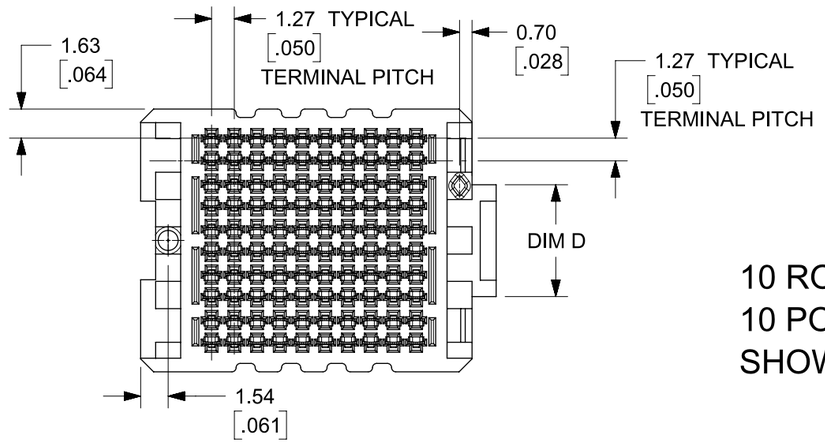
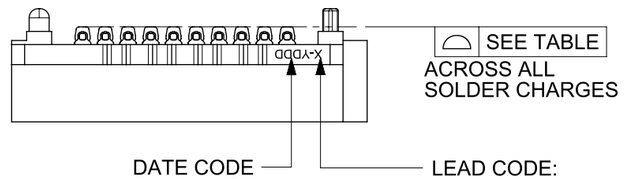
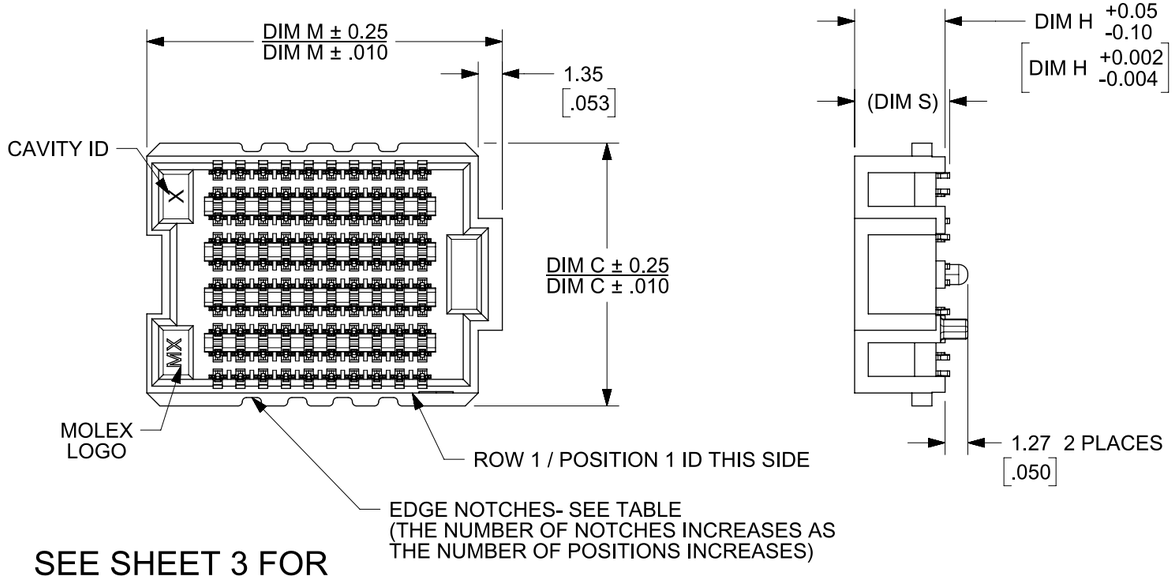


