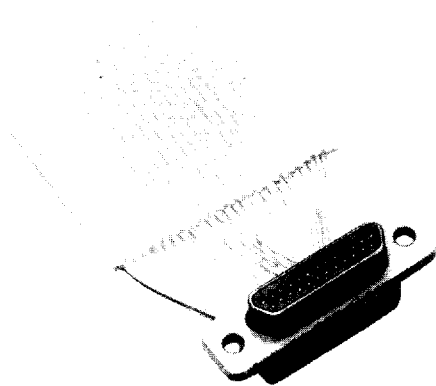




MDM connectors are used in applications requiring highly reliable, extremely small, lightweight connectors with higher density contact configurations than available in traditional rectangular connectors. They are available in 8 shell sizes accommodating from 9 to 100 contacts, and special arrangements of power and coaxial contacts.

These connectors are designed to meet the rapidly increasing demands for an environmental, high performance, rugged, moisture-sealed microminiature connector. This connector employs size 24 MICRO-

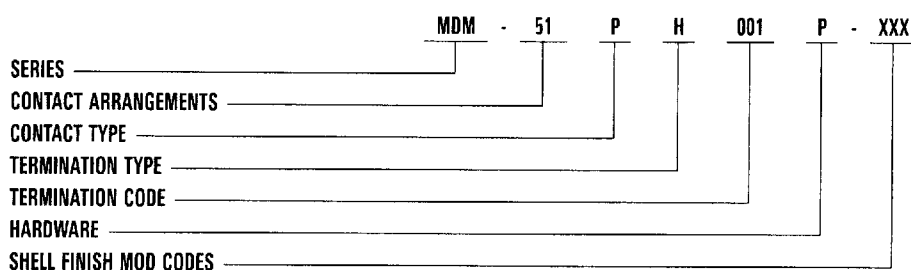
PIN™/MICROSOCKET™ contacts on .050(1.27) centers in a contact density identical to the standard MICRO-D connector series, but with these additional features:

- Aluminum shells to provide greater strength, prevent chipping, cracking or breaking, offer electromagnetic (EMI) and RFI shielding.
- Silicone elastomer compression interfacial seal to provide a moisture and humidity seal between each contact and between contacts and shell.

How to Order

MIL-C-83513 ordering information – pages 240 and 241

Microminiature Connectors



SERIES

MDM: Diallyl Phthalate Insulator Material
MDMV: Polyester Insulator Material

CONTACT ARRANGEMENTS

9-15-21-25-31-37-51-100 (standard)
7C2, 24C4, (coaxial) } or combination of
7P2, 24P4 (power) } coax and power

CONTACT TYPE

P – Pin
S – Socket

TERMINATION TYPE

H – Harness-insulated wire.
L – Solid-uninsulated wire.
S – Solder pot to accept #26 AWG MAX. harness wire. (Not available with power contact arrangements.)

TERMINATION CODE*

(H) 001 – 18", 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, yellow.
(H) 003 – 18", 7/34 strand, #26 AWG, MIL-W-16878/4, Type E Teflon, color coded to MIL-STD-681 System I.
(L) 1 – 1/2" uninsulated solid #25 AWG gold plated copper.
(L) 2 – 1" uninsulated solid #25 AWG gold plated copper.

HARDWARE

M – Military specification hardware, see page 237.
P – Jackpost
K – Jackscrew–standard
L – Jackscrew–low profile

F – Float mount
B – No hardware standard
A – .125 (3.18) dia. mounting holes for sizes 9-51;
.166 (4.22) dia. hole for size 100.
B1 – .1475 (3.75) dia. hole for size 100 (Per MIL-C-83513)

SHELL FINISH MOD CODES**

No
Number – Standard Cadmium/yellow chromate
A174 – Electroless nickel
A172 – Gold over nickel
A141 – Irridite/alodine
A30 – Black anodize

*See Termination Codes page 233 for additional length Modification Codes.

**For other modifications not listed, consult the factory.

Performance and Material Specifications

STANDARD MATERIALS AND FINISHES

Shell	– Aluminum alloy per QQ-A-200/8 (6061-T6), yellow chromate/cadmium per QQ-P-416, Type II, class 3.
Insulator	– Glass-filled diallyl phthalate per MIL-M-14, Type SDGF, or polyester per MIL-M-24519, Type GPT-30F
Contacts	– Copper alloy, gold plate
Mounting Hardware	– 300 Series stainless steel, passivate
Kit, Jackpost (3) Items	– 300 Series stainless steel, passivate
Washer	– 400 Series stainless steel, passivate
Standard Epoxy	– Hysol EE4198 with HD3561 hardener, color green or EE4215 with HD3561, color black

MECHANICAL FEATURES

Coupling	– Friction/jackscrews
Polarization	– Keystone-shaped shells
Contact Spacing Centers	– .050 (1.27)
Shell Styles	– Plug and receptacle
No. of Contacts	– 9 thru 100 standard; 5 signal/2 coaxial; 5 signal/2 power; 20 signal/4 coaxial; 20 signal/4 power
Coaxial Cable	– RG-178/U
Wire Size	– #24 thru #32 AWG
Contact Termination	– Multiple indent crimp

ELECTRICAL DATA – page 231

ITT Cannon

For technical assistance, price or delivery information, call your local technical sales office or distributor.

Dimensions are shown in inches (millimeters).
Dimensions subject to change.

