

# Micro-D PCB - .050" Contact Spacing

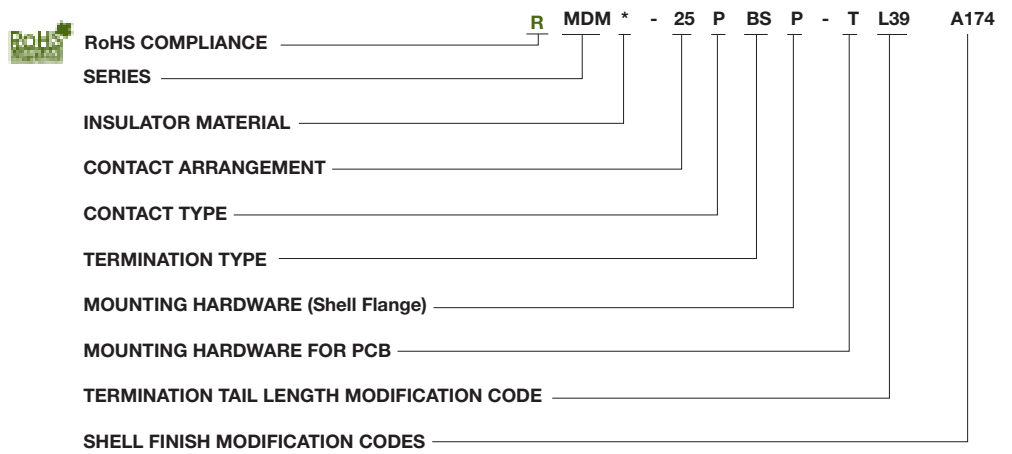
# MDM-PCB



MDM-PCB connectors are designed for use with flex circuitry, flat cable and printed circuit boards or multi-layer boards. They use the standard MDM metal shell and provide high density and high reliability in board-to-board, board-to-cable and cable-to-cable applications.

MDM-PCB connectors are available in 8 shell sizes with 9 to 100 contacts. Terminations may be straight (BS) or at 90° right angle (BR, CBR) board thickness. Jackpost mounting for use with locking hardware is also available.

## How to Order - MDM-PCB Series



### SERIES

MDM - Micro "D" Metal Shell

### INSULATOR MATERIAL

Liquid Crystal Polymer (LCP)

### CONTACT ARRANGEMENT

9, 15, 21, 25, 31, 37, 51, and 100

### CONTACT TYPE

P - Pin (Plug)  
S - Socket (Receptacle)

NOTE: Back molding material –  
Epoxy Hysol #MG40FS

### TERMINATION TYPE

BS - Straight PCB Termination  
BR - Right Angle PCB Termination  
CBR - Right Angle Narrow Profile PCB Terminations

### MOUNTING HARDWARE (Shell Flange)

P - Jackposts  
M7 - Jackposts  
M83513/5-07 (Sizes 9-51)  
M17 - Jackposts  
M83513/5-17 (Size 100)  
No letter - none

### MOUNTING HARDWARE FOR PCB

T - Threaded Insert  
#2-56 Thd for Shell Sizes 9 thru 51  
#4-40 Thd for Shell Size 100  
No letter - none

### TERMINATION TAIL LENGTH MODIFICATION CODE

None - .109 (2.77) ±.015 (0.38) Standard  
L61 - .125 (3.18)  
L56 - .150 (3.81)  
L57 - .190 (4.83)  
L39 - .250 (6.35)  
L58 - .375 (9.52)

### SHELL FINISH MODIFICATION CODES

None - Yellow Chromate/Cadmium over Nickel  
A174 - Electroless Nickel  
A172 - Gold over Nickel  
A141 - Iridite/Alodine  
A30 - Black Anodize  
(For special modification codes, consult customer service.)



