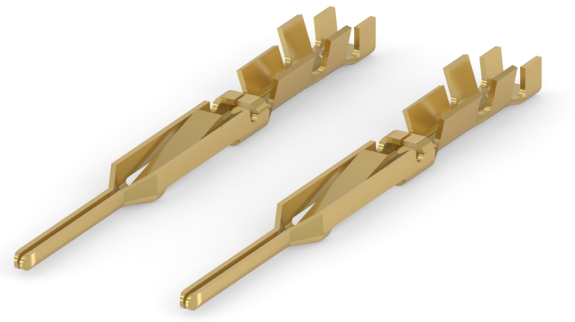
Material- Phosphor bronze, plated as follows:

Plating A- 2.5 µm tin over 1.3 µm nickel on entire contact

Plating B- Selectively plated 0.4 µm gold on contact area, with gold flash over 1.3 µm nickel on entire contact

Technical Documents:

Application Specification- 114-16003



PRODUCT INFORMATION

Wire Size Range mm²	AWG	Insulation Diameter mm	Plating	Part Numbers	
				Strip Form	Loose Piece
0.32-0.13	22-28	0.90-1.55	Plating B	86557-6	86561-6
			Plating A	1-86557-9	1-86561-0
0.08-0.04	28-30	0.64-1.27	Plating B	88048-4	–

For application tooling please see Page 82

MOD II RECEPTACLES

HORIZONTAL PCB MOUNT

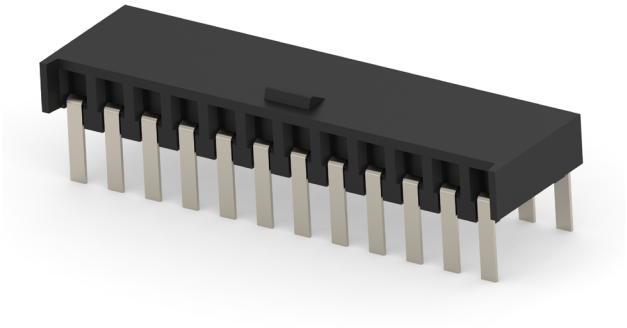
Specification:

Housing- Black glass fibre filled polyester, UL 94V-0 rated

Contacts- Phosphor bronze, plated as follows:

Plating A- Selectively plated 0.4 µm gold on contact area, with gold flash over nickel on entire contact

Plating B- Tin 0.8 µm



Mating Connectors:

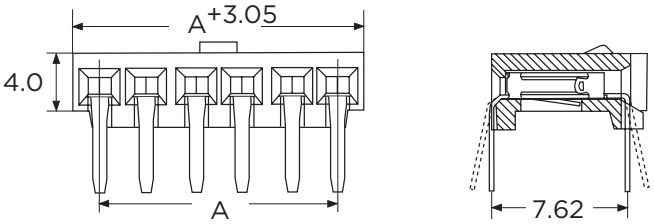
MODII Shrouded Headers - Page 172

MOD II Pin Housings - Page 230

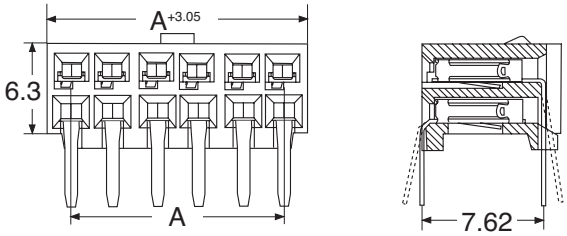
Technical Documents:

Product Specification- 108-20025

SINGLE ROW



DOUBLE ROW



PRODUCT INFORMATION

No. of Positions	Dimensions: in	Part Numbers
		Plating A
12	27.94	280580-2
15	35.56	280581-2

KEYING PLUG



Part Number 86286-1
(Plugs into receptacle contact)
Material **-** Natural color nylon

MOD II SHROUDED HEADERS

STRAIGHT, SINGLE ROW

Specification:

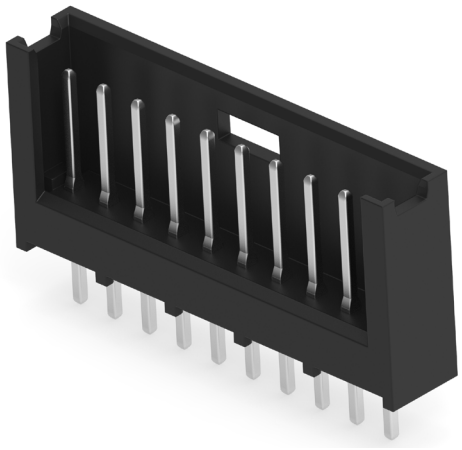
Housing- Black glass fibre filled polyester, UL 94V-0 rated

Posts- Brass (gold plating) or phosphor bronze (tin plating). Plating details as follows:

Plating A- Gold 0.8 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

Plating B- Gold 0.4 µm on contact area and 2.5 µm tin on solder area, with entire post underplated 1.3 µm nickel

Plating C- Tin 3.5 µm



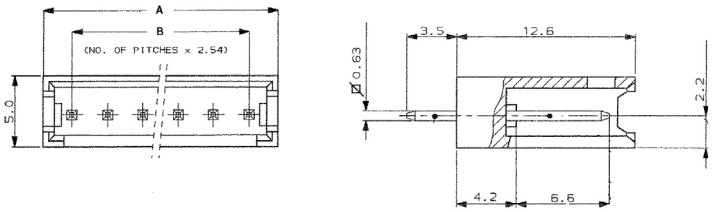
Mating Connectors:

MOD II Receptacle Housings - Page 228

MOD II PCB Receptacles - Page 232

Technical Documents:

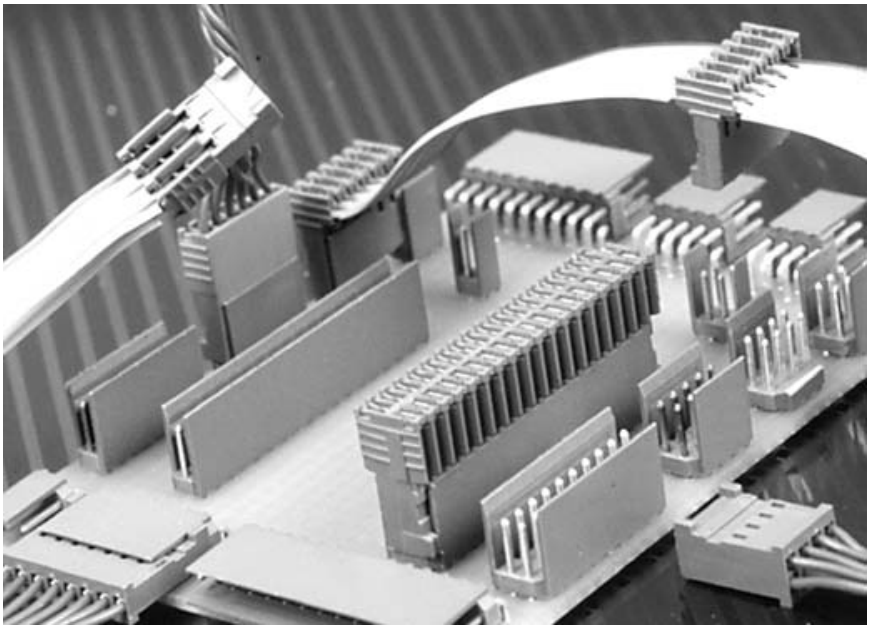
Product Specification- 108-20025



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers		
	A	B	Plating A	Plating B	Plating C
2	7.7	2.54	280370-3	280370-2	280370-1
4	12.7	7.62	280371-3	280371-2	280371-1
6	17.8	12.70	280372-3	280372-2	280372-1
8	22.9	17.78	-	280373-2	280373-1
9	25.4	20.32	-	280508-2	280508-1
10	28.0	22.86	280374-3	280374-2	280374-1
12	33.1	27.94	280520-3	280520-2	280520-1
15	40.7	35.56	280375-3	280375-2	280375-1
22	58.5	53.34	280376-3	-	280376-1

HE 13 / HE 14 - 2.54 mm CENTRELINE INTERCONNECTION SYSTEM



Product Facts

- Receptacle assemblies preloaded with Insulation Displacement Contacts (IDC) to terminate discrete wires or 2.54 mm centreline ribbon cable
- Receptacle housings accept crimp snap-in contacts to terminate discrete wires
- Headers provided for straight or right-angle mounting to be soldered onto 1.6mm printed circuit boards
- Protective header shrouds feature an integrated detent latching device
- Compliant to the CEI IEC 603-8 International Standard

Specification:

Current Rating	- 3 A max at 20°C
Contact Resistance	- 20 mΩ max (HE 13)
	- 30 mΩ max (HE 14)
Dielectric Withstanding Voltage	- 1000 V rms (HE 13)
	- 500 V rms (HE 14)
Insulation Resistance	- 5000 MΩ (HE 13)
	- 1000 MΩ (HE 14)
Operating Temperature	- -55°C to +125°C (HE 13)
	- -40°C to +100°C (HE 14)
Durability	- 400 cycles (HE 13)
	- 30 cycles (HE 14)
Insertion/Withdrawal Force	- 1.5 N max per contact + latching force (HE 13)
	- 3 N max per contact + latching force (HE 14)

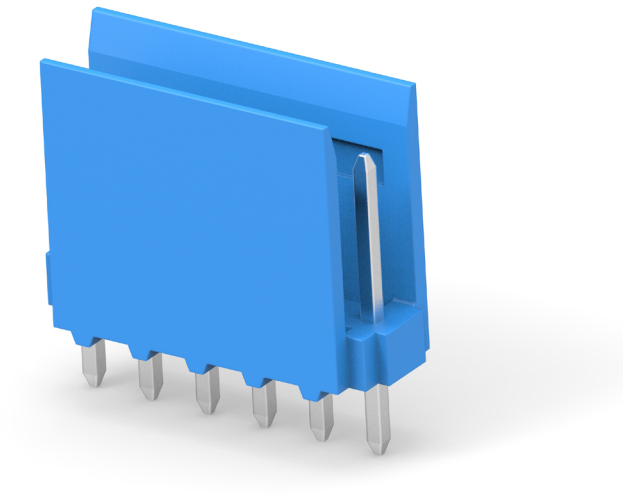
A multi-contact connector range designed to reliably meet today's interconnection requirements for signal transmission in a variety of computer, telecommunications and industrial applications.