How to Order – ITT Cannon Part Number Nomenclature to MIL-C-83513

MD** 01 - H100 - ** ***

ITT CANNON SERIES

- MDM – Metal Shell, Diallyl Phthalate Insulator
 MDMV – Metal Shell, Polyester Insulator
 MDB – Diallyl Phthalate Insulator
 MDVB – Polyester Insulator

MIL-C-83513 SLASH SHEET

- 01 – Plug, Connector, Solderpot
 02 – Receptacle, Connector, Solderpot
 03 – Plug, Connector, Crimp Type } Metal Shell
 04 – Receptacle, Connector, Crimp Type
 05 – Hardware Only 
 06 – Plug, Connector, Solderpot
 07 – Receptacle, Connector, Solderpot } Plastic 
 08 – Plug, Connector, Crimp Type
 09 – Receptacle, Connector, Crimp Type

INSERT ARRANGEMENT

	METAL SHELL	PLASTIC
A9	– 9 Contact	9 Contact
B15	– 15 Contact	15 Contact
C21	– 21 Contact	21 Contact
D25	– 25 Contact	25 Contact
E31	– 31 Contact	31 Contact
F37	– 37 Contact	37 Contact
G51	– 51 Contact	51 Contact
H100	– 100 Contact	

WIRE TYPE

- No Number – For Solderpot
 01 – 18" long, #26 AWG per MIL-W-22759/11-26-9
 02 – 36" long, #26 AWG per MIL-W-22759/11-26-9
 03 – 18" long, #26 AWG per MIL-W-22759/11-26
 Color Coded per MIL-STD-681, System 1 
 04 – 36" long, #26 AWG per MIL-W-22759/11-26
 Color Coded per MIL-STD-681, System 1 
 05 – .5" long, #25 AWG, type S per QQ-W-343,
 Gold Plated
 06 – 1.0" long, #25 AWG, type S per QQ-W-343,
 Gold Plated
 07 – .5" long, #25 AWG, type S per QQ-W-343,
 Tin Plated
 08 – 1.0" long, #25 AWG, type S per QQ-W-343,
 Tin Plated
 09 – 18" long, #26 AWG per MIL-W-22759/33-26-9 
 10 – 36" long, #26 AWG per MIL-W-22759/33-26-9 
 11 – 18" long, #26 AWG per MIL-W-22759/33-26
 Color Coded per MIL-STD-681, System 1 
 12 – 36" long, #26 AWG per MIL-W-22759/33-26
 Color Coded per MIL-STD-681, System 1 
 13 – 72" long, #26 AWG per MIL-W-22759/11-26-9 
 14 – 72" long, #26 AWG per MIL-W-22759/11-26
 Color Coded per MIL-STD-681, System 1 
 15 – 72" long, #26 AWG per MIL-W-22759/33-26-9 
 16 – 72" long, #26 AWG per MIL-W-22759/33-26
 Color Coded per MIL-STD-681, System 1 

NOTES:

(Specify when ordering, if necessary.)

-  For every Mil-Spec P/N, ITT has two corresponding part numbers.
 Example: ITT P/N's MDM01-A9 (Diallyl Phthalate Insulator)
 MDMV01-A9 (Polyester Insulator)
- 2 - Tolerance on wire lengths – 18", 36" and 72" long,
 +1.000"/–0.000"
 .5" and 1.00" +.200"/–.000"
-  For space application, connector shell finish must be "A174"
 and wire must be per MIL-W-22759/33-26.
- 4 - Any deviations to these P/N's will result in assignment of a special
 P/N, consult factory.
-  No size 100 in plastic type connector.
-  Color coding in accordance with MIL-STD-681, System 1 except the
 appropriate color code is the individual contact cavity number minus
 1 for contact positions.
-  For mounting hardware to Military Specification (sizes 9 to 100) see
 page 238.

SHELL FINISH

- No number – for Plastic type connector
 No number – for Cadmium
 A174 – Electroless Nickel 

Qualification to slash sheets 10 thru 27 for the PCB connectors will be announced when completed.

How to Order – MIL-C-83513 Part Number Nomenclature

M83513 /		01	-	A	**	C
SERIES _____						
Connector, Electrical, Rectangular Microminiature, Polarized Shell						
MIL-C-83513 SLASH SHEET _____						
01	– Plug, Connector, Solderpot	} Metal Shell				
02	– Receptacle, Connector, Solderpot					
03	– Plug, Connector, Crimp Type					
04	– Receptacle, Connector, Crimp Type					
05	– Hardware only 					
06	– Plug, Connector, Solderpot	} Plastic 				
07	– Receptacle, Connector, Solderpot					
08	– Plug, Connector, Crimp Type					
09	– Receptacle, Connector, Crimp Type					
INSERT ARRANGEMENT _____						
	<u>METAL SHELL</u>	<u>PLASTIC</u>				
A	– 9 Contact	9 Contact				
B	– 15 Contact	15 Contact				
C	– 21 Contact	21 Contact				
D	– 25 Contact	25 Contact				
E	– 31 Contact	31 Contact				
F	– 37 Contact	37 Contact				
G	– 51 Contact	51 Contact				
H	– 100 Contact					
WIRE TYPE _____						
No Number – For Solderpot						
01	– 18" long, #26 AWG per MIL-W-22759/11-26-9					
02	– 36" long, #26 AWG per MIL-W-22759/11-26-9					
03	– 18" long, #26 AWG per MIL-W-22759/11-26 Color Coded per MIL-STD-681, System 1					
04	– 36" long, #26 AWG per MIL-W-22759/11-26 Color Coded per MIL-STD-681, System 1					
05	– .5" long, #25 AWG, type S per QQ-W-343, Gold Plated					
06	– 1.0" long, #25 AWG, type S per QQ-W-343, Gold Plated					
07	– .5" long, #25 AWG, type S per QQ-W-343, Tin Plated					
08	– 1.0" long, #25 AWG, type S per QQ-W-343, Tin Plated					
09	– 18" long, #26 AWG per MIL-W-22759/33-26-9					
10	– 36" long, #26 AWG per MIL-W-22759/33-26-9					
11	– 18" long, #26 AWG per MIL-W-22759/33-26 Color Coded per MIL-STD-681, System 1					
12	– 36" long, #26 AWG per MIL-W-22759/33-26 Color Coded per MIL-STD-681, System 1					
13	– 72" long, #26 AWG per MIL-W-22759/11-26-9					
14	– 72" long, #26 AWG per MIL-W-22759/11-26 Color Coded per MIL-STD-681, System 1					
15	– 72" long, #26 AWG per MIL-W-22759/33-26-9					
16	– 72" long, #26 AWG per MIL-W-22759/33-26 Color Coded per MIL-STD-681, System 1					
SHELL FINISH _____						
No letter – for Plastic type connector						
C – Cadmium						
N – Electroless Nickel 						

