



General Information

Microminiature D Connectors



Introduction

Product Facts

- Designed for both military and commercial applications
- Low engaging force is achieved by the manner in which Twist/Con Twist Pin Contacts are designed
- The metal shell and plastic shell are available with solder cup and solid or stranded wire terminations
- Mating force maximum is 10 oz. times the number of contacts
- Durability - No mechanical or electrical defects detrimental to the function of the connectors after 500 cycles of mating and unmating
- Current Rating - 3 amps max per contact

MICRODOT Connectors MCK and MCD High Density Microminiature "D" Connectors comprise a complete connector system, which is adaptable to a numerous variety of form factors. Low engaging force is achieved by the manner in which the Twist/Con twist pin contacts are designed. By constructing the male contact as a breathing helical spring, electrical contact is achieved at many points around the periphery of the pin bundle rather than at a few discrete points, as in conventional pin designs. Normal twist pin engagement force is 6 ounces typically and 8 ounces maximum. The low force twist pins exhibit an engaging force of 4 oz. typically and 5 oz. maximum. Low force twist pins are standard in MIL-PRF-83513 configurations of MCK and MCD connectors and may be supplied as an option in all other configurations.

The MCK and MCD Series of connectors are designed to meet the applicable requirements of MIL-PRF-83513, for intermateability, interchangeability, and performance. Designed for both military and commercial applications, the MCK's and MCD's are especially well suited for use in miniaturized airborne and space electronics, computers, and test equipment. The metal shell MCK's and plastic shell MCD's are available with solder cup, and solid or stranded wire terminations. MCK transition blocks are standard for printed circuit board mounting. Custom termination configurations for both MCK and MCD can be accommodated. Micro D's are also supplied in wired harness assemblies.

Technical and Performance Data

Electrical

Contacts - Pin #24 AWG twist pin, Socket #24 AWG precision machined barrel, Wire Range #24 AWG to #30 AWG solid and stranded.

Contact Resistance - (voltage drop) 25 millivolts max. at 3 amps, $25^{\circ} \pm 3^{\circ}\text{C}$.

Current Rating - 3 amps max. per contact.

Dielectric Withstanding Voltage - Volts RMS 60 Hz at room ambient. At sea level 600V solder pots, 800V wire terminations & transition blocks. At 70,000 ft. 150V solder pots, 200V wire terminations & transition blocks.

Insulation Resistance - 5,000 megohms min. (@ 500 VDC) at ambient room temperature.

Magnetic Permeability - 2 mu max.

Mechanical

Contact Spacing - .050 [1.27mm] centers.

Contact Engagement & Separation - Standard contact engaging force is 6.0 oz. (8.0 oz max.), low engaging force contact is 3.5 oz. (5.0 oz. max.). Separation force for both is 0.5 oz. min.

Mating Force Maximum - Calculated as 10 oz. times the number of contacts.

Environmental

Temperature Range - -55°C to +125°C for MCK/MCD.

Vibration - No discontinuity in excess of 1 µ sec. when tested in accordance with MIL-STD-1344, Method 2005, test Condition IV.

Solderability - Connectors shall pass the test requirements of MIL-STD-202, Method 208

Shock - No discontinuity in excess of 1 µ sec. when tested in accordance with MIL-STD-1344, Method 2004, test Condition E.

Durability - No mechanical or electrical defects detrimental to the function of the connectors after 500 cycles of mating and unmating.

Humidity - After exposure to humidity as specified by MIL-STD-1344, Method 1002, Type II, IR shall be 1 megohm min. following step 7a of Method 1002 and 1000 megohms min. after 24 hours of conditioning per Method 1002.

Salt Spray - Connectors shall meet the performance requirements of contact resistance, mating and unmating forces, and contact retention after being subjected to the 48-hour 5% solution salt spray test per MIL-STD-1344, Method 1001, Condition B.

Fluid Immersion - Unmated connectors after being fully immersed in one of the following fluids, for the prescribed time, will mate at a force of 10 oz. times the number of contacts or less: Perchloroethylene, 2 hours; Lubricating oil per MIL-L-23699, 20 hours.

Insert Retention - Inserts will withstand a 50 lb. per square inch load in either direction.

Crimp Termination Tensile Strength - (Unassembled contacts with crimped stranded wire terminations) Wires will not pull out of contacts when the following axial loads are applied: #24 AWG, 5 lbs.; #26 AWG, 4 lbs.; #28 AWG, 3 lbs.

Materials and Finishes

Contacts - Copper alloy plated with .000050 [.00127] gold over copper flash per MIL-G-45204 Type II.

MCK-Metal Shell -

Insulator - Ryton R4, Polyphenylene Sulfide per MIL-M-24519

Interfacial Seal - Fluorosilicone Rubber per MIL-R-25988 (socket side only)

Body Shell - Aluminum alloy-high grade plated

Cadmium - Per QQ-P-416

Nickel - Electroless per AMS 2404

Transition Block Shell -

Ryton R4, Polyphenylene Sulfide - Per MIL-M-24519

Potting Material - Epoxy, Black

MCD-Plastic Shell -

Insulator/Body - Polyester, glass filled per MIL-M-24519, Polyphenylene Sulfide per MIL-M-24519

Wire Terminations -

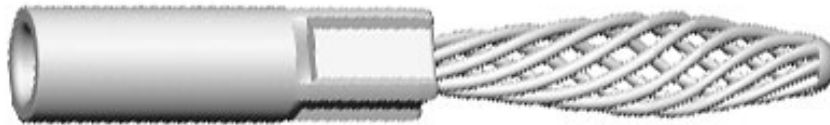
Solid copper - Per QQ-W-343, gold plated per MIL-G-45204

Stranded Teflon - Insulated per MIL-W-16878

Stranded Teflon - Insulated per MIL-W-22759/11, /33

Solid copper - Per QQ-W-343, solder dipped (Transition block)

TWIST/CON-24 Pins and Sockets

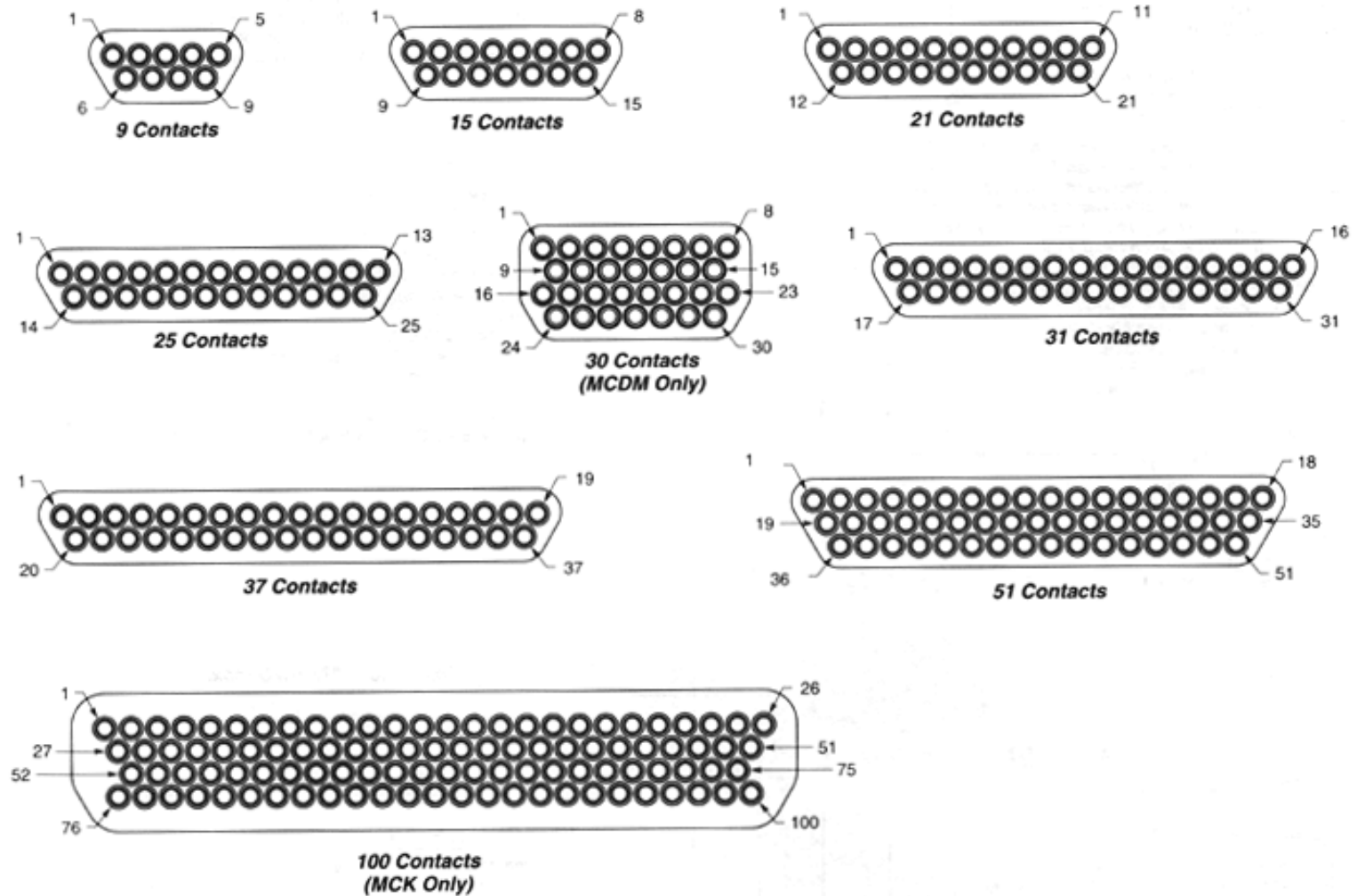


Wire range 24-36 AWG solid and stranded.

