

Description

Micro-Ribbon connectors offer a fast, economical and distinctively different method of achieving electrical interconnection.

The heart of the connector is the ribbon contact, selectively plated gold over nickel underplate on a copper alloy base.

With contacts designed to mate easily and positively, the 57 series Micro-Ribbon connector delivers electrically and mechanically sound interconnections time after time.

Exceptionally versatile, 57 series Micro-Ribbon connectors are available in rack and panel, cable to panel, cable to cable and printed circuit board types.

Features

- SCL-6020A standard
- 14-24-36-50 (64 way) contact connectors
- Hooked contacts recessed in body to prevent mating damage
- Coded contacts to assist wiring identification
- Self wiping contacts
- Copper alloy contacts, selectively gold plated over copper for excellent current carrying characteristics
- UL94V-O rated dially phthalate dielectric per MIL-M14F type MDG, for operation up to 700 volts D.C. (sea level) without shorting or flashover, cracking and chipping resistant, and low moisture absorption
- Float bushings on receptacles allow 0.020" radial float
- Metal shells for improved EMI/RFI connector shielding
- Zinc plated steel outer shell, with clear chromate finishing, for corrosion resistance
- Wide, flat mating surfaces, pressed tightly together by flexing action of both contacts, for electrical continuity
- Positive mating action wipes contacts clean, removes film or foreign matter and with low contact resistance
- Solder cup type contact tails (for easy wire attachment), pin style tails (for printed circuit board attachment) and a high barrier between contact rows available
- Trapezoidal shape shell assures correct polarity
- UL and CSA approved

Specifications

Physical Characteristics

Contact Spacing : 0.085" pitch

Insulation Material : Dially-phthalate per MIL-M-14F type MDG UL94V-0 rated

Contact Material : Copper alloy

Contact Plating : Selective gold plated over nicked underplate

Shell Material : Zinc plated steel with clear chromate coating, with nickel & tin-lead plate optional

Spring Latch : Stainless steel

Rivet : Steel

Eyelet : Deep draw brass

Wire Sizes : Solid wire : 22 AWG max. - 30 AWG min.

Stranded wire : 24 AWG max. - 30 AWG min.

Electrical Characteristics

Current Rating : 5 Amps

Voltage Rating : 700 VDC at sea level
200 VDC at 70,000 ft.

Insulation Resistance : $\geq 5000 M\Omega$

Dielectric Withstanding Voltage : 1500 VAC (RMS) at sea level

Applications

Please consult sales office for information.

Mechanical Characteristics

Connector Mating Force : Refer to table I

Contact Retention Force : 2 lbs max.

Durability : 250 cycles min.