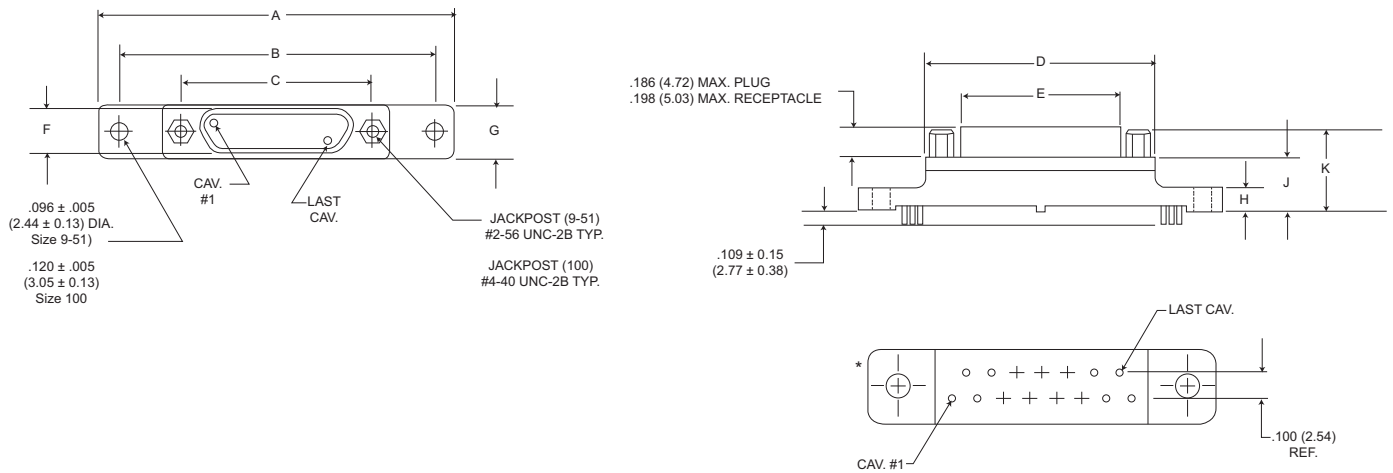
Dimensions shown in inch (mm)  
Specifications and dimensions subject to change

