



# Micro-D Metal Shell Printed Circuit Board Connectors CBR Style Right Angle Thru-Hole



**High Performance** – These connectors feature gold-plated TwistPin contacts for best performance. PC tails are .020 inch diameter. Specify nickel-plated shells or cadmium plated shells for best availability.

**Solder-Dipped** – Terminals are coated with SN63/Pb37 tin-lead solder for best solderability. Optional gold-plated terminals are available for RoHS compliance.

**Front Panel or Rear Mountable** – Can be installed through panels up to .125 inch thick. Specify rear panel mount jackposts.

## HOW TO ORDER CBR STYLE PCB MICRO-D CONNECTORS

| Series | Shell Material and Finish | Insulator Material                                 | Contact Layout                       | Contact Type   | Termination Type                   | Jackpost Option                 | Threaded Insert Option | Terminal Length In Inches | Gold-Plated Terminal Mod Code  |                                   |                                     |
|--------|---------------------------|--|--------------------------------------|--|------------------------------------|---------------------------------|------------------------|---------------------------|--|-----------------------------------|-------------------------------------|
| MWDM   | Aluminum Shell            | L – LCP<br>30% Glass-Filled Liquid Crystal Polymer | 9                                    | P<br>Pin   | CBR<br>Condensed Board Right Angle | (Omit for None)<br>P – Jackpost | T                      | .080                      | These connectors are solder-dipped in 63/37 tin-lead solder.<br><br>To delete the solder dip and change to gold-plated terminals, add code 513 |                                   |                                     |
|        | 1 – Cadmium               |  | 15                                   |  |                                    |                                 |                        | S<br>Socket               |  | Jackposts for Rear Panel Mounting | .110                                |
|        | 2 – Nickel                |  | 21                                   |  |                                    |                                 |                        |                           |  |                                   | Threaded Insert In Board Mount Hole |
|        | 4 – Black Anodize         |  | 25                                   | R1 – .032" Panel<br>R2 – .047" Panel<br>R3 – .062" Panel<br>R4 – .093" Panel<br>R5 – .125" Panel |                                    | (Omit for Thru-Hole)            | .140                   |                           |  |                                   |                                     |
|        | 5 – Gold                  |  | 31                                   |  |                                    |                                 | .150                   |                           |  |                                   |                                     |
|        | 6 – Chem Film             |  | 37                                   |  |                                    |                                 | .172                   |                           |  |                                   |                                     |
|        | Stainless Steel Shell     | 3 – Passivated                                     | 51                                   | 100  | .190                               |                                 |                        |                           |  |                                   |                                     |
|        |                           |  | 69                                   |  | .250                               |                                 |                        |                           |  |                                   |                                     |
|        |                           |  | Length in Inches<br>± .015<br>(0.38) |  |                                    |                                 |                        |                           |  |                                   |                                     |
|        |                           |  |                                      |  |                                    |                                 |                        |                           |  |                                   |                                     |

### Sample Part Number

|      |   |   |      |   |     |    |  |        |  |
|------|---|---|------|---|-----|----|--|--------|--|
| MWDM | 1 | L | - 15 | P | CBR | R3 |  | - .110 |  |
|------|---|---|------|---|-----|----|--|--------|--|

## MICRO-D JACKPOST OPTIONS

|  |  |  |
|--|--|--|
| <p><b>No Designator</b></p> <p>HEX NUT<br/>EPOXY FILL</p>  | <p><b>P</b></p>  | <p><b>R1 Thru R5</b></p> <p>Panel</p>  |
| <p><b>Thru-Hole</b><br/>For use with Glenair jackposts only. Order hardware separately. Install with threadlocking compound.</p> | <p><b>Standard Jackpost</b><br/>Factory installed, not intended for removal.</p> | <p><b>Jackpost for Rear Panel Mounting</b><br/>Shipped loosely installed. Install with permanent threadlocking compound.</p> |

