

Micro-D Plastic Shell - .050" Contact Spacing

MD**

Microminiature Rectangular Connectors with MICRO-Pin Contacts on .050 (1.27) centers.

MICRO-D microminiature rack/panel connectors are used in applications requiring highly reliable, extremely small, lightweight connectors. These connectors are available in 2 insulator materials, 2 mounting variations, 7 shell sizes accommodating from 9 to 51 contacts and a special arrangement of 5 micro contacts and 2 coaxials. The insulator materials listed give the MICRO-D connector wide versatility in most applications required by industry.

ITT can also terminate a wide variety of stranded or solid wire directly to MICRO-D contacts, which is often desirable in high density arrangements.

MICRO-D connectors can also be custom harnessed to meet any customer requirement of single or multiple connectors. Pigtail lead and harness description must be given by the customer. A typical description would be: .5" #25 AWG, gold plated copper leads or 18" of #26 yellow, Teflon-insulated, Type E wire. Shown below are various methods of termination. Consult customer service for any routine or complex harnessing of MICRO-D connectors.

- Glass-filled diallyl phthalate thermoset material used in high temperature applications that is immune to cleaning solvents. It also has excellent dielectric properties. Temperature range: -65°F to +300°F (-55°C to +149°C).
- Glass-filled polyester thermoplastic that is not affected by cleaning solvents and exhibits excellent dielectric properties. Temperature range: -55°F to +257°F (-65°C to +125°C).

Specifications

MATERIALS AND FINISHES

Shell/Insulator (One Piece)	MD/MDB: Glass-filled thermoset plastic MDV/MDVB: Thermoplastic
Contacts	- Copper alloy, gold plate

ELECTRICAL DATA

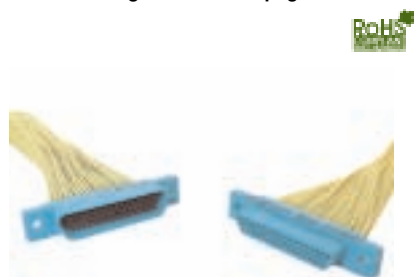
No of Contacts	- 9 to 51: (1 arrangement of 5 contacts and 2 coaxials - for screw mount only)
Coaxial Cable	- RG-178/U (Not available for MD clip mount)
Wire Size	- #24 thru #32 AWG
Contact Termination	- Multi-indent crimp

MECHANICAL FEATURES

Size or Length	- 7 sizes
Coupling	- Friction/jackscrews
Polarization	- Keystone-shaped shells
Contact Spacing Centers	-.050 (1.27mm)
Shell Styles	- Plug and receptacle
Consult factory for availability.	

How to Order

PCB ordering information - page 30



RoHS COMPLIANCE

SERIES-INSULATOR STYLE-MATERIAL

CONTACT SPACING

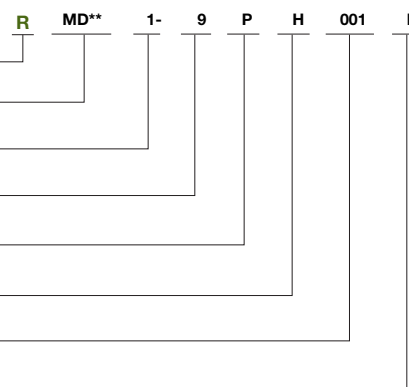
CONTACT ARRANGEMENT

CONTACT TYPE

TERMINATION TYPE

TERMINATION CODE

LOCKING HARDWARE



SERIES-INSULATOR STYLE-MATERIAL

MDB - Screw mounting-Diallyl phthalate
MDVB - Screw mounting-Polyester

CONTACT SPACING

1 - .050 (1.27) centers

CONTACT ARRANGEMENT

9-15-21-25-31-37-51. See page 9

CONTACT TYPE

P - Pin S - Socket

TERMINATION TYPE

H - Insulated solid or stranded wire
L - Uninsulated solid wire
S - Solder pot to accept #26 AWG max. harness wire.

TERMINATION CODE

See page 79 and 81 for additional codes

(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.

LOCKING HARDWARE (SCREW MOUNTING ONLY)

P - Jackpost
K - Jackscrew-standard
L - Jackscrew-low profile
F - Float mount
M - Military specification hardware, see page 13.

No designator - No hardware - standard mounting
.091 (2.31) hole diameter



Dimensions shown in inch (mm)
Specifications and dimensions subject to change

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Standard Wire Termination Codes

The following termination codes are listed for your information. For additional codes please refer to Appendix on page 79 and 81. **All wire lengths are minimum.**

Harness Type (H)

