



MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector



High Performance

These connectors feature goldplated 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 Sn60/Pb40 tin-lead solder for best solderability.

How To Order MIL-DTL-83513 Straight PCB Micro-D Connectors

| Sample Part Number | M83513/ | /26-G | 03 | C | W |
|--------------------------|---|-------|--|---|---|
| Base Part Number | M83513 | | | | |
| Slash Number-Shell Sizes | Plug (Pin Contacts) | | Receptacle (Socket Contacts) | | |
| | 22-A – 9 Contacts 22-B – 15 Contacts 22-C – 21 Contacts 22-D – 25 Contacts 22-E – 31 Contacts 22-F – 37 Contacts 23-G – 51 Contacts 24-H – 100 Contacts (See Table I) | | 25-A – 9 Contacts 25-B – 15 Contacts 25-C – 21 Contacts 25-D – 25 Contacts 25-E – 31 Contacts 25-F – 37 Contacts 26-G – 51 Contacts 27-H – 100 Contacts | | |
| PC Tail Length | 01 - .109 Inch (2.77 mm) 02 - .140 Inch (3.56 mm) 03 - .172 Inch (4.37 mm) | | PC Tail Length ± .015 (0.38) | | |
| Shell Finish | C - Cadmium N - Electroless Nickel P - Passivated SST | | A - Electrodeposited Aluminum K - Zinc Nickel T - Nickel Fluorocarbon Polymer | | |
| Hardware Options | N - No Jackpost | | P - Jackposts Installed | | |
| | Sizes 9-51 T - Threaded Insert in Board Mount Hole (No Jackposts) W - Threaded Insert in Board Mount Hole and jackposts Installed Shell Size 100 (H) U - #4-40 Threaded Insert Y - #4-40 Threaded Insert & Jackpost (See Table I) | | | | |

Table I: Hardware options

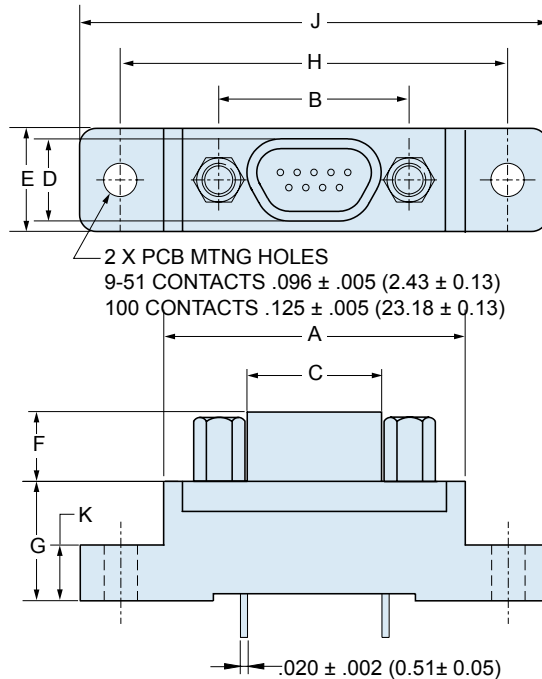
| N | P | T or U | W or Y |
|------------------|------------------|------------------------|---------------------------|
| <p>Thru Hole</p> | <p>Thru Hole</p> | <p>Threaded Insert</p> | <p>Threaded Insert</p> |
| No Jackpost | Jackpost | Threaded Insert | Jackpost, Threaded Insert |