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# MDM-PCB

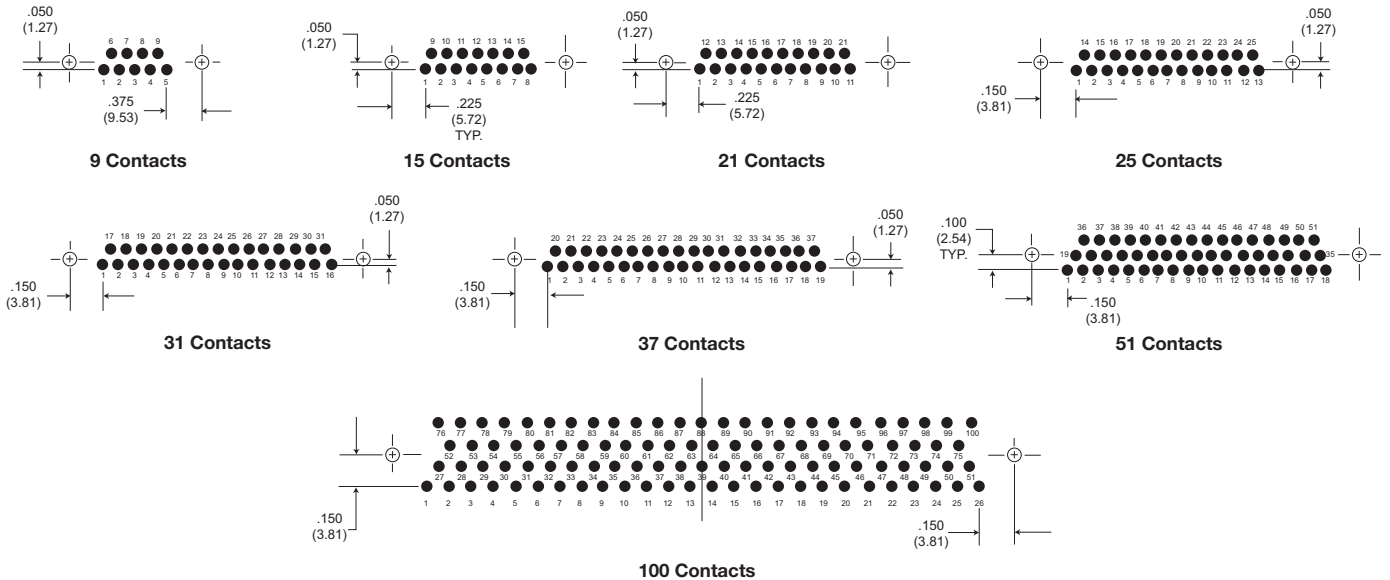
## BS (Board Straight) Series



### PCB Termination Arrangements\* (Viewed from PCB solder side)

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

NOTE: Dimensions shown are for reference only-consult factory for final design dimensions.



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

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

| Part Number<br>By Shell Size | A<br>Max.     | B<br>±.007 (.18) | C<br>±.005 (.13) | D<br>Max.     | E<br>Max.     | F<br>Max.    | G<br>Max.    | H<br>Max.   | J<br>Max.    | K<br>Max.    |
|------------------------------|---------------|------------------|------------------|---------------|---------------|--------------|--------------|-------------|--------------|--------------|
| MDM-9PBS*                    | 1.390 (35.31) | 1.150 (29.21)    | .565 (14.35)     | .785 (19.94)  | .334 (8.48)   | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-9SBS*                    | 1.390 (35.31) | 1.150 (29.21)    | .565 (14.35)     | .785 (19.94)  | .402 (10.21)  | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-15PBS*                   | 1.390 (35.31) | 1.150 (29.21)    | .715 (18.16)     | .935 (23.75)  | .484 (12.29)  | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-15SBS*                   | 1.390 (35.31) | 1.150 (29.21)    | .715 (18.16)     | .935 (23.75)  | .552 (13.97)  | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-21PBS*                   | 1.690 (43.93) | 1.450 (36.83)    | .865 (21.97)     | 1.085 (27.56) | .634 (16.10)  | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-21SBS*                   | 1.690 (43.93) | 1.450 (36.83)    | .865 (21.97)     | 1.085 (27.56) | .702 (17.83)  | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-25PBS                    | 1.740 (44.20) | 1.500 (38.10)    | .965 (24.51)     | 1.185 (30.10) | .734 (18.64)  | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-25SBS*                   | 1.740 (44.20) | 1.500 (38.10)    | .965 (24.51)     | 1.185 (30.10) | .802 (20.37)  | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-31PBS*                   | 2.040 (51.82) | 1.800 (45.72)    | 1.115 (28.32)    | 1.335 (33.91) | .884 (22.45)  | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-31SBS*                   | 2.040 (51.82) | 1.800 (45.72)    | 1.115 (28.32)    | 1.335 (33.91) | .952 (24.18)  | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-37PBS*                   | 2.340 (59.44) | 2.100 (53.34)    | 1.265 (32.13)    | 1.485 (37.72) | 1.034 (26.26) | .185 (4.70)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-37SBS*                   | 2.340 (59.44) | 2.100 (53.34)    | 1.265 (32.13)    | 1.485 (37.72) | 1.102 (27.99) | .253 (6.43)  | .308 (7.82)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-51PBS*                   | 2.270 (67.66) | 2.000 (50.80)    | 1.215 (30.86)    | 1.435 (36.45) | .984 (24.99)  | .228 (5.79)  | .351 (8.92)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-51SBS*                   | 2.270 (67.66) | 2.000 (50.80)    | 1.215 (30.86)    | 1.435 (36.45) | 1.052 (26.72) | .296 (7.52)  | .351 (8.92)  | .165 (4.19) | .355 (9.02)  | .555 (14.10) |
| MDM-100PBS*                  | 3.070 (77.98) | 2.800 (71.12)    | 1.800 (45.72)    | 2.175 (55.24) | 1.384 (35.15) | .271 (6.88)  | .460 (11.68) | .303 (7.70) | .550 (12.70) | .686 (17.42) |
| MDM-100SBS*                  | 3.070 (77.98) | 2.800 (71.12)    | 1.800 (45.72)    | 2.175 (55.24) | 1.508 (38.30) | .394 (10.01) | .460 (11.68) | .303 (7.70) | .550 (12.70) | .686 (17.75) |

\*For jackpost, add letter "P" or "M7" for sizes 9-51, "M17" for size 100.