The contact spring member normally found in socket contacts has been eliminated by creating a breathing helical spring principle on the pin contact - smaller, more durable contacts can be manufactured economically.

Contact Arrangements

Face View of Pin Insert (Socket Side is Mirror Image)



Note: MCK metal shells are not designed to intermate or interchange with MCD plastic shells.

MCK Series Metal Shell Connectors

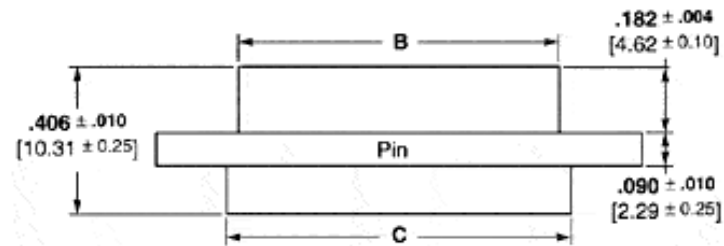
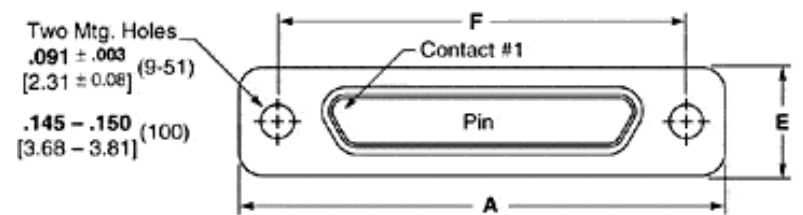
Dimensions per MIL-PRF-83513

Plug (Pin Side)

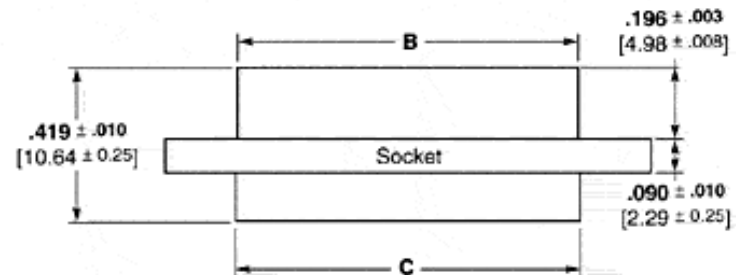
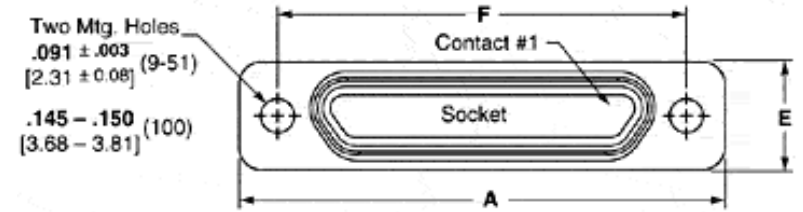
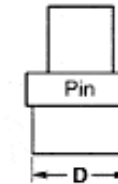


Receptacle (Socket Side)

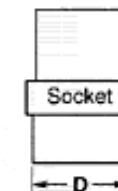




Crimp or Solder



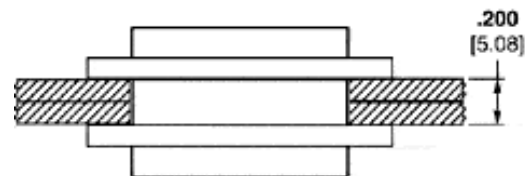
Crimp or Solder



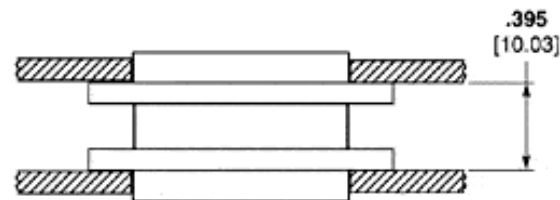
Part Number	A ± .010 [.254]	B Max.	C +.010 [.254] -.018 [.457]	D Max	E ±.010 [.254]	F ±.005 [.127]
MCK**- 9P***	.775 19.68	.333 8.46	.390 9.91	.270 6.86	.298 7.57	.565 14.35
MCK**- 9S***	.775 19.68	.402 10.22	.390 9.91	.270 6.86	.298 7.57	.565 14.35
MCK**- 15P***	.925 23.50	.483 12.27	.540 13.72	.270 6.86	.298 7.57	.715 18.16
MCK**- 15S***	.925 23.50	.552 14.03	.540 13.72	.270 6.86	.298 7.57	.715 18.16
MCK**- 21P***	1.075 27.30	.633 16.08	.690 17.53	.270 6.86	.298 7.57	.865 21.97
MCK**- 21S***	1.075 27.30	.702 17.84	.690 17.53	.270 6.86	.298 7.57	.865 21.97
MCK**- 25P***	1.175 29.84	.733 18.62	.790 20.07	.270 6.86	.298 7.57	.965 24.51
MCK**- 25S***	1.175 29.84	.802 20.38	.790 20.07	.270 6.86	.298 7.57	.965 24.51
MCK**- 31P***	1.325 33.66	.883 22.43	.940 23.88	.270 6.86	.298 7.57	1.115 28.32
MCK**- 31S***	1.325 33.66	.952 24.19	.940 23.88	.270 6.86	.298 7.57	1.115 28.32
MCK**- 37P***	1.475 37.46	1.033 26.24	1.090 27.69	.270 6.86	.298 7.57	1.265 32.13
MCK**- 37S***	1.475 37.46	1.102 28.00	1.090 27.69	.270 6.86	.298 7.57	1.265 32.13
MCK**- 51P***	1.425 36.20	.983 24.97	1.040 26.42	.310 7.87	.341 8.66	1.215 30.86
MCK**- 51S***	1.425 36.20	1.052 26.73	1.040 26.42	.310 7.87	.341 8.66	1.215 30.86
MCK**- 100P***	2.160 54.86	1.383 35.13	1.432 36.37	.360 9.15	.384 9.75	1.800 45.71
MCK**- 100S***	2.160 54.86	1.508 38.31	1.432 36.37	.360 9.15	.384 9.75	1.800 45.71