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Micro-D
MIL-DTL-83513

Table II: Dimensions



THREAD SIZES
9-51 CONTACTS #2-56 UNC
100 CONTACTS #4-40 UNC

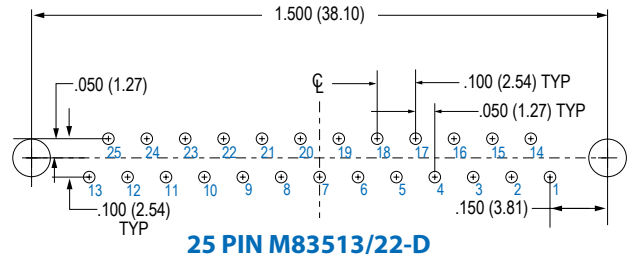
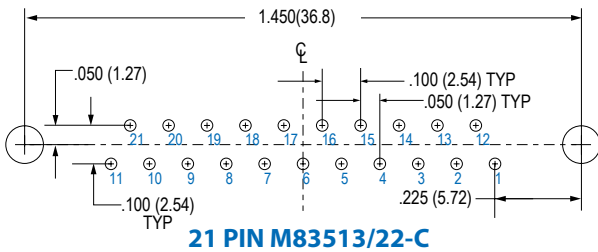
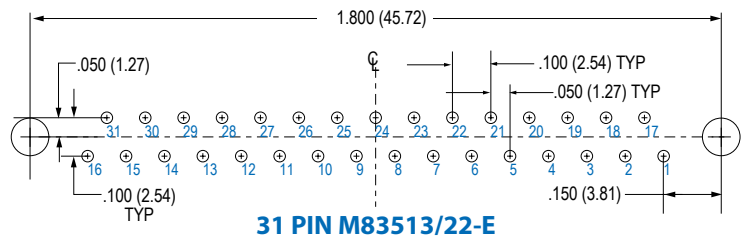
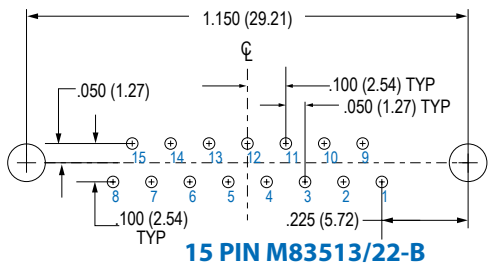
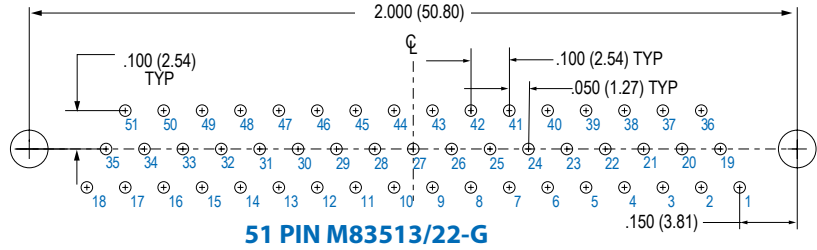
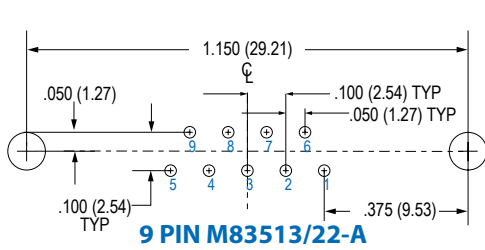
| Layout | A Max. | | B | | C Max. | | D Max. | | E Max. | | F | | G | | H | | J Max. | | K | |
|--------|--------|-------|-------------------|-------------------|--------|-------|--------|------|--------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--------|-------|-------------------|-------------------|
| | In. | mm. | In. $\pm .003$ | mm. ± 0.08 | In. | mm. | In. | mm. | In. | mm. | In. $\pm .004$ | mm. ± 0.10 | In. $\pm .010$ | mm. ± 0.25 | In. $\pm .007$ | mm. ± 0.18 | In. | mm. | In. $\pm .010$ | mm. ± 0.25 |
| 9P | .790 | 20.07 | .565 | 14.35 | .333 | 8.46 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 1.150 | 29.21 | 1.390 | 35.31 | .155 | 3.94 |
| 9S | .790 | 20.07 | .565 | 14.35 | .400 | 10.16 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 1.150 | 29.21 | 1.390 | 35.31 | .155 | 3.94 |
| 15P | .940 | 23.88 | .715 | 18.16 | .483 | 12.27 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 1.150 | 29.21 | 1.390 | 35.31 | .155 | 3.94 |
| 15S | .940 | 23.88 | .715 | 18.16 | .551 | 14.00 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 1.150 | 29.21 | 1.390 | 35.31 | .155 | 3.94 |
| 21P | 1.180 | 29.97 | .865 | 21.97 | .633 | 16.08 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 1.450 | 36.83 | 1.690 | 42.93 | .155 | 3.94 |
