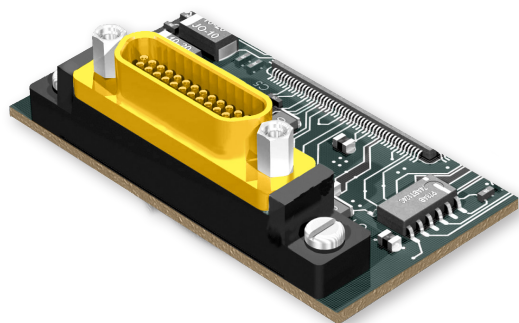




MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector



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

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) 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)		Receptacle (Socket Contacts) 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

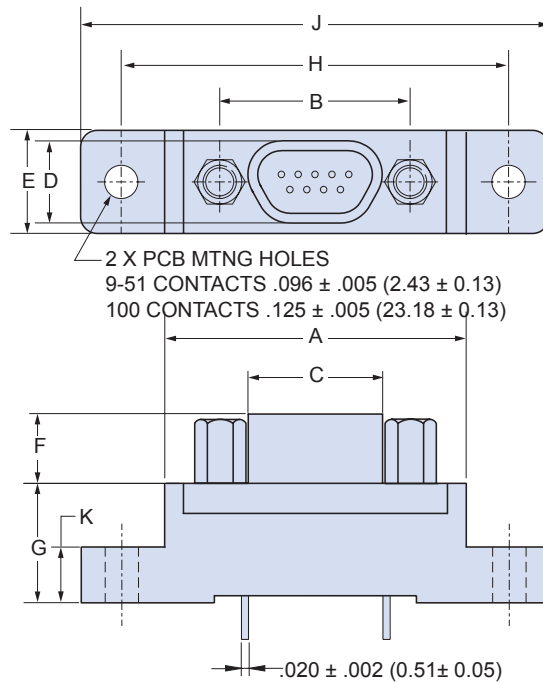
N	P	T or U	W or Y
Thru Hole No Jackpost	Thru Hole Jackpost	Threaded Insert Threaded Insert	Threaded Insert Jackpost, Threaded Insert

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



Micro-D
MIL-DTL-83513

Table II: Dimensions



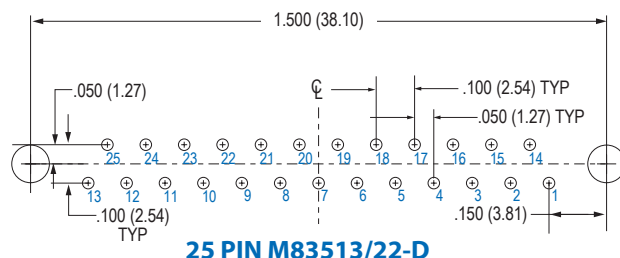
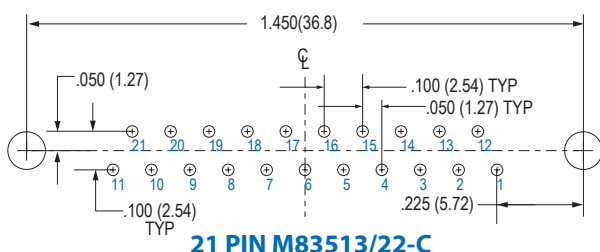
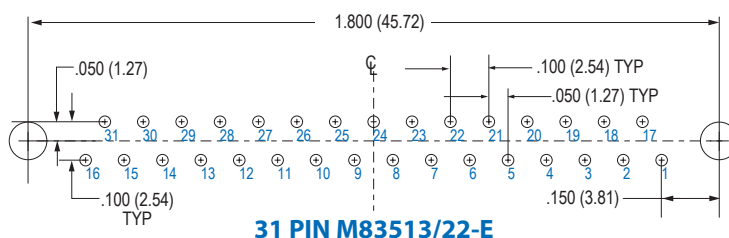
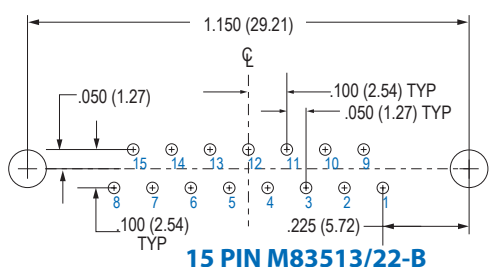
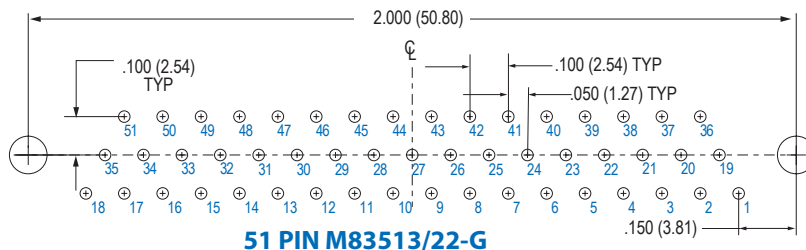
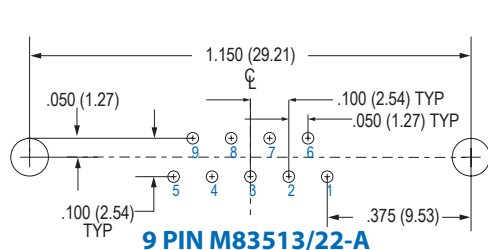
Layout	A Max.		B		C Max.		D Max.		E Max.		F		G		H		J Max.		K	
	In.	mm.	In. $\pm .003$	mm. ± 0.08	In.	mm.	In.	mm.	In.	mm.	In. $\pm .004$	mm. ± 0.10	In. $\pm .010$	mm. ± 0.25	In. $\pm .007$	mm. ± 0.18	In.	mm.	In. $\pm .010$	mm. ± 0.25
9P	.790	20.07	.565	14.35	.333	8.46	.184	4.67	.310	7.87	.183	4.65	.333	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