Complying fully with the CEI IEC 603-8 international standard, this wire-to-board interconnection system is composed of IDC receptacle assemblies for discrete wires or ribbon cable, receptacle housings for crimp snap-in receptacle contacts, and vertical or right-angle shrouded and polarised board-mount headers.

All products are available with a choice of gold (HE 13) or tin (HE 14) plating finishes.

SHROUDED HEADERS

STRAIGHT 0.63mm SQUARE POST



Specification:

Housing- Blue flame retardant glass filled polyester, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

HE 13- Selectively plated 0.4 µm gold on contact area, gold flash on insertion area, 2.5 µm tin min on solder tail with entire post underplated 1.3 µm nickel

HE 14- Tin plated min. 2.5 µm on solder area, with entire post tin plated 0.8 µm over 0.8 µm nickel

Mating Connectors:

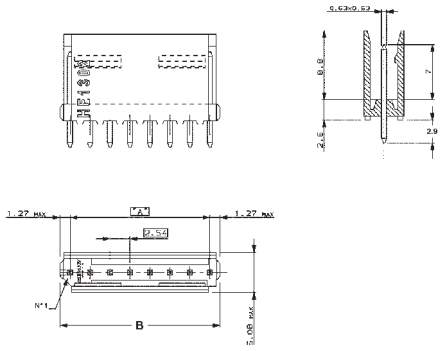
HE 13 / HE 14 IDC Receptacles- Page 154

HE 13 / HE 14 Receptacle Housings- Page 136

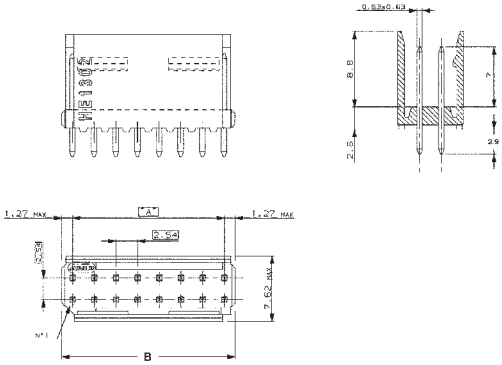
Technical Documents:

Product Specification- 108-15053

SINGLE ROW



DOUBLE ROW



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers 26 AWG		Part Numbers 24 AWG	
	A	B	HE 13	HE 14	HE 13	HE 14
2	2.54	5.08	281696-2	281695-2	-	281739-2
3	5.08	7.62	281696-3	281695-3	-	281739-3
4	7.62	10.16	281696-4	281695-4	-	281739-4
5	10.16	12.70	281696-5	281695-5	281740-5	281739-5
6	12.70	15.24	281696-6	281695-6	-	281739-6
7	15.24	17.78	-	281695-7	–	–
8	17.78	20.32	281696-8	281695-8	-	281739-8
10	22.86	25.40	-	1-281695-0	1-281740-0	1-281739-0
12	27.94	30.48	-	1-281695-2	1-281740-2	1-281739-2
15	35.56	38.10	-	1-281695-5	1-281740-5	1-281739-5

SHROUDED HEADERS

STRAIGHT 0.63mm SQUARE POST

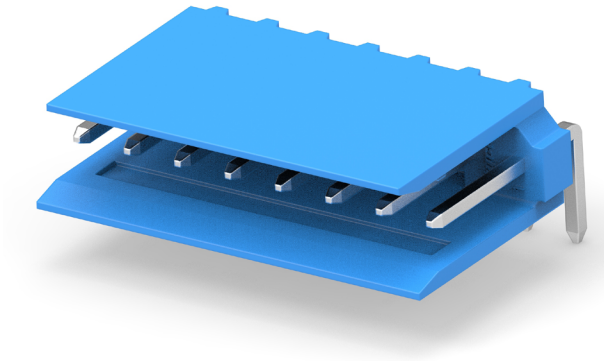
Specification:

Housing- Blue flame retardant high temperature nylon, UL 94V-0 rated

Posts- Phosphor bronze, plated as follows:

HE 13- Selectively plated 0.4 µm gold on contact area, gold flash on insertion area, 2.5 µm tin min on solder tail with entire post underplated 1.3 µm nickel

HE 14- Tin plated min. 2.5 µm on solder area, with entire post tin plated 0.8 µm over 0.8 µm nickel



Mating Connectors:

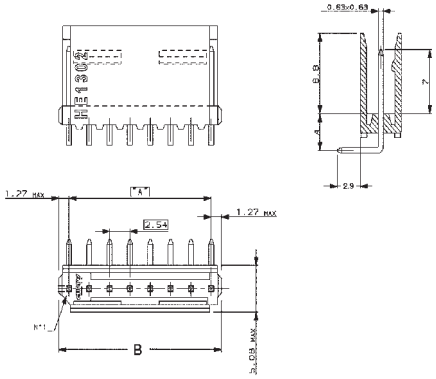
HE 13 / HE 14 IDC Receptacles- Page 154

HE 13 / HE 14 Receptacle Housings- Page 136

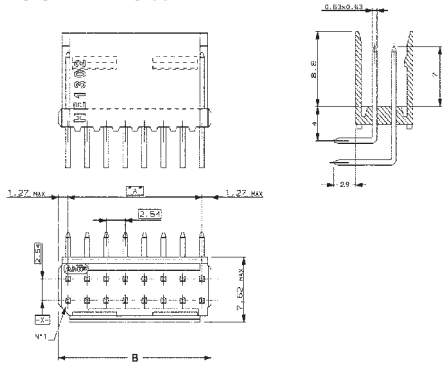
Technical Documents:

Product Specification- 108-15053

SINGLE ROW



DOUBLE ROW



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers 26 AWG		Part Numbers 24 AWG	
	A	B	HE 13	HE 14	HE 13	HE 14
2	2.54	5.08	-	281698-2	-	-
3	5.08	7.62	281699-3	281698-3	-	281742-3
4	7.62	10.16	281699-4	281698-4	281743-4	281742-4
5	10.16	12.70	281699-5	281698-5	281743-5	281742-5
6	12.70	15.24	-	281698-6	281743-6	281742-6
8	17.78	20.32	-	281698-8	-	281742-8
10	22.86	25.40	-	1-281698-0	1-281743-0	1-281742-0
12	27.94	30.48	-	1-281698-2	-	1-281742-2

RECEPTACLE HOUSINGS

SINGLE AND DOUBLE ROW

Specification:

Housing- Blue flame retardant glass filled polyester, UL 94V-0 rated

Mating Connectors:

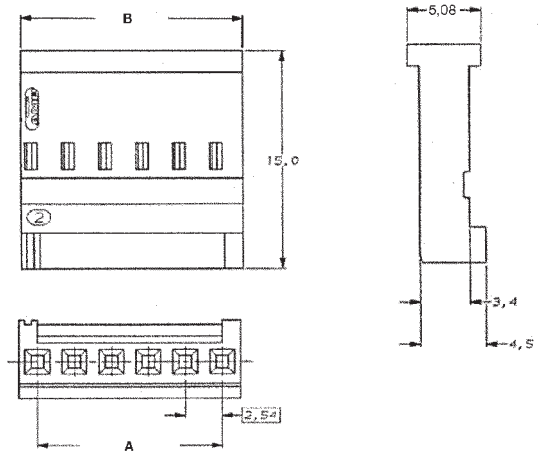
HE 13 / HE 14 Shrouded Headers- Page 154

Technical Documents:

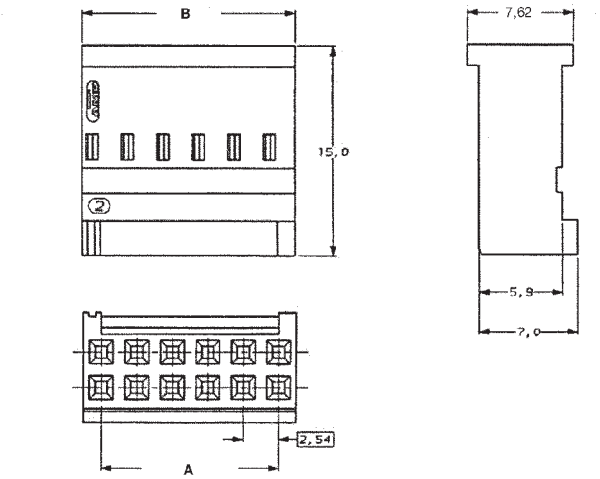
Product Specification- 108-15053



SINGLE ROW



DOUBLE ROW



PRODUCT INFORMATION

No. of Positions	Dimensions: in		Part Numbers	
	A	B	Single Row	Double Row
3	5.08	7.62	281838-3	281839-3
4	7.62	10.16	281838-4	281839-4
5	10.16	12.70	281838-5	281839-5
6	12.70	15.24	281838-6	281839-6
7	15.24	17.78	-	281839-7
8	17.78	20.32	281838-8	281839-8
10	22.86	25.40	1-281838-0	1-281839-0
12	27.94	30.48	1-281838-2	1-281839-2
15	35.56	38.10	1-281838-5	1-281839-5

SHROUDED HEADERS

STRAIGHT 0.63mm SQUARE POST

Specification:

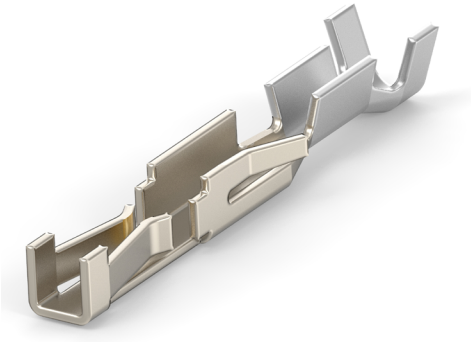
Material- Phosphor bronze, plated as follows:

HE 13- Selectively plated 0.8 µm gold on contact area, 2.5 µm tin on crimp area, with entire contact underplated 1.3 µm nickel

HE 14- Plated 2.5 µm tin

Technical Documents:

Product Specification- 108-15053



PRODUCT INFORMATION

Wire Size Range mm^2	AWG	Insulation Diameter mm	Plating	Part Numbers	
				Strip Form	Loose Piece
0.22-0.08	24-28	1.5-0.8	HE 13	188746-1	182734-3
			HE 14	188744-1	182734-2

APPLICATION TOOLING

Tooling and equipment options are many, varied and are continually improved.