#26 AWG per MIL-W-16878 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

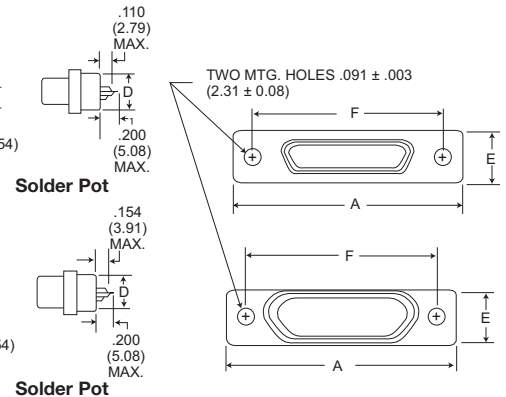
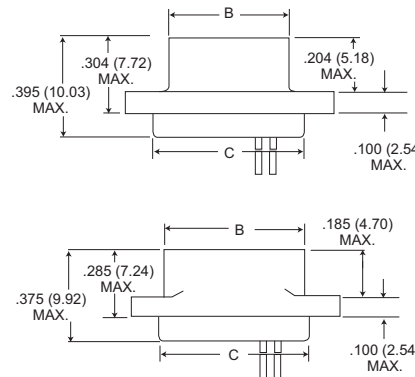
Termination Code	Length
L61	.125 (3.18)
L56	.150 (3.81)
L57	.190 (4.83)
L39	.250 (6.35)
L58	.375 (9.52)
L1	.500 (12.70)
L14	.750 (19.05)
L2	1.000 (25.40)
L7	1.500 (38.10)
L6	2.000 (50.80)
L16	2.500 (63.50)
L10	3.000 (76.20)

With Screw Mounting Holes (Conforms to MIL-DTL-83513)



MDB Glass-filled Diallyl Phthalate Plastic Insulator

MDVB Glass-filled Polyester Plastic Insulator



Part Number by Shell Size		A Max.	B Max.	C Max.	D Max.	E Max.	F ±.005	Avg. Weight*** ±5% (oz.) ±5% (gm.)
MDB1-9P**	MDVB1-9P**	.788 (20.02)	.292 (7.42)	.408 (10.36)	.173 (4.39)	.218 (5.54)	.565 (14.35)	.026 (0.73)
MDB1-9S**	MDVB1-9S**	.788 (20.02)	.380 (9.65)	.408 (10.36)	.173 (4.39)	.218 (5.54)	.565 (14.35)	.025 (0.70)
MDB1-15P**	MDVB1-15P**	.938 (23.82)	.442 (11.23)	.588 (14.17)	.173 (4.39)	.218 (5.54)	.715 (18.16)	.038 (1.10)
MDB1-15S**	MDVB1-15S**	.938 (23.82)	.530 (13.46)	.588 (14.17)	.173 (4.39)	.218 (5.54)	.715 (18.16)	.035 (1.00)
MDB1-21P**	MDVB1-21P**	1.088 (27.64)	.592 (15.04)	.708 (17.98)	.173 (4.39)	.218 (5.54)	.865 (21.97)	.053 (1.50)
MDB1-21S**	MDVB1-21S**	1.088 (27.64)	.680 (17.27)	.708 (17.98)	.173 (4.39)	.218 (5.54)	.865 (21.97)	.050 (1.40)
MDB1-25P**	MDVB1-25P**	1.188 (30.18)	.692 (17.58)	.808 (20.56)	.173 (4.39)	.218 (5.54)	.965 (24.51)	.063 (1.80)
MDB1-25S**	MDVB1-25S**	1.188 (30.18)	.780 (19.81)	.808 (20.56)	.173 (4.39)	.218 (5.54)	.965 (24.51)	.056 (1.60)
MDB1-31P**	MDVB1-31P**	1.338 (33.98)	.842 (21.39)	.958 (24.33)	.173 (4.39)	.218 (5.54)	1.115 (28.32)	.080 (2.30)
MDB1-31S**	MDVB1-31S**	1.338 (33.98)	.930 (23.62)	.958 (24.33)	.173 (4.39)	.218 (5.54)	1.115 (28.32)	.073 (2.10)
MDB1-37P**	MDVB1-37P**	1.488 (37.80)	.992 (25.20)	1.108 (28.14)	.173 (4.39)	.218 (5.54)	1.265 (32.13)	.086 (2.45)
MDB1-37S**	MDVB1-37S**	1.488 (37.80)	1.080 (27.43)	1.108 (28.14)	.173 (4.39)	.218 (5.54)	1.265 (32.13)	.076 (2.15)
MDB1-51P**	MDVB1-51P**	1.438 (36.52)	.942 (23.93)	1.058 (26.87)	.220 (5.59)	.260 (6.60)	1.215 (30.86)	.109 (3.10)
MDB1-51S**	MDVB1-51S**	1.438 (36.52)	1.030 (26.16)	1.058 (26.87)	.220 (5.59)	.260 (6.60)	1.215 (30.86)	.093 (2.64)

** Add lead type and length, see Part Number Explanation.

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

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

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MD*B-PCB connectors use standard MD*B all plastic shells and are designed for use with flex circuitry, printed circuit and multi-layer boards. They are easily mounted and soldered and provide high density/high reliability in board-to-board and board-to-cable applications. While being similar to the MDM-PCB connectors, the MD*B-PCB connectors are all plastic, extremely small, and lightweight yet rugged enough for use in the most demanding applications.

MD*B-PCB connectors are available in seven shell sizes with 9 to 51 contacts in the popular 90° narrow profile PCB termination, with a variety of tail lengths for varying board thickness.

Jackpost mounting for use with locking hardware is also available.

If the connectors shown in the catalog do not meet the requirements of your applications, a special shape, size or layout using the basic all plastic shell can be made available. For further technical and applications information, contact customer service.