# Micro-D Metal Shell Printed Circuit Board Connectors CBR Style Right Angle Thru-Hole

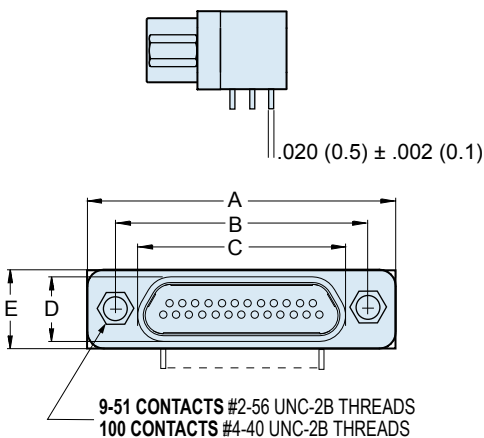


## PERFORMANCE SPECIFICATIONS

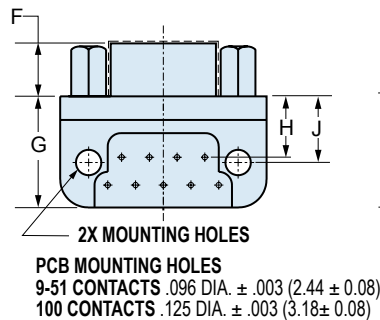
|                           |                               |
|---------------------------|-------------------------------|
| Current Rating            | 3 AMP                         |
| DWV                       | 600 VAC Sea level             |
| Insulation Resistance     | 5000 Megohms Minimum          |
| Contact Resistance        | 8 Milliohms Maximum           |
| Low Level Contact Resist. | 32 Milliohms Maximum          |
| Magnetic Permeability     | 2 $\mu$ Maximum               |
| Operating Temperature     | -55° C. to +150° C.           |
| Shock, Vibration          | 50 g., 20g.                   |
| Mating Force              | (10 Ounces) X (# of Contacts) |

## MATERIALS AND FINISHES

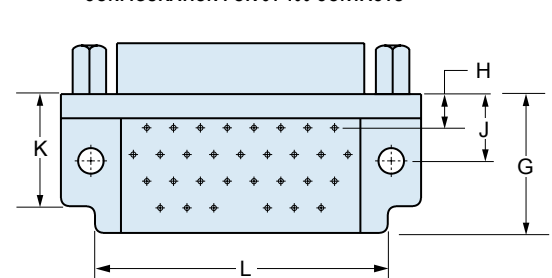
|                  |   |
|------------------|---|
| Connector Shell  | Aluminum Alloy 6061 or Stainless Steel, 300 Series, passivated. See Ordering Info for Plating Options |
| Insulator, Tray  | Liquid Crystal Polymer (LCP)  |
| Interfacial Seal | Flourosilicone Rubber, Blue   |
| Pin Contact      | Beryllium Copper Gold over Nickel Plating   |
| Socket Contact   | Copper Alloy Gold Over Nickel Plating   |
| PCB Terminals    | Gold Plated Copper Alloy, Solder Dipped   |
| Hardware         | 300 Series Stainless Steel  |
| Encapsulant      | Epoxy Resin Hysol EE4215  |