NOTES:

(Specify when ordering, if necessary.)

-  - For every Mil-Spec P/N, ITT has two corresponding part numbers.
Example: ITT P/N's MDM01-A9 (Diallyl Phthalate Insulator)
MDMV01-A9 (Polyester Insulator)
- 2 - Tolerance on wire lengths – 18", 36" and 72" long.
+1.000"/–0.000"
.5" and 1.00" +.200"/–.000"
-  - For space application, connector shell finish must be "N" and wire must be per MIL-W-22759/33-26.
- 4 - Any deviations to these P/N's will result in assignment of a special P/N, consult factory.
-  - No size 100 in plastic type connector.
-  - Color coding in accordance with MIL-STD-681, System 1 except the appropriate color code is the individual contact cavity number minus 1 for contact positions.
-  - For mounting hardware to Military Specification (sizes 9 to 100) see page 238.

Qualification to slash sheets 10 thru 27 for the PCB connectors will be announced when completed.

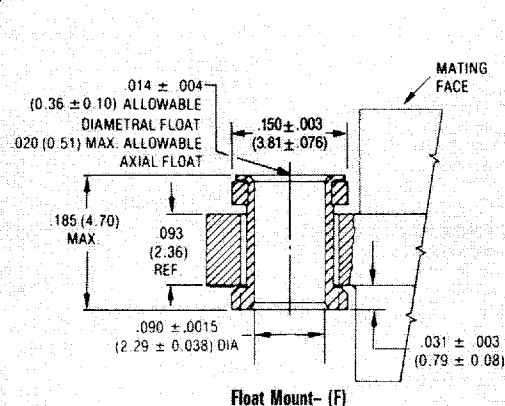
ITT Cannon

For technical assistance, price or delivery information, call your local technical sales office or distributor.

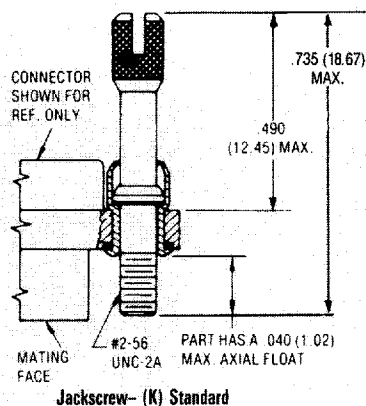
Microminiature
Connectors

Mounting Hardware Views (sizes 9 – 51)

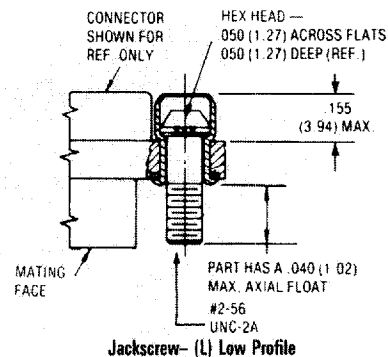
This hardware is factory installed.



Float Mount– (F)



Jackscrew– (K) Standard



Jackscrew– (L) Low Profile

Shown here is a cutaway view of the float mount for the MD connector. The basic shell dimensions are the same for the float mount and the screw mounting hole configurations. View shown is for standard float mount front panel mounting. Reverse mounting is available on request.

*NOTE: Torque values are as follows:
Low Profile Jackscrew (L)–2.5 in/lbs
Standard Jackscrew (K)–2.5 in/lbs

Repair kit available—consult factory.

Mounting Hardware to Military Specification (for sizes 9 – 100) per MIL-C-83513/5

This hardware supplied in kits unassembled (2 pieces of each item).

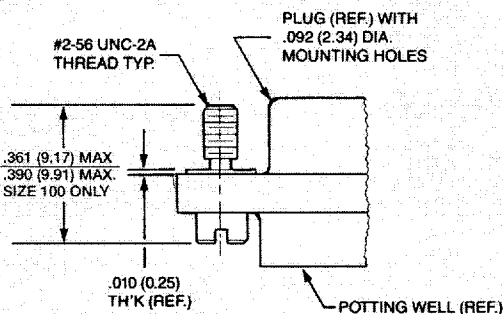
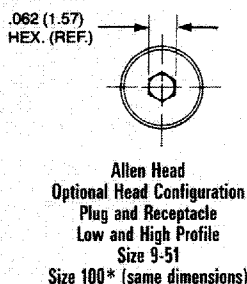


Figure 1. Jackscrew – Low profile
Slotted Head
Size 9-51
Size 100*



Allen Head
Optional Head Configuration
Plug and Receptacle
Low and High Profile
Size 9-51
Size 100* (same dimensions)

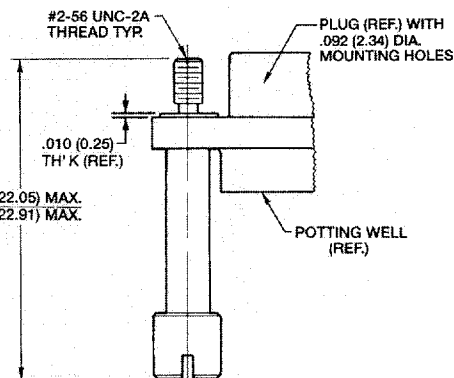


Figure 2. Jackscrew – High Profile
Slotted Head
Size 9-51
Size 100*

To order hardware kits separately, order either by M83513/5-** or by 320-950X-XXX.