How to Order



RoHS COMPLIANCE

SERIES

CONTACT ARRANGEMENT

CONTACT TYPE

TERMINATION TYPE

HARDWARE

TERMINATION TAIL LENGTH

MODIFICATION CODES
(Consult Factory)

CONNECTOR SERIES

CONNECTOR ARRANGEMENT

CONTACT TYPE

TERMINATION TYPE

HARDWARE

TERMINATION TAIL LENGTH CODES

R

MD*B

-

37

S

CBR

*

L39

-

MDVB, MDB

9, 15, 21, 25, 31, 51

S = Socket
P = Pin

CBR = 90° Narrow Profile PCB Terminations

P = Jackpost
M7 = Jackposts, M635135-07
No Letter = Less Hardware

NONE - .109 (2.77) ± 0.15 (0.38) Standard

L61 - .125 (3.18)

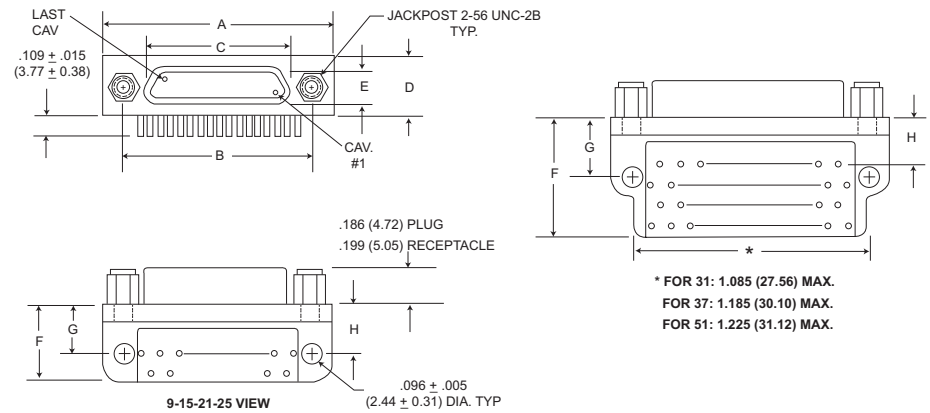
L66 - .150 (3.81)

L57 - .190 (4.83)

L39 - .250 (6.35)

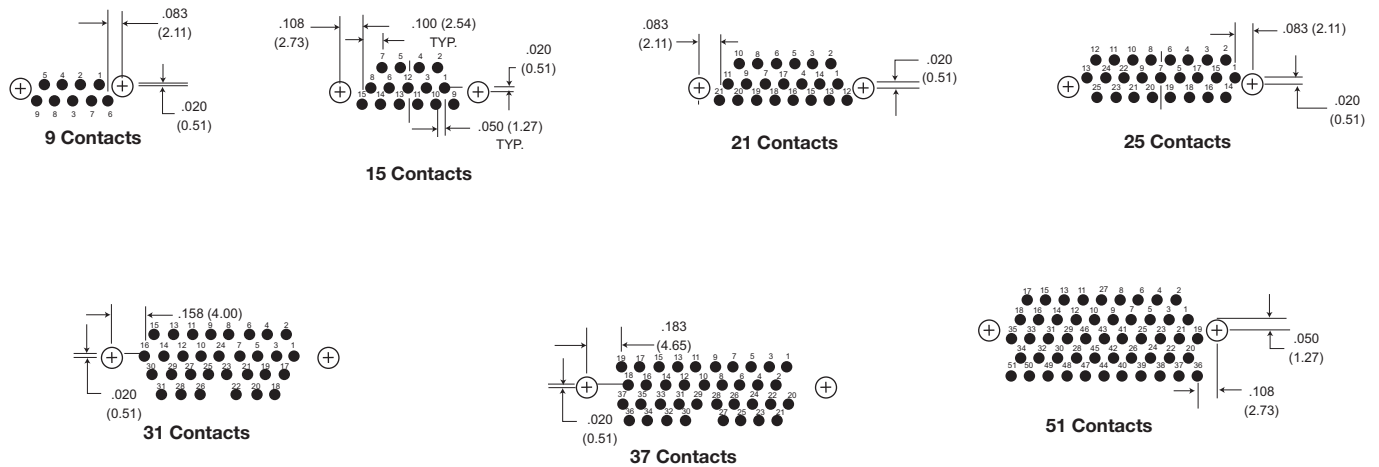
L58 - .375 (9.52)

CBR Series (90° Mounting Narrow Profile)



PCB Termination Arrangements (Viewed from bottom of connector, on PCB solder side.)

Identification number shown for plug connector, use reverse order for socket connector.



All Termination Configurations .100 (2.54) x .100 (2.54) Grid Pattern, Offset .050 (1.27)