CONFIGURATION FOR 9-25 CONTACTS



CONFIGURATION FOR 31-100 CONTACTS

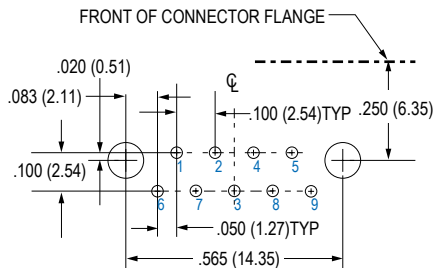


## DIMENSIONS

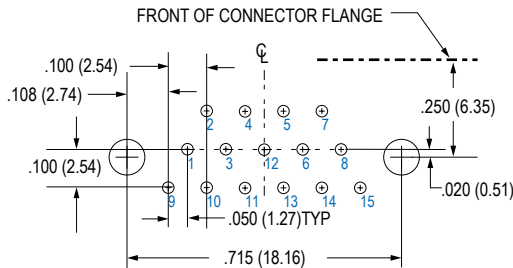
| Layout | A Max. |       | B              |                | C Max. |       | D Max. |      | E Max. |       | F              |                | G Max. |       | H              |                | J              |                | K Max. |       | L Max. |       |
|--------|--------|-------|----------------|----------------|--------|-------|--------|------|--------|-------|----------------|----------------|--------|-------|----------------|----------------|----------------|----------------|--------|-------|--------|-------|
|        | In.    | mm.   | In. $\pm$ .003 | mm. $\pm$ 0.08 | In.    | mm.   | In.    | mm.  | In.    | mm.   | In. $\pm$ .003 | mm. $\pm$ 0.08 | In.    | mm.   | In. $\pm$ .010 | mm. $\pm$ 0.25 | In. $\pm$ .010 | mm. $\pm$ 0.25 | In.    | mm.   | In.    | mm.   |
| 9P     | .787   | 19.94 | .565           | 14.35          | .333   | 8.46  | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .425   | 10.80 | .230           | 5.84           | .250           | 6.35           |        |       |        |       |
| 9S     | .787   | 19.94 | .565           | 14.35          | .400   | 10.16 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .425   | 10.80 | .230           | 5.84           | .250           | 6.35           |        |       |        |       |
| 15P    | .937   | 23.75 | .715           | 18.16          | .483   | 12.27 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 15S    | .937   | 23.75 | .715           | 18.16          | .551   | 14.00 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 21P    | 1.087  | 27.56 | .865           | 21.97          | .633   | 16.08 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 21S    | 1.087  | 27.56 | .865           | 21.97          | .701   | 17.81 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 25P    | 1.187  | 30.01 | .965           | 24.51          | .733   | 18.62 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 25S    | 1.187  | 30.01 | .965           | 24.51          | .801   | 20.35 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .425   | 10.80 | .130           | 3.30           | .250           | 6.35           |        |       |        |       |
| 31P    | 1.337  | 33.91 | 1.115          | 28.32          | .883   | 22.43 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .525   | 13.34 | .130           | 3.30           | .250           | 6.35           | .450   | 11.43 | 1.085  | 27.56 |
| 31S    | 1.337  | 33.91 | 1.115          | 28.32          | .951   | 24.16 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .525   | 13.34 | .130           | 3.30           | .250           | 6.35           | .450   | 11.43 | 1.085  | 27.56 |
| 37P    | 1.487  | 37.72 | 1.265          | 32.13          | 1.033  | 26.24 | .184   | 4.67 | .310   | 7.87  | .183           | 4.65           | .525   | 13.34 | .130           | 3.30           | .250           | 6.35           | .450   | 11.43 | 1.185  | 30.10 |
| 37S    | 1.487  | 37.72 | 1.265          | 32.13          | 1.101  | 27.96 | .250   | 6.35 | .310   | 7.87  | .195           | 4.95           | .525   | 13.34 | .130           | 3.30           | .250           | 6.35           | .450   | 11.43 | 1.185  | 30.10 |
| 51P    | 1.435  | 36.45 | 1.215          | 30.86          | .983   | 24.97 | .224   | 5.69 | .351   | 8.92  | .183           | 4.65           | .660   | 16.76 | .150           | 3.81           | .300           | 7.62           | .450   | 11.43 | 1.225  | 31.12 |
| 51S    | 1.435  | 36.45 | 1.215          | 30.86          | 1.051  | 26.70 | .293   | 7.44 | .351   | 8.92  | .195           | 4.95           | .660   | 16.76 | .150           | 3.81           | .300           | 7.62           | .450   | 11.43 | 1.225  | 31.12 |
| 69P    | 1.735  | 44.06 | 1.515          | 38.48          | 1.284  | 32.61 | .224   | 5.69 | .351   | 8.92  | .183           | 4.65           | .660   | 16.76 | .150           | 3.81           | .300           | 7.62           | .450   | 11.43 | 1.225  | 31.12 |
| 69S    | 1.735  | 44.06 | 1.515          | 38.48          | 1.350  | 33.75 | .293   | 7.44 | .351   | 8.92  | .195           | 4.95           | .660   | 16.76 | .150           | 3.81           | .300           | 7.62           | .450   | 11.43 | 1.225  | 31.12 |
| 100P   | 2.175  | 55.12 | 1.800          | 45.72          | 1.383  | 35.13 | .270   | 6.86 | .394   | 10.01 | .183           | 4.65           | 1.010  | 25.65 | .200           | 5.08           | .400           | 10.16          | .590   | 14.99 | 1.820  | 46.23 |
| 100S   | 2.175  | 55.12 | 1.800          | 45.72          | 1.451  | 36.86 | .333   | 8.46 | .394   | 10.01 | .195           | 4.95           | 1.010  | 25.65 | .200           | 5.08           | .400           | 10.16          | .590   | 14.99 | 1.820  | 46.23 |