P = Pin, S = Socket

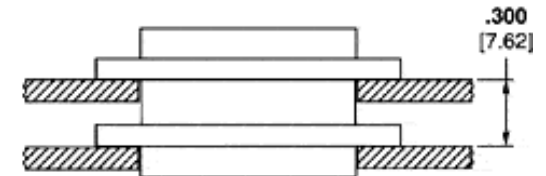
Panel Mounting Dimensions - MCK



Plug and Receptacle
Rear Mounted



Plug and Receptacle
Front Mounted



Plug Front Mounted
Receptacle Rear Mounted

Panel Cutout Dimensions - MCK

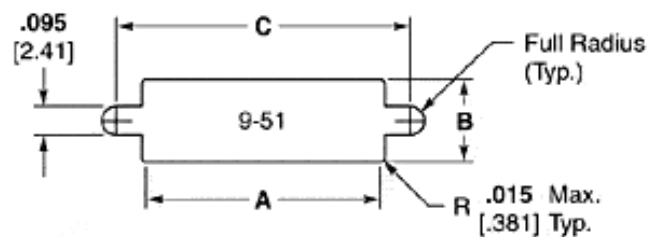


Figure 1
Front Mounting

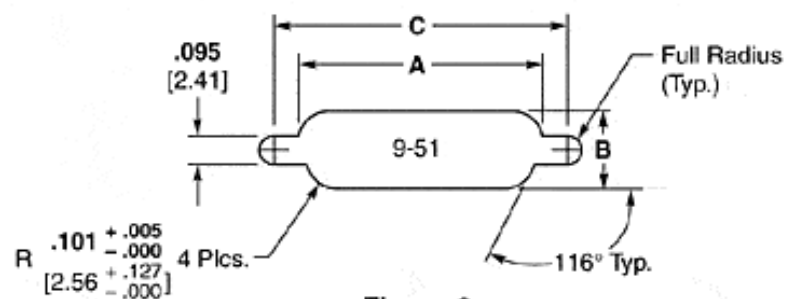
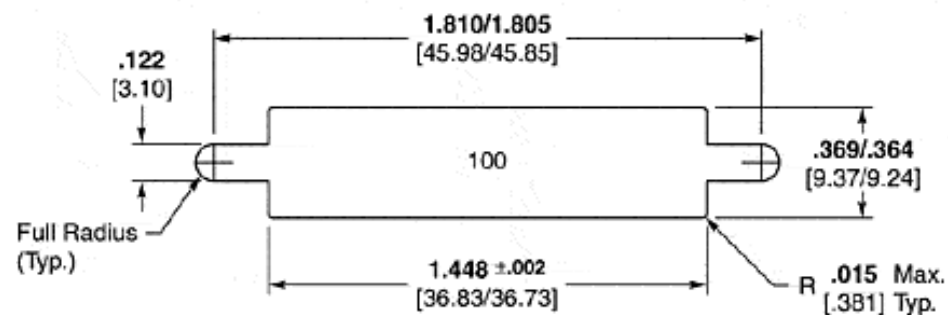
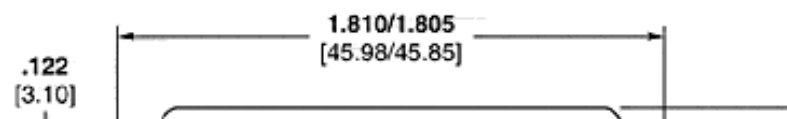
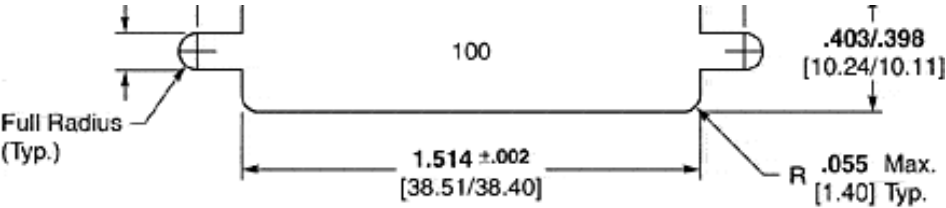


Figure 2
Rear Mounting



Front Mounting





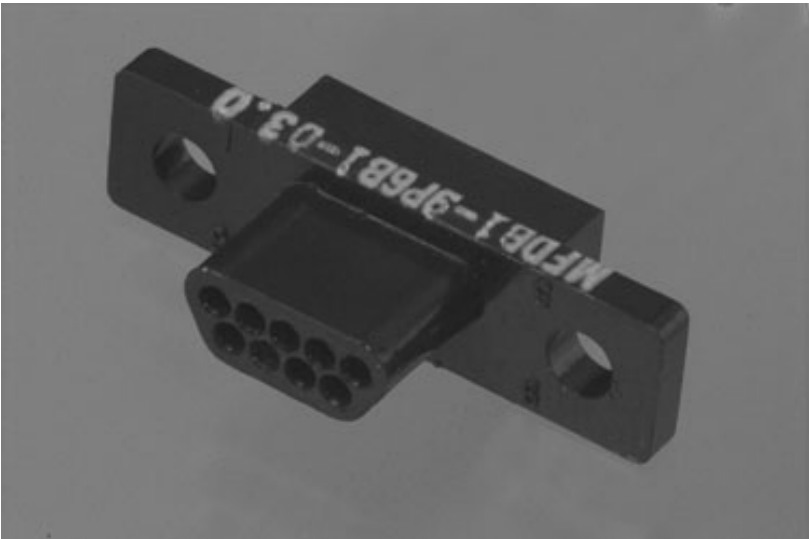
Rear Mounting

Number of Contacts	Fig.	A	B	C
		+ .004 [.102] - .000 [.000]	+ .004 [.102] - .000 [.000]	+ .005 [.127] - .000 [.000]
9	1	.404 10.26	.274 6.96	.570 14.48
	2	.406 10.31	.257 6.53	.570 14.48
15	1	.554 14.07	.274 6.96	.720 18.29
	2	.556 14.12	.257 6.53	.720 18.29
21	1	.704 17.88	.274 6.96	.870 22.10
	2	.706 17.93	.257 6.53	.870 22.10
25	1	.804 20.42	.274 6.96	.970 24.64
	2	.806 20.47	.257 6.53	.970 24.64
31	1	.954 24.23	.274 6.96	1.120 28.45
	2	.956 24.28	.257 6.53	1.120 28.45
37	1	1.104 28.04	.274 6.96	1.270 32.26
	2	1.106 28.09	.257 6.53	1.270 32.26
51	1	1.054 26.77	.314 7.98	1.220 30.99
	2	1.056 26.82	.300 7.62	1.220 30.99

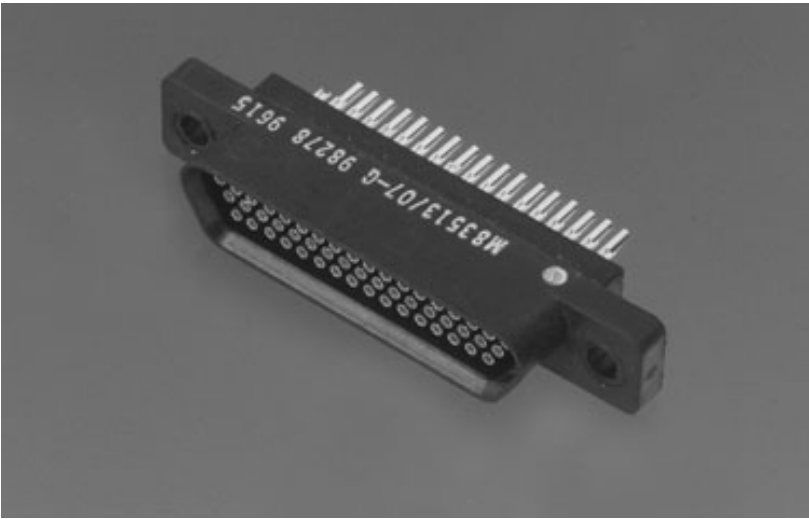
MCD Series Plastic Shell Connectors

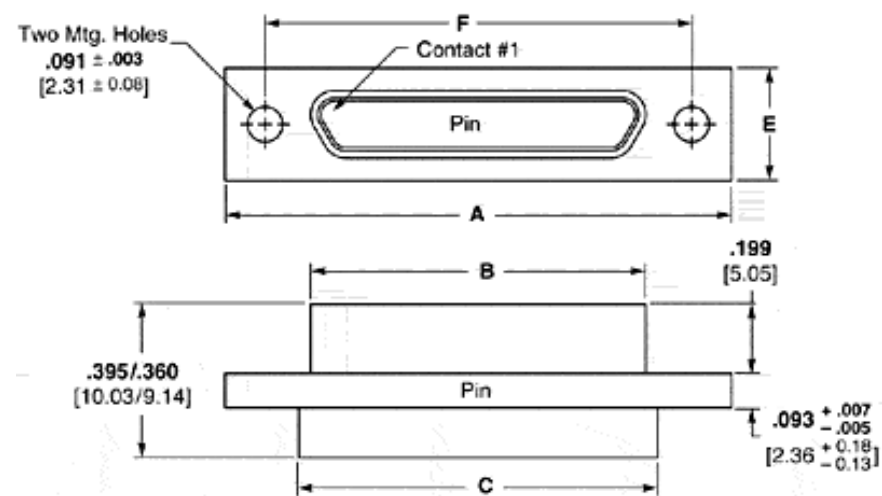
Screw Mount Dimensions per MIL-PRF-83513

Plug (Pin Side)