Part Number By Shell Size	A Max.	B ± .005 (0.13)	C Max.	D Max.	E Max.	F Max.	G ± .010 (0.25)	H ± .010 (0.25)
MD*B-9PCBR*	.788 (20.01)	.565 (14.35)	.292 (7.42)	.218 (5.54)	.134 (3.40)	.420 (10.67)	.250 (6.35)	.230 (5.84)
MD*B-9SCBR*	.788 (20.01)	.565 (14.35)	.375 (9.52)	.218 (5.54)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.230 (5.84)
MD*B-15PCBR*	.938 (23.82)	.715 (18.16)	.442 (11.23)	.218 (5.54)	.134 (3.40)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-15SCBR*	.938 (23.82)	.715 (18.16)	.525 (13.34)	.218 (5.54)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-21PCBR*	1.088 (27.63)	.865 (21.97)	.592 (15.04)	.218 (5.54)	.134 (3.40)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-21SCBR*	1.088 (27.63)	.865 (21.97)	.675 (17.14)	.218 (5.54)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-25PCBR*	1.188 (30.17)	.965 (24.51)	.692 (17.58)	.218 (5.54)	.134 (3.40)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-25SCBR*	1.188 (30.17)	.965 (24.51)	.775 (19.68)	.218 (5.54)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-31PCBR*	1.338 (33.98)	1.115 (28.32)	.842 (21.39)	.218 (5.54)	.134 (3.40)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-31SCBR*	1.338 (33.98)	1.115 (28.32)	.925 (23.50)	.218 (5.54)	.218 (5.54)	.420 (10.67)	.250 (6.35)	.130 (3.30)
MD*B-37PCBR*	1.488 (37.79)	1.265 (32.13)	.994 (25.25)	.218 (5.54)	.134 (3.40)	.520 (13.21)	.250 (6.35)	.130 (3.30)
MD*B-37SCBR*	1.488 (37.79)	1.265 (32.13)	1.075 (27.30)	.218 (5.54)	.218 (5.54)	.520 (13.21)	.250 (6.35)	.130 (3.30)
MD*B-51PCBR*	1.438 (36.52)	1.215 (30.86)	.942 (23.93)	.258 (6.55)	.177 (4.50)	.550 (13.97)	.300 (7.62)	.150 (3.81)
MD*B-51SCBR*	1.438 (36.52)	1.215 (30.86)	1.026 (26.06)	.258 (6.55)	.258 (6.55)	.550 (13.97)	.300 (7.62)	.150 (3.81)

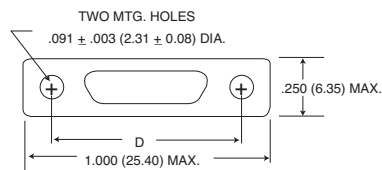
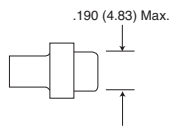
* For jackpost locking add letter "P" or "M7".

NOTE: Standard lead termination is #24 AWG, solid copper, solder or tin dipped.

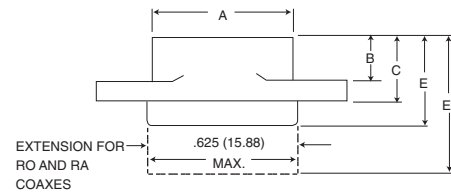
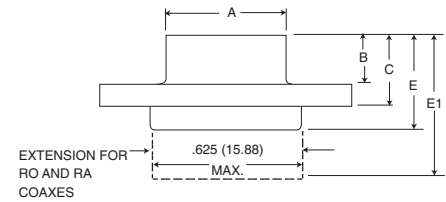
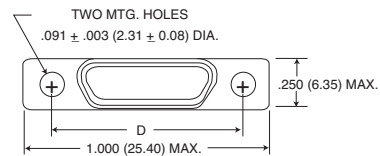
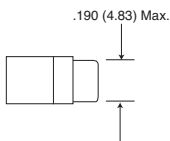
Dimension - MDB Coaxial Series

(See page 9 for layouts)

Plug



Receptacle



Part Number by Shell Size	A Max.	B Max.	C Max.	D ± .005 (0.13)	E Max.	E1 Max.	Avg. Weight** (oz) ± 5% (gm.) ± 5%
MDB1-7C2P*	.510 (12.95)	.204 (5.18)	.298 (7.57)	.782 (19.86)	.395 (10.03)	.510 (12.95)	.290 (8.30)
MDB1-7C2S*	.602 (15.29)	.185 (4.70)	.279 (7.09)	.782 (19.86)	.375 (9.52)	.540 (13.72)	.273 (7.80)

* Add lead type and length, see Part Number Explanation.

** Weight given is with 7 inch (177.80) insulated leads, #26 AWG silver plated copper pigtailed and RG178/U coaxials.

Mounting Hardware Views (Sizes 9-51)

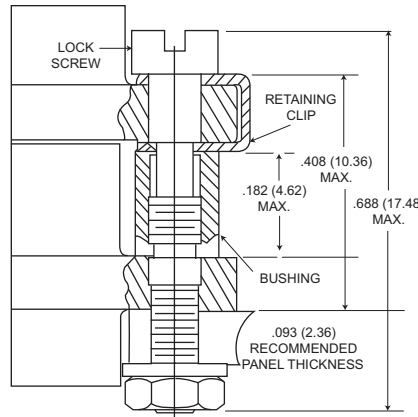
This hardware supplied unassembled.



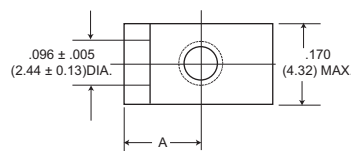
Screw Lock Assembly



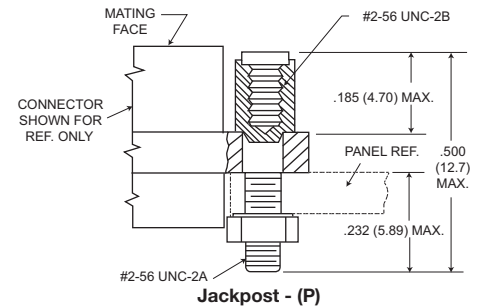
90° Angle Mounting Bracket



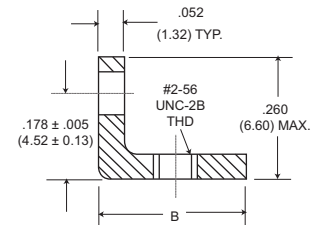
Screw Lock Assembly*



90° Angle Mounting Bracket



Jackpost - (P)