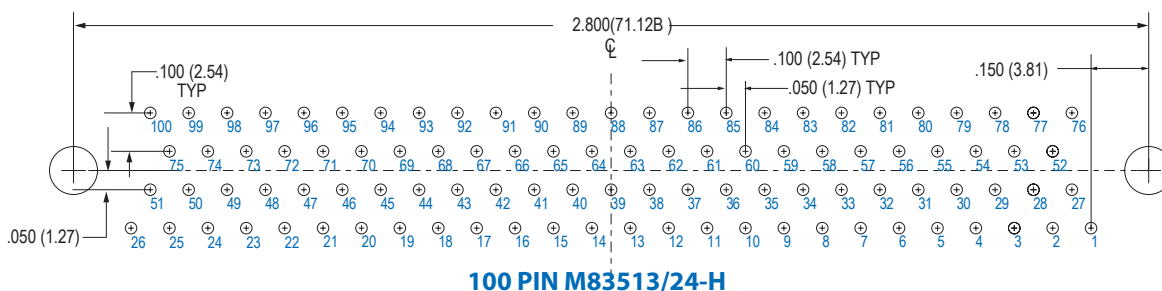
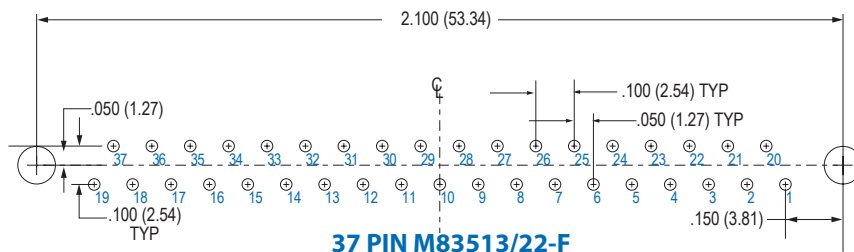
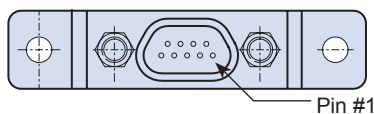
MIL-DTL-83513/22 Thru /27 Micro-D BS Straight PCB Terminated Connector