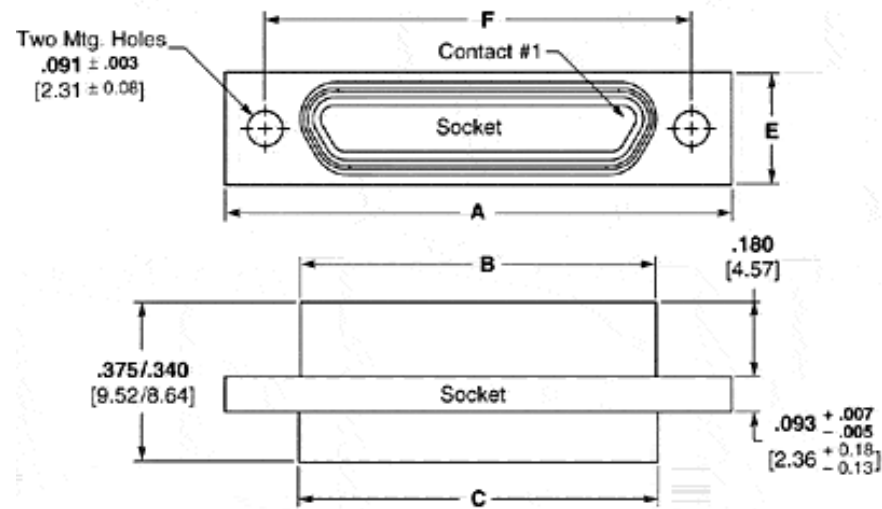
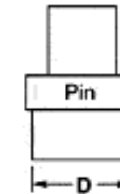


Receptacle (Socket Side)

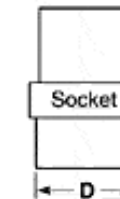




Crimp or Solder



Crimp or Solder



Part Number	A ± .010 [.254]	B Max.	C +.010 [.254] -.018 [.457]	D Max	E ± .010 [.254]	F ± .005 [.127]	Avg. Weight lbs. ± 5%
MCD**- 9P***	.788 20.02	.2918 7.412	.398 10.11	.173 4.39	.208 5.28	.565 14.35	.0017
MCD**- 9S***	.788 20.02	.3798 9.647	.398 10.11	.173 4.39	.208 5.28	.565 14.35	.0016
MCD**- 15P***	.938 23.83	.4418 11.222	.548 13.92	.173 4.39	.208 5.28	.715 18.16	.0024
MCD**- 15S***	.938 23.83	.5298 13.457	.548 13.92	.173 4.39	.208 5.28	.715 18.16	.0023
MCD**- 21P***	1.088 27.64	.5918 15.032	.698 17.73	.173 4.39	.208 5.28	.865 21.97	.0035
MCD**- 21S***	1.088 27.64	.6798 17.267	.698 17.73	.173 4.39	.208 5.28	.865 21.97	.0034
MCD**- 25P***	1.188 30.18	.6918 17.572	.798 20.27	.173 4.39	.208 5.28	.965 24.51	.0042
MCD**- 25S***	1.188 30.18	.7798 19.807	.798 20.27	.173 4.39	.208 5.28	.965 24.51	.0037
MCD**- 31P***	1.338 33.99	.8418 21.382	.948 24.08	.173 4.39	.208 5.28	1.115 28.32	.0053
MCD**- 31S***	1.338 33.99	.9298 23.617	.948 24.08	.173 4.39	.208 5.28	1.115 28.32	.0048
MCD**- 37P***	1.488 37.80	.9918 25.192	1.098 27.89	.173 4.39	.208 5.28	1.265 32.13	.0057
MCD**- 37S***	1.488 37.80	1.0798 27.427	1.098 27.89	.173 4.39	.208 5.28	1.265 32.13	.0051
MCD**- 51P***	1.438 36.53	.9418 23.922	1.048 26.62	.220 5.59	.250 6.35	1.215 30.86	.0072
MCD**- 51S***	1.438 36.53	1.0298 26.157	1.048 26.62	.220 5.59	.250 6.35	1.215 30.86	.0063

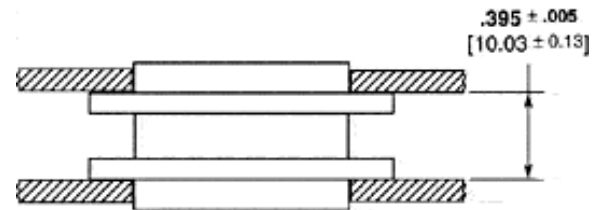
P = Pin, S = Socket

Weight given is with 1/2" uninsulated, solid, #24 AWG gold plated copper pigtails.

Panel Mounting Dimensions - MCD Screw Mount



**Plug and Receptacle
Rear Mounted**



**Plug and Receptacle
Front Mounted**



**Plug Front Mounted
Receptacle Rear Mounted**

Panel Cutout Dimensions - MCD Screw Mount

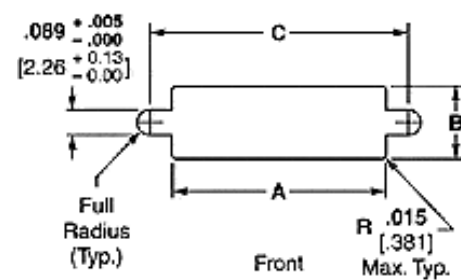


Figure 2

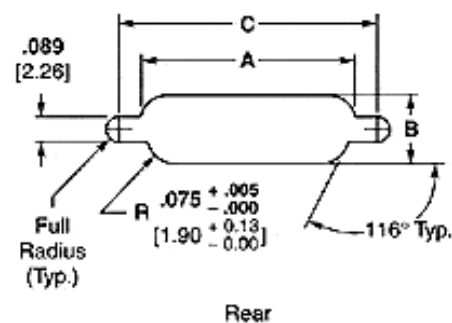
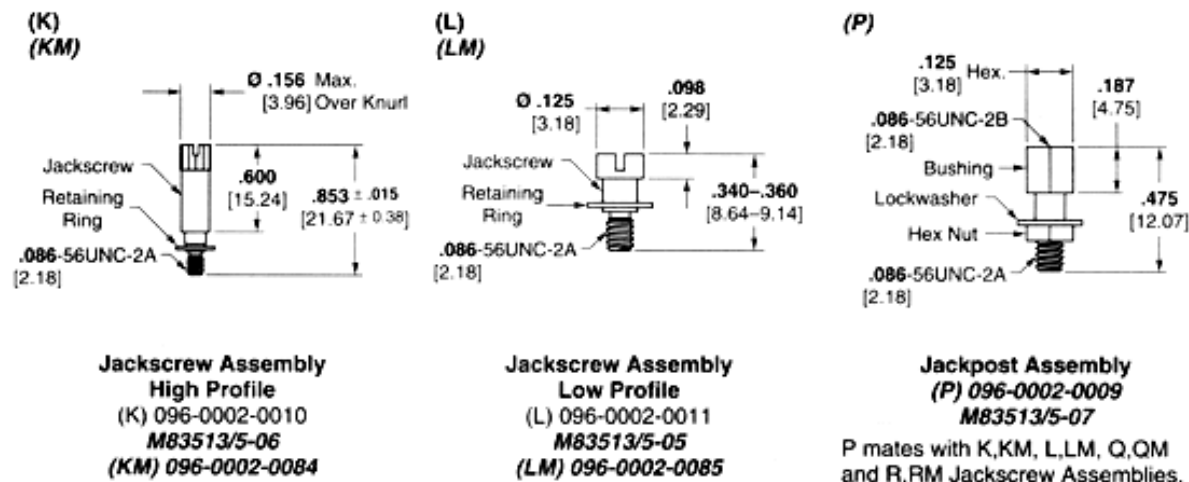


Figure 4

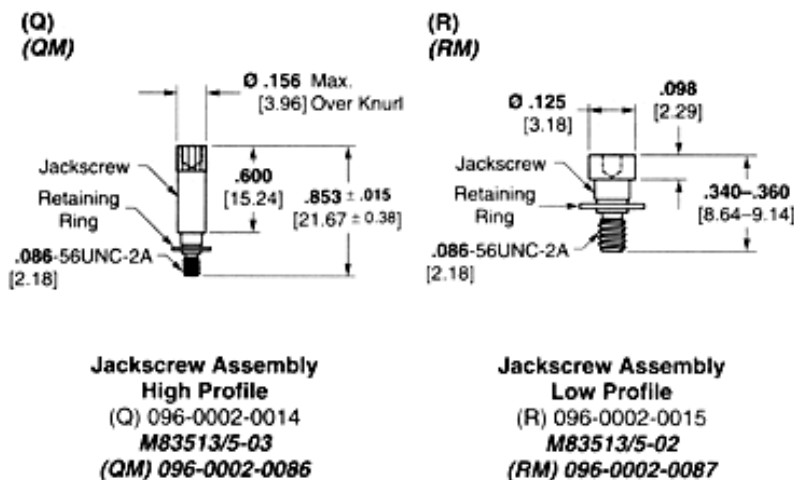
Number of Contacts	Fig.	A		B		C	
		+.004	-.000	+.004	-.000	+.005	-.000
9	2	.412	[10.46]	.177	[4.50]	.570	[14.48]
	4	.384	[9.75]	.222	[5.64]	.570	[14.48]
15	2	.562	[14.27]	.177	[4.50]	.720	[18.29]
	4	.534	[13.56]	.222	[5.64]	.720	[18.29]
21	2	.712	[18.08]	.177	[4.50]	.870	[22.10]
	4	.684	[17.37]	.222	[5.64]	.870	[22.10]
25	2	.812	[20.62]	.177	[4.50]	.970	[24.64]
	4	.784	[19.91]	.222	[5.64]	.970	[24.64]
31	2	.962	[24.43]	.177	[4.50]	1.120	[28.45]
	4	.934	[23.72]	.222	[5.64]	1.120	[28.45]
37	2	1.112	[28.24]	.177	[4.50]	1.270	[32.26]
	4	1.084	[27.53]	.222	[5.64]	1.270	[32.26]
51	2	1.062	[26.97]	.224	[5.69]	1.220	[30.99]
	4	1.034	[26.26]	.264	[6.71]	1.220	[30.99]