## MICRO-D CBR BOARD MOUNT CONNECTOR PCB LAYOUTS – PIN CONNECTORS

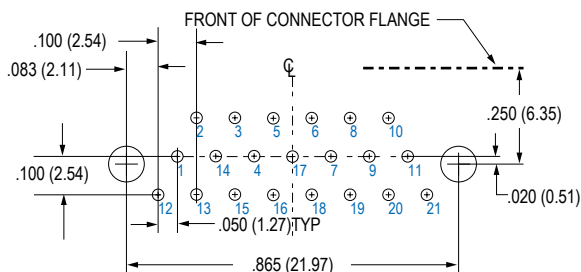
Patterns shown are for connector mounting side of PC board. 9 Thru 51 Contacts .096 (2.44) Diameter Mounting Holes, 100 Pin .125 (3.18) Diameter



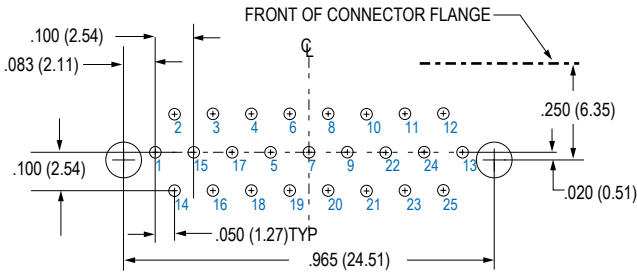
**9 PIN MWDM-9PCBR**



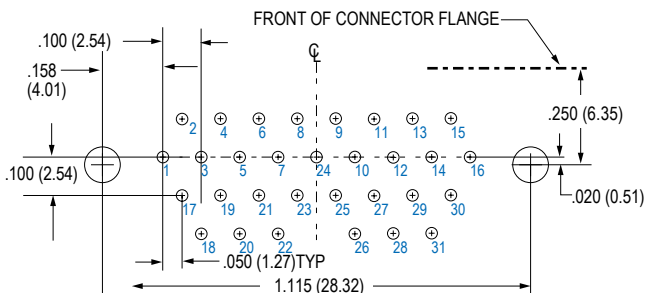
**15 PIN MWDM-15PCBR**



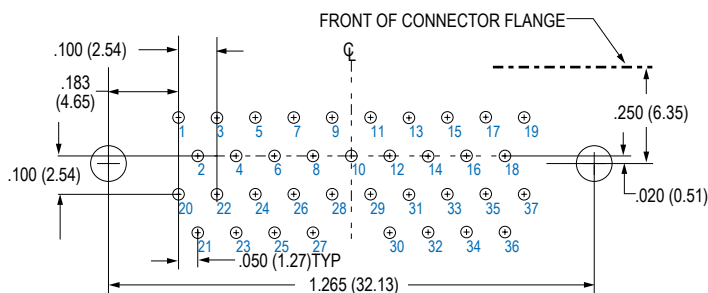
**21 PIN MWDM-21PCBR**



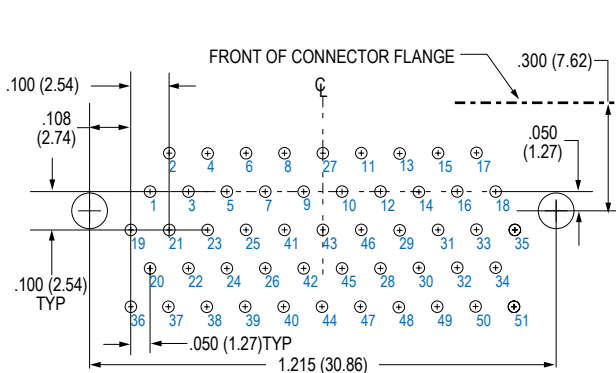
**25 PIN MWDM-25PCBR**



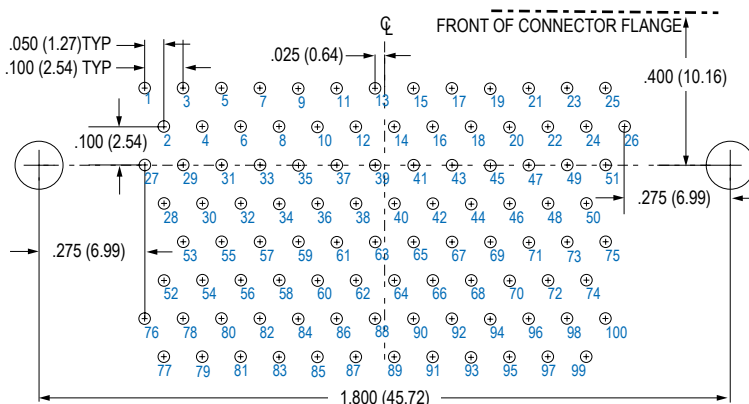