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- Country Contracts
- Europe Tooling Home

Country Sites

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- China

HELPING YOURSELF

- If you are new to referencing our Terminals / Contacts to hand tools, we strongly recommend that you read our one page guide to selecting the right tool in our online hand tool catalogue.
- First select the category you are looking for from the left-hand menu-bar.
- Generally there will be a Brochure that will show top-level information on the range of equipment available for the category selected. Also flyers that give more detailed information for each type of equipment listed in the Brochure.
- On the Applicator and Hand Tool pages - you can search on Terminal Part Numbers for tooling options Or by Tool Part Numbers for more product information
- If you regularly need Hand Tool information, there is an online Hand Tool Catalogue that is available to view or print, but can also be printed and sent to you if more convenient. This catalogue is updated regularly, so please ensure that your version is kept up to date.
- Requesting assistance If you can't find what you are looking for, it does not necessarily mean that there is nothing available for your application:

for cross-referencing information - contact one of our Product Information Centres (PIC), listed when making a selection from the right-hand menu box:

for more complex equipment and technical help – find your country contact by selecting from the right-hand menu box.

APPLICATION TOOLING FOR WIRE CRIMP CONTACTS

Tooling shown on this page is designed to terminate wire crimp contacts used in various AMPMODU wire-to-board connectors. Refer to page 5 and 6 to determine the applicable connectors.

EDGE, ELECTRONIC APPLICATOR COUNTER

The new versatile EDGE applicator counter tracks wearable tool usage for the most effective maintenance planning. The completely electronic counter with clear LCD display, indicates cycles since installation. By performing maintenance at measured intervals with pre-set limits, operators avoid breakdowns and rejects caused by tool wear or mid-adjustment. For more information, request catalogue 1773385.



Tooling shown on this page is designed to terminate wire crimp contacts used in various AMPMODU wire-to-board connectors. Refer to page 88 to determine the applicable connectors.

AMPOMATOR SYSTEM III LEADMAKER

The AMPOMATOR System III is an automatic machine for the production of terminated wire leads. The machine combines state of the art technology to process single and double wire application utilizing the wire processing industry's best and most friendly subsystems and accessories available to meet the latest market requirements for wire lead production.

The new machine incorporates a servo-driven, software-controlled AMP-O-LECTRIC ST III terminator and the next generation System III Applicator.

See catalogue 1654956-5 for more information.



APPLICATION TOOLING FOR WIRE CRIMP CONTACTS

COMMERCIAL PRO-CRIMPER III HAND TOOL

Commercial grade hand tool for crimping various products. Features ratchet control to provide complete crimp cycle. Accepts both pinned- and shoulderedstyle die sets. Locators are provided with pinned-style die sets for proper contact and wire positioning, and to help minimize contact rotation and bending during crimping. Approximate weight 1.3 lb [0.60 kg].





PREMIUM CERTI-CRIMP STRAIGHT ACTION HAND TOOL (SAHT)

TE hand tools are ideal for small production and prototype applications. They feature ratchet control to help eliminate partial crimps, straight-line die closure, terminal locator and support, and insulation crimp adjustment. TE hand tools also can be adapted for use with pneumatic tooling assemblies, providing air operated crimping capabilities. For further details on TE straight action hand tools, request TE Catalogue 65780. For more details on TE pneumatic tooling assemblies, call the TE Technical Support Center, 1-800-522-6752.





APPLICATION TOOLING FOR INSULATION DISPLACEMENT CRIMP (IDC) CONTACTS AND CONNECTORS

Tooling shown on this page is designed to terminate IDC contacts for various AMPMODU wire-to-board connectors. Refer to page 88 to determine the applicable connectors.

PISTOL GRIP MANUAL AND AIR POWERED TOOLS

The manual pistol grip tool features an interchangeable modular terminating head which also can be used in the pneumatic version, the Bench Mount Pneumatic Power Assembly and the IDC Electric Power Unit. The head terminates one unstripped wire per cycle and indexes the connector to the next terminating position. The head rotates to permit optimum access to the wiring area. The Bench Mount Pneumatic Power Assembly is air actuated with either a foot or knee switch. This capability frees the operator's hands for optimum positioning.

Modular Heads:

58062-1 (for MT connectors)
58336-1 (for MTE connectors)
58395-1 (for Level V IDC connectors)
58540-1 (for MTE connectors, discrete wire or flat ribbon cable)



Manual Pistol Grip
Tool No. 58074-1



Pneumatic Pistol Grip
Tool No. 58075-1



Bench Mounted Pneumatic Power Assembly
No. 58338-1

TECHNICAL DOCUMENTS FOR BOARD-TO-BOARD PRODUCTS

Various technical documents are available for your use.

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineers.

Receptacle Assemblies and Unshrouded Breakaway Headers, Surface-Mount — Page 46-Page 50, Page 131-Page 142
108-25017 AMPMODU Interconnection System, Two-Piece

108-25022 AMPMODU Mod. IV Interconnection System, Vertical Assemblies

108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header

Two-Piece Printed Circuit Board Connectors — Page 143-Page 158
108-16 ACTION PIN Contacts

108-25017 AMPMODU Interconnection System, Two-Piece

108-25027 AMPMODU Mod. II Interconnection System, Short-Point Receptacle Assembly and Header

Receptacle Assemblies, Horizontal and Vertical Board Mount — Page 96-Page 128
108-25022 AMPMODU Mod. IV Interconnection System, Vertical Assemblies

108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header

108-25027 AMPMODU Mod. II Interconnection System, Short-Point Receptacle Assembly and Header

.025 [0.64] Square Posts, Headers, Accessories and Tooling — Page 93-Page 99, Page 13-Page 24, Page 159-Page 162
108-16 ACTION PIN Contacts

108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header

Application Specifications describe requirements for using the product in its intended application, and/or crimping information. They are intended for the Packaging and Design Engineers and the Setup person.

Two-Piece Printed Circuit Board Connectors — Page 143-Page 158
114-9009 AMPMODU Two-Piece Header Assembly

Receptacle Assemblies, Horizontal and Vertical Board Mount — Page 96-Page 128
114-25018 AMPMODU Mod. II and IV Receptacle Assembly, PC Board Mounted, Vertical

.025 [0.64] Square Posts, Headers, Accessories and Tooling — Page 93, Page 13-Page 24, Page 159-Page 162
114-25028 ACTION PIN Contacts with TE Headers, Application

114-13011 AMPMODU .025 and .045 Square Continuous Posts

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

Two-Piece Printed Circuit Board Connectors — Page 143-Page 158
408-2636 ACTION PIN Contact Rear Insertion/Extraction Tool 265871-7

408-9054 Seating Tools

Receptacle Assemblies, Horizontal and Vertical Board Mount — Page 96-Page 128
408-7411 Suggestions for Wave Soldering Vertical AMPMODU Receptacles

.025 [0.64] Square Posts, Headers, Accessories and Tooling — Page 93-Page 99, Page 13-Page 24, Page 159-Page 162
408-2636 ACTION PIN Contact Rear Insertion/Extraction Tool 265871-7

408-6944 TE Uninsulated Bandolier Post Insertion Tool 91419-1

408-7977 AMPMODU Double Row, Straight Posts, End Shrouds .100 x .100 [0.64 x 0.64] Centers

408-7878 AMPMODU Header Barrier Inserts

408-9054 ACTION PIN Contact Headers Seating Tool, 91170 Series

408-9707 Tool Kit 314818-1 for Breakaway Headers

Handbook Guide to Application of ACTION PIN Contact Connectors
5697

TECHNICAL DOCUMENTS FOR WIRE-TO-BOARD PRODUCTS

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineers.

Locking Clip Contacts and Housings — Page 149-Page 157
108-36028 Connector, Locking Clip, .025 [0.64] Square, Gold

108-36028-1 Connector, Locking Clip, .025 [0.64] Square, Tin

Mod. IV Wire-Applied Contacts and Housings — Page 158-Page 180
108-25019 AMPMODU Mod. IV Male Connectors

108-25020 AMPMODU Mod. IV Interconnection System, (Standard, Intermediate and High Pressure)

Short-Point Wire-Applied Contacts and Housings — Page 181-Page 184
108-1472 Short-Point Contacts and Housings

AMPMODU MTE Interconnection System — Page 185-Page 212
108-25034 AMPMODU MTE Connectors

AMPMODU MT and Shielded MT Interconnection System — Page 221-Page 226
108-25015 AMPMODU MT Standard Pressure Connectors

108-25018 AMPMODU MT High Pressure Connectors

108-25030 AMPMODU MT Shielding Accessories

Application Specifications describe requirements for using the product in its intended application, and/or crimping information. They are intended for the Packaging and Design Engineers and the Setup person.

Locking Clip Contacts and Housings — Page 149-Page 157
114-25006 Contact, Locking Clip, .025 [0.64] Square.

Mod. IV Wire-Applied Contacts and Housings — Page 160-Page 180
114-25003 AMPMODU Mod. IV (Standard Pressure), AMPMODU Mod. IV.V (Intermediate Pressure) and AMPMODU Mod. V (High Pressure) Receptacle Contacts.