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

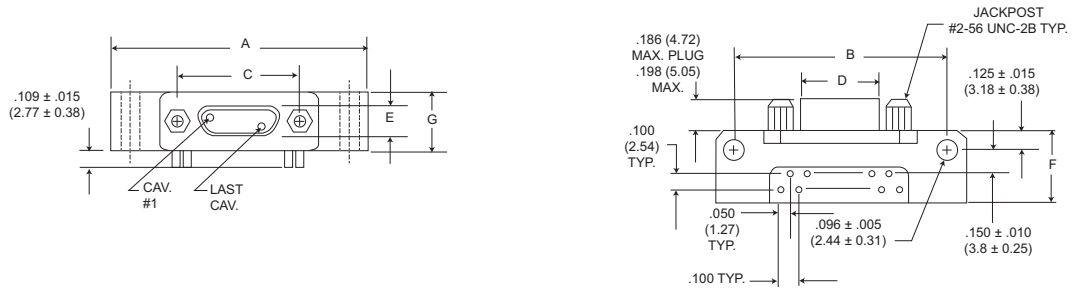
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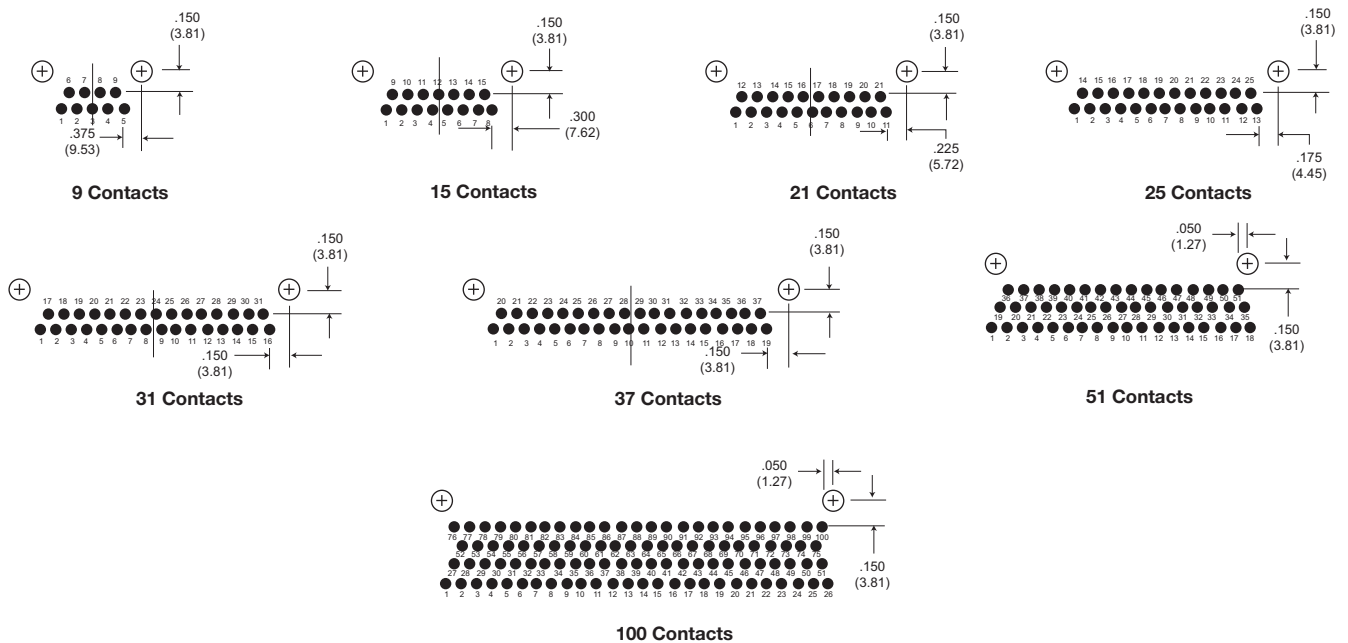
# MDM-PCB