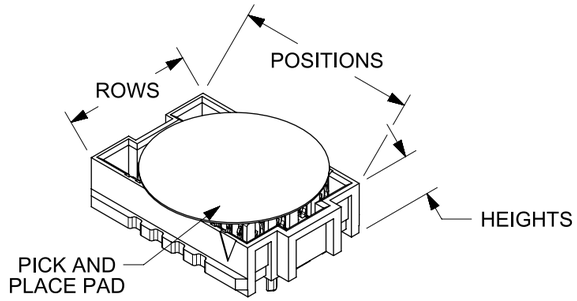
10 ROW
10 POSITION
SHOWN

NOTES:
1. MATERIALS: HOUSING: GLASS FILLED LCP (LIQUID CRYSTAL POLYMER), UL94V-0, BLACK
   CONTACTS: COPPER ALLOY
   SOLDER CHARGE: 95% TIN, 3.8% SILVER, 0.7% COPPER
2. FINISH: SELECT GOLD IN CONTACT AREA: 30 MICROINCH MINIMUM
   SELECT TIN IN TAIL, 50 MICROINCH MINIMUM
   OVERALL NICKEL UNDERPLATE
3. PRODUCT SPECIFICATION: PS-45970-001
4. PACKAGING SPECIFICATION: PK-45971-002 (TAPE AND REEL)
5. MATES WITH SEARAY PLUG ASSEMBLY SERIES 45970
6. APPLICATION SPECIFICATION: AS-45970-001
7. COSMETIC SPECIFICATION: PS-45499-002 CLASS B
8. PART STATUS: CONTACT MOLEX



NOTE: THESE CODES MAY BE LOCATED
ON EITHER SIDE OF THE HOUSING





SEE SHEET 2
FOR DIAMETERS

POSITIONS	TOTAL NUMBER OF EDGE NOTCHES	⌓
10	8	0.15/.006
15	14	
20	18	
25	24	
30	28	
35	34	
40	38	
45	44	0.23/.009
50	48	

SEE SHEET 3 FOR
8 ROW GEOMETRY &
SEE SHEET 4 FOR
6 ROW GEOMETRY

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	MM/IN
SCALE	3:1
GENERAL TOLERANCES (UNLESS SPECIFIED)	
ANGULAR TOL ± °	
4 PLACES ±	
3 PLACES ±	
2 PLACES ± 0.25	
1 PLACE ± 0.38	
0 PLACES ±	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

CURRENT REV DESC: OBSOLETED PART NUMBERS

EC NO: 661197
DRWN: SANTHN 2021/02/09
CHK'D: GGA 2021/04/26
APPR: GGA 2021/04/26

INITIAL REVISION:
DRWN: TGREGORI 2005/05/17
APPR: JCOMERCI 2010/03/05

molex

SEARAY
RECEPTACLE ASSEMBLY 1.27/.050 CENTERS

PRODUCT CUSTOMER DRAWING

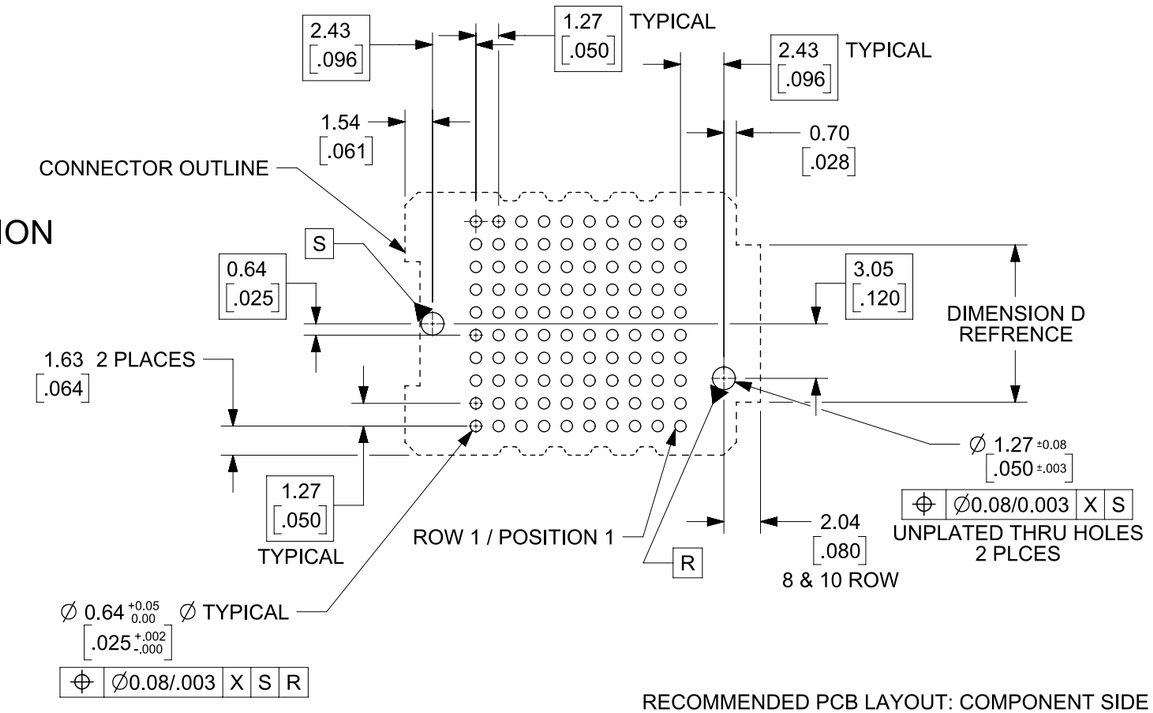
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-45971-001	PSD	001	Y4