Vibration : No interruptions < 1 μ sec

Table I

CONNECTOR SIZES	AVERAGE MATING FORCE (POUNDS)
14	5
24	8
36	12
50	15

Environmental Characteristics

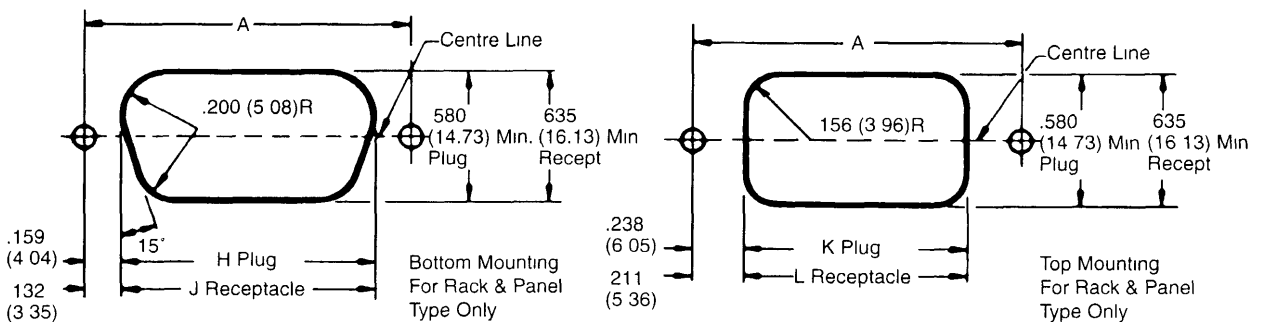
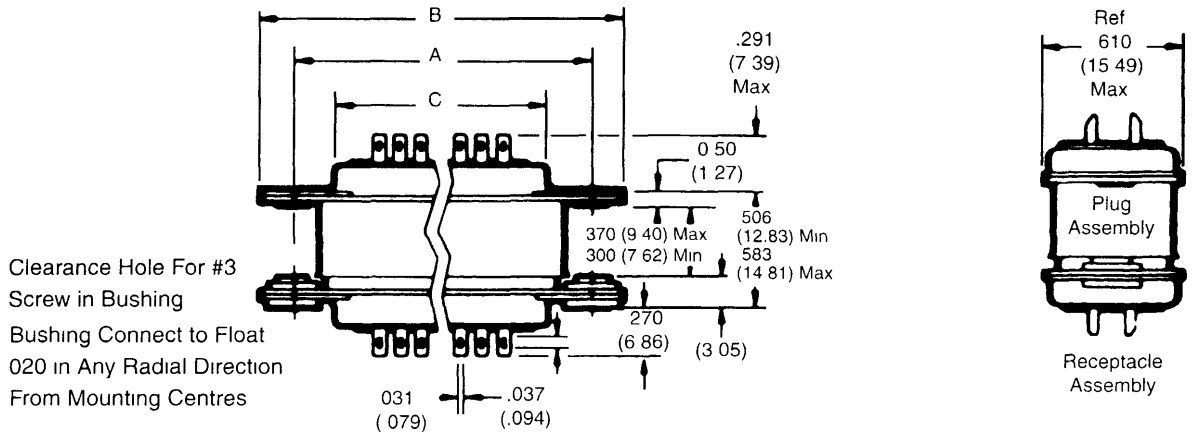
Operating Temperature : - 55°C to + 105°C

Rack and Panel Connectors

Part Numbers				
Contacts	Plugs : Fix-mounted*	Plugs : Fix-mounted**	Receptacles : Float - mounted*	Receptacles : Less Float Bushings**
14	57-10140	Consult sales office	57-20140	57-20140-4
24	57-10240	57-10240-4	57-20240	57-20240-2
36	57-10360	57-10360-22	57-20360	57-20360-3
50	57-10500	57-10500-48	57-20500	57-20500-15

* 0.103" mounting hole

** 0.185" mounting hole



Dimensions				
	14 Contacts mm.	24 Contacts mm.	36 Contacts mm.	50 Contacts mm.
A	35.99	46.79	59.74	74.85
B	44.45	55.25	68.20	83.31
C	23.11	33.91	46.86	61.98
Bottom Mounting				
H	27.92	38.71	51.66	66.78
J	29.29	40.08	53.04	68.15
Top Mounting				
K	23.90	34.70	47.65	62.76
L	25.27	36.07	49.02	64.14

Cable to Cable

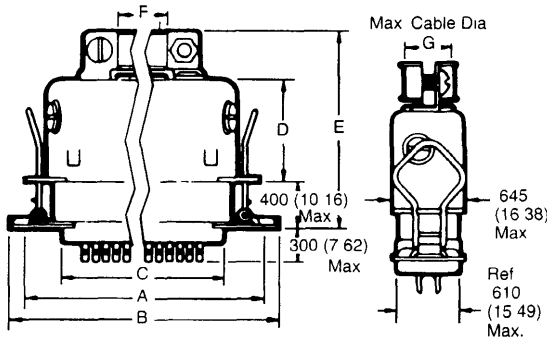


Part Numbers		
Contacts	Plug: Top Cable Entry	Receptacle Mating Connection with Spring Latches
14	57-30140	57-60140
24	57-30240	57-60240
36	57-30360	57-60360
50	57-30500	57-60500

Dimensions				
	14 Contacts mm.	24 Contacts mm.	36 Contacts mm.	50 Contacts mm.
B	44.95	55.75	68.70	83.82
D	21.59	21.08	23.11	25.40
E	31.88	31.37	33.40	35.69
F	8.84	12.01	16.46	19.61
G	8.84	12.01	12.70	12.70
N	29.28	40.08	53.06	68.14
O	73.81	73.02	77.01	81.73