Mounting and Coupling Hardware for Screw Mount MCK and MCD

9-51 Contacts - Slot Head

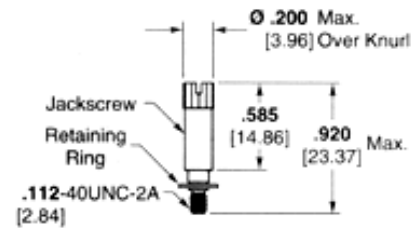


9-51 Contacts - 1/16" Allen Head



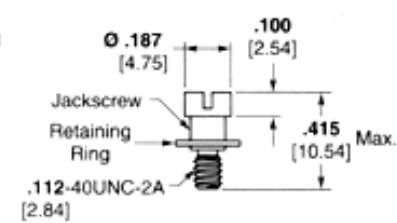
100 Contacts - Slot Head

(H)
(HM)



**Jackscrew Assembly
High Profile**
(H) 096-0002-0061
M83513/5-16
(HM) 096-0002-0088

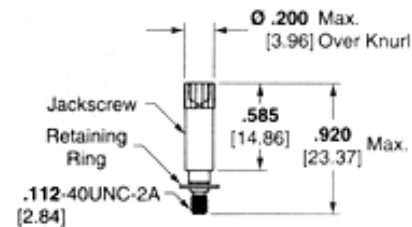
(J)
(JM)



**Jackscrew Assembly
Low Profile**
(J) 096-0002-0062
M83513/5-15
(JM) 096-0002-0089

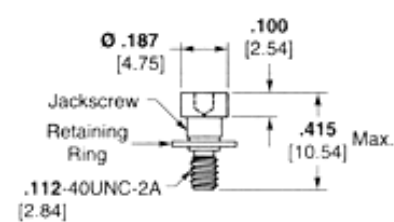
100 Contacts - 1/16" Allen Head

(T)
(TM)



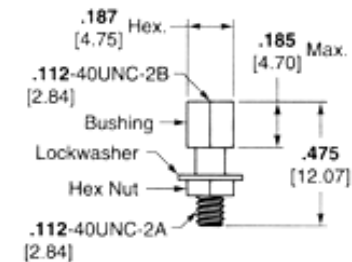
**Jackscrew Assembly
High Profile**
(T) 096-0002-0064
M83513/5-13
(TM) 096-0002-0090

(N)
(NM)



**Jackscrew Assembly
Low Profile**
(N) 096-0002-0065
M83513/5-12
(NM) 096-0002-0091

(S)

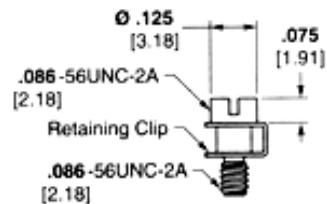


Jackpost Assembly
(S) 096-0002-0060
M83513/5-17
S mates with H, HM, J, JM, T, TM and N, NM Jackscrew Assemblies.

Slot Head

Slot Head

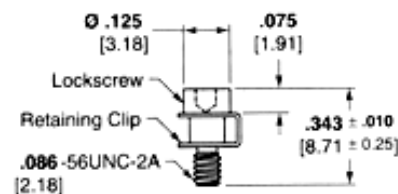
(X)



Lockscrew Assembly
096-0002-0008

1/16" Allen Head

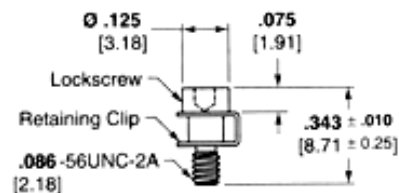
(Y)



Lockscrew Assembly
096-0002-0013

1/16" Allen Head

(Y)



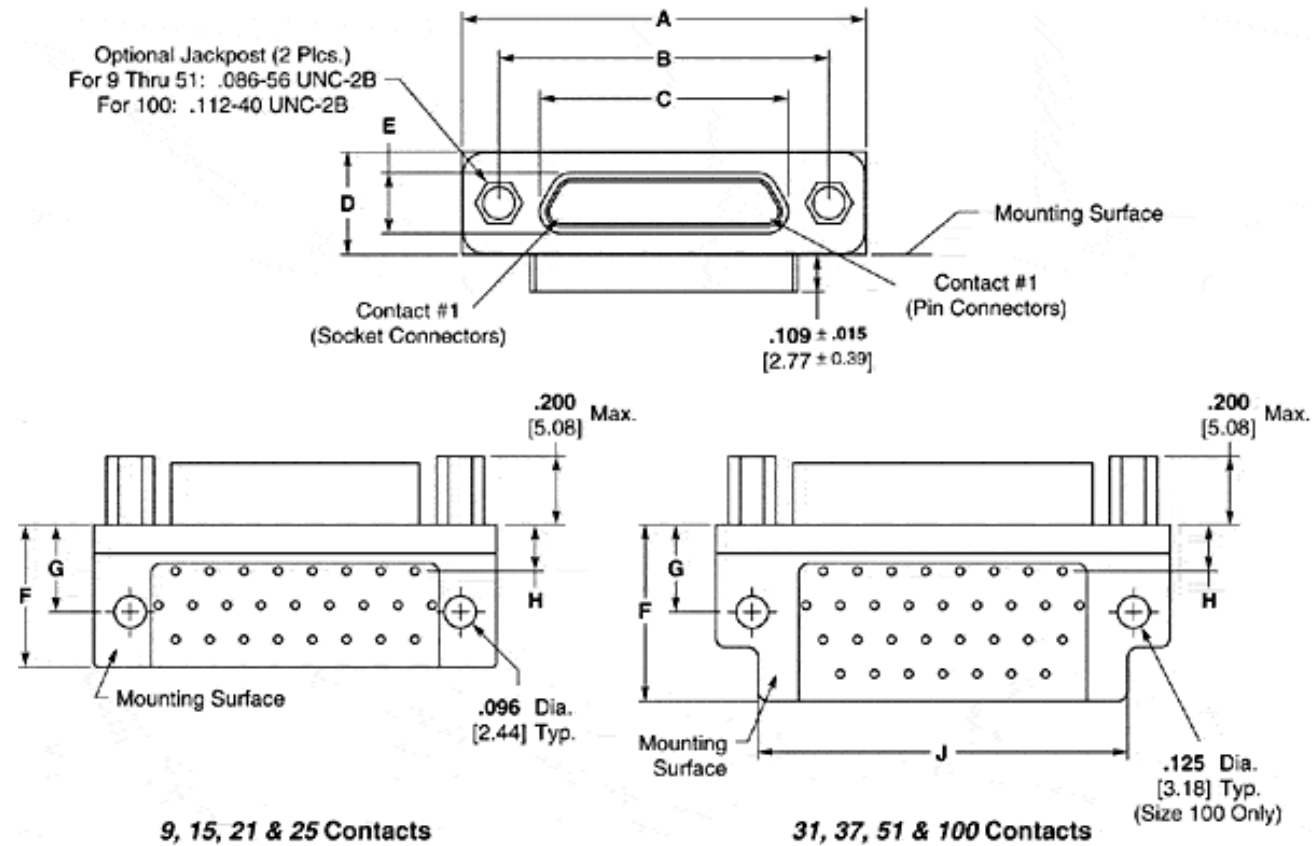
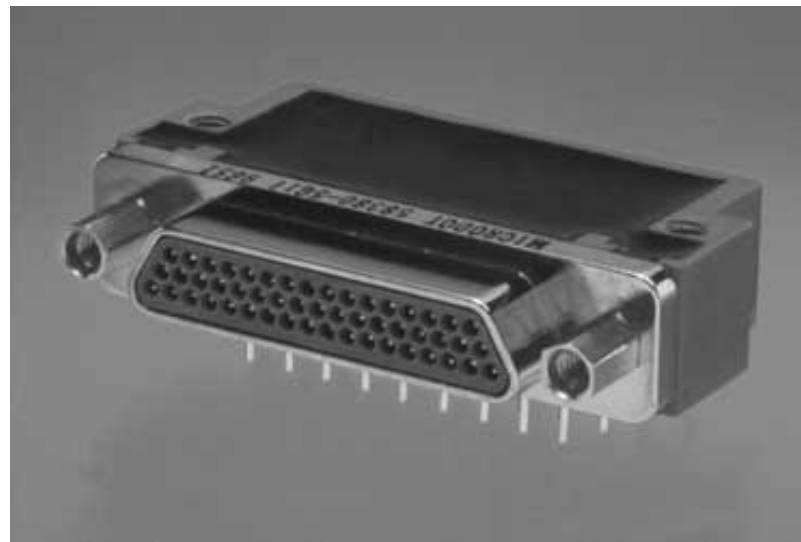
Lockscrew Assembly
096-0002-0013