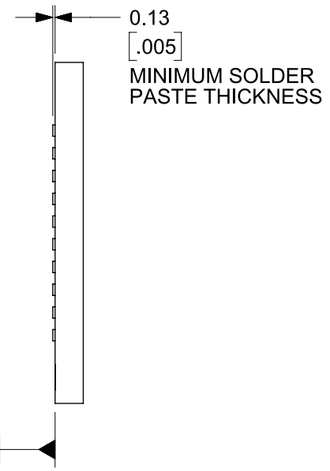
THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	B-SIZE	45971	SEE TABLE SHEET NO 5	GENERAL MARKET	1 OF 5

DOCUMENT STATUS	P1	RELEASE DATE	2021/04/26 05:37:42

FORMAT: master-tb-prod-B
REVISION: J
DATE: 2020/01/14

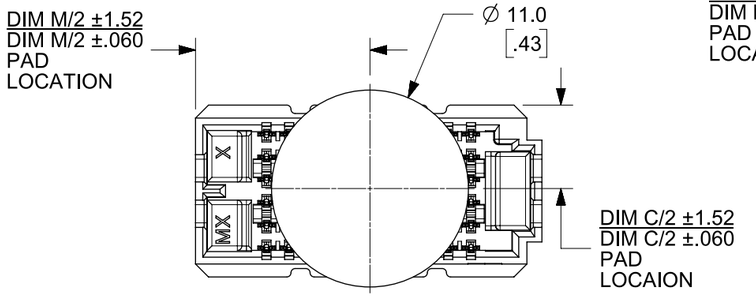
10 ROW
10 POSITION
SHOWN



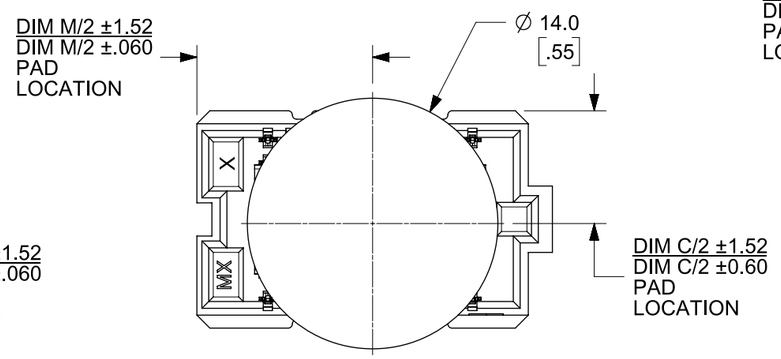


NUMBER OF ROWS	DIMENSION D
6	SEE SHEET 4
8	SEE SHEET 3
10	6.24/.246

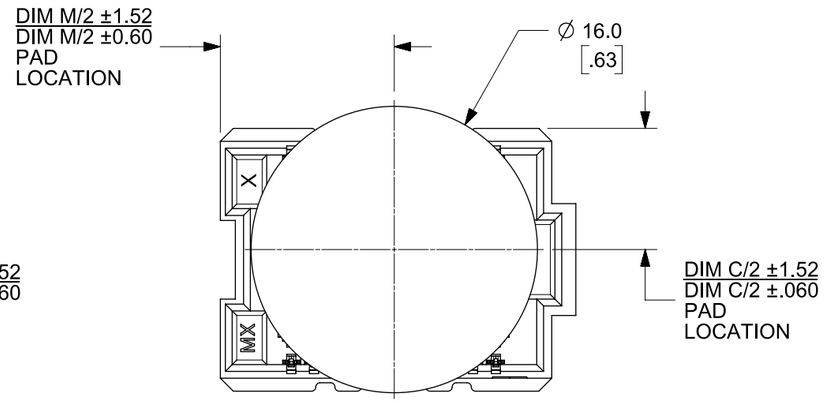
RECOMMENDED PCB LAYOUT: COMPONENT SIDE
SOLDER SCREEN APERTURE SIZE: .890/.035 DIAMETER
PCB THICKNESS: NA



6 ROW OPTION



8 ROW OPTION



10 ROW OPTION

PICK AND PLACE
PAD DIAMETERS
10 POSITION VERSIONS SHOWN

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX ELECTRONIC TECHNOLOGIES, LLC AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

