



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

Table I: Hardware options

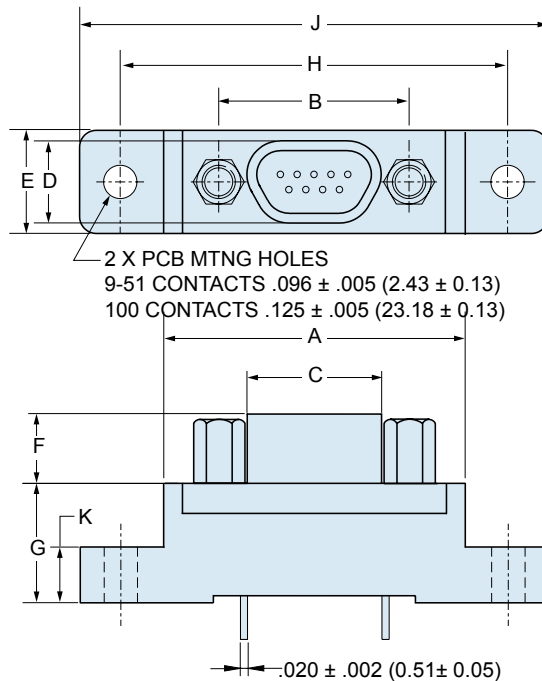
N	P	T or U	W or Y
<p>Thru Hole</p>	<p>Thru Hole</p>	<p>Threaded Insert</p>	<p>Threaded Insert</p>
No Jackpost	Jackpost	Threaded Insert	Jackpost, Threaded Insert

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



Micro-D  
MIL-DTL-83513

Table II: Dimensions



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

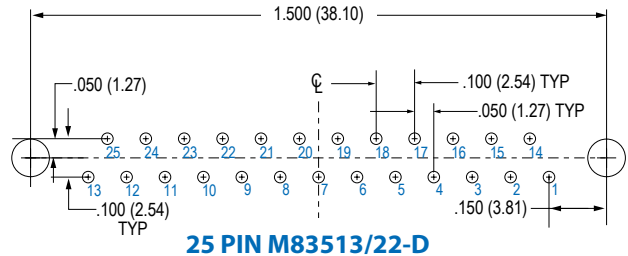
Layout	A Max.		B		C Max.		D Max.		E Max.		F		G		H		J Max.		K	
	In.	mm.	In. ±.003	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. ±.004	mm. ±0.10	In. ±.010	mm. ±0.25	In. ±.007	mm. ±0.18	In.	mm.	In. ±.010	mm. ±0.25
<b>9P</b>	.790	20.07	.565	14.35	.333	8.46	.184	4.67	.310	7.87	.183	4.65	.333	8.46	1.150	29.21	1.390	35.31	.155	3.94
<b>9S</b>	.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
<b>15P</b>	.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
<b>15S</b>	.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
<b>21P</b>	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
<b>21S</b>	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
<b>25P</b>	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
<b>25S</b>	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
<b>31P</b>	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
<b>31S</b>	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
<b>37P</b>	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
<b>37S</b>	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
<b>51P</b>	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
<b>51S</b>	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
<b>100P</b>	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
<b>100S</b>	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



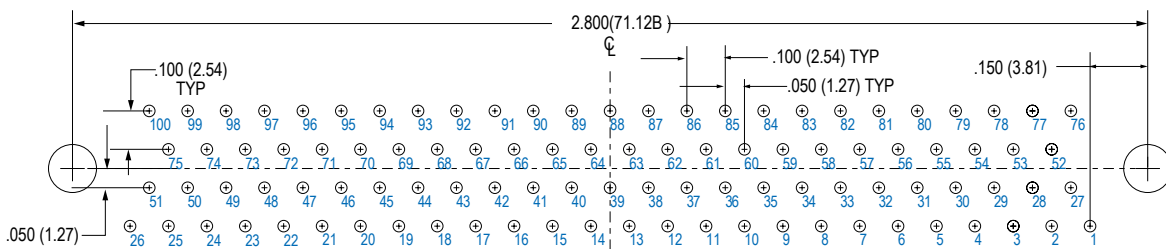
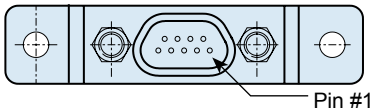
# MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector

## 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



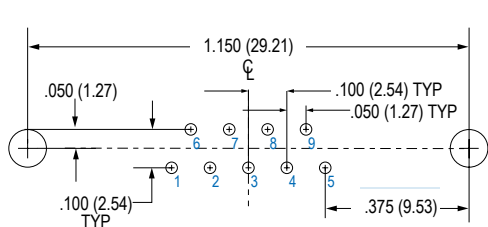
### Connector Orientation



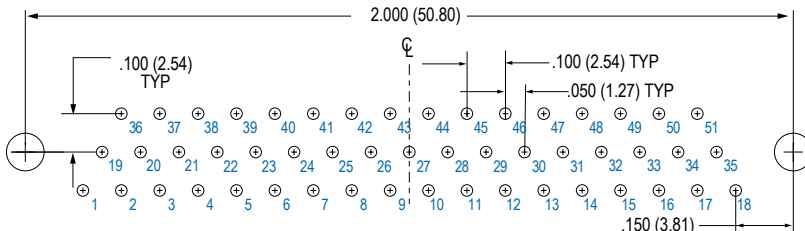
100 PIN M83513/24-H

### M83513/25 Thru /27 PCB Layouts – Socket Connectors

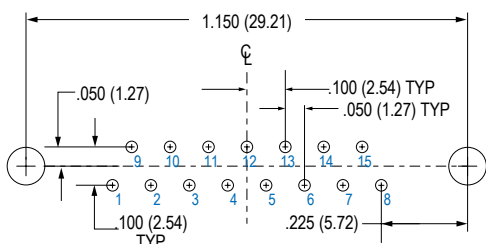
Patterns shown are for connector mounting side of PC board. 9 Thru 51 Contacts .096 (2.44) Diameter Mounting Holes, 100 Pin .125 (3.18) Diameter



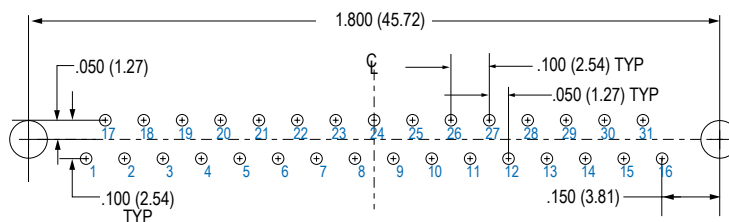
**9 SOCKET M83513/25-A**



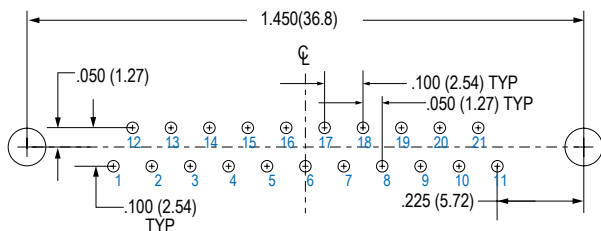
**51 SOCKET M83513/26-G**



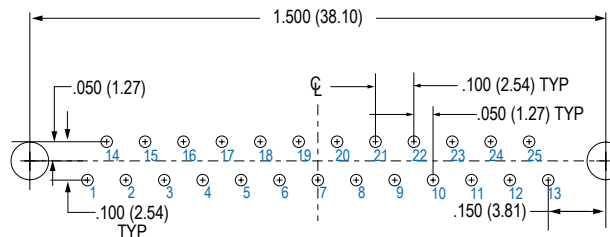
**15 SOCKET M83513/25-B**



**31 SOCKET M83513/25-E**

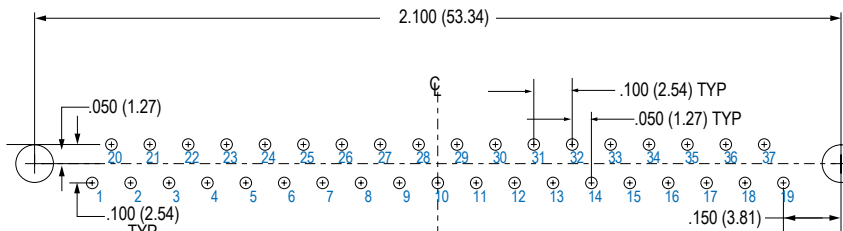
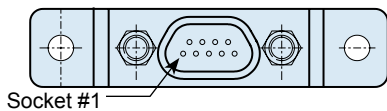


**21 SOCKET M83513/25-C**

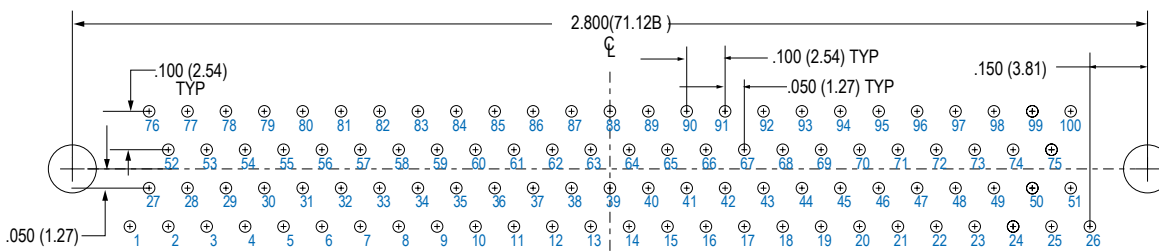


**25 SOCKET M83513/25-D**

**Connector Orientation**



**37 SOCKET M83513/25-F**



**100 SOCKET M83513/27-H**