Remarks : All dimensions are reference only

Cable to Panel Connectors



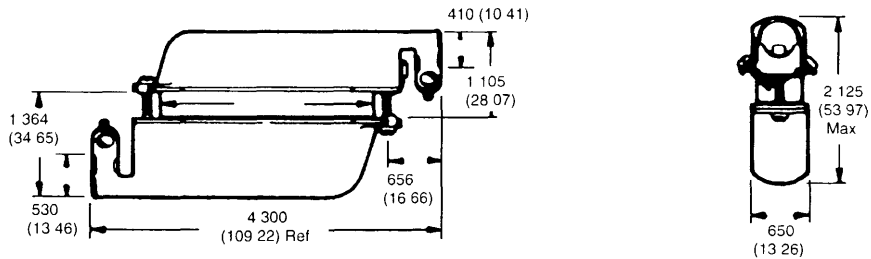
Part Numbers		
Contacts	Plug: Top Cable Entry	Receptacle Mating Connection with Spring Latches
14	57-30140	57-40140
24	57-30240	57-40240
36	57-30360	57-40360
50	57-30500	57-40500

Dimensions				
	14 Contacts mm.	24 Contacts mm.	36 Contacts mm.	50 Contacts mm.
A	35.99	46.79	59.74	74.85
B	44.96	55.75	68.71	83.82
C	23.11	33.91	46.86	61.98
D	21.59	21.08	23.11	25.40
E	42.29	41.78	43.82	46.10
F	8.84	12.01	16.46	19.61
G	8.84	12.01	12.70	12.70

Remarks : All dimensions are reference only

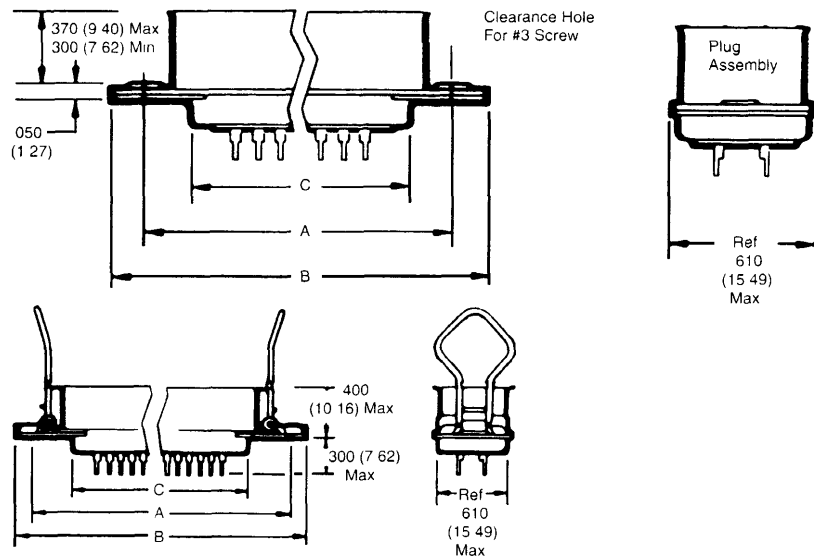
Metal Hood Running Cable

Part Numbers			
Contacts	Style	Low Profile Hood 5/8" High	Std. Profile Hood 7/8" High
50	Plug	57-10500-7	57-10500-14
50	Receptacle	57-20500-19	57-20500-7



Panel Mounting PCB Connectors

Part Number			
Contacts	Without Spring Latch		With Spring Latch
	Plug 0.156 Tails	Receptacle 0.156 Tails	Receptacle 0.156 Tails
24	57-10240-12	57-20240-23	57-40240-14
36	57-10360-25	57-20360-19	57-40360-24
50	57-10500-73	57-20500-85	57-40500-24