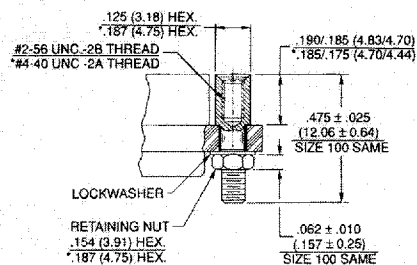
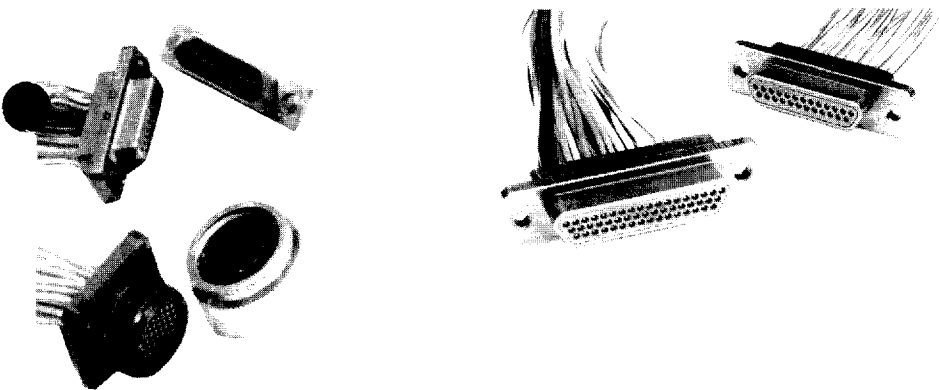


Figure 3. Jackpost Assembly
Size 9-51
Size 100*

Description	Size 9-51	**	Size 100*	**
	Mod Code Part Number		Mod Code Part Number	
Slotted Head Jackscrew Assy Low Profile (Figure 1)	M5 320-9508-025	05	M15 320-9508-021	15
Slotted Head Jackscrew Assy High Profile (Figure 2)	M6 320-9508-027	06	M16 320-9508-023	16
Allen Head Jackscrew Assy Low Profile (Figure 1)	M2 320-9508-026	02	M12 320-9508-022	12
Allen Head Jackscrew Assy High Profile (Figure 2)	M3 320-9508-028	03	M13 320-9508-024	13
Jackpost Assy (Figure 3)	M7 320-9505-033	07	M17 320-9505-030	17

*Size 100 requires B1 size mounting holes.

The Micro Line – .050" Contact Spacing



The Cannon MICRO Series established the standards for performance and reliability in microminiature interconnects. Exceptionally versatile, MICRO connectors are available in rectangular, circular, and strip configurations, with 3 amp MICROPIN™/MICROSOCKET™ contacts on .050(1.27) centers, or with special arrangements of power and coaxial contacts.

The heart of the Cannon MICROPIN/MICROSOCKET contact system is a multi-element Twist Pin Contact recessed within an insulating housing. The rugged, cylindrical sockets are mounted in the exposed half of the connector. When connector

halves are mated, the chamfered sockets are first aligned by the connector body, then guide the spiral MICROPIN contacts into proper and positive alignment, even under worst-case tolerance conditions. This is Cannon's POS-A-LINE connector design.

The multiple spring elements of the MICROPIN, then under compression, form a multi-point contact system of high mechanical and electrical integrity. Contacts will provide a high degree of reliability over hundreds of mating and unmating cycles, and have proven themselves in applications that range from commercial products to equipment that has been landed on the moon.

- Contact rating – 3 amps max.
- Contact centers – .050(1.27).
- Wire sizes – #24 thru #32 AWG, stranded or solid.
- Contact termination—multiple indent crimp.
- Contact retention – fixed via epoxy.
- Contact materials and finish – Copper alloy, gold-plated per MIL-G-45204, Type II, Grade C, Class 1 over copper flash.
- Mating/unmating force – 8 oz. per contact, max./0.5 oz. per contact min.

Microminiature
Connectors

Test Data

The table below summarizes the results of key tests performed in accordance with MIL-STD-1344, where applicable. Data is applicable to standard

connectors with standard terminations. Variations may affect this data, so please consult the factory for further information on your requirements.