## BR (Board Right Angle) Series



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

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



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

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

| Part Number<br>By Shell Size | A<br>Max.     | B<br>± .007 (.18) | C<br>± .005 (.13) | D<br>Max.     | E<br>Max.    | F<br>Max.    | G<br>Max.    |
|------------------------------|---------------|-------------------|-------------------|---------------|--------------|--------------|--------------|
| MDM-9PBR*                    | 1.390 (35.31) | 1.150 (29.21)     | .565 (14.35)      | .334 (8.48)   | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-9SBR*                    | 1.390 (35.31) | 1.150 (29.21)     | .565 (14.35)      | .402 (10.21)  | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-15PBR*                   | 1.540 (39.12) | 1.300 (33.02)     | .715 (18.16)      | .484 (12.29)  | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-15SBR*                   | 1.540 (39.12) | 1.300 (33.02)     | .715 (18.16)      | .552 (13.97)  | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-21PBR*                   | 1.690 (42.93) | 1.450 (36.83)     | .865 (21.97)      | .634 (16.10)  | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-21SBR*                   | 1.690 (42.93) | 1.450 (36.83)     | .865 (21.97)      | .702 (17.83)  | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-25PBR*                   | 1.790 (45.47) | 1.550 (39.37)     | .965 (24.51)      | .734 (18.64)  | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-25SBR*                   | 1.790 (45.47) | 1.550 (39.37)     | .965 (24.51)      | .802 (20.37)  | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-31PBR*                   | 2.040 (51.82) | 1.800 (45.72)     | 1.115 (28.32)     | .884 (22.45)  | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-31SBR*                   | 2.040 (51.82) | 1.800 (45.72)     | 1.115 (28.32)     | .952 (24.18)  | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-37PBR*                   | 2.340 (59.44) | 2.100 (53.34)     | 1.265 (32.13)     | 1.034 (26.26) | .185 (4.70)  | .455 (11.56) | .308 (7.82)  |
| MDM-37SBR*                   | 2.340 (59.44) | 2.100 (53.34)     | 1.265 (32.13)     | 1.102 (27.99) | .253 (6.43)  | .455 (11.56) | .308 (7.82)  |
| MDM-51PBR*                   | 1.875 (47.63) | 1.600 (40.64)     | 1.215 (30.86)     | .984 (24.99)  | .228 (5.79)  | .565 (14.35) | .351 (8.92)  |
| MDM-51SBR*                   | 1.875 (47.63) | 1.600 (40.64)     | 1.215 (30.86)     | 1.052 (26.72) | .296 (7.52)  | .565 (14.35) | .351 (8.92)  |
| MDM-100PBR*                  | 2.74 (69.72)  | 2.500 (63.50)     | 1.800 (45.72)     | 1.384 (35.15) | .271 (6.88)  | .755 (19.18) | .394 (10.01) |
| MDM-100SBR*                  | 2.74 (69.72)  | 2.500 (63.50)     | 1.800 (45.72)     | 1.508 (38.10) | .394 (10.01) | .755 (19.18) | .394 (10.01) |

\*For jackpost, add letter "P" or "M7" for sizes 9-51, "M17" for size 100.