DIMENSION UNITS	SCALE
MM/IN	3:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.25
1 PLACE	± 0.38
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: OBSOLETED PART NUMBERS

EC NO: 661197
DRWN: SANTHN 2021/02/09
CHK'D: GGA 2021/04/26
APPR: GGA 2021/04/26

INITIAL REVISION:
DRWN: TGREGORI 2005/05/17
APPR: JCOMERCI 2010/03/05

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SEARAY
RECEPTACLE ASSEMBLY 1.27/.050 CENTERS

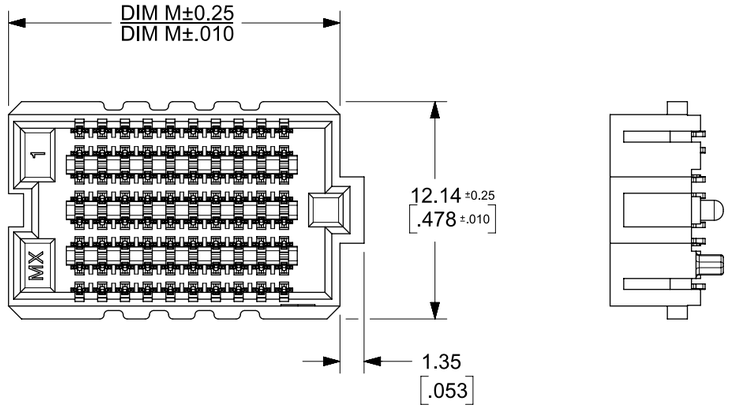
PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-45971-001	PSD	001	Y4

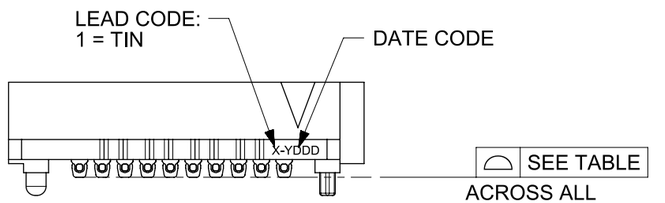
THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	B-SIZE	45971	SEE TABLE SHEET NO 5	GENERAL MARKET	2 OF 5

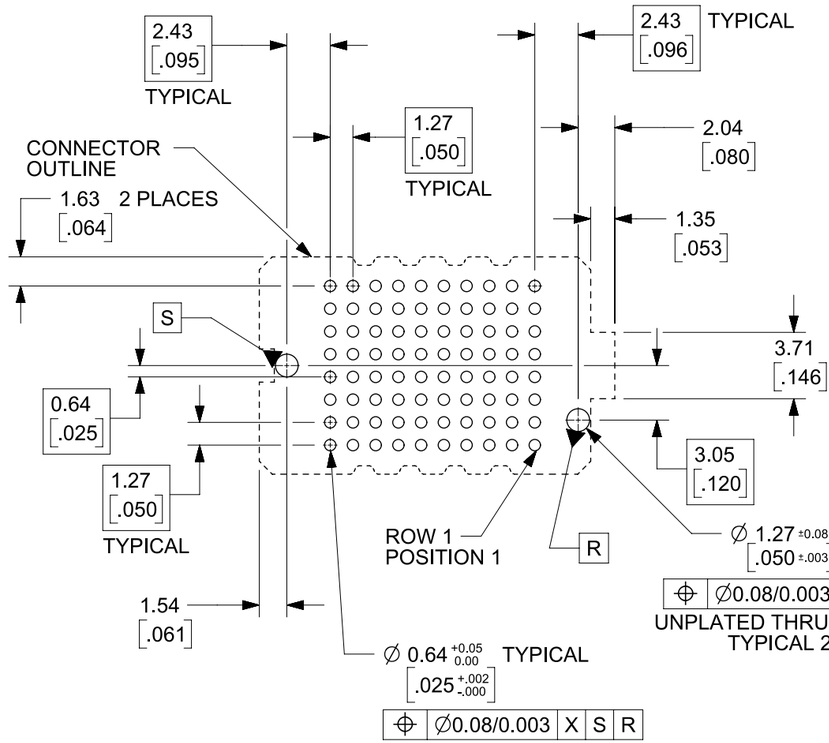
DOCUMENT STATUS	P1	RELEASE DATE	2021/04/26 05:37:42