114-25016 AMPMODU Mod. IV Crimp Pin Contact

Short-Point Wire-Applied Contacts and Housings — Page 181-Page 184
114-25038 Short-Point Contacts and Housings

AMPMODU MTE Interconnection System — Page 185-Page 212
114-25026 AMPMODU MTE Interconnection System

AMPMODU MT and Shielded MT Interconnection System — Page 221-Page 226
114-25032 AMPMODU MT Interconnection System and Shielding Accessories, Application of

TECHNICAL DOCUMENTS FOR BOARD-TO-BOARD PRODUCTS

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

Locking Clip Contacts and Housings — Page 149 - Page 157

408-7604	TE Extraction Tool 91084-1
408-7606	TE Locking Clip Contacts and Connectors
408-8547	TE Hand Crimp Tool 91533-1, 22-26 AWG Wire
408-9388	TE Hand Crimp Tool 90431-1, 20 AWG Wire

Mod. IV Wire-Applied Contacts and Housings — Page 158 - Page 179

408-4379	TE PRO-CRIMPER II Hand Tool
408-7935	AMPMODU Receptacle Connectors with Strain Relief/Pull Tabs
408-8547	TE Hand Tool 91516-1, 91517-1 and 91541-1
408-9451	TE Extraction Tool 843473-1 for AMPMODU Wire-Applied Housings 86308
408-9453	TE Extraction Tools 843996 and 843477 for Removing AMPMODU Crimp Snap-In Receptacle Contacts from Wire-Applied Housings

AMPMODU MTE Interconnection System — Page 185 - Page 220

409-5746	TE Electric Power Unit 931800-1
409-5832	MTE Ribbon Cable Terminator 856002-1
408-6789	TE Pneumatic Pistol Handle 58075-1
408-6790	TE Manual Pistol Handle 58074-1
408-6919	AMPMODU MTE Connectors
408-8547	TE Hand Crimp Tool 91518-1 and 91551-1
408-9230	TE Keying Tool 91417-1
408-9359	MTE Modular Terminating Head 58336-1
408-9393	TE Pneumatic Bench Assy. 58338-1
408-9407	TE Hand Crimp Tool 91531-1 and 58342-2
408-9453	TE Extraction Tools 843996 and 843477 for Removing AMPMODU Crimp Snap-In Receptacle Contacts from Wire-Applied Housings
408-9515	Ribbon Cable Notcher 854449-[]

AMPMODU MT and Shielded MT Interconnection System — Page 221 - Page 226

408-6532	AMPMODU MT Connectors

ENGINEERING NOTES

PC/104 AND PC/104-PLUS CONNECTORS

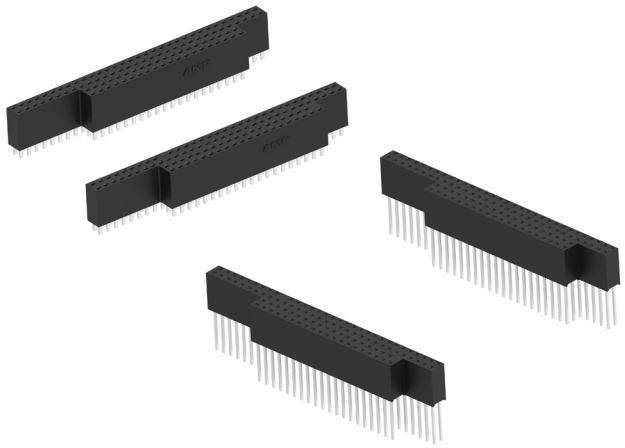
INTRODUCTION

The PC/104 and PC/104-Plus connectors are industry standard product offerings which comply with the interconnection requirements defined by the PC/104 organization (http://www.pc104.org)

Both products are designed specifically for “flat-rock” press-fit installation for ease of application. Solder version is also available.

Optional integral standoffs minimize the customer’s system assembly time.

The Tyco Electronics offering of the standard PC/104 product is a unitized connector rather than the two piece, 40 and 64 position connectors currently on the market. Customer needs to stock and apply only one Part Numbers rather than two.



PRODUCT FACTS

- Press fit design — eliminates hand soldering
- Unitized PC/104 connector assembly — eliminates two piece (64 pin & 40 pin) configuration
- Integral board spacers with captive hardware — eases & improves assembly efficiency while minimizing stocked hardware
- “Flat-rock” insertable — no need for complex insertion tooling
- Recognized by Underwriters’ Laboratories to US and Canadian standards file No. E28476
- Fully compliant with PC104 & PC104-Plus standards
- Solutions available for lead free processes (ie. ENIG and silver immersion plated PCB’s)

PERFORMANCE SPECIFICATIONS

Electrical Characteristics

Meets requirements of PC/104 and PC/104-Plus standards

Nominal Resistance — 10 milliohms maximum, R

Insulation Resistance — 1000 megohms minimum

Dielectric Withstanding Voltage — 500 VAC for 1 min. at sea level

Mechanical Characteristics

Meets requirements of PC/104 and PC/104-Plus standards

Current — Signal application only

Temperature — -55° to 105°C

Material and Finish

Housing — Black Thermoplastic, UL 94V-0

Contact — Phosphor Bronze, Full Gold all over Nickel (stackthrough), Gold on mating end, Tin or Tin-lead on PCB tail all over Nickel (non-stackthrough)

Technical Documents

Product Specifications — 108-1956

Application Specifications — 114-13021

Connector	Centerline	Position
PC/104	.100 [2.54]	104*
PC/104-Plus	.079 [2.0]	120**

*Two circuits plugged per PC/104 specification.Other options available.

**One circuit plugged per PC/104-Plus specification.
Other options available.w

PC/104, PRESS-FIT

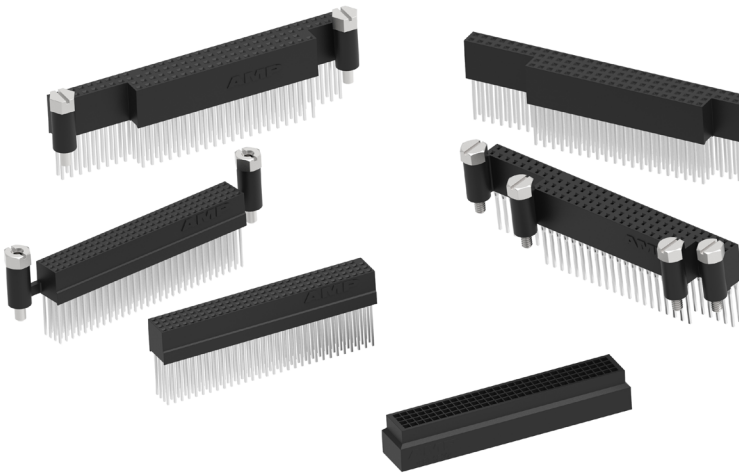
Material and Finish

Housing — Glass filled thermoplastic, Black, 94V-0 rated

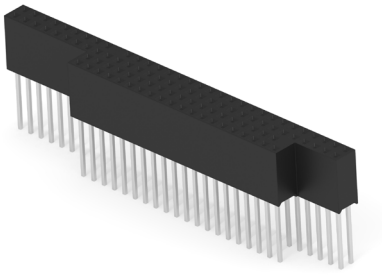
Contacts

Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000005 [0.000130] min. Gold on remainder, all over .000050 [0.00127] Nickel
or
Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100-.000200 [0.000254-.00508] matte tin on compliant section, .000005 {0.000130] min. Gold on remainder of post, all over .000050 [0.00127] Nickel

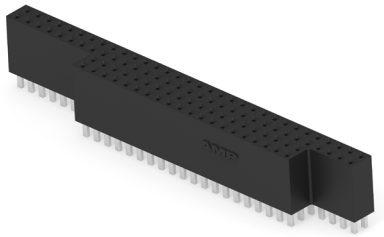
Non-Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100 [0.00254] matte tin or tin-lead on remainder, all over .000050 [0.00127] Nickel



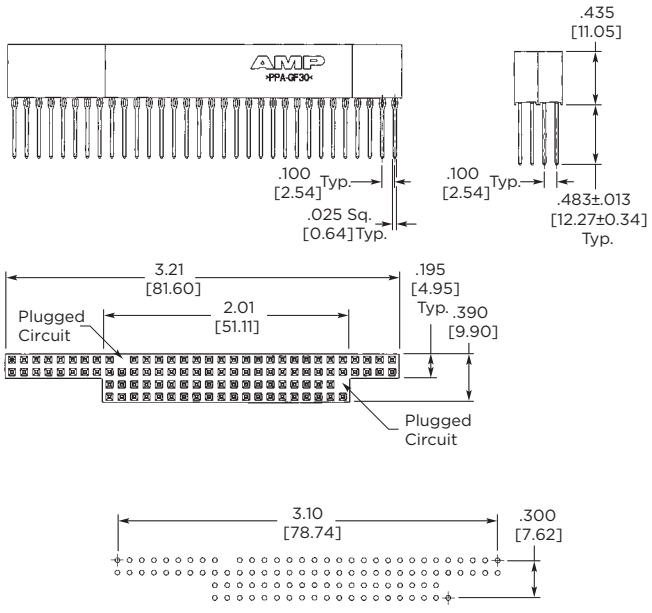
STACKTHROUGH, NO STANDOFFS



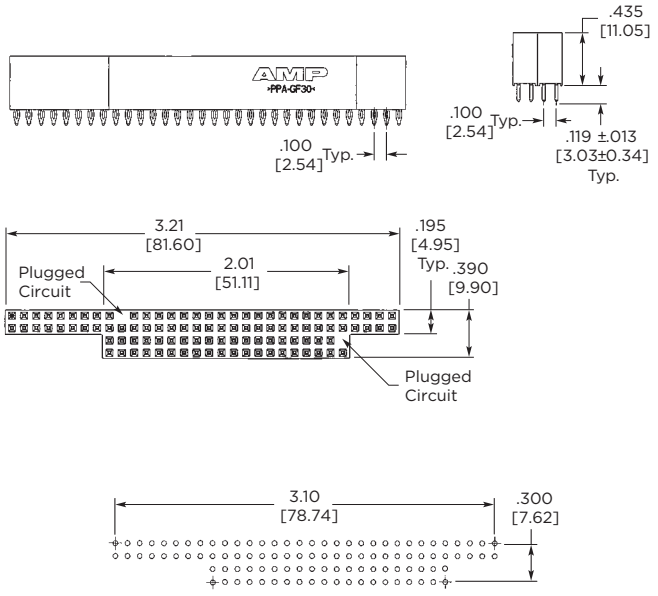
NON-STACKTHROUGH, NO STANDOFFS



Dimension [Unit: mm(in)]



Keyed



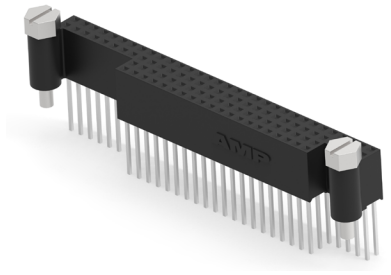
Unkeyed

Recommended PC Board Layout
See Customer Drawing for
Hole Geometry and Recommended Plating.