Test	Method	Criteria of Acceptance
Dielectric Withstanding Voltage	Method 3001:	
	900 VAC at sea level	No breakdown
	300 VAC at 70,000' altitude	No breakdown
	Solder Pots and Shielded Cable 600 VAC at sea level	No breakdown
	150 VAC at 70,000' altitude	No breakdown
Insulation Resistance	Method 3003	5,000 megohms minimum
Thermal Shock	Method 1003, Condition A: -55°C to +125°C	No physical damage
Physical Shock	Method 2004, Condition E:	No physical damage
	50 G's, 3-axes, 6 millisecond duration sawtooth pulse	No loss of continuity > 1 µsec
Vibration	Method 2005, Condition IV: 20 G's, 10-2,000 Hz, 12 hrs.	No physical damage No loss of continuity > 1 µsec
Durability	500 cycles of mating and unmating, 500 CPH max.	No mechanical or electrical defects
Moisture Resistance	Method 1002, Type II omit steps 7a & 7b	Insulation resistance > 100 megohms
Salt Spray	Method 1001, Condition B: 48 hours	Shall be capable of mating and unmating, and meet contact resistance requirements
Contact Resistance (MIL-STD-202)	Method 307:	
	At 3 amps At 1 milliamp	8 milliohms maximum 10 milliohms maximum
Contact Retention	Per MIL-C-83513	5 lb. minimum axial load

Standard Wire Termination Codes

Cannon Modification Code (Not MS)

The following termination codes are listed for your information. For lengths not shown, consult factory for proper modification code. All wire lengths are minimum.

Harness Type (H)

#26 AWG per MIL-W-16878/4, 7/34 strand, type E Teflon, stranded.

Length	All Yellow	Color Coded*
3 (76.2)	H020	H027
6 (152.4)	H019	H016
8 (203.2)	H026	H034
10 (254.0)	H029	H025
12 (304.8)	H028	H002
18 (457.2)	H001	H003
20 (508.0)	H038	H023
24 (609.6)	H009	H004
30 (762.0)	H010	H005
36 (914.4)	H011	H006
48 (1219.2)	H013	H048
72 (1828.8)	H017	H046
120 (3048.0)	H042	H041

*Cavity #1 black

Solid Uninsulated Type (L)

#25 AWG gold plated copper.

Termination Code	Length
L61	.125 (3.18)
L56	.150 (3.81)
L57	.190 (4.83)
L39	.250 (6.35)
L58	.375 (9.52)
L1	.500 (12.70)
L14	.750 (19.05)
L2	1.000 (25.40)
L7	1.500 (38.10)
L6	2.000 (50.80)
L16	2.500 (63.50)
L10	3.000 (76.20)

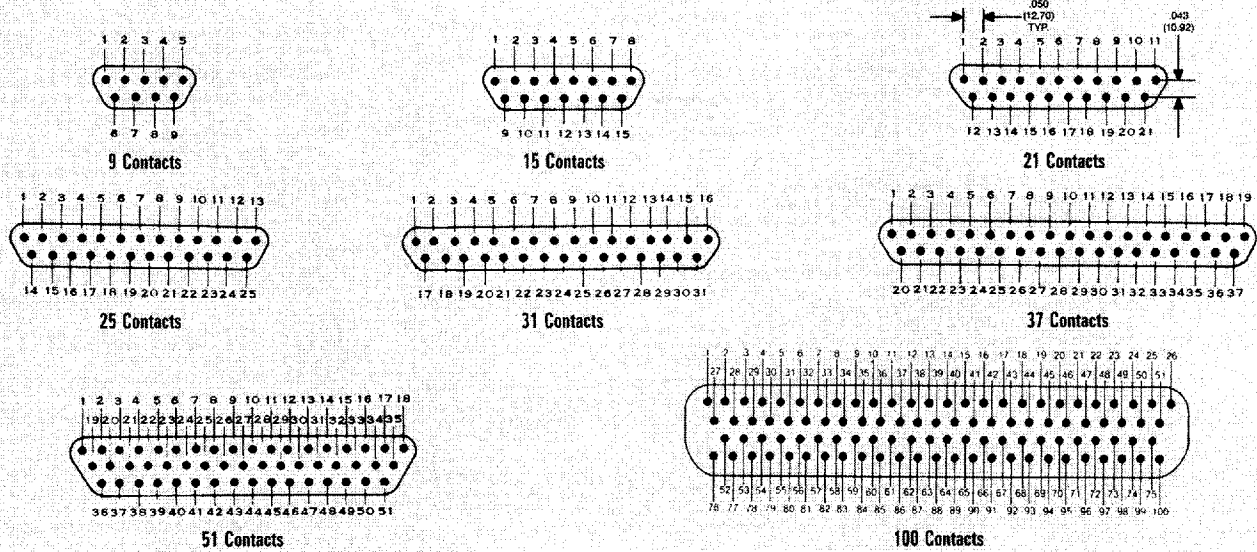
Millimeters are in parentheses.

Microminiature Connectors

Contact Arrangements

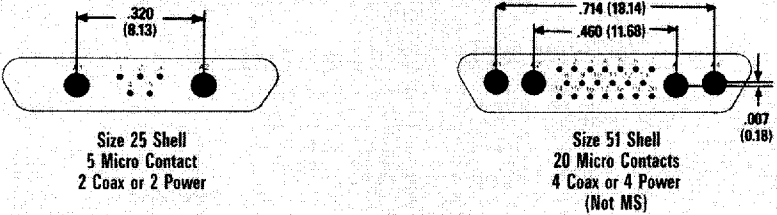
(Face View of Pin Insert – Use Reverse Order for Socket Side)

Standard



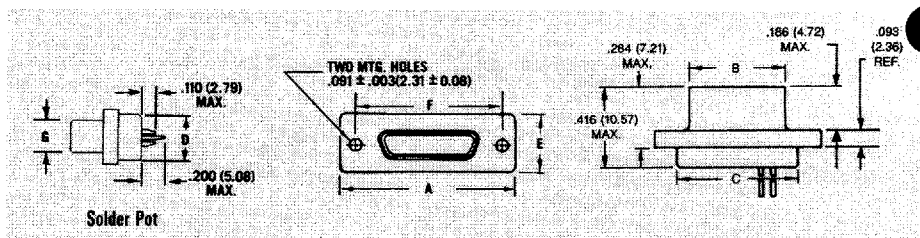
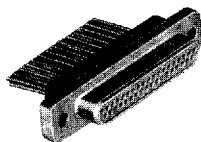
Contact identification numbers are for reference only and do not appear on insulator or connector body.