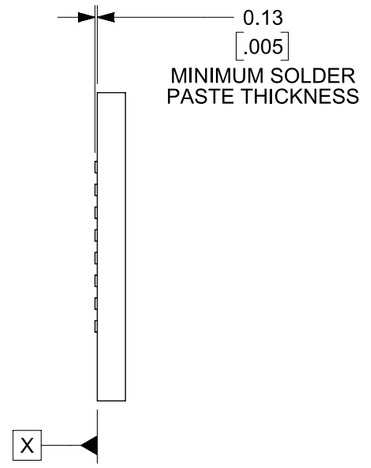
FORMAT: master-tb-prod-B
REVISION: J
DATE: 2020/01/14

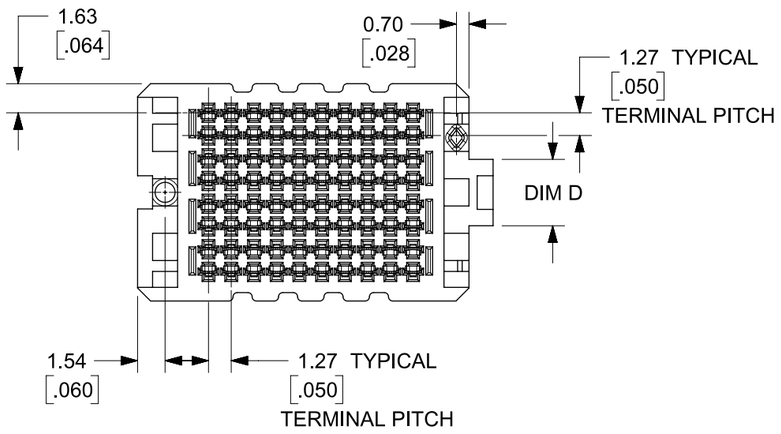


NOTE: THESE CODES MAY BE LOCATED
ON EITHER SIDE OF THE HOUSING





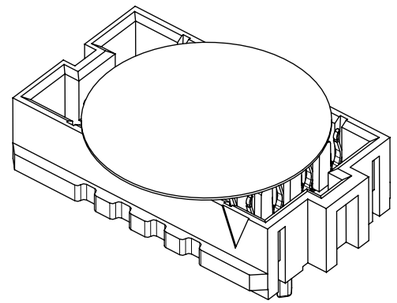




SEE SHEET 4 FOR
6 ROW GEOMETRY

RECOMMENDED PCB LAYOUT: COMPONENT SIDE
SOLDER SCREEN APERTURE SIZE: 0.089/0.035 DIAMETER
PCB THICKNESS: N/A

8 ROW 10 POSITION SHOWN



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DIMENSION UNITS	MM/IN
SCALE	3:1
GENERAL TOLERANCES (UNLESS SPECIFIED)	
ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.25
1 PLACE	± 0.38
0 PLACES	±
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

CURRENT REV DESC: OBSOLETED PART NUMBERS

EC NO: 661197

DRWN:	SANTHN	2021/02/09
CHK'D:	GGA	2021/04/26
APPR:	GGA	2021/04/26

INITIAL REVISION:

DRWN:	TGREGORI	2005/05/17
APPR:	JCOMERCI	2010/03/05

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SEARAY
RECEPTACLE ASSEMBLY 1.27/.050 CENTERS

PRODUCT CUSTOMER DRAWING

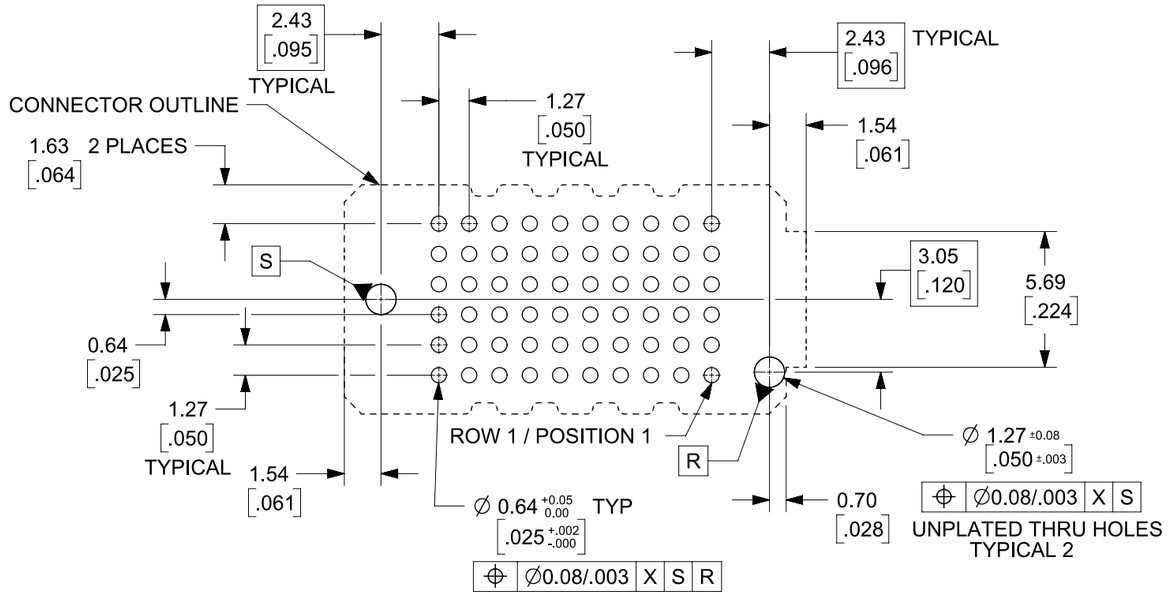
DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-45971-001	PSD	001	Y4

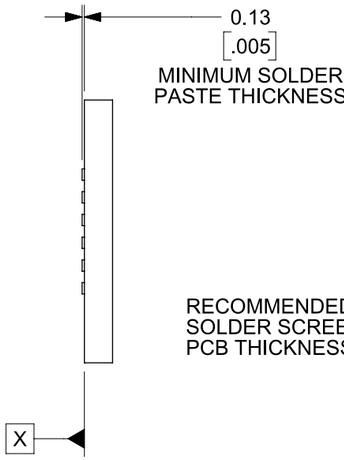
THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	B-SIZE	45971	SEE TABLE SHEET NO 5	GENERAL MARKET	3 OF 5

DOCUMENT STATUS	P1	RELEASE DATE	2021/04/26 05:37:42

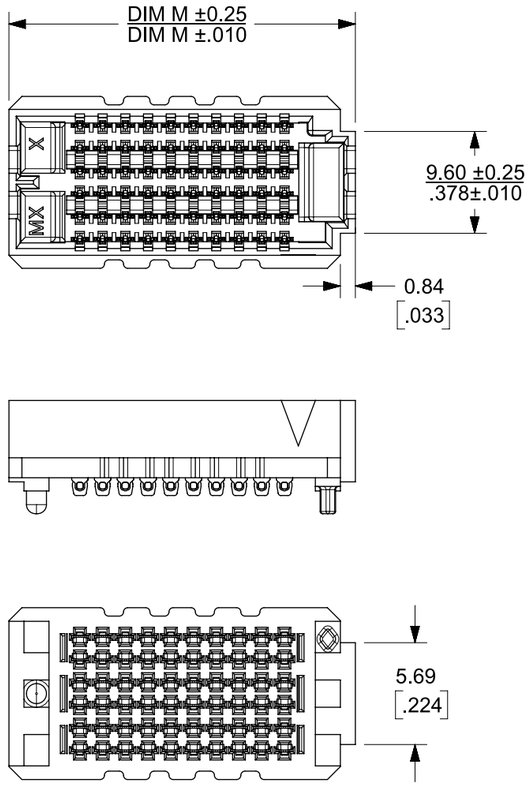
FORMAT: master-B-prod-B
REVISION: J
DATE: 2020/01/14