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

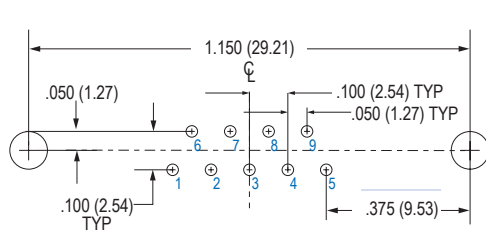


Connector Orientation

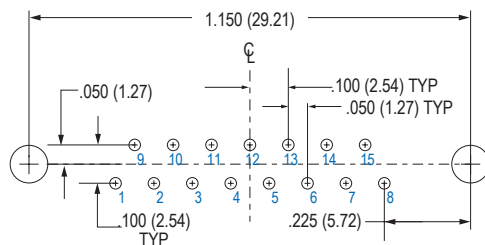


M83513/25 Thru /27 PCB Layouts – Socket Connectors

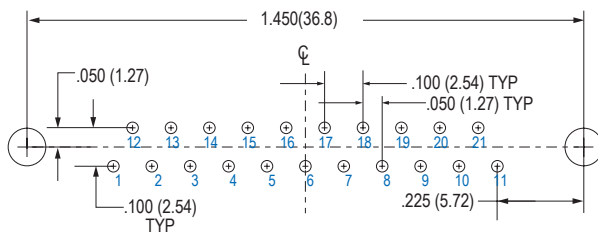
Patterns shown are for connector mounting side of PC board. 9 Thru 51 Contacts .096 (2.44) Diameter Mounting Holes, 100 Pin .125 (3.18) Diameter