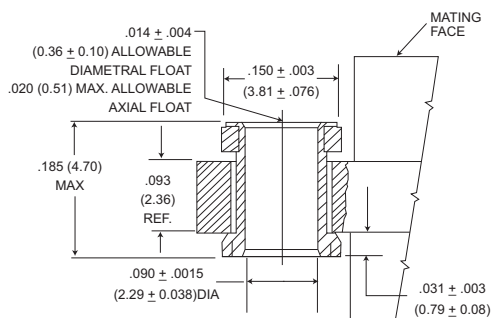


*NOTE: Torque value is 4.0 in/lbs max.

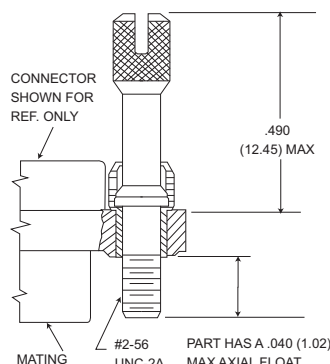
Description	Part Number	A ± .005 (0.13)	B Max.
Screw Lock Assembly	322-9500-000		
Jackpost Kit	320-9505-000		
Mounting Bracket, 90° Angle- MD*1 for 9 thru 37 Shell Sizes	015-9516-000	.100 (2.54)	.215 (5.46)
MD*1 for 51 Shell Size	015-9516-000	.122 (3.10)	.257 (6.53)

NOTES: Screw lock assembly (322-9500-000) can be used for front front mounting. Jackpost kit (320-9505-000) consists of 2 assemblies, shipped unassembled.

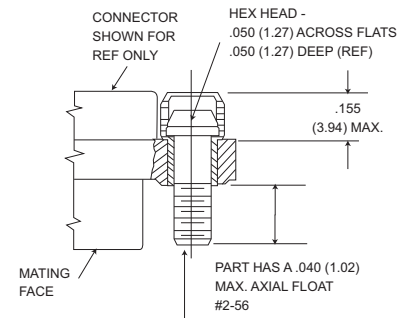
This hardware is factory installed.



Float Mount - (F)



Jackscrew - (K) Standard



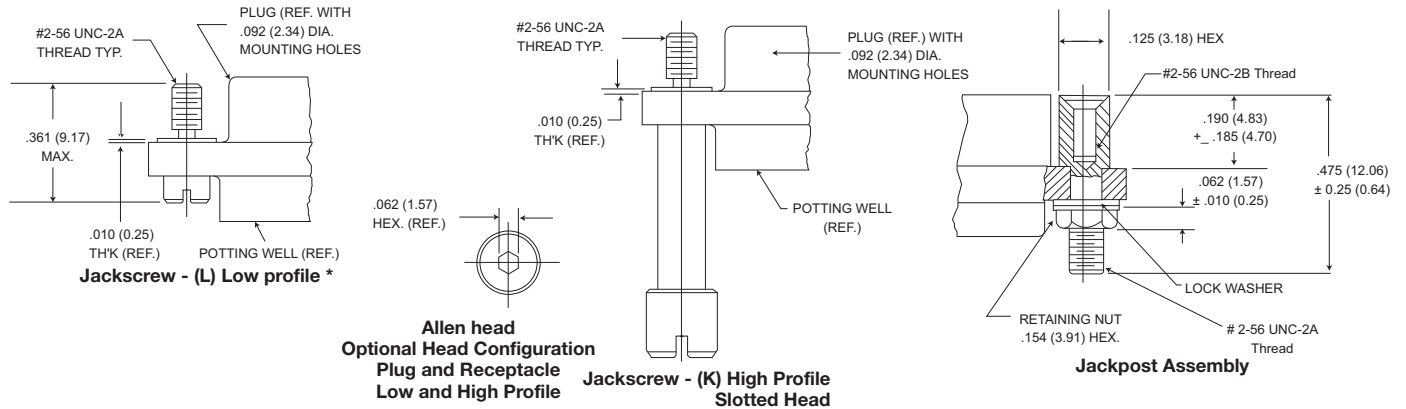
Jackscrew - (L) Low Profile

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

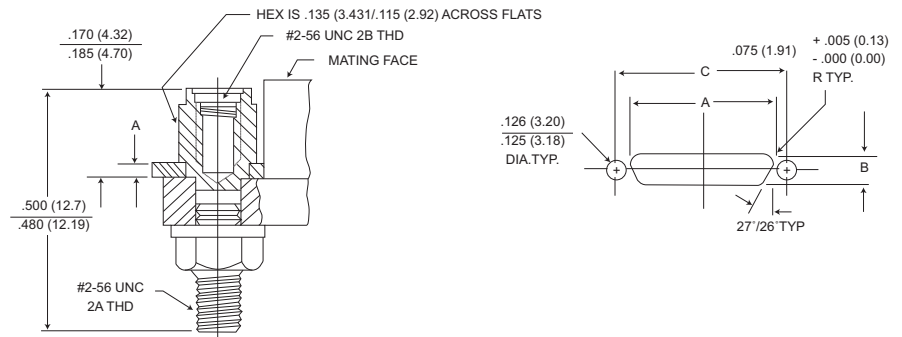
Mounting Hardware to Military Specification (Sizes 9 - 51) PER MIL-DTL-83513/5

This hardware supplied unassembled.