**31 PIN MWDM-31PCBR**



**37 PIN MWDM-37PCBR**



**51 PIN MWDM-51PCBR**



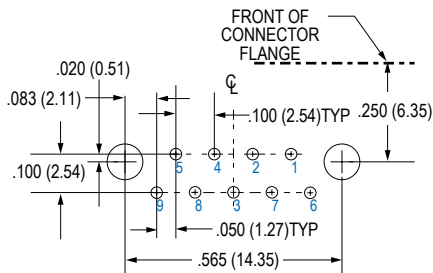
**100 PIN MWDM-100PCBR**

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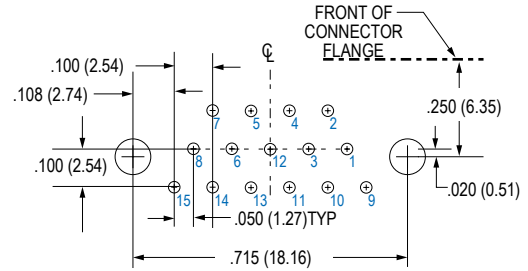


## MICRO-D CBR BOARD MOUNT CONNECTOR PCB LAYOUTS – SOCKET CONNECTORS

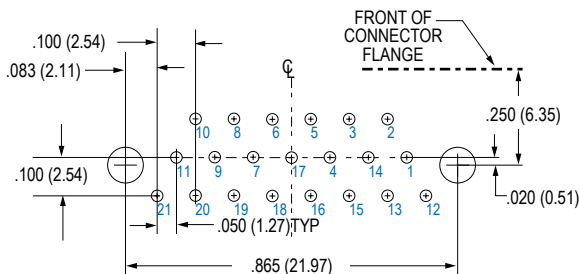
Patterns shown are for connector mounting side of PC board. 9 Thru 51 Contacts .096 (2.44) Diameter Mounting Holes, 100 Pin .125 (3.18) Diameter