Notes:

1. Jackpost Assemblies will accommodate 3/32" max. thickness panel.
2. Letter(s) in parentheses is to assist in ordering hardware with the connector.
3. Single letters (e.g. K) designate hardware that meets M83513/5 requirements except the material is 303 stainless steel, passivated.
4. Add M suffix (e.g. KM) to designate hardware that meets all M83513/5 requirements. Material is corrosion resistant steel, non-magnetic, 125,000 PSI tensile strength minimum (Applies to jackscrews only).
5. Hardware ordered separately should be ordered in pairs; i.e. 2 pcs. P/N 096-0002-0009 per connector half.
6. Items in bold italic are qualified to MIL-PRF-83513

MCK Transition Blocks (PCB Connectors)

RT-1 - Right Angle Termination Configurations

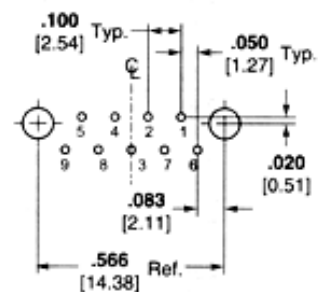
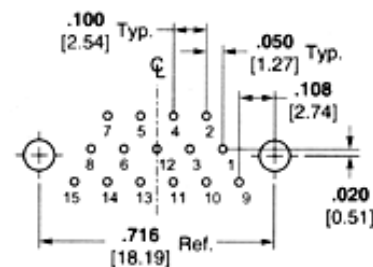
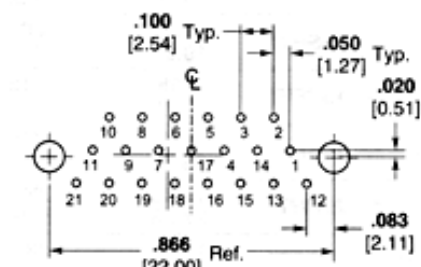


Part Number	A Max.	B ± .005 [.127]	C Max.	D Max.	E Max.	F Max.	G +.010 [.254]	H +.010 [.254]	J Max.
MCK-**-*. 9PRTI	.785 19.94	.565 14.35	.333 8.46	.308 7.83	.184 4.68	.420 10.67	.250 6.35	.230 5.84	—
MCK-**-*. 9SRTI	.785 19.94	.565 14.35	.402 10.22	.308 7.83	.250 6.35	.420 10.67	.250 6.35	.230 5.84	—
MCK-**-*. 15PRTI	.935 23.75	.715 18.16	.483 12.27	.308 7.83	.184 4.68	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 15SRTI	.935 23.75	.715 18.16	.552 14.03	.308 7.83	.250 6.35	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 21PRTI	1.085 27.56	.865 21.97	.633 16.08	.308 7.83	.184 4.68	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 21SRTI	1.085 27.56	.865 21.97	.702 17.84	.308 7.83	.250 6.35	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 25PRTI	1.185 30.10	.965 24.51	.733 18.62	.308 7.83	.184 4.68	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 25SRTI	1.185 30.10	.965 24.51	.802 20.38	.308 7.83	.250 6.35	.420 10.67	.250 6.35	.130 3.30	—
MCK-**-*. 31PRTI	1.335 33.91	1.115 28.32	.883 22.43	.308 7.83	.184 4.68	.520 13.21	.250 6.35	.130 3.30	1.085 27.56
MCK-**-*. 31SRTI	1.335 33.91	1.115 28.32	.952 24.19	.308 7.83	.250 6.35	.520 13.21	.250 6.35	.130 3.30	1.085 27.56
MCK-**-*. 37PRTI	1.485 37.72	1.265 32.13	1.033 26.24	.308 7.83	.184 4.68	.520 13.21	.250 6.35	.130 3.30	1.185 30.10
MCK-**-*. 37SRTI	1.485 37.72	1.265 32.13	1.102 28.00	.308 7.83	.250 6.35	.520 13.21	.250 6.35	.130 3.30	1.185 30.10
MCK-**-*. 51PRTI	1.435 36.45	1.215 30.86	.983 24.97	.351 8.92	.227 5.77	.650 16.51	.300 7.62	.150 3.81	1.225 31.88
MCK-**-*. 51SRTI	1.435 36.45	1.215 30.86	1.052 26.73	.351 8.92	.295 7.50	.650 16.51	.300 7.62	.150 3.81	1.225 31.88
MCK-**-*. 100PRTI	2.170 55.12	1.800 45.72	1.383 35.13	.394 10.01	.270 6.86	1.000 25.40	.400 10.16	.200 5.08	1.815 46.11
MCK-**-*. 100SRTI	2.170 55.12	1.800 45.72	1.508 38.31	.394 10.01	.394 10.01	1.000 25.40	.400 10.16	.200 5.08	1.815 46.11

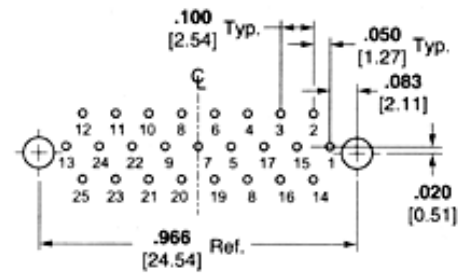
P = Pin, S = Socket

RT-1 - Right Angle Termination Configurations

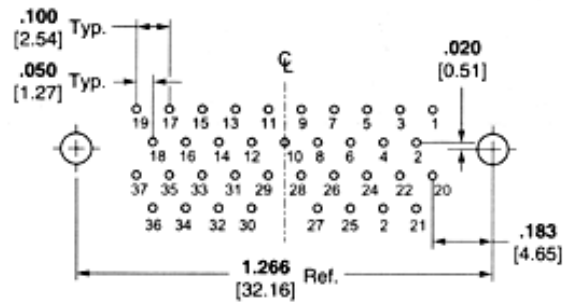
View is from mounting surface of connector. Plug configuration shown. For receptacle, use mirror image (except 100 contacts).

**9 Contacts****15 Contacts****21 Contacts**

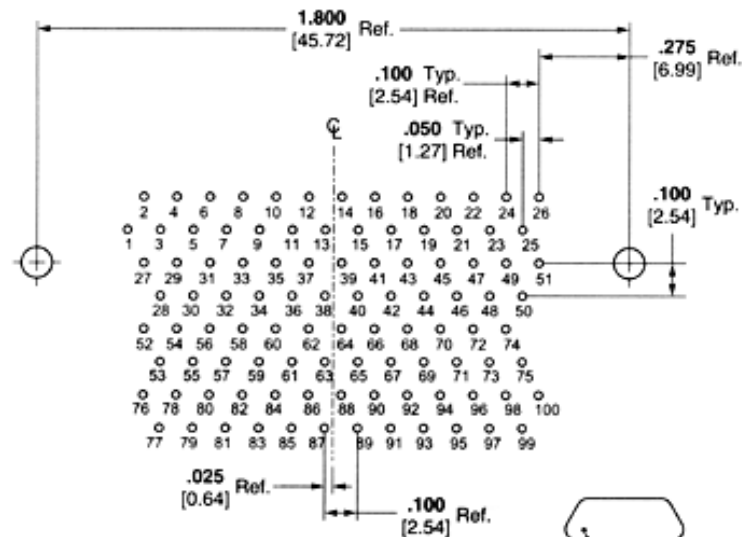
9 Contacts



25 Contacts



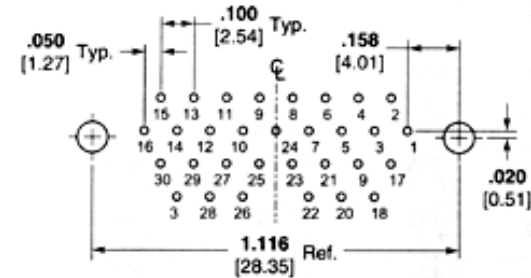
37 Contacts



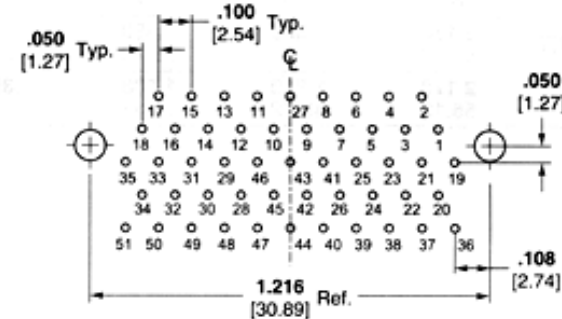
100 Contacts
(Socket Connector)