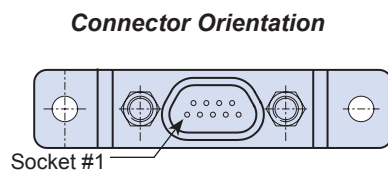
9 SOCKET M83513/25-A



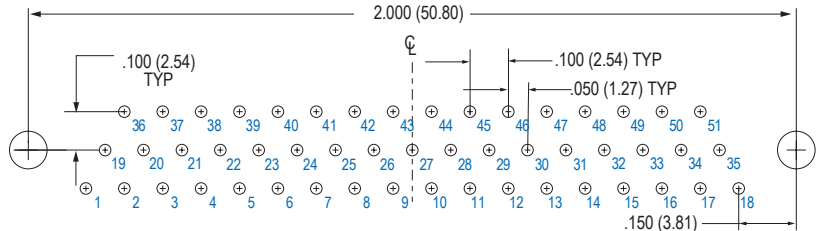
15 SOCKET M83513/25-B



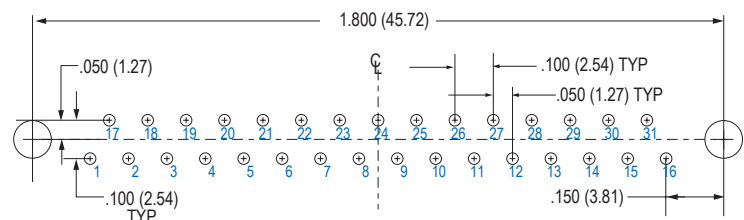
21 SOCKET M83513/25-C



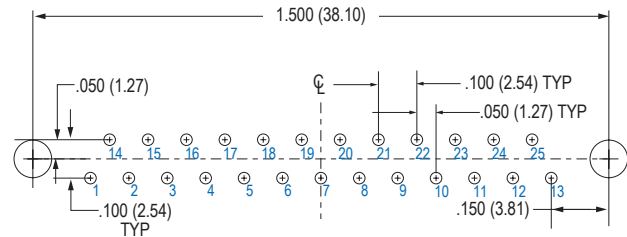
Connector Orientation



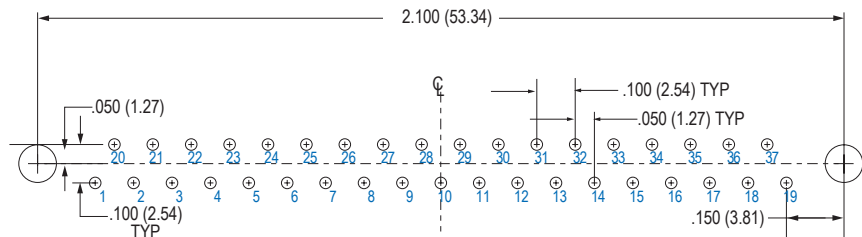
51 SOCKET M83513/26-G



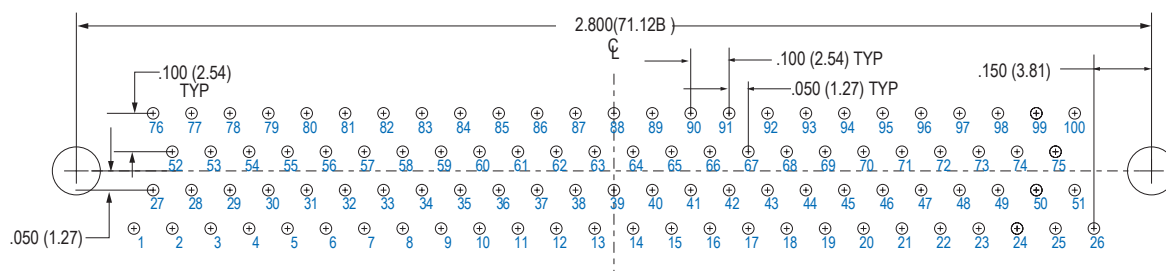
31 SOCKET M83513/25-E



25 SOCKET M83513/25-D



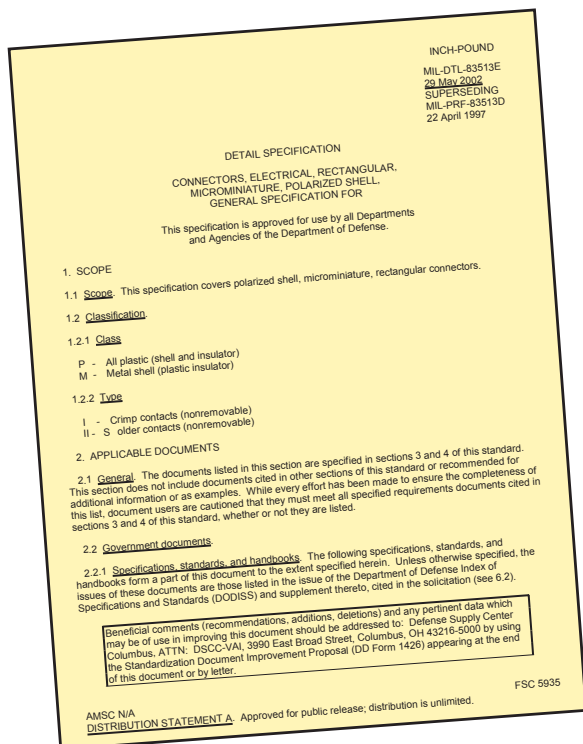
37 SOCKET M83513/25-F



100 SOCKET M83513/27-H



MIL-DTL-83513 At-A-Glance



What is the difference between a Glenair COTS Micro-D and a Glenair Mil Spec Micro-D? Which is less expensive?

All Glenair Micro-D's, whether mil spec or COTS, are built with the same components and meet identical requirements. A COTS Micro-D is not a lower cost version of a mil spec part. COTS versions offer more options than the mil spec versions.

Which is more readily available:

Mil Spec or COTS?

All M83513 aluminum shell connectors are in stock. All standard COTS versions are also stocked.

What is the difference between a Glenair Mil Spec connector and another brand?

MIL-DTL-83513 allows the use of low-cost stamped contacts; however, the Glenair Micro-D connector features the high performance TwistPin contact system. Glenair M83513 connectors are 100% Made in USA. Glenair's industry-leading Micro-D capacity and capabilities offer quick worldwide access to the full range of QPL items.

About The Mil Spec

The United States Department of Defense, Defense Logistics Agency, Defense Supply Center, Columbus, Ohio (DSCC, pronounced "Dessy"), maintains a vast library of military specifications covering all kinds of components used in defense equipment. These mil specs simplify system design and procurement, because mil spec parts do not require costly testing for suitability. Easy multiple sourcing is another key advantage of a mil spec part. MIL-DTL-83513 is a detail spec controlling dimensions, materials, performance and testing. This spec covers plastic and metal shell Micro-D connectors.

The QPL At-A-Glance

Manufacturers are required to perform a series of mechanical, electrical and environmental tests in order to be eligible for listing as an approved supplier. When DSCC approval is granted, the manufacturer is added to the Qualified Products List (QPL). Glenair is QPL approved for all M83513 variations.

The "Slash Sheets" At-A-Glance

In addition to the general specification, MIL-DTL-83513 contains a total of 33 Detail Specification Sheets, nicknamed "slash sheets" because a forward slash is used in the numbering system.

How to get a copy of the spec

DSCC specs are available for download. The documents include:

MIL-DTL-83513 Detail Specification (the general spec)

MIL-DTL-83513 Slash Sheets (33 individual specs)

These specs can be found at:

<http://www.dsccl.dla.mil/Programs/MilSpec/DocSearch.asp>

The QPL can be found at:

<http://www.dsccl.dla.mil/programs/qmlqpl/default.asp>

Glenair CAGE Codes

A **CAGE** (**C**ommercial **A**nd **G**overnment **E**ntity) Code is a five position code that identifies companies doing or wishing to do business with the Federal Government. Glenair uses two CAGE codes to identify M83513 products: **06324**, Glenair, Glendale, California
0CA77, Glenair Microway Division, Lincolnwood Illinois.