| 21S | 1.180 | 29.97 | .865 | 21.97 | .701 | 17.81 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 1.450 | 36.83 | 1.690 | 42.93 | .155 | 3.94 |
| 25P | 1.275 | 32.39 | .965 | 24.51 | .733 | 18.62 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 1.500 | 38.10 | 1.740 | 44.20 | .155 | 3.94 |
| 25S | 1.275 | 32.39 | .965 | 24.51 | .801 | 20.35 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 1.500 | 38.10 | 1.740 | 44.20 | .155 | 3.94 |
| 31P | 1.575 | 40.01 | 1.115 | 28.32 | .883 | 22.43 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 1.800 | 45.72 | 2.040 | 51.82 | .155 | 3.94 |
| 31S | 1.575 | 40.01 | 1.115 | 28.32 | .951 | 24.16 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 1.800 | 45.72 | 2.040 | 51.82 | .155 | 3.94 |
| 37P | 1.875 | 47.63 | 1.265 | 32.13 | 1.033 | 26.24 | .184 | 4.67 | .310 | 7.87 | .183 | 4.65 | .333 | 8.46 | 2.100 | 53.34 | 2.340 | 59.44 | .155 | 3.94 |
| 37S | 1.875 | 47.63 | 1.265 | 32.13 | 1.101 | 27.96 | .250 | 6.35 | .310 | 7.87 | .195 | 4.95 | .333 | 8.46 | 2.100 | 53.34 | 2.340 | 59.44 | .155 | 3.94 |
| 51P | 1.775 | 45.09 | 1.215 | 30.86 | .983 | 24.97 | .228 | 5.79 | .351 | 8.92 | .183 | 4.65 | .333 | 8.46 | 2.000 | 50.80 | 2.270 | 57.64 | .155 | 3.94 |
| 51S | 1.775 | 45.09 | 1.215 | 30.86 | 1.051 | 26.70 | .296 | 7.52 | .351 | 8.92 | .195 | 4.95 | .333 | 8.46 | 2.000 | 50.80 | 2.270 | 57.64 | .155 | 3.94 |
| 100P | 2.585 | 65.66 | 1.800 | 45.72 | 1.383 | 35.13 | .270 | 6.86 | .460 | 11.68 | .183 | 4.65 | .525 | 13.34 | 2.800 | 71.12 | 3.250 | 82.55 | .293 | 7.44 |
| 100S | 2.585 | 65.66 | 1.800 | 45.72 | 1.451 | 36.86 | .333 | 8.46 | .460 | 11.68 | .195 | 4.95 | .525 | 13.34 | 2.800 | 71.12 | 3.250 | 82.55 | .293 | 7.44 |