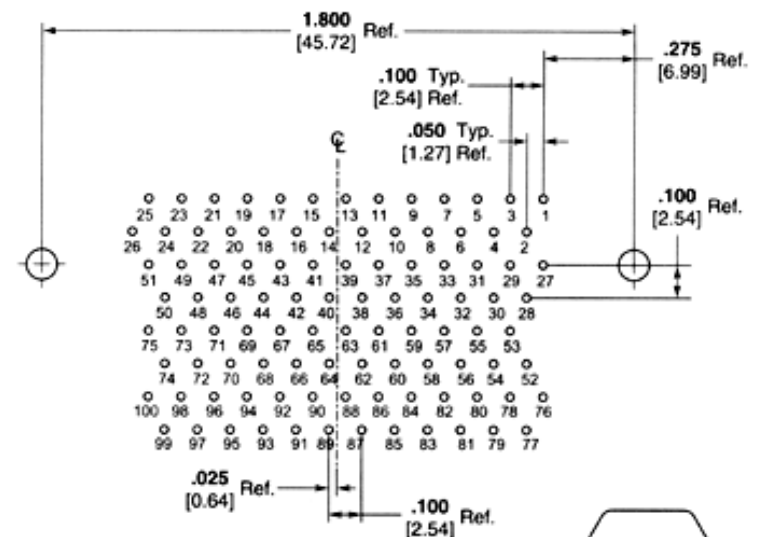
15 Contacts



31 Contacts

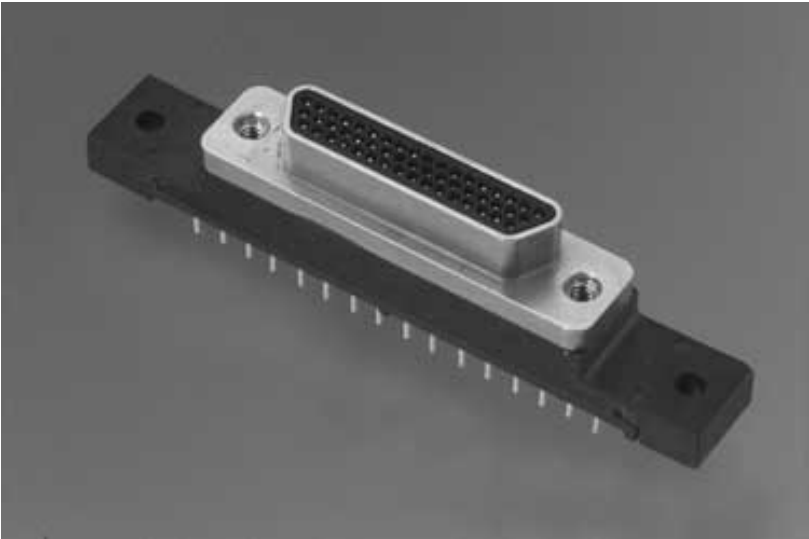


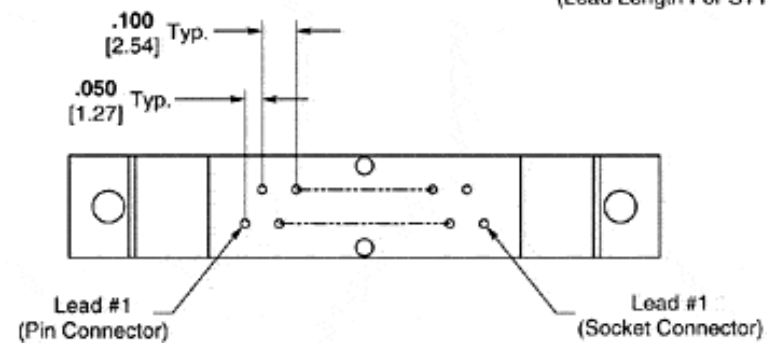
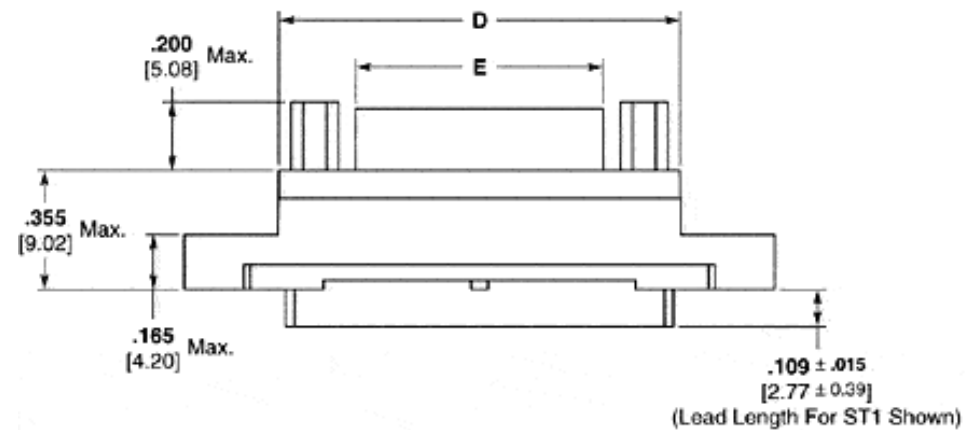
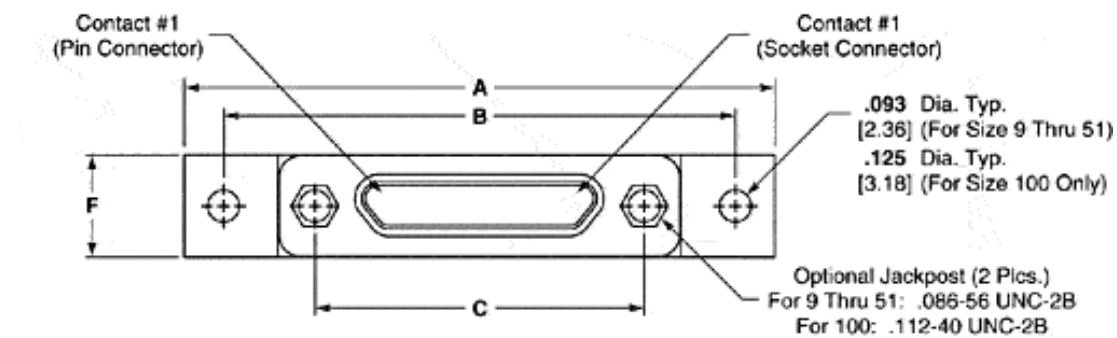
51 Contacts



