



# 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

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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. $\pm 0.08$	In.	mm.	In.	mm.	In.	mm.	In. $\pm .004$	mm. $\pm 0.10$	In. $\pm .010$	mm. $\pm 0.25$	In. $\pm .007$	mm. $\pm 0.18$	In.	mm.	In. $\pm .010$	mm. $\pm 0.25$
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





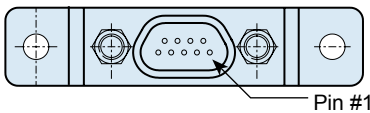
# MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector

## 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

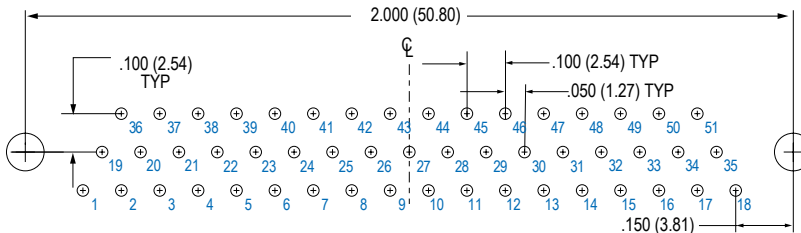


### M83513/25 Thru /27 PCB Layouts – Socket Connectors

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



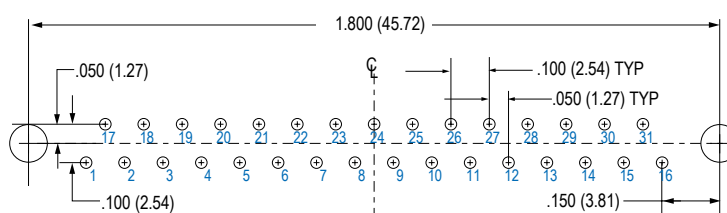
**9 SOCKET M83513/25-A**



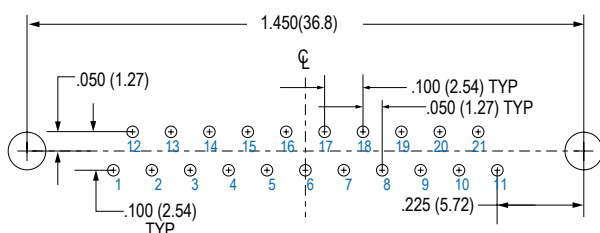
**51 SOCKET M83513/26-G**



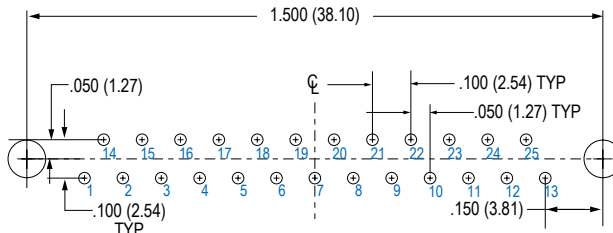
**15 SOCKET M83513/25-B**



**31 SOCKET M83513/25-E**

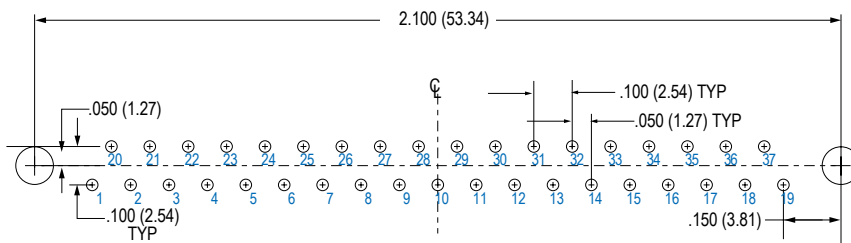
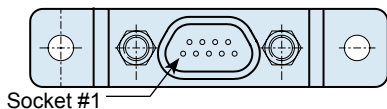


**21 SOCKET M83513/25-C**

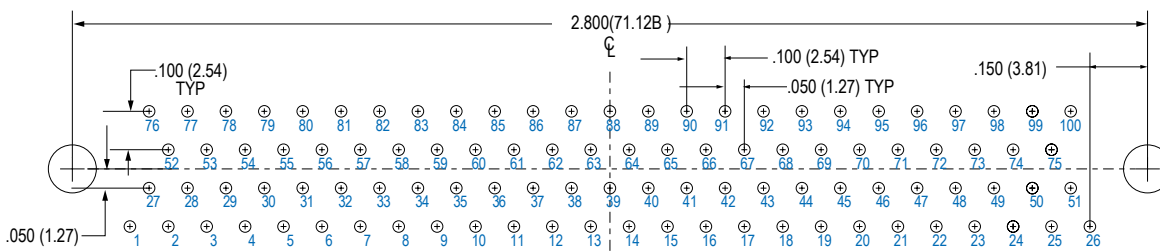


**25 SOCKET M83513/25-D**

**Connector Orientation**



**37 SOCKET M83513/25-F**



**100 SOCKET M83513/27-H**