Description	M83513/5	Mode Code	Part Number
Slotted Head Jackscrew Assy Low Profile	-05	M5	320-9508-025
Slotted Head Jackscrew Assy High Profile	-06	M6	320-9508-027
Allen Head Jackscrew Assy Low Profile	-02	M2	320-9508-026
Allen Head Jackscrew Assy High Profile	-03	M3	320-9508-028
Jackpost Assy	-07	M7	320-9505-033

Jackpost Bushing (For Rear Panel Mounting)



Panel Thickness	A Dim.	Jackpost Kit Number*
3/32 (2.4)	.092 / .087 (2.34 / 2.21)	320-9505-007
1/16 (1.6)	.061 / .056 (2.34 / 1.42)	320-9505-006
3/64 (1.2)	.047 / .042 (1.19 / 1.07)	320-9505-005
1/32 (0.8)	.030 / .025 (0.76 / 0.64)	320-9505-004

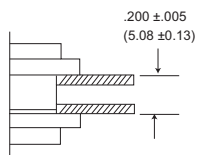
*2 Jackposts, 2 nuts, 2 washers.

NOTE: Torque value for jackpost 2.5 in/lbs

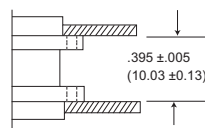
Plug and Receptacle Dimensions

Shell Size	A +.004 (0.10) -.000 (0.00)	B +.004 (0.10) -.000 (0.00)	C ±.005 (0.13)
9	.379 (9.63)	.219 (5.56)	.565 (14.35)
15	.529 (13.44)	.219 (5.56)	.715 (18.16)
21	.679 (17.25)	.219 (5.56)	.865 (21.97)
25	.779 (19.79)	.219 (5.56)	.965 (24.51)
31	.929 (23.60)	.219 (5.56)	1.115 (28.32)
37	1.079 (27.41)	.219 (5.56)	1.265 (32.13)
51	1.029 (26.14)	.261 (6.63)	1.215 (30.86)

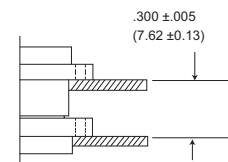
Panel Mounting Dimensions



Plug and Receptacle
Rear Mounted



Plug and Receptacle
Front Mounted



Plug Front Mounted
Receptacle Rear Mounted

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

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Panel Cutouts

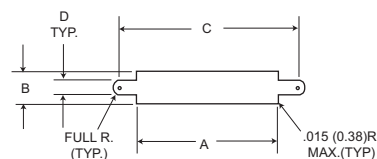


Figure 1
Front Mounting

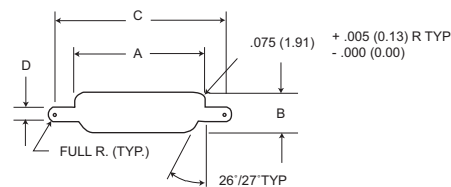


Figure 2
Rear Mounting

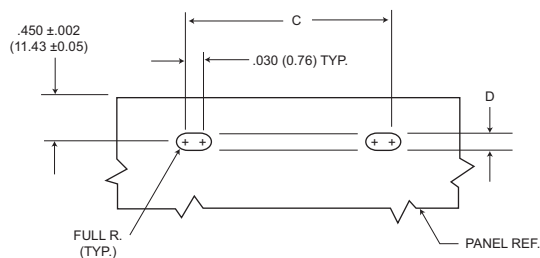


Figure 3
Edgeboard Mounting

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	.409 (10.39)	.172 (4.37)	.570 (14.48)	.089 (2.26)
	2	.379 (9.63)	.219 (5.56)	.570 (14.48)	.089 (2.26)
	3	-	-	.570 (14.48)	.089 (2.26)
15	1	.559 (14.20)	.172 (4.37)	.720 (18.29)	.089 (2.26)
	2	.529 (13.44)	.219 (5.56)	.720 (18.29)	.089 (2.26)
	3	-	-	.720 (18.29)	.089 (2.26)
21	1	.709 (18.00)	.172 (4.37)	.870 (22.10)	.089 (2.26)
	2	.679 (17.25)	.219 (5.56)	.870 (22.10)	.089 (2.26)
	3	-	-	.870 (22.10)	.089 (2.26)
25	1	.809 (20.55)	.172 (4.37)	.970 (24.64)	.089 (2.26)
	2	.779 (19.79)	.219 (5.56)	.970 (24.64)	.089 (2.26)
	3	-	-	.970 (24.64)	.089 (2.26)
31	1	.959 (24.36)	.172 (4.37)	1.120 (28.45)	.089 (2.26)
	2	.929 (23.60)	.219 (5.56)	1.120 (28.45)	.089 (2.26)
	3	-	-	1.120 (28.45)	.089 (2.26)
37	1	1.109 (28.17)	.172 (4.37)	1.270 (32.26)	.089 (2.26)
	2	1.079 (27.41)	.219 (5.56)	1.270 (32.26)	.089 (2.26)
	3	-	-	1.270 (32.26)	.089 (2.26)
51	1	1.059 (26.90)	.215 (5.46)	1.220 (30.99)	.089 (2.26)
	2	1.029 (26.14)	.261 (6.63)	1.220 (30.99)	.089 (2.26)
	3	-	-	1.220 (30.99)	.089 (2.26)

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 detail on previous page.
3. Edgeboard mounting bracket (figure 3) uses #2-56 screws. Dimension .450 ± .002 (11.43 ± 0.05) locates the MD receptacle flush with the end of the board.