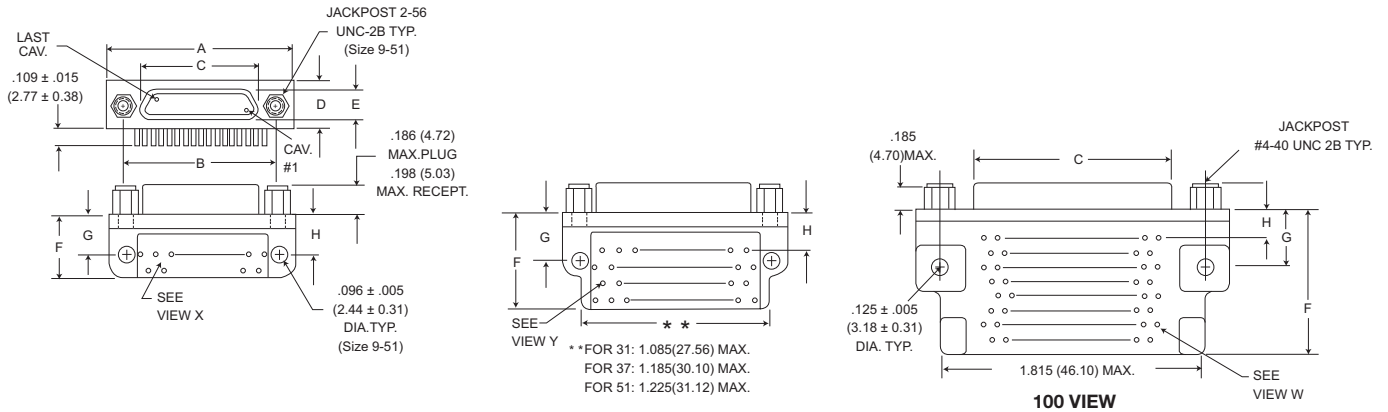
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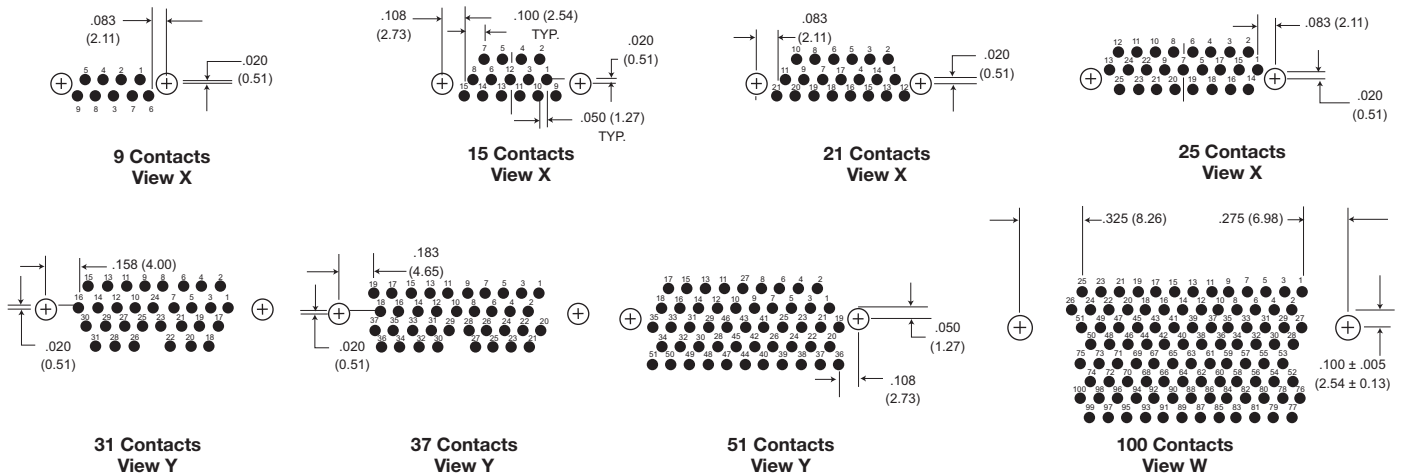
# MDM-PCB

## CBR (Condensed Board Right Angle) Series



### PCB Termination Arrangements (Viewed from bottom of connector, 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).