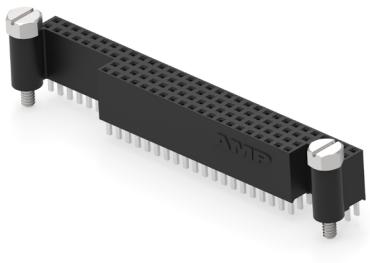
PRODUCT INFORMATION

Plating	Version	Part Numbers
Stackthrough, No Standoffs		
Gold plated contacts*	Keyed	1375795-1
	Unkeyed	1375795-2
Non-Stackthrough, No Standoffs		
Matte tin plated tails**	Keyed	1375796-3
	Unkeyed	1375796-4

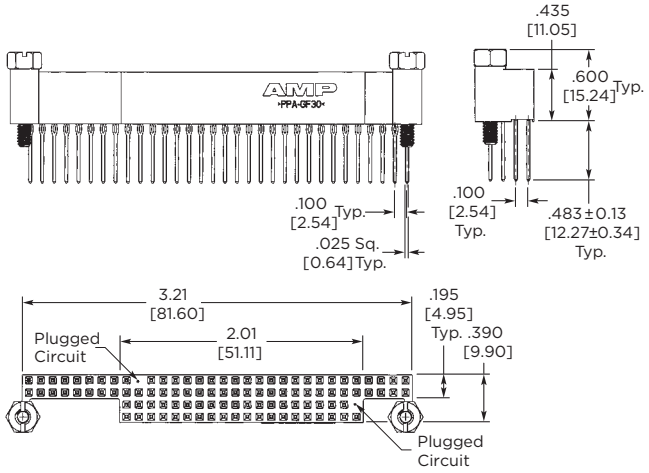
STACKTHROUGH, 2 STANDOFFS

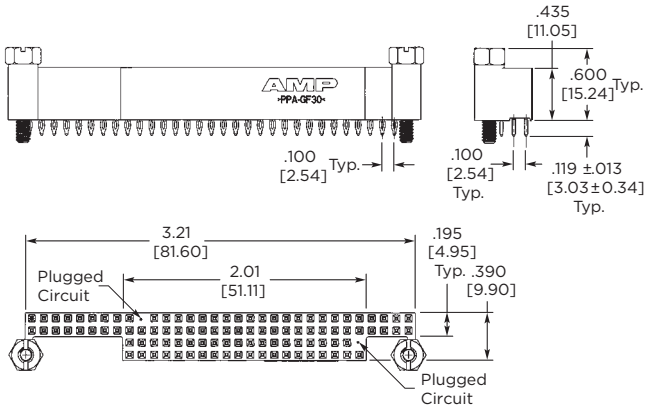


NON-STACKTHROUGH, 2 STANDOFFS



Dimension [Unit: mm(in)]





Recommended PC Board Layout
See Customer Drawing for
Hole Geometry and Recommended Plating.

PRODUCT INFORMATION

Plating	Version	Part Numbers
Stackthrough, 2 Standoffs		
Gold plated contacts*	Unkeyed	1375793-2
Non-Stackthrough, 2 Standoffs		
Matte tin plated tails**	Unkeyed	1375794-4

Notes: All Part Numbers are RoHS compliant.

* For RoHS exempt Tin-lead processes (including ENIG Plated PCB's)

** for Silver Immersion processes or where a total lead free solution is desired

PC/104-PLUS, PRESS-FIT

Material and Finish

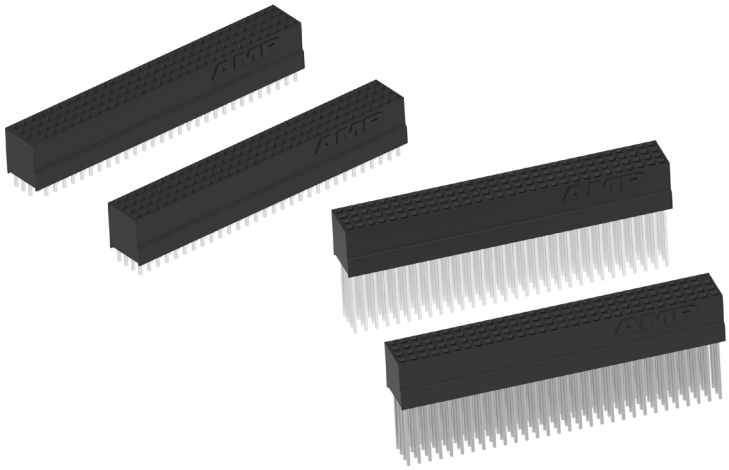
Housing — Glass filled thermoplastic, Black, 94V-0 rated

Contacts

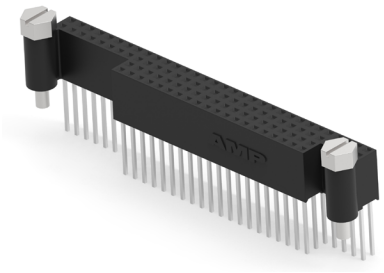
Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000005 [0.000130] min. Gold on remainder, all over .000050 [0.00127] Nickel
or
Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100-.000200 [0.000254-.00508] matte tin on compliant section, .000005 {0.000130] min. Gold on remainder of post, all over .000050 [0.00127] Nickel

Non-Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100 [0.00254] matte tin or tin-lead on remainder, all over .000050 [0.00127] Nickel

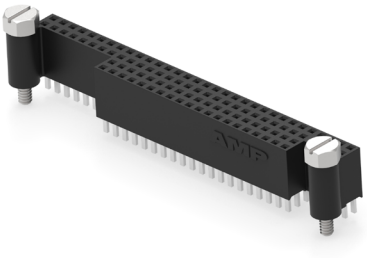
Screwlocks — Steel, Clear Chromate over Zinc



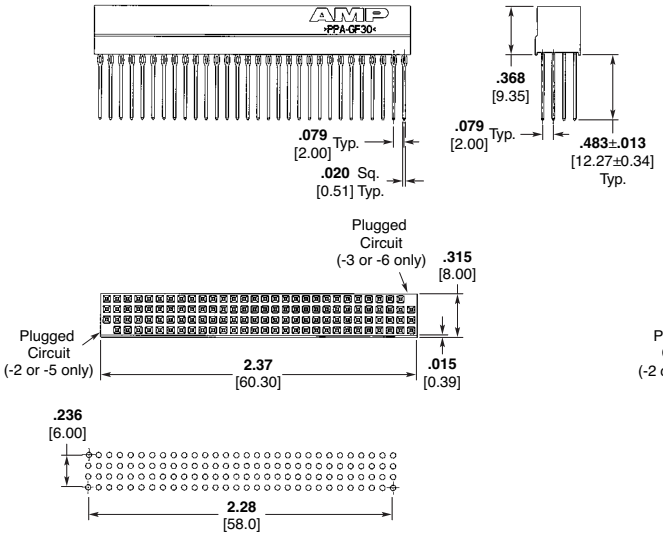
STACKTHROUGH, NO STANDOFFS



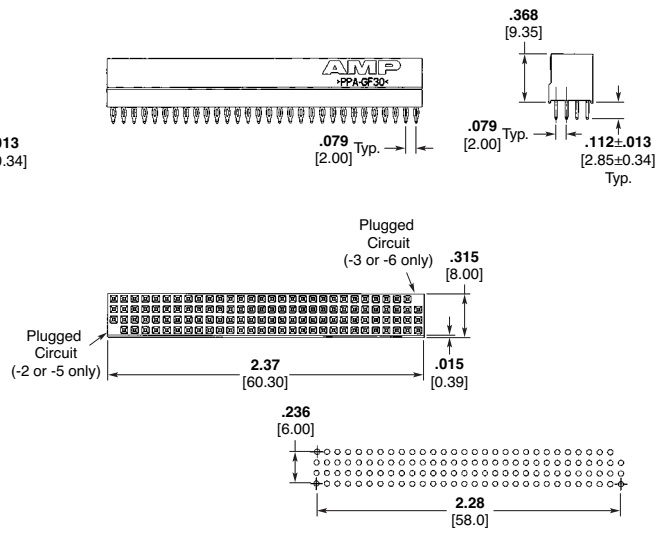
NON-STACKTHROUGH, NO STANDOFFS



Dimension [Unit: mm(in)]



Recommended PC Board Layout for 1375799-1, 1375800-1, 1375800-4.



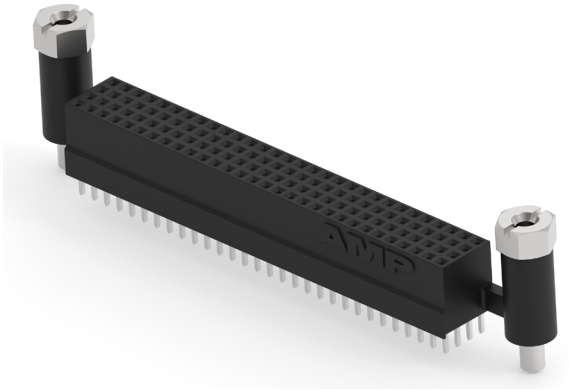
Recommended PC Board Layout for 1375799-3

See Customer Drawing for Hole Geometry and Recommended Plating.
(Including ENIG plated PCB's)

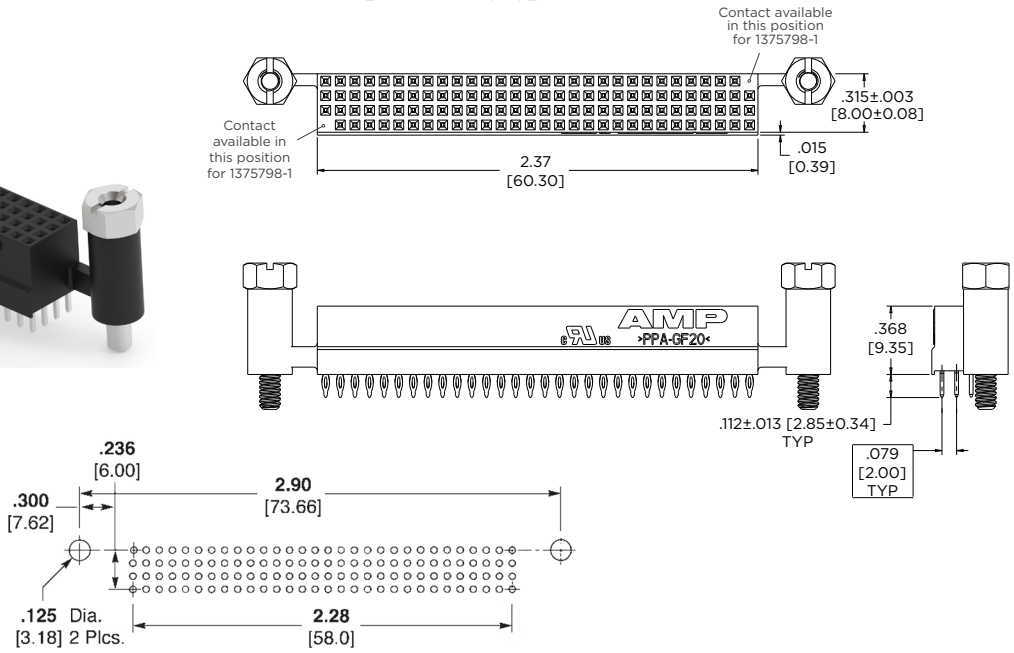
PRODUCT INFORMATION

Plating	Version	Part Numbers
Stackthrough, No Standoffs		
Gold plated contacts*	Unkeyed	1375799-1
	(keyed-D30) per PC/104-Plus specification	1375799-3
Non-Stackthrough, No Standoffs		
Tin-lead plated tails*	Unkeyed	1375800-1
Matte tin plated tails**	Unkeyed	1375800-4

NON-STACKTHROUGH, 2 STANDOFFS



Dimension [Unit: mm(in)]



Recommended PC Board Layout for 1375798-1.
See Customer Drawing for Hole Geometry and Recommended Plating.