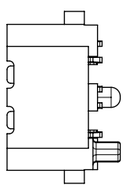
6 ROW
10 POSITION

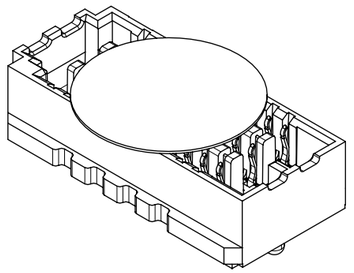




RECOMMENDED PCB LAYOUT: COMPONENT SIDE
SOLDER SCREEN APERTURE SIZE: .089/.035 DIAMETER
PCB THICKNESS: NA







6 ROW
10 POSITION
SHOWN

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DIMENSION UNITS	MM/IN
SCALE	3:1
GENERAL TOLERANCES (UNLESS SPECIFIED)	
ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.25
1 PLACE	± 0.38
0 PLACES	±
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

CURRENT REV DESC: OBSOLETED PART NUMBERS

EC NO: 661197
DRWN: SANTHN 2021/02/09
CHK'D: GGA 2021/04/26
APPR: GGA 2021/04/26

INITIAL REVISION:
DRWN: TGREGORI 2005/05/17
APPR: JCOMERCI 2010/03/05

THIRD ANGLE PROJECTION | DRAWING: B-SIZE | SERIES: 45971

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SEARAY
RECEPTACLE ASSEMBLY 1.27/.050 CENTERS

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-45971-001	PSD	001	Y4

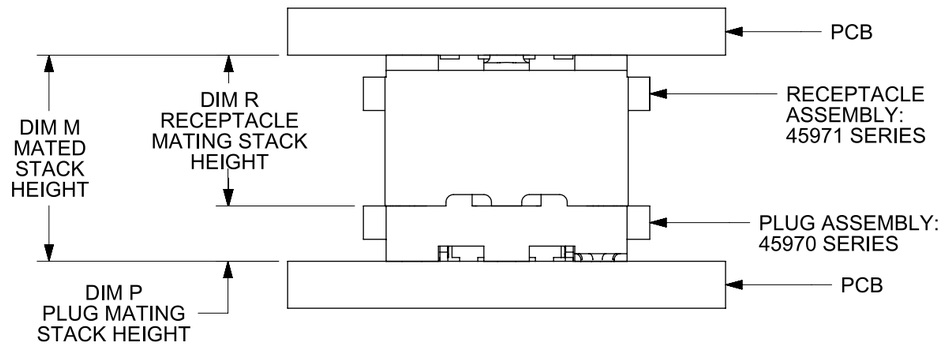
MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE SHEET NO 5	GENERAL MARKET	4 OF 5

DOCUMENT STATUS	P1	RELEASE DATE	2021/04/26 05:37:42

FORMAT: master-tb-prod-B
REVISION: J
DATE: 2020/01/14

ROWS: 6 DIMENSION C = 9.60/.378 DIMENSION D = 5.69/.224						
DIM R: (REF)		5.0 mm	6.0 mm	6.5 mm	7.5 mm	8.0 mm
DIM H:		5.05/.199	6.04/.238	6.66/.258	7.54/.297	8.05/.317
DIM S:		5.31/.209	6.30/.248	6.92/.272	7.80/.307	8.31/.327
POSITION	DIM M	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	19.35/0.762					
20	32.05/1.262					
30	44.75/1.762	45971-3165				
40	57.45/2.262					
50	70.15/2.762	45971-5165				
15	25.70/1.012					
25	38.40/1.512					
35	51.10/2.012					
45	63.80/2.512					