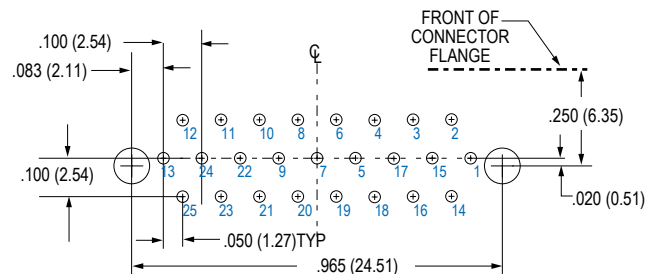
**9 SOCKET MWDM-9SCBR**



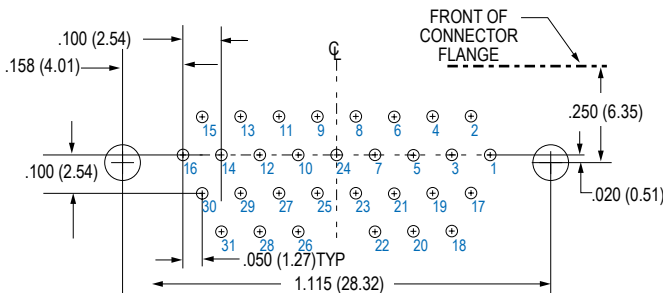
**15 SOCKET MWDM-15SCBR**



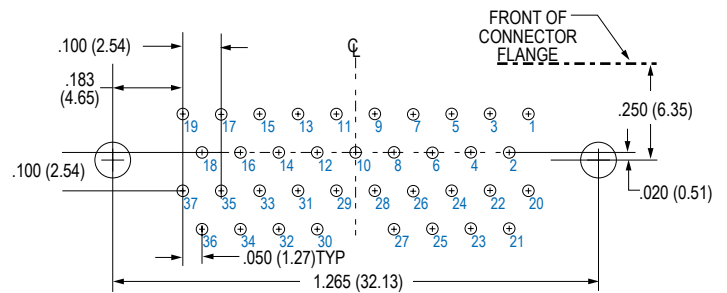
**21 SOCKET MWDM-21SCBR**



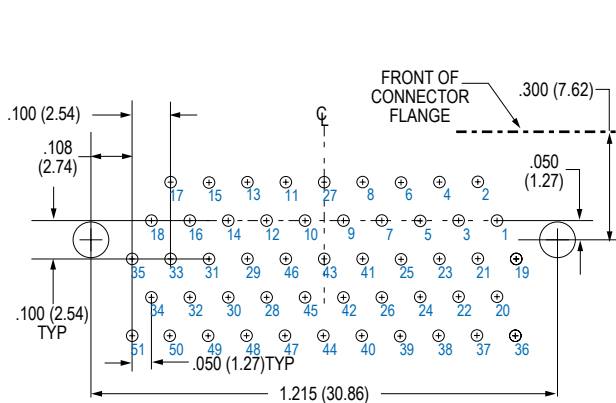
**25 SOCKET MWDM-25SCBR**



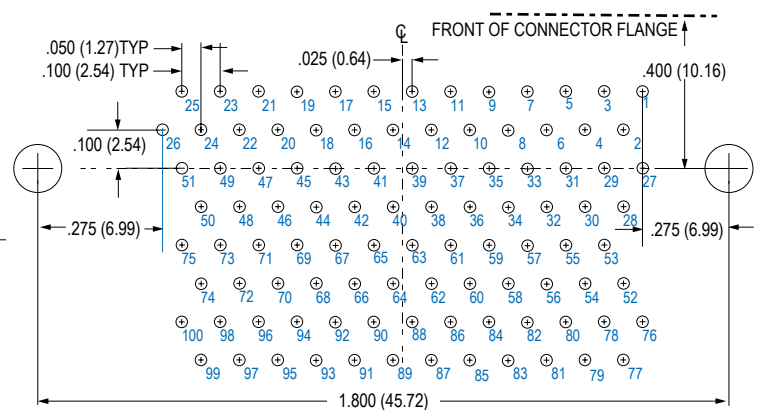
**31 SOCKET MWDM-31SCBR**



**37 SOCKET MWDM-37SCBR**



**51 SOCKET MWDM-51SCBR**



**100 SOCKET MWDM-100SCBR**