PRODUCT INFORMATION

Plating	Version	Part Numbers
Non-Stackthrough, 2 Standoffs		
Tin-lead plated tails*	Unkeyed	1375798-1

Notes: All Part Numbers are RoHS compliant.
* For RoHS exempt Tin-lead processes (including ENIG Plated PCB's)
** for Silver Immersion processes or where a total lead free solution is desired

PC/104, SOLDER

Material and Finish

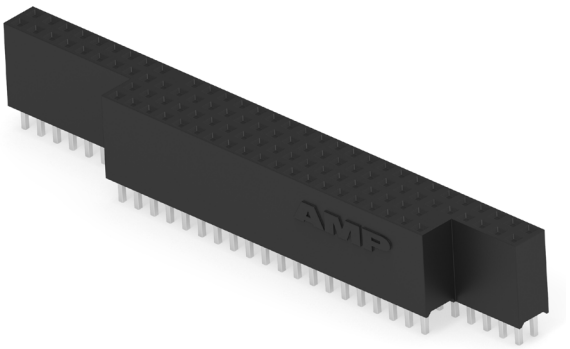
Housing — Glass filled thermoplastic, Black, 94V-0 rated

Contacts

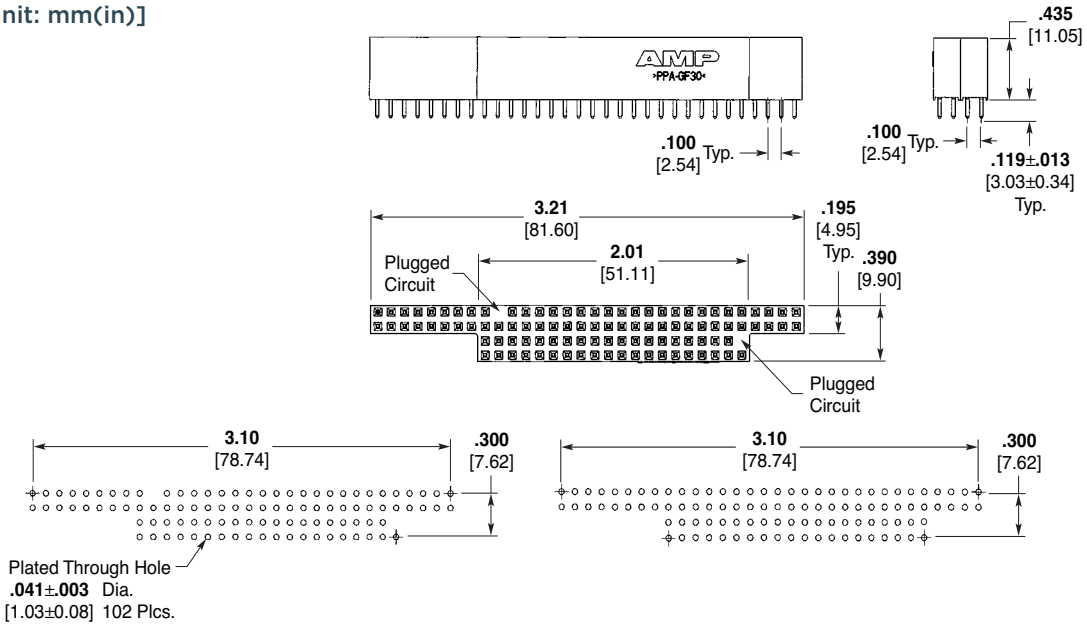
Non-Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100 [0.00254] matte tin on remainder, all over .000050 [0.00127] Nickel

Screwlocks — Steel, Clear Chromate over Zinc

NON-STACKTHROUGH, NO STANDOFFS



Dimension [Unit: mm(in)]



Keyed **Unkeyed**

Recommended PC Board Layout

PRODUCT INFORMATION

Version	Part Numbers
Non-Stackthrough, No Standoffs	
Keyed	1375963-3
Unkeyed	1375963-4

Note: All Part Numbers are RoHS compliant.

PC/104-PLUS, SOLDER

Material and Finish

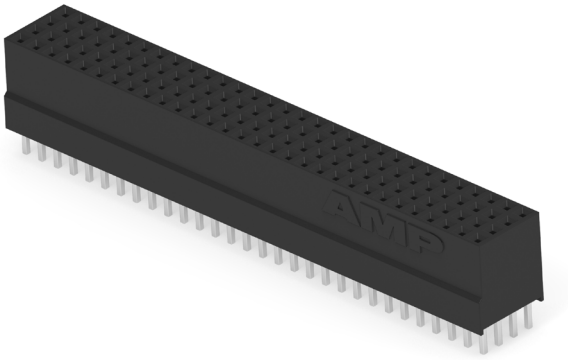
Housing — Glass filled thermoplastic, Black, 94V-0 rated

Contacts

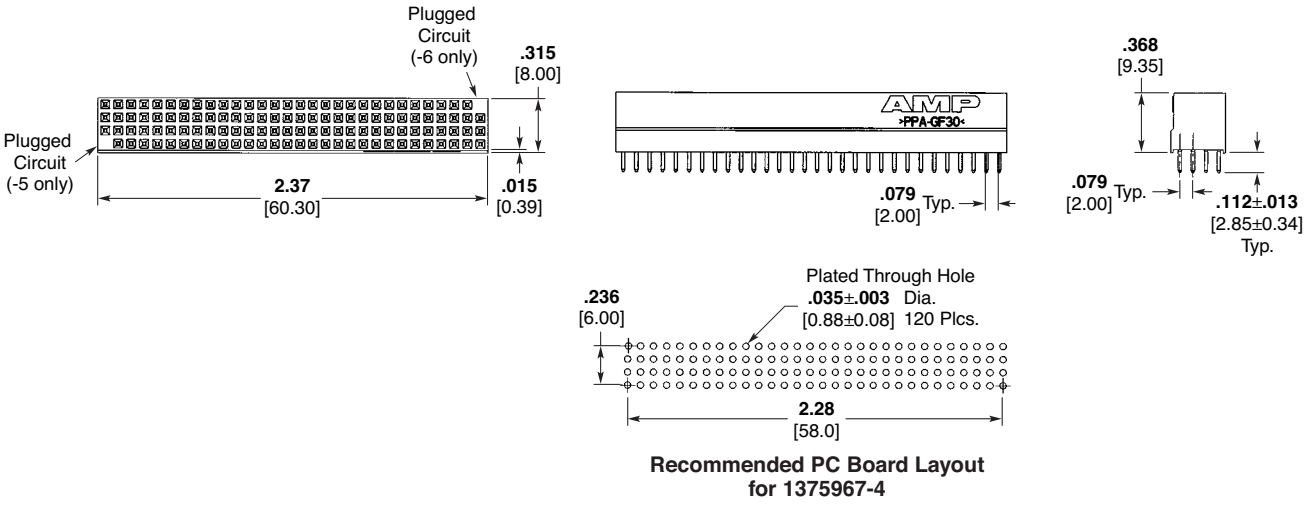
Non-Stackthrough — Phosphor Bronze; plated .000015 [0.00038] min. Gold on mating receptacle end, .000100 [0.00254] matte tin on remainder, all over .000050 [0.00127] Nickel

Screwlocks — Steel, Clear Chromate over Zinc

NON-STACKTHROUGH, NO STANDOFFS



Dimension [Unit: mm(in)]



Recommended PC Board Layout for 1375967-4

PRODUCT INFORMATION

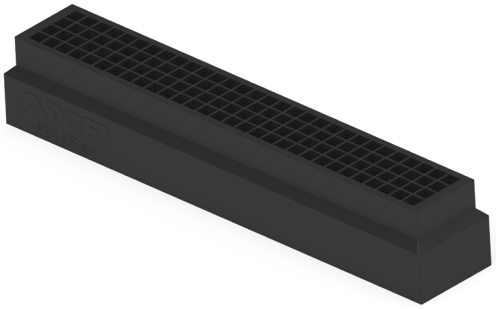
Version	Part Numbers
Non-Stackthrough, No Standoffs	
Unkeyed	1375967-4

Note: All Part Numbers are RoHS compliant.