ROWS: 10 DIMENSION C = 14.68/.578 DIMENSION D = 6.24/.246						
DIM R: (REF)		5.0 mm	6.0 mm	6.5 mm	7.5 mm	8.0 mm
DIM H:		5.05/.199	6.04/.238	6.66/.258	7.54/.297	8.05/.317
DIM S:		5.31/.209	6.30/.248	6.92/.272	7.80/.307	8.31/.327
POSITION	DIM M	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	19.88/0.784	45971-1115	45971-1215	45971-1315	45971-1415	45971-1515
20	32.58/1.284	45971-2115	45971-2215	45971-2315	45971-2415	45971-2515
30	45.28/1.784	45971-3115	45971-3215	45971-3315	45971-3415	45971-3515
40	57.98/2.284	45971-4115	45971-4215	45971-4315	45971-4415	45971-4515
50	70.68/2.784	45971-5115	45971-5215	45971-5315	45971-5415	45971-5515
15	26.23/1.034	45971-6115	45971-6215	45971-6315	45971-6415	45971-6515
25	38.93/1.534	45971-7115	45971-7215	45971-7315	45971-7415	45971-7515
35	51.63/2.034	45971-8115	45971-8215	45971-8315	45971-8415	45971-8515
45	64.33/2.534	45971-9115	45971-9215	45971-9315	45971-9415	45971-9515



STACK HEIGHTS
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

ROWS: 8 DIMENSION C = 12.14/.478 DIMENSION D = 3.70/.146						
DIM R: (REF)		5.0 mm	6.0 mm	6.5 mm	7.5 mm	8.0 mm
DIM H:		5.05/.199	6.04/.238	6.66/.258	7.54/.297	8.05/.317
DIM S:		5.31/.209	6.30/.248	6.92/.272	7.80/.307	8.31/.327
POSITION	DIM M	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO	MATERIAL NO
10	19.88/0.784					
20	32.58/1.284	45971-2185		45971-2385		
30	45.28/1.784	45971-3185		45971-3385		
40	57.98/2.284	45971-4185		45971-4385		
50	70.68/2.784	45971-5185				
15	26.23/1.034					
25	38.93/1.534					
35	51.63/2.034					
45	64.33/2.534					

MATING STACK HEIGHTS (DIMENSION R)
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

DIM P PLUG STACK HEIGHT		DIM R RECEPTACLE STACK HEIGHT									
		5.0		6.0		6.5		7.5		8.0	
	mm	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX	DIM M FULLY MATED	DIM M MAX
	2.0	7.00	7.74	8.00	8.74	8.50	9.24	9.50	10.24	10.00	10.74
	3.0	8.00	8.74	9.00	9.74	9.50	10.24	10.50	11.24	11.00	11.74
	3.5	8.50	9.24	9.50	10.24	10.00	10.74	11.00	11.74	11.50	12.24
	2.5	7.50	8.24	8.50	9.24	9.00	9.74	10.00	10.74	10.50	11.24
	4.5	9.50	10.24	10.50	11.24	11.00	11.74	12.00	12.74	12.50	13.24
	5.0	10.00	10.74	11.00	11.74	11.50	12.24	12.50	13.24	13.00	13.74
	7.0	12.00	12.74	13.00	13.74	13.50	14.24	14.50	15.24	15.00	15.74

MATED STACK HEIGHTS
GIVEN IN MILLIMETERS (mm) FOR REFERENCE ONLY

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DIMENSION UNITS: MM/IN | SCALE: 3:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	± °
4 PLACES	±
3 PLACES	±
2 PLACES	± 0.25
1 PLACE	± 0,38
0 PLACES	±

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: OBSOLETED PART NUMBERS

EC NO: 661197
DRWN: SANTHN 2021/02/09
CHK'D: GGA 2021/04/26
APPR: GGA 2021/04/26

INITIAL REVISION:
DRWN: TGREGORI 2005/05/17
APPR: JCOMERCI 2010/03/05

THIRD ANGLE PROJECTION | DRAWING: B-SIZE | SERIES: 45971

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SEARAY
RECEPTACLE ASSEMBLY 1.27/.050 CENTERS

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
SD-45971-001	PSD	001	Y4

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE TABLE SHEET NO 5	GENERAL MARKET	5 OF 5

DOCUMENT STATUS	P1	RELEASE DATE	2021/04/26 05:37:42

FORMAT: master-tb-prod-B
REVISION: J
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