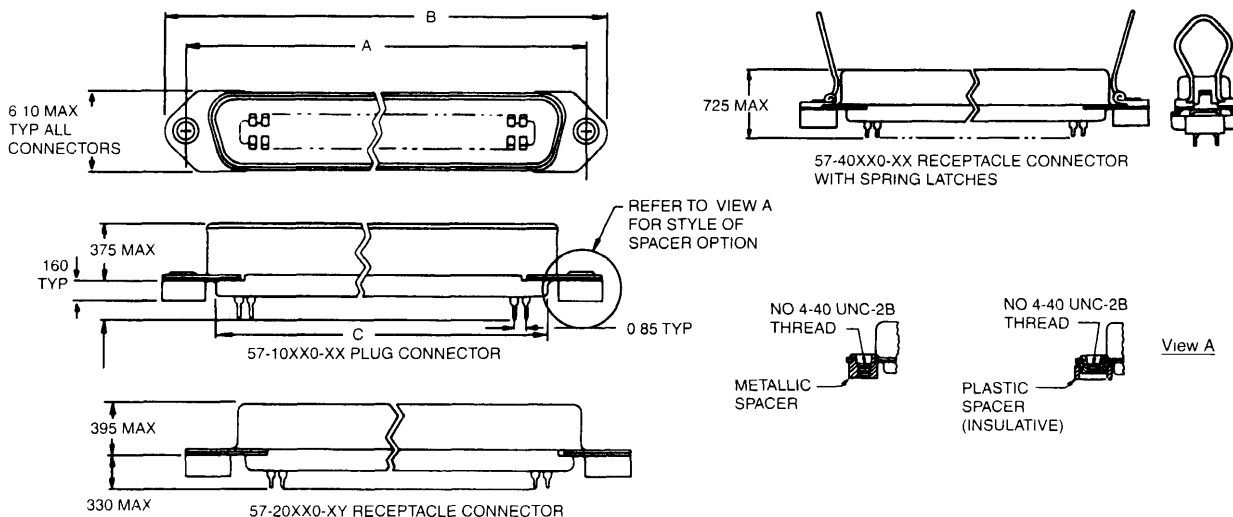


Straight PCB with Standoffs						
Contacts	Plug Metallic Standoff without Latches	Plug Insulated Standoff without Latches	Receptacle Metallic Standoff without Latches	Receptacle Insulated Standoff without Latches	Receptacle Metallic Standoff + Spring Latches	Receptacle Insulated Standoff + Spring Latches
24	57-10240-14	57-10240-13	57-20240-25	57-20240-24	57-40240-16	57-40240-15
36	57-10360-27	57-10360-26	57-20360-21	57-20360-20	57-40360-23	57-40360-21
50	57-10500-77	57-10500-69	57-20500-87	57-20500-79	57-40500-26	57-40500-23

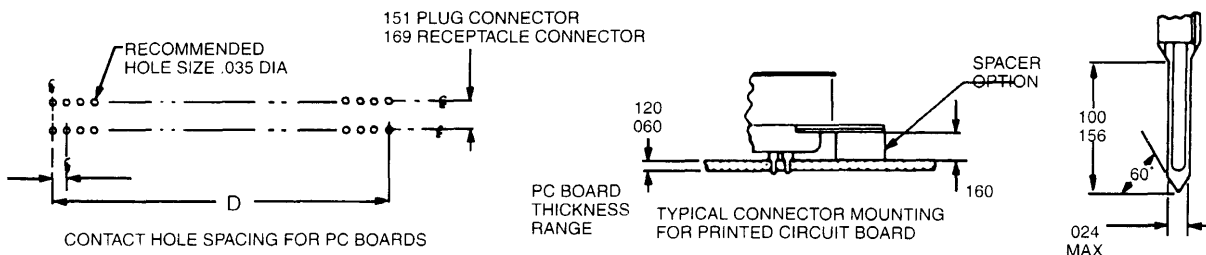
Contact Tail Lengths 0.156"

Panel Mounting PCB Connectors

Dimensions				
	14 Contacts mm.	24 Contacts mm.	36 Contacts mm.	50 Contacts mm.
A	35.99	46.78	59.74	74.85
B	44.45	55.24	68.19	83.31
C	23.11	33.90	46.86	61.97
D	12.95	22.74	36.70	51.81



Typical Mounting, Contact Hole Spacing and Termination Lengths for PV Boards.



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