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

| Part Number<br>By Shell Size | A<br>Max.     | B<br>± .005 (.13) | C<br>Max.     | D<br>Max.    | E<br>Max.    | F<br>Max.     | G<br>± .010 (.25) | H<br>± .010 (.25) |
|------------------------------|---------------|-------------------|---------------|--------------|--------------|---------------|-------------------|-------------------|
| MDM-9PCBR*                   | .785 (19.94)  | .565 (14.35)      | .334 (8.48)   | .308 (7.82)  | .185 (4.70)  | .420 (10.67)  | .250 (6.35)       | .230 (5.81)       |
| MDM-9SCBR*                   | .785 (19.94)  | .565 (14.35)      | .402 (10.21)  | .308 (7.82)  | .253 (6.43)  | .420 (10.67)  | .250 (6.35)       | .230 (5.81)       |
| MDM-15PCBR*                  | .935 (23.75)  | .715 (18.16)      | .484 (12.29)  | .308 (7.82)  | .185 (4.70)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-15SCBR*                  | .935 (23.75)  | .715 (18.16)      | .552 (13.97)  | .308 (7.82)  | .253 (6.43)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-21PCBR*                  | 1.085 (27.56) | .865 (21.97)      | .634 (16.10)  | .308 (7.82)  | .185 (4.70)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-21SCBR*                  | 1.085 (27.56) | .865 (21.97)      | .702 (17.83)  | .308 (7.82)  | .253 (6.43)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-25PCBR*                  | 1.185 (30.10) | .965 (24.51)      | .734 (18.64)  | .308 (7.82)  | .184 (4.70)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-25SCBR*                  | 1.185 (30.10) | .965 (24.51)      | .802 (20.37)  | .308 (7.82)  | .253 (6.43)  | .420 (10.67)  | .250 (6.35)       | .130 (3.30)       |
| MDM-31PCBR*                  | 1.335 (33.91) | 1.115 (28.32)     | .884 (22.45)  | .308 (7.82)  | .185 (4.70)  | .520 (13.21)  | .250 (6.35)       | .130 (3.30)       |
| MDM-31SCBR*                  | 1.335 (33.91) | 1.115 (28.32)     | .952 (24.18)  | .308 (7.82)  | .253 (6.43)  | .520 (13.21)  | .250 (6.35)       | .130 (3.30)       |
| MDM-37PCBR*                  | 1.485 (37.72) | 1.265 (32.13)     | 1.034 (26.26) | .308 (7.82)  | .185 (4.70)  | .520 (13.21)  | .250 (6.35)       | .130 (3.30)       |
| MDM-37SCBR*                  | 1.485 (37.72) | 1.265 (32.13)     | 1.102 (27.99) | .308 (7.82)  | .253 (6.43)  | .520 (13.21)  | .250 (6.35)       | .130 (3.30)       |
| MDM-51PCBR*                  | 1.435 (36.45) | 1.215 (30.86)     | .984 (24.99)  | .351 (8.92)  | .228 (5.79)  | .650 (16.15)  | .300 (7.62)       | .150 (3.81)       |
| MDM-51SCBR*                  | 1.435 (36.45) | 1.215 (30.86)     | 1.052 (26.72) | .351 (8.92)  | .296 (7.52)  | .650 (16.15)  | .300 (7.62)       | .150 (3.81)       |
| MDM-100PCBR*                 | 2.170 (55.12) | 1.800 (45.72)     | 1.384 (35.15) | .394 (10.01) | .271 (6.88)  | 1.000 (25.40) | .400 (10.16)      | .200 (5.08)       |
| MDM-100SCBR*                 | 2.170 (55.12) | 1.800 (45.72)     | 1.508 (38.10) | .394 (10.01) | .394 (10.01) | 1.000 (25.40) | .400 (10.16)      | .200 (5.08)       |

\*For jackpost, add letter "P" or "M7" for sizes 9-51, "M17" for size 100.

Dimensions shown in inch (mm)

Specifications and dimensions subject to change

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