Coaxial

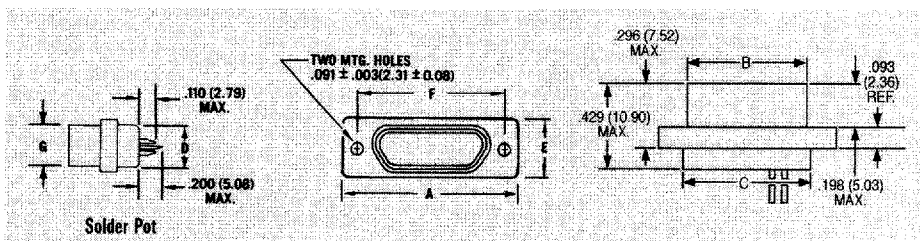
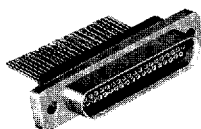


Shell Dimensions (Conforms to MIL-C-83513)

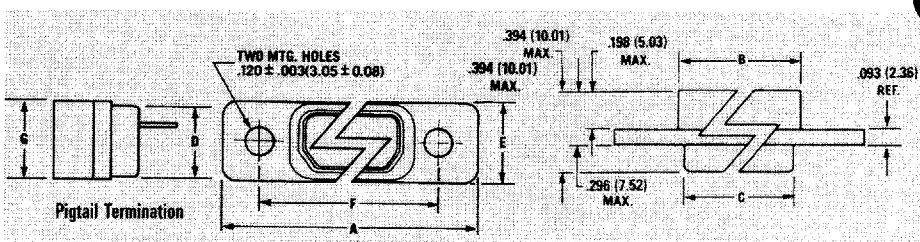
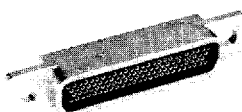
Plug



Receptacle



Receptacle (MDM-100 only)

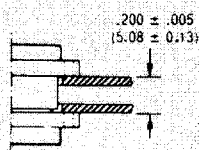
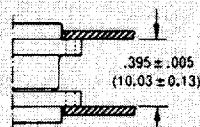
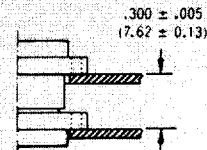


Part Number By Shell Size	A Max.	B Max.	C Max.	D Max.	E Max.	F ±.005 (0.13)	G Max.	Average Weights* oz. (gm.) ±5%
MDM-9P*	.785 (19.94)	.334 (8.48)	.400 (10.16)	.270 (6.86)	.308 (7.82)	.565 (14.35)	.185 (4.70)	.063 (1.79)
MDM-9S*	.785 (19.94)	.402 (10.21)	.400 (10.16)	.270 (6.86)	.308 (7.82)	.565 (14.35)	.253 (6.43)	.063 (1.79)
MDM-15P*	.935 (23.75)	.484 (12.29)	.550 (13.97)	.270 (6.86)	.308 (7.82)	.715 (18.16)	.185 (4.70)	.084 (2.39)
MDM-15S*	.935 (23.75)	.552 (13.97)	.550 (14.02)	.270 (6.86)	.308 (7.82)	.715 (18.16)	.253 (6.43)	.083 (2.37)
MDM-21P*	1.085 (27.56)	.634 (16.10)	.700 (17.78)	.270 (6.86)	.308 (7.82)	.865 (21.97)	.185 (4.70)	.105 (2.99)
MDM-21S*	1.085 (27.56)	.702 (17.83)	.700 (17.78)	.270 (6.86)	.308 (7.82)	.865 (21.97)	.253 (6.43)	.104 (2.97)
MDM-25P*	1.185 (30.10)	.734 (18.64)	.800 (20.32)	.270 (6.86)	.308 (7.82)	.965 (24.51)	.185 (4.70)	.119 (3.39)
MDM-25S*	1.185 (30.10)	.802 (20.37)	.800 (20.32)	.270 (6.86)	.308 (7.82)	.965 (24.51)	.253 (6.43)	.118 (3.36)
MDM-31P*	1.335 (33.91)	.884 (22.45)	.950 (24.13)	.270 (6.86)	.308 (7.83)	1.115 (28.32)	.185 (4.70)	.140 (3.99)
MDM-31S*	1.335 (33.91)	.952 (24.18)	.950 (24.13)	.270 (6.86)	.308 (7.83)	1.115 (28.32)	.253 (6.43)	.139 (3.96)
MDM-37P*	1.485 (37.72)	1.034 (26.26)	1.100 (27.94)	.270 (6.86)	.308 (7.82)	1.265 (32.13)	.185 (4.70)	.161 (4.59)
MDM-37S*	1.485 (37.72)	1.102 (27.99)	1.100 (27.94)	.270 (6.86)	.308 (7.82)	1.265 (32.13)	.253 (6.43)	.160 (4.56)
MDM-51P*	1.435 (36.45)	.984 (24.99)	1.050 (26.67)	.310 (7.87)	.351 (8.92)	1.215 (30.86)	.228 (5.79)	.193 (5.50)
MDM-51S*	1.435 (36.45)	1.052 (26.72)	1.050 (26.67)	.310 (7.87)	.351 (8.92)	1.215 (30.86)	.296 (7.52)	.188 (5.35)
MDM-100P*	2.170 (55.12)	1.384 (35.15)	1.442 (36.63)	.360 (9.14)	.394 (10.01)	1.800 (45.72)	.271 (6.88)	.500 (14.3)
MDM-100S*	2.170 (55.12)	1.508 (38.10)	1.442 (36.63)	.360 (9.14)	.394 (10.01)	1.800 (45.72)	.394 (10.01)	1.040 (29.5)

*Add lead type and length; see How To Order.