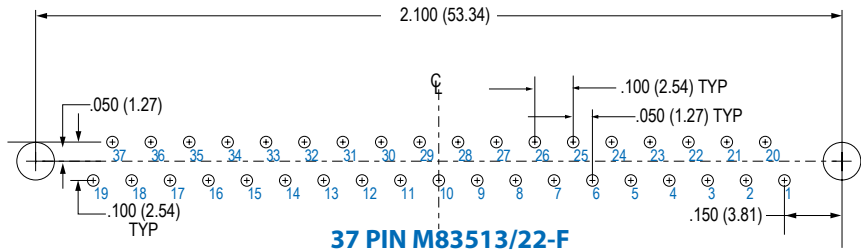
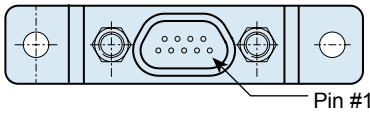
MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector

M83513/22 Thru /24 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



Connector Orientation

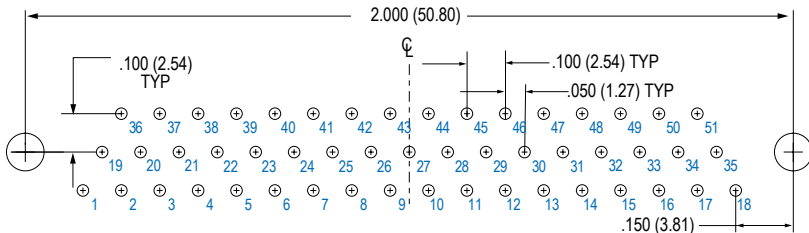


M83513/25 Thru /27 PCB Layouts – Socket Connectors

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



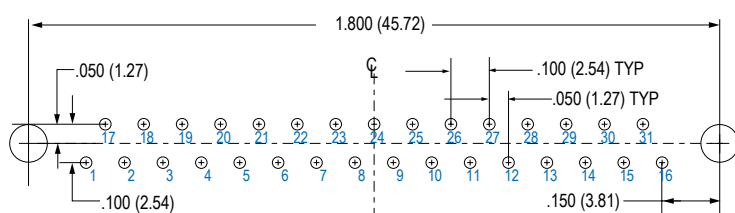
9 SOCKET M83513/25-A



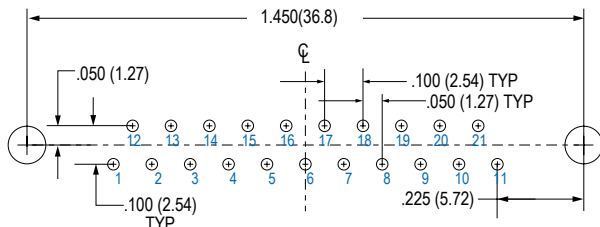
51 SOCKET M83513/26-G



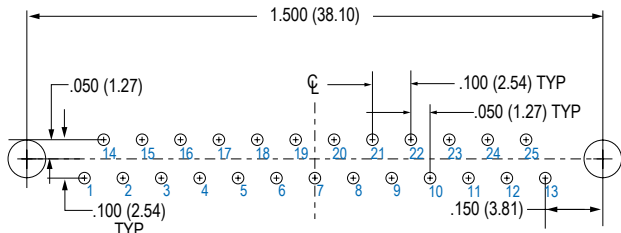
15 SOCKET M83513/25-B



31 SOCKET M83513/25-E

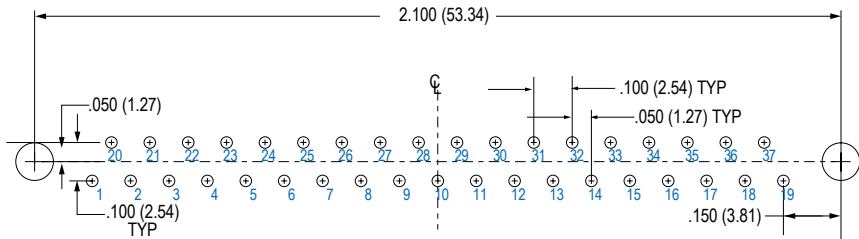
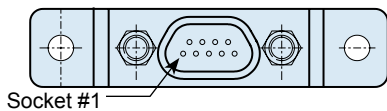


21 SOCKET M83513/25-C

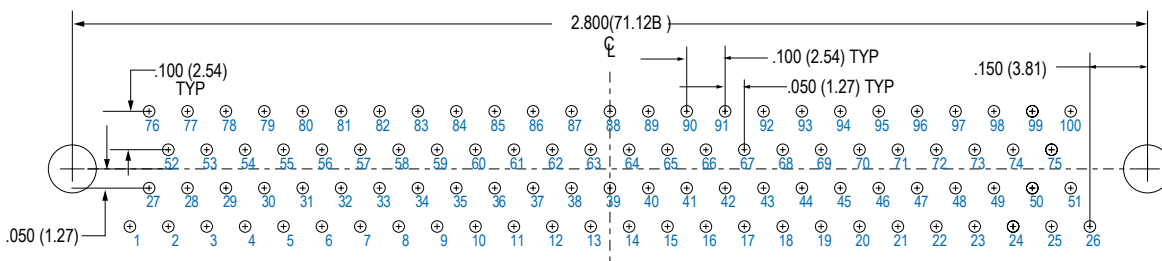


25 SOCKET M83513/25-D

Connector Orientation



37 SOCKET M83513/25-F



100 SOCKET M83513/27-H