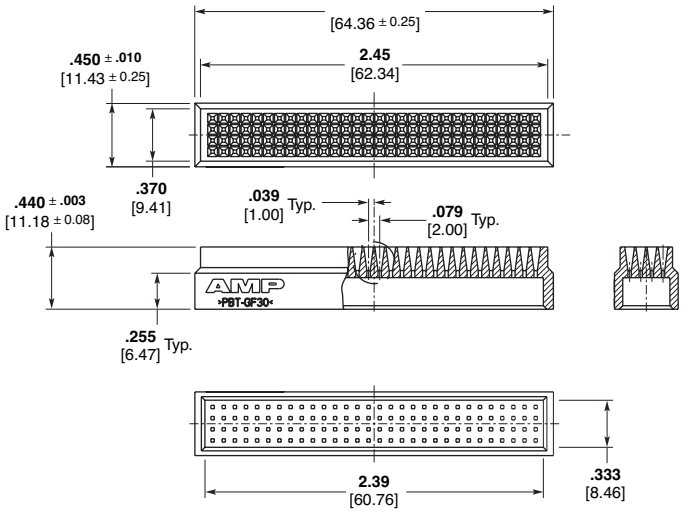
ACCESSORIES

SHROUD, PC/104-PLUS

Material - PBT, Black



Dimension [Unit: mm(in)]



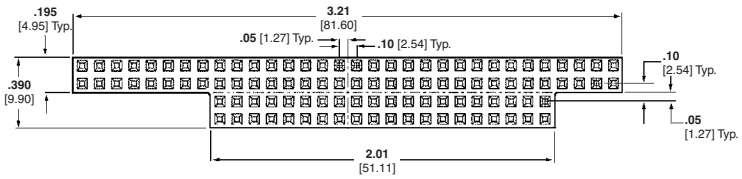
PRODUCT INFORMATION

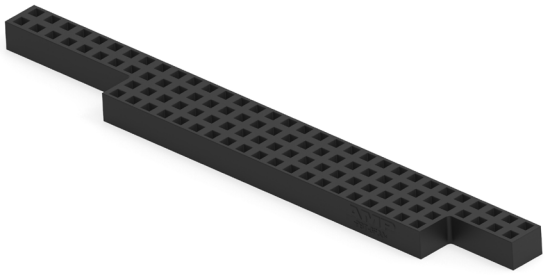
Description	Part Numbers
Shroud, 120 Position PC104 Plus	1375801-1

ORGANIZER, PC/104

Material
Polyester, PBT, Black

Dimension [Unit: mm(in)]



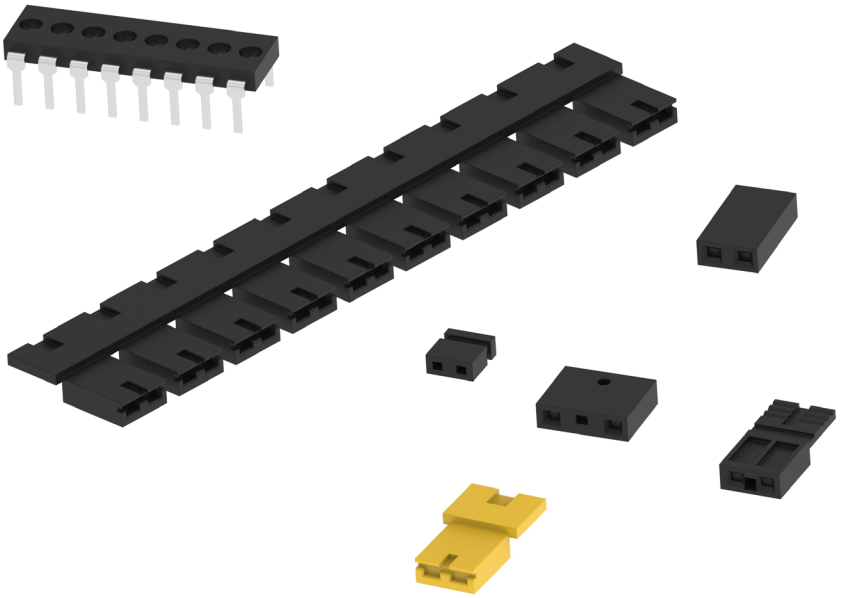


PRODUCT INFORMATION

Description	Part Numbers
Organizer PC/104	1445251-1

Note: All Part Numbers are RoHS compliant.

SHUNTS



INTRODUCTION

TE offers a variety of high quality shunts for low cost manual programming. TE 7600 Series Programmable Shunts are designed on the standard .100 x .300 [2.54 x 7.62] DIP spacing.

TE DIP Shunts are a highly reliable, low cost means of manually programming various types of electrical/electronic equipment. The shunt consists of a series of conductive straps packaged in a DIP configuration. The straps can be retained intact for a closed circuit or broken with a hand tool to produce an open circuit.

TE Post Shunts mate with any common pairs of square, rectangular and round posts. Post shunts come in two-position low profile, 2 mm miniature, tandem spring, dual beam, and multiposition versions.

Among the options available are choices of gold or tin plating, beryllium copper or phosphor bronze contact material and shunts with 94V-0 rated housing spaces on .079 [2.00], .100 [2.54] and .200 [5.08] centers with the low profile series requiring only .250 [6.35] clearance from the pc board.

All TE shunts feature onepiece construction for high reliability. All have high normal forces for excellent electrical continuity. For added reliability, Tandem Spring and Dual Beam Shunts have two points of contact in each receptacle.

PRODUCT FACTS

- 7600 Series Programmable Shunts use conventional .100 x .300 [2.54x7.62] DIP leg spacing
- Post Shunts are used to common pairs of .025 [0.64] square posts, .025 [0.64] diameter round posts and .022 x .026 [0.56 x 0.66] formed posts

DUAL IN-LINE PACKAGE (DIP) SHUNTS — 7600 SERIES

STANDARD SHUNT STANDARD PRESSURE

Material and Finish

Housing— Glass-filled polyester, UL 94V-0 rated

Contacts— Brass

Finish— Selectively plated .000100 min. tin on solder area over .000050 min. nickel on entire contact

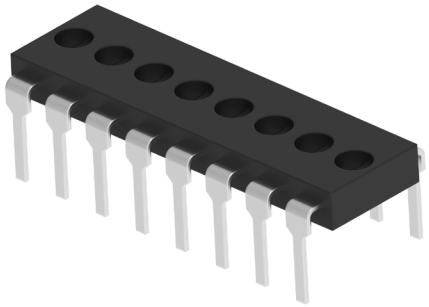
Contact Lead Spacing— .100 x .300 [2.54x7.62]

Lead Length— .140 [3.56] below mounting surface

Housing Color— Black

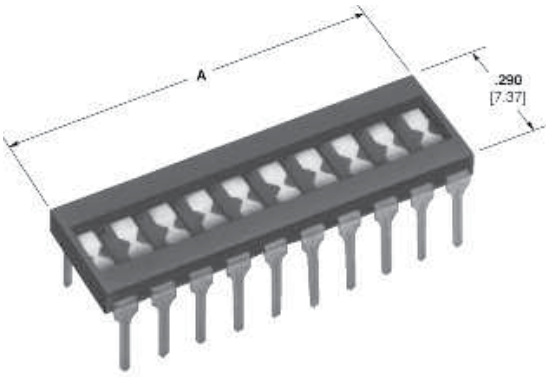
Programming Tool— See below

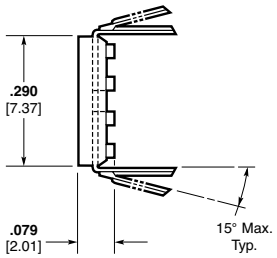
Programming Hand Tool— Part No. 435862-1

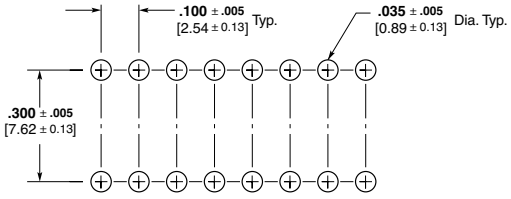




This tool provides a reliable means of programming DIP shunts. It is rugged, light-weight and dependable. No special skills are required to use this tool







PRODUCT INFORMATION

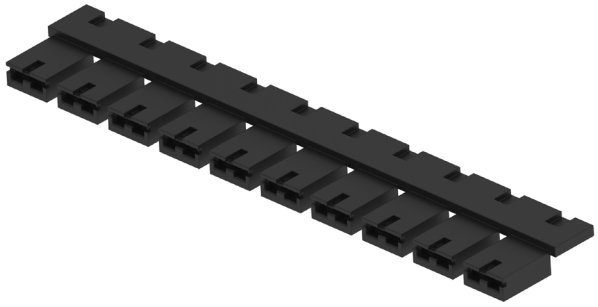
No. of Positions	Dimensions A		Part Numbers
	inch	mm	Standard Shunt Standard Pressure
7	.700	17.78	1825190-7
10	1.000	25.40	1-1825190-0
12	1.200	30.48	1-1825190-2

Note: All Part Numbers are RoHS compliant.

POST SHUNTS

2-POSITION, LOW PROFILE SHUNTS

Economy Shunt .100 [2.54] Centerline



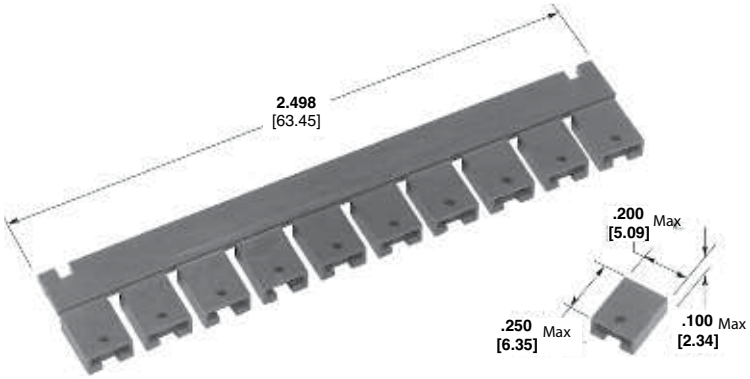
PRODUCT FACTS

- One-piece contact construction
- High normal forces
- 94V-0 rated housings
- Gold inlay, gold plate or tin plate over nickel
- Stackable
- Those post shunts indicated are recognized under the component program of Underwriters Laboratories Inc., File No. E28476 and certified by the Canadian Standards Association File No. LR 7189

Material and Finish

Housing— Glass-filled thermoplastic, black, UL 94V-0 rated

Contacts— Beryllium copper or phosphor bronze, plated .000050 [0.00127] nickel underplate with gold plate in contact area or tin overall



PRODUCT INFORMATION

Configuration	Housing Color	Part Numbers			
		Gold Plate1 .000015 [0.00038]	Gold Flash1 .000005 [0.00013]	Tin Plate .000100 [0.00254]	Gold Plate .000030 [0.00076]
Strip of 10	Blue	382811-2	—	—	—
Strip of 10	Black	382811-6	382811-8	382811-5	2-382811-0
Strip of 10	Red	382811-9	—	—	—
Loose Piece	Black	1-382811-6	1-382811-8	—	—

[1] In contact area

Note: All Part Numbers are RoHS compliant.