**Weight given is 1/2", uninsulated, solid, #25 AWG gold plated copper pigtails.

Panel Mounting Dimensions (Sizes 9 – 100)

Plug and Receptacle
Rear MountedPlug and Receptacle
Front MountedPlug Front Mounted
Receptacle Rear Mounted

Panel Cutouts

NOTE: See page 237 for rear panel mounting configuration.

Shell Sizes 9 thru 51

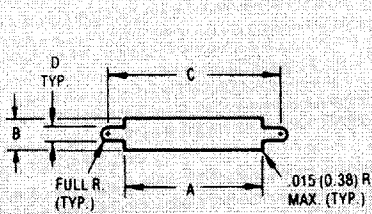


Figure 1
Front Mounting

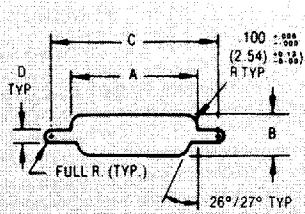


Figure 2
Rear Mounting

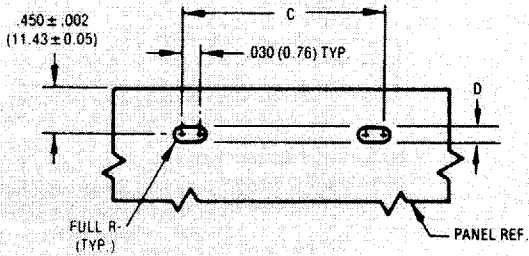


Figure 3
Edgeboard Mounting

Shell Size 100

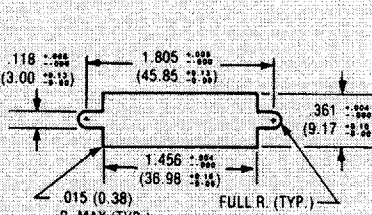


Figure 1
Front Mounting

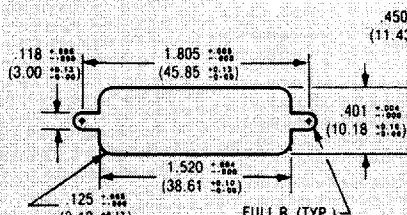


Figure 2
Rear Mounting

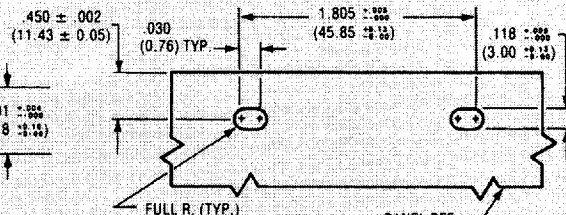


Figure 3
Edgeboard Mounting

For 9-51 Shell Sizes

NOTES:

- 1. Front mounting (figure 1) and rear mounting (figure 2) accommodates #2-56 screws.
- 2. Front mounting is preferred. However, when rear mounting is necessary, use figure 2 dimensions when jackscrews are used. See detail on page 24 when jackposts are used.
- 3. Edgeboard mounting bracket (figure 3) uses #2-56 screws. Dimension .450 ± .002 (11.43 ± 0.05) locates the MDM receptacle flush with the end of the board.

For 100 Shell Size

NOTES:

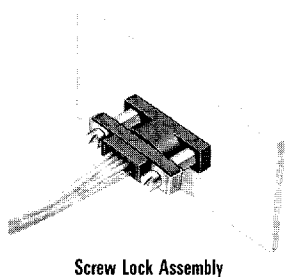
- 1. Front mounting (figure 1) and rear mounting (figure 2) accommodates #4-40 screws.
- 2. Edgeboard mounting bracket (figure 3) uses #4-40 screws. Dimension .450 ± .002 (11.43 ± 0.05) locates the MDM receptacle flush with the end of the board.
- 3. Front mounting is preferred. However, when rear mounting is necessary, use figure 2 dimensions.

Shell Size	Cutout Figure	A	B	C	D
		+ .004 (0.10) - .000 (0.00)	+ .004 (0.10) - .000 (0.00)	+ .005 (0.13) - .000 (0.00)	+ .005 (0.13) - .000 (0.00)
9	1	.408 (10.36)	.271 (6.88)	.570 (14.48)	.089 (2.26)
	2	.401 (10.19)	.252 (6.40)	.570 (14.48)	.089 (2.26)
	3	-	-	.570 (14.48)	.089 (2.26)
15	1	.558 (14.17)	.271 (6.88)	.720 (18.29)	.089 (2.26)
	2	.551 (14.00)	.252 (6.40)	.670 (18.29)	.089 (2.26)
	3	-	-	.720 (18.29)	.089 (2.26)
21	1	.708 (17.98)	.271 (6.88)	.870 (22.10)	.089 (2.26)
	2	.701 (17.81)	.252 (6.40)	.870 (22.10)	.089 (2.26)
	3	-	-	.870 (22.10)	.089 (2.26)
25	1	.808 (20.52)	.271 (6.88)	.970 (24.64)	.089 (2.26)
	2	.801 (20.34)	.252 (6.40)	.970 (24.64)	.089 (2.26)
	3	-	-	.970 (24.64)	.089 (2.26)
31	1	.958 (24.33)	.271 (6.88)	1.120 (28.45)	.089 (2.26)
	2	.951 (24.16)	.252 (6.40)	1.120 (28.45)	.089 (2.26)
	3	-	-	1.120 (28.45)	.089 (2.26)
37	1	1.108 (28.14)	.271 (6.88)	1.270 (32.26)	.089 (2.26)
	2	1.101 (27.97)	.252 (6.40)	1.270 (32.26)	.089 (2.26)
	3	-	-	1.270 (32.26)	.089 (2.26)
51	1	1.058 (26.87)	.315 (8.00)	1.220 (30.99)	.089 (2.26)
	2	1.051 (26.70)	.295 (7.49)	1.220 (30.99)	.089 (2.26)
	3	-	-	1.220 (30.99)	.089 (2.26)