100 Contacts
(Pin Connector)





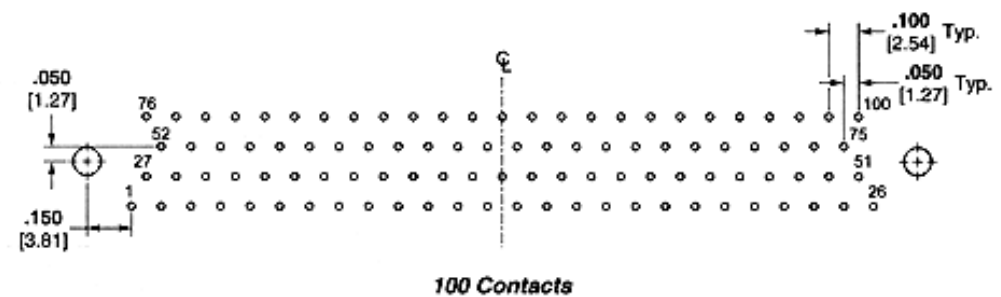
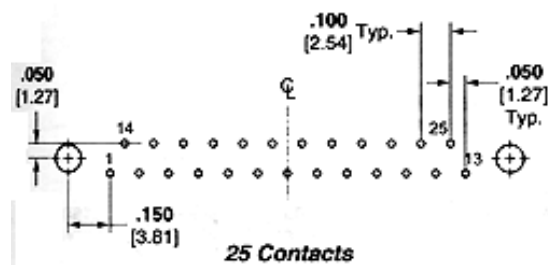
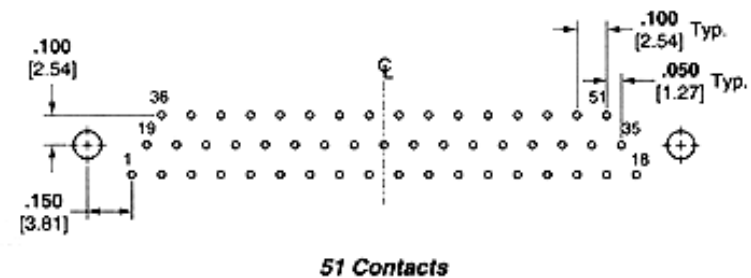
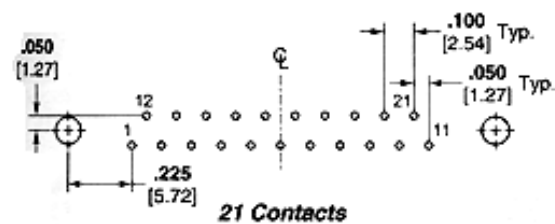
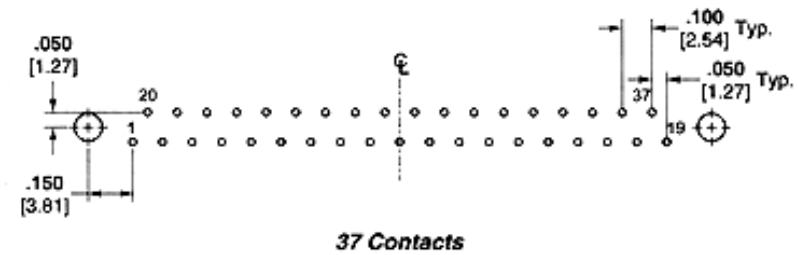
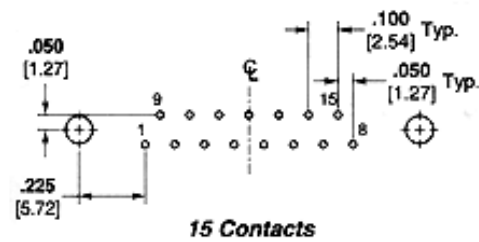
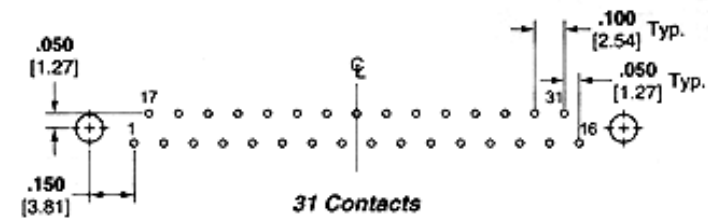
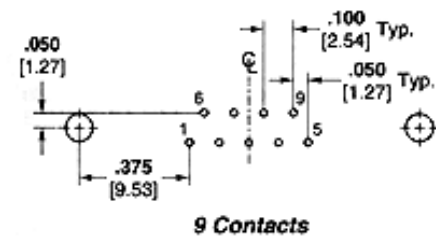


Part Number	A Max.	B ± .005 [.127]	C ± .005 [.127]	D Max.	E Max.	F Max.	G Max.
<i>MCK--. *- 9PSTI</i>	1.390 35.31	1.150 29.21	.565 14.35	.785 19.94	.333 8.46	.308 7.83	.184 4.68
<i>MCK--. *- 9SSTI</i>	1.390 35.31	1.150 29.21	.565 14.35	.785 19.94	.402 10.22	.308 7.83	.250 6.35
<i>MCK--. *- 15PSTI</i>	1.390 35.31	1.150 29.21	.715 18.16	.935 23.75	.483 12.27	.308 7.83	.184 4.68
<i>MCK--. *- 15SSTI</i>	1.390 35.31	1.150 29.21	.715 18.16	.935 23.75	.552 14.03	.308 7.83	.250 6.35
<i>MCK--. *- 21PSTI</i>	1.690 42.93	1.450 36.83	.865 21.97	1.085 27.56	.633 16.08	.308 7.83	.184 4.68
<i>MCK--. *- 21SSTI</i>	1.690 42.93	1.450 36.83	.865 21.97	1.085 27.56	.702 17.84	.308 7.83	.250 6.35
<i>MCK--. *- 25PSTI</i>	1.740 44.20	1.500 38.10	.965 24.51	1.185 30.10	.733 18.62	.308 7.83	.184 4.68
<i>MCK--. *- 25SSTI</i>	1.740 44.20	1.500 38.10	.965 24.51	1.185 30.10	.802 20.38	.308 7.83	.250 6.35
<i>MCK--. *- 31PSTI</i>	2.040 51.82	1.800 45.72	1.115 28.32	1.335 33.91	.883 22.43	.308 7.83	.184 4.68
<i>MCK--. *- 31SSTI</i>	2.040 51.82	1.800 45.72	1.115 28.32	1.335 33.91	.952 24.19	.308 7.83	.250 6.35
<i>MCK--. *- 37PSTI</i>	2.340 59.44	2.100 53.34	1.265 32.13	1.485 37.72	1.033 26.24	.308 7.83	.184 4.68
<i>MCK--. *- 37SSTI</i>	2.340 59.44	2.100 53.34	1.265 32.13	1.485 37.72	1.102 28.00	.308 7.83	.250 6.35
<i>MCK--. *- 51PSTI</i>	2.270 57.66	2.000 50.80	1.215 30.86	1.435 36.45	.983 24.97	.351 8.92	.227 5.77
<i>MCK--. *- 51SSTI</i>	2.270 57.66	2.000 50.80	1.215 30.86	1.435 36.45	1.052 26.73	.351 8.92	.295 7.50
<i>MCK--. *- 100PSTI</i>	3.070 77.98	2.800 71.12	1.800 45.72	2.170 55.12	1.383 35.13	.394 10.01	.270 6.86
<i>MCK--. *- 100SSTI</i>	3.070 77.98	2.800 71.12	1.800 45.72	2.170 55.12	1.508 38.31	.394 10.01	.394 10.01

P = Pin, S = Socket

ST-1 - Straight Termination Configurations

View is from mounting surface of connector. Plug configuration shown. For receptacle, use mirror image.



Socket #1 Ref.
(Receptacle Connector)



Pin #1 Ref.
(Plug Connector)



RS Components

Part No	Product	Type
MCKN1-B-15P6A1-18.0	4208309	Supplier
MCKN1-B-15S6A1-18.0	4208359	Supplier
MCKN1-B-25P6A1-18.0	4208315	Supplier
MCKN1-B-25S6A1-18.0	4208371	Supplier
MCKN1-B-37P6A1-18.0	4208321	Supplier
MCKN1-B-37S6A1-18.0	4208387	Supplier
MCKN1-B-51P6A1-18.0	4208337	Supplier
MCKN1-B-51S6A1-18.0	4208393	Supplier
MCKN1-B-9P6A1-18.0	4208292	Supplier
MCKN1-B-9S6A1-18.0	4208343	Supplier
MCKN1-P-15PRT1	4208501	Supplier
MCKN1-P-15PST1	4208618	Supplier
MCKN1-P-15SRT1	4208551	Supplier
MCKN1-P-15SST1	4208674	Supplier
MCKN1-P-25PRT1	4208517	Supplier
MCKN1-P-25PST1	4208624	Supplier
MCKN1-P-25SRT1	4208567	Supplier
MCKN1-P-25SST1	4208680	Supplier
MCKN1-P-37PRT1	4208523	Supplier
MCKN1-P-37PST1	4208630	Supplier
MCKN1-P-37SRT1	4208573	Supplier
MCKN1-P-37SST1	4208696	Supplier
MCKN1-P-51PRT1	4208539	Supplier
MCKN1-P-51PST1	4208652	Supplier
MCKN1-P-51SRT1	4208595	Supplier
MCKN1-P-51SST1	4208719	Supplier
MCKN1-P-9PRT1	4208494	Supplier
MCKN1-P-9PST1	4208602	Supplier
MCKN1-P-9SRT1	4208545	Supplier
MCKN1-P-9SST1	4208668	Supplier