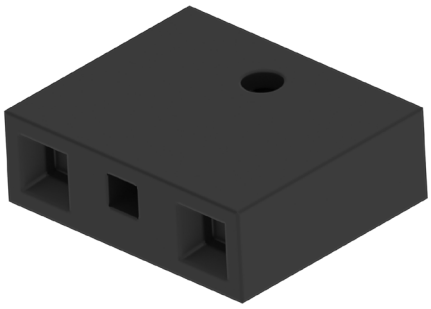
POST SHUNTS

2 mm MINI SHUNTS

Standard Housing Shunt .200 [5.08] Centerline

PRODUCT FACTS

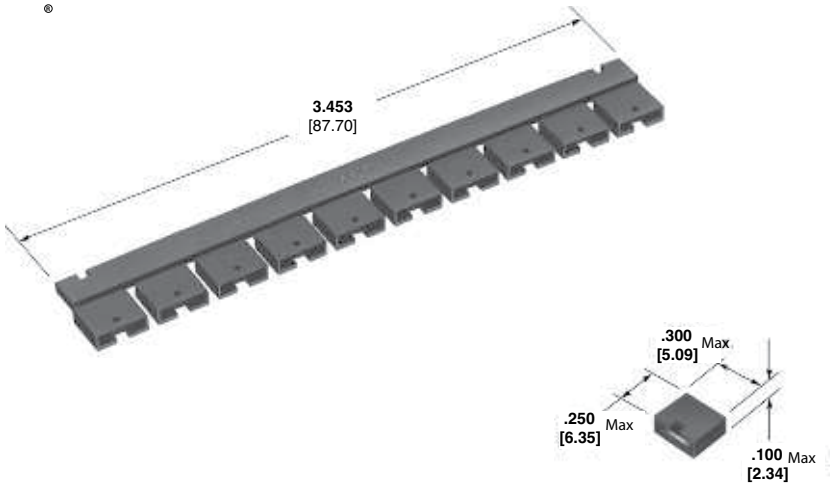
- Stackable on 2mm contact
- centerline
- Low profile
- Available in strips of 10



Material and Finish

Housing— Glass-filled thermoplastic, black, UL 94V-0 rated

Contacts— Beryllium copper or phosphor bronze, plated .000050 [0.00127] nickel underplate with gold plate in contact area or tin overall



PRODUCT INFORMATION

Configuration	Housing Color	Part Numbers		
		Gold Plate1 .000015 [0.00038]	Gold Plate .000030 [0.00076]	Tin Plate .000100 [0.00254]
Strip of 10	Black	531230-2	531230-3	531230-1

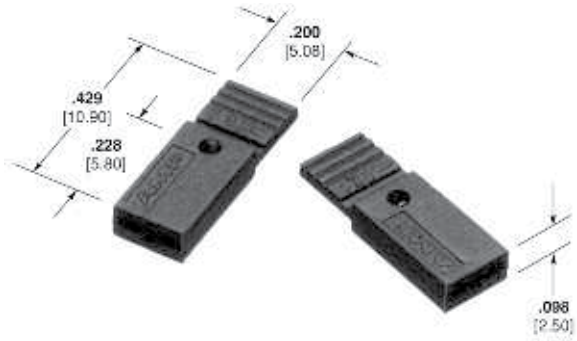
[1] In contact area

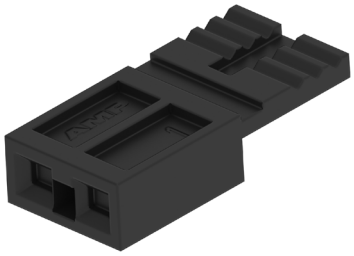
Note: All Part Numbers are RoHS compliant.

POST SHUNTS

2-POSITION, LOW PROFILE SHUNTS (NOVO)

Handle Shunt .100 [2.54] Centerline



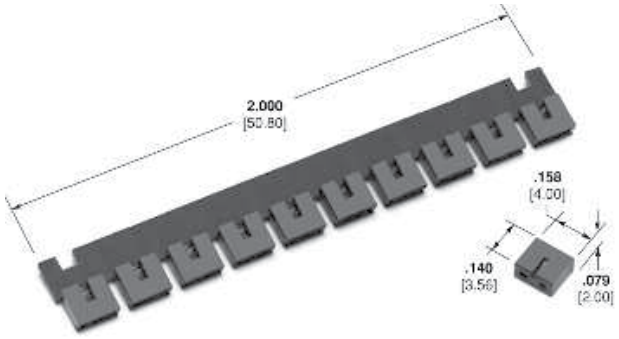


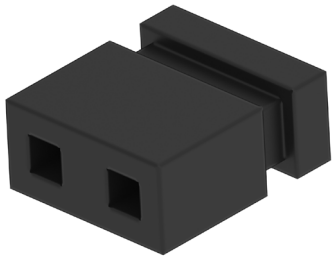
PRODUCT INFORMATION

Housing Color	Part Numbers				Type
	Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	Gold Plate[1] .000050 [0.00127]	Tin Plate .000100 [0.00254]	
Black	881545-1	881545-2	881545-3	4-881545-2	Open Top
Black	880584-1	880584-2	-	880584-4	Closed Top

[1] In contact area

2 mm Mini-Shunt .079 [2.00] Centerline





PRODUCT INFORMATION

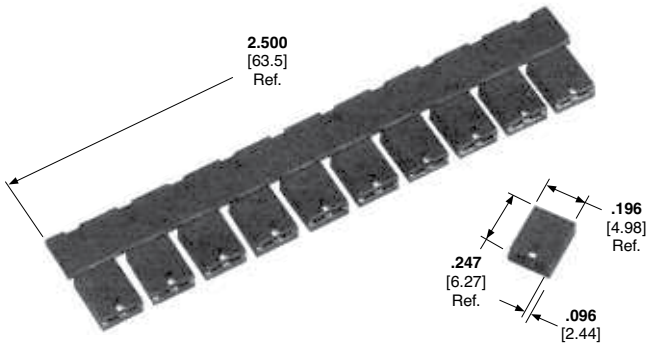
Configuration	Housing Color	Part Numbers	
		Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]
Strip of 10	Black	382575-2	382575-3

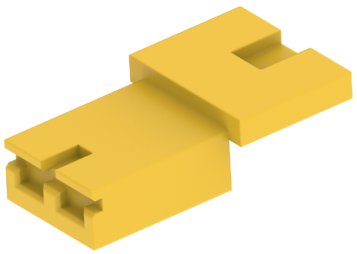
[1] In contact area

Note: All Part Numbers are RoHS compliant.

POST SHUNTS

DUAL BEAM SHUNT





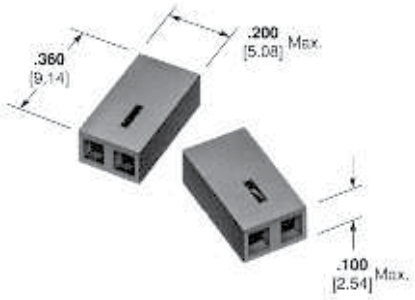
PRODUCT INFORMATION

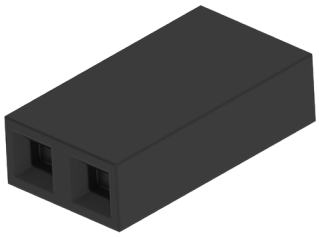
Configuration	Housing Color	Part Numbers		Type
		Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	
Strip of 10	Black	390088-2	390088-1	Open Top
Strip of 10	Blue	-	390088-3	Open Top
Strip of 10	Yellow	-	390088-5	Open Top

[1] In contact area

TANDEM SPRING SHUNT

.100 [2.54] Centerline





PRODUCT INFORMATION

Housing Color	Part Numbers	
	Gold Inlay[1] .000030 [0.00076]	TinPlate .000100 [0.00254]
Black	530153-2	4-530153-1

[1] In contact area

Note: All Part Numbers are RoHS compliant.

PERFORMANCE SPECIFICATIONS

DUAL IN-LINE PACKAGE (DIP) SHUNTS — 7600 SERIES

Current Rating—

Standard pressure — 2 amperes for +20°C rise above ambient (one conductor per shunt

Machine insertable — 1 ampere for +20°C rise above ambient (one conductor per shunt)

Insulation Resistance— 1x 1010 ohms min. at 100 VDC

Dielectric Withstanding Voltage— 500 VDC min.

Capacitance— 2 picofarads max. between adjacent straps

Temperature Rating— -55°C to +105°C

Terminal Strength (Bend Test)— Two 45° bend cycles per MIL-STD-202, Method 211, Condition B

Solder Bridging— Cut straps can be reconnected by solder bridging. Solder bridging recommendations are:

- Use low temperature solder (60/40 tin/lead)
- Use solder tip approximately 1/32 [0.79] in diameter
- Do not let solder tip come in contact with plastic material

POST SHUNTS

Current Rating— 3 amperes max. unless otherwise noted

Temperature Rating— -65°C to +105°C (gold) -40°C to +85°C (tin)

TECHNICAL DOCUMENTS

Various technical documents are available for your use:

Product Specifications describe technical performance characteristics and verification tests.
They are intended for the Design, Component and Quality Engineer.

108-7533 Dual In-Line Package (DIP) Shunts

108-1445 2mm Mini Shunt

108-1476 Economy Shunt, Multiposition Shunt

108-1674 Dual Beam Shunt

108-9057 Low Profile Shunt

108-9062 Tandem Spring Shunt

108-37006 Novo Shunt with Handle

Application Specifications describe requirements for using the product in its intended application and/or crimping information.
They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-1045 Tandem Spring Shunt

114-1054 Dual In-Line Package (DIP) Shunts

114-1059 Economy Shunt, Dual Beam Shunt, Low Profile Shunt, Multiposition Shunt

114-1074 2mm Mini Shunt

Instruction Sheets provide instructions for assembling or applying the product.
They are intended for the Manufacturing Assembler or Operator.

408-7768 Dual In-Line Package (DIP) Shunts

408-3208 Tandem Spring Shunt

408-3230 Economy Shunt, Dual Beam Shunt, Low Profile Shunt

408-3251 Multiposition Shunt

408-3276 2mm Mini Shunt

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