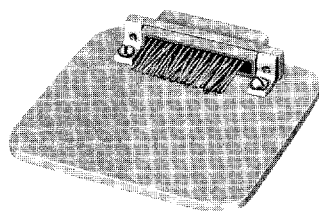
Microminiature
Connectors

Mounting Hardware Views (for sizes 9 – 51)

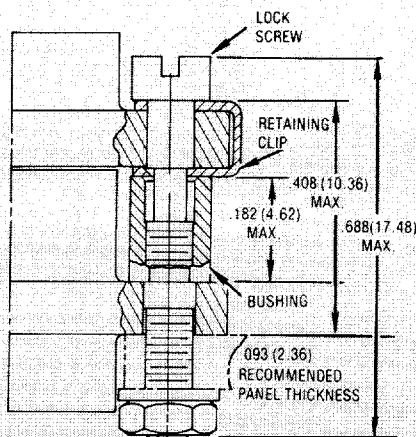
This hardware supplied unassembled.



Screw Lock Assembly

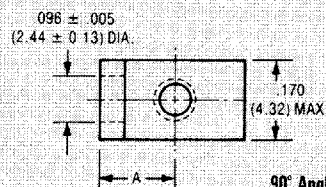


90° Angle Mounting Bracket

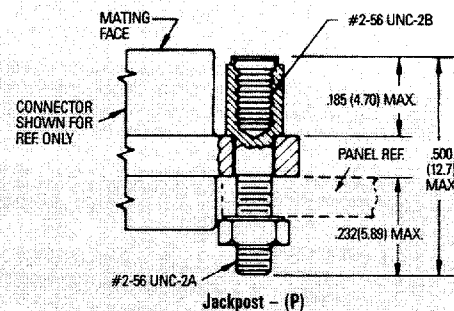


Screw Lock Assembly*

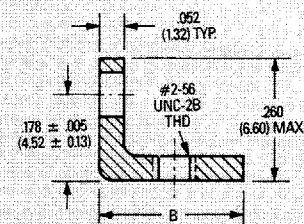
*NOTE: Torque value is 2.5 in./lbs max.



90° Angle Mounting Bracket



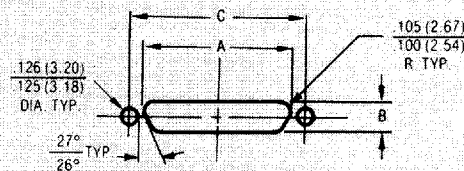
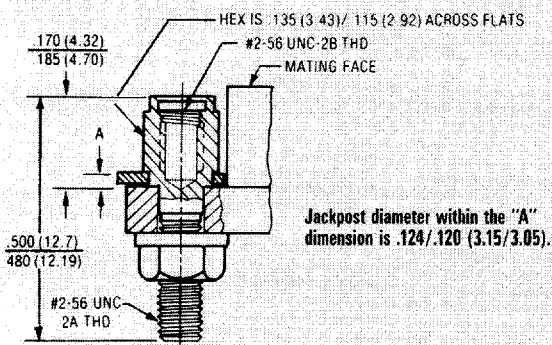
Jackpost - (P)



Description	Part Number	A ±.005 (±0.13)	B Max.
Screw Lock Assembly	322-9500-000	N/A	
Jackpost Kit	320-9505-000	N/A	
Mounting Bracket 90° MDM for 9 thru 37 Shell Sizes	015-9516-002	.147 (3.73)	.308 (7.82)
Mounting Bracket 90° MDM for 51 Shell Size	015-9516-003	.169 (4.29)	.350 (8.89)

NOTES: Screw lock assembly (322-9500-000) can be used for front mounting only. Jackpost kit (320-9505-000) consists of two assemblies, shipped unassembled.

Jackpost Bushing (for rear panel mounting-for sizes 9 – 51)



Plug and Receptacle Dimensions

Shell Size	A +.004 (0.10) -.000 (0.00)	B +.004 (0.10) -.000 (0.00)	C ±.005 (0.13)
9	.401 (10.19)	.252 (6.40)	.565 (14.35)
15	.551 (14.00)	.252 (6.40)	.715 (18.16)
21	.701 (17.81)	.252 (6.40)	.865 (21.97)
25	.801 (20.34)	.252 (6.40)	.965 (24.51)
31	.951 (24.16)	.252 (6.40)	1.115 (28.34)
37	1.101 (27.97)	.252 (6.40)	1.265 (32.13)
51	1.051 (26.70)	.295 (7.49)	1.215 (30.86)

Panel A Thickness	A +.005 (0.13) -.000 (0.00)	Jackpost Kit Number*
3/32 (2.4)	.087 (2.21)	320-9505-007
1/16 (1.6)	.056 (1.42)	320-9505-006
3/64 (1.2)	.042 (1.07)	320-9505-005
1/32 (0.8)	.025 (0.64)	320-9505-004

*A kit consists of 2 jackposts, 2 nuts, 2 washers.