How to Order

PCB ordering information - page 30



RoHS COMPLIANCE	R	MD	1-	9	P	H	001	P
SERIES-INSULATOR STYLE-MATERIAL								
CONTACT SPACING								
CONTACT ARRANGEMENT								
CONTACT TYPE								
TERMINATION TYPE								
TERMINATION CODE								
LOCKING HARDWARE								

SERIES-INSULATOR STYLE-MATERIAL

MD - Clip mounting -Diallyl phthalate
MDV - Clip mounting-Polyester

CONTACT SPACING

1 - .050 (1.27) centers

CONTACT ARRANGEMENT

9-15-21-25-31*-37-51. See page 7

CONTACT TYPE

P - Pin S - Socket

TERMINATION TYPE

H - Insulated solid or stranded wire
L - Uninsulated solid wire
S - Solder pot to accept #26 AWG max. harness wire.

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.
No designator - No hardware - standard mounting
.091 (2.31) hole diameter

* Not available in clip mounting.

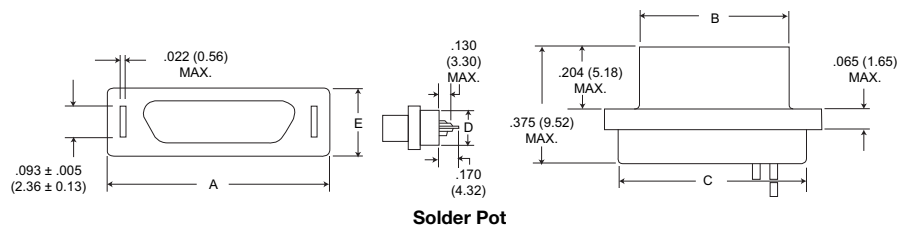
** See page 79 and 81 for additional codes.

With Clip Mounting Slots

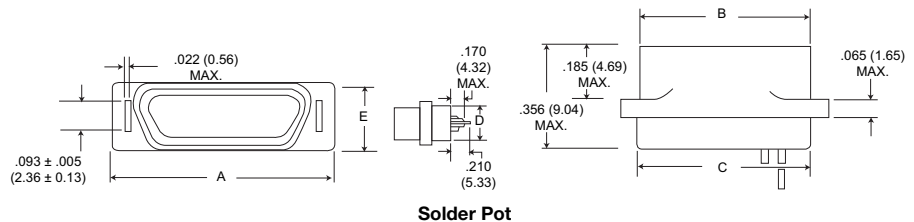
Plug

MD Glass-filled Diallyl Phthalate Plastic Insulator

MDV Glass-filled Polyester Plastic Insulator



Receptacle



Part Number by Shell Size		A Max.	B Max.	C Max.	D Max.	E Max.	Avg. Weight*** ±5% (oz.)/±5% (gm.)
MD1-9P**	MDV1-9-P**	.512 (13.00)	.292 (7.42)	.405 (10.29)	.170 (4.32)	.215 (5.46)	.026 (0.73)
MD1-9S**	MDV1-9S**	.512 (13.00)	.376 (9.55)	.405 (10.29)	.170 (4.32)	.215 (5.46)	.026 (0.73)
MD1-15P**	MDV1-15P**	.662 (16.81)	.442 (11.23)	.555 (14.10)	.170 (4.32)	.215 (5.46)	.038 (1.10)
MD1-15S**	MDV1-15S**	.662 (16.81)	.526 (13.36)	.555 (14.10)	.170 (4.32)	.215 (5.46)	.035 (1.00)
MD1-21P**	MDV1-21P**	.812 (20.62)	.592 (15.04)	.705 (17.91)	.170 (4.32)	.215 (5.46)	.053 (1.50)
MD1-21S**	MDV1-21S**	.812 (20.62)	.676 (17.17)	.705 (17.91)	.170 (4.32)	.215 (5.46)	.050 (1.40)
MD1-25P**	MDV1-25P**	.912 (23.16)	.692 (17.58)	.805 (20.45)	.170 (4.32)	.215 (5.46)	.063 (1.80)
MD1-25S**	MDV1-25S**	.912 (23.16)	.776 (19.71)	.805 (20.45)	.170 (4.32)	.215 (5.46)	.056 (1.60)
MD1-37P**	MDV1-37P**	1.212 (30.78)	.992 (25.20)	1.105 (28.07)	.170 (4.32)	.215 (5.46)	.086 (2.45)
MD1-37S**	MDV1-37S**	1.212 (30.78)	1.076 (27.33)	1.105 (28.07)	.170 (4.32)	.215 (5.46)	.076 (2.15)
MD1-51P**	MDV1-51P**	1.162 (29.51)	.942 (23.93)	1.055 (26.80)	.213 (5.41)	.258 (6.55)	.109 (3.10)
MD1-51S**	MDV1-51S**	1.162 (29.51)	1.026 (26.06)	1.055 (26.80)	.213 (5.41)	.258 (6.55)	.093 (2.65)

** Add lead type and length, see Part Number Explanation. *** Weight given is with 1/2", uninsulated solid #25 AWG gold plated copper pigtailed.

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

www.ittcannon.com



Panel Mounting Hardware

Clip Mounting

Illustrated is the recommended method of front mounting with metal panel mounting keys. Panel mounting keys are available with or without coupling retention clips.

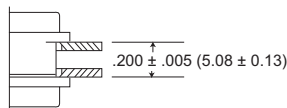
For front mounting, place the rear of the connector thru the panel cutout. With the mounting flange against the panel, fully insert the panel mounting keys thru the slots in the flange and thru the panel cutout. Retaining the keys in this position, bend them outward against the rear of the panel. When mating a front mounted connector with an unmounted connector, a coupling retention clip assembly may be used to securely lock the two together. Mounting screw brackets are available and may be used instead of the panel mounting keys.

Description	Part Number
Panel Mounting Key	201-9100-000
Mounting Key and Coupling Clip Assembly	294-9100-000
Mounting Screw Bracket	015-9100-000
* Edgeboard Mounting Bracket	015-5009-000
** Edgeboard Mounting Bracket and Coupling Clip Assembly	MD51428-1

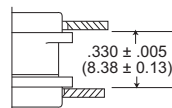
* Must be ordered separately; specify left and right hand for complete assembly.

** Must be ordered separately; assembly contains set of left and right hand types.

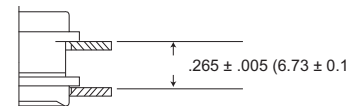
Dimensions (Clip Mounting Only)



Plug and Receptacle
Rear Mounted



Plug and Receptacle
Front Mounted



Plug Front Mounted
Receptacle Rear Mounted

Panel Cutouts

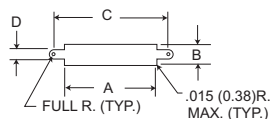


Figure 1

Front Mounting

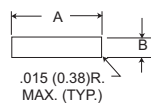


Figure 2

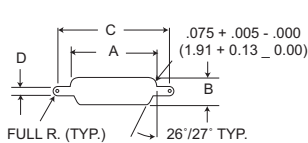


Figure 3
Rear Mounting

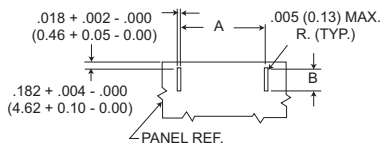


Figure 4
Edgeboard Mounting

1. A panel thickness of 1/8" (3.17mm) maximum is recommended for ease of tab bending when a panel mounting key & clip assembly or edgeboard mounting brackets are used.
2. Front mounting is preferred. However, when rear mounting is necessary, use figure 3 for dimensions.
3. Figure 4 is for edge board mounting bracket or edgeboard clip assembly. The .184 + .002 (2.67 + .05) dimension locates the MD socket insulator flush with the end of the board.
4. Screw brackets (015-9100-000) will accommodate #2-56 screws.
5. Front mounting (Figure 1) and rear mounting (Figure 3) accommodate #2-56 screws.

Shell Size	Cutout Figure	A + .004 (0.10) - .000 (0.00)	B + .004 (0.10) - .000 (0.00)	C + .004 (0.10) - .000 (0.00)	D + .005 (0.13) - .000 (0.00)
9	1	.408 (10.36)	.172 (4.37)	.650 (16.51)	.089 (2.26)
	2	.408 (10.36)	.172 (4.37)	-	-
	3	.378 (9.60)	.217 (5.51)	.650 (16.51)	.089 (2.26)
	4	.400 (10.16)	.091 (2.31)	-	-
15	1	.588 (14.94)	.172 (4.37)	.795 (20.19)	.089 (2.26)
	2	.588 (14.94)	.172 (4.37)	-	-
	3	.528 (13.28)	.217 (5.51)	.795 (20.19)	.089 (2.26)
	4	.550 (13.97)	.091 (2.31)	-	-
21	1	.738 (18.75)	.172 (4.37)	.945 (24.00)	.089 (2.26)
	2	.738 (18.75)	.172 (4.37)	-	-
	3	.678 (17.27)	.217 (5.51)	.945 (24.00)	.089 (2.26)
	4	.700 (17.78)	.091 (2.31)	-	-
25	1	.838 (21.29)	.172 (4.37)	1.045 (26.54)	.089 (2.26)
	2	.838 (21.29)	.172 (4.37)	-	-
	3	.778 (19.76)	.217 (5.51)	1.045 (26.54)	.089 (2.26)
	4	.800 (20.32)	.091 (2.31)	-	-
37	1	1.138 (28.91)	.172 (4.37)	1.345 (34.16)	.089 (2.26)
	2	1.138 (28.91)	.172 (4.37)	-	-
	3	1.078 (27.38)	.217 (5.51)	1.345 (34.16)	.089 (2.26)
	4	1.100 (27.94)	.091 (2.31)	-	-
51	1	1.088 (27.64)	.215 (5.46)	1.295 (32.89)	.089 (2.26)
	2	1.088 (27.64)	.215 (5.46)	-	-
	3	1.028 (26.11)	.260 (6.60)	1.295 (32.89)	.089 (2.26)
	4	1.050 (26.67)	.091 (2.31)	-	-