# **HiPer-D Combo Connectors**



### 280-050P straight PC tail combo pin connectors with O-ring flange for rear panel mounting



The HiPer-D is a high performance version of the M24308-type D-Subminiature connector. HiPer-D connectors feature improved EMI performance and environmental sealing. Factory-installed PC tail contacts, integral board standoffs and threaded holes for attaching to circuit board. Optional ground springs for improved resistance to electromagnetic interference. Gold-plated copper alloy contacts, one-piece machined aluminum shell, glass-reinforced thermoset epoxy insulator, epoxy potting compound, fluorosilicone face seal and O-ring. 1000 VAC, 7.5 Amps (#20), up to 40 Amps with size #8 power contacts.

How To Order												
Sample Part Number	280-050P	МТ	G	P	A							
Basic Part Number	280-050P											
Shell Size- Contact Arrangement	Contact Arrangements are shown in the adjacent table											
Shell Finish	ME = Electroless Nickel (RoHS) MT = Nickel-PTFE (RoHS) JF = Cadmium with Yellow Chron Z2 = Gold (RoHS) Z1 = Passivated Stainless Steel											
Ground Spring	G = Supplied with EMI Ground Spring N = No Ground Spring											
Mating Hardware	N = No Hardware P = #4-40 Female Jackposts G = Male Guide Pins B = Female Guide Bushings											
PC Tail Length	A = .125 (3.18) Tail Length B = .250 (6.35) Tail Length											

Contact /	Arrangements			
Shell Size-		ze and Qty		
Contact Arr.	#20	#8		
1-2P2		2		
1-5P1	4	1		
2-3P3		3		
2-7P2	5	2		
2-11P1	10	1		
3-5P5		5		
3-9P4	5	4		
3-13P3	10	3		
3-17P2	15	2		
3-21P1	20	1		
4-8P8		8		
4-13P6	7	6		
4-17P5	12	5		
4-21PA4	17	4		
4-25P3	22	3		
4-27P2	25	2		
5-24P7	17	7		
5-36P4	32	4		
5-43P2	41	2		
5-47P1	46	1		

Specifications							
Current Rating	#20 7.5 AMPS, #8 40 AMPS						
Test Voltage	1000 VAC RMS						
Insulation Resistance	5000 megohms minimum						
Operating Temperature	-65° C. to +200° C.						
Ingress Protection	IP 67						
Shock	300 g.						
Vibration, Random	43.92 g.						

Materials and Finishes					
Shell Aluminum alloy					
Contacts	Copper alloy, 50 microinches gold				
Insulator	Thermoset epoxy				
Potting Compound	Ероху				
EMI Spring	Copper alloy, nickel plated				
Face Seal, O-ring	Fluorosilicone rubber				
Hardware	300 series stainless steel				

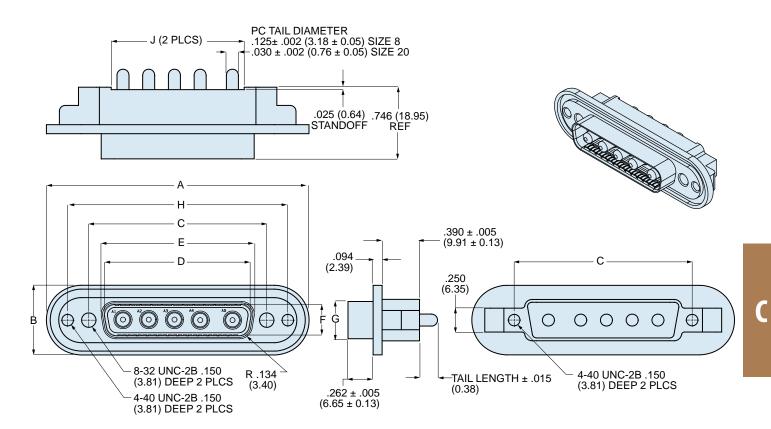
Mating H	lardware
N	Р
No Hardware #8-32 tapped hole	Female Jackposts #4-40, Non-removable
В	G
Female Guide Bushings Non-removable	Male Guide Pins Non-removable

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### 280-050P DIMENSIONS



Dimensions																		
	Α		В		C Basic		D		E		F		G		H Basic		,	J
Shell	in	mm	in	mm			in	mm	in	mm	in	mm	in	mm				
Size	± .015	± 0.38	± .015	± 0.38	in.	mm	± .005	± 0.13	± .005	± 0.13	± .005	± 0.13	± .015	± 0.38	in	mm	in	mm
1	1.865	47.37	.725	18.42	.984	24.99	.666	16.92	.726	18.44	.329	8.36	.389	9.88	1.424	36.17	.520	13.21
2	2.200	55.88	.725	18.42	1.312	33.32	.994	25.25	1.054	26.77	.329	8.36	.389	9.88	1.752	44.50	.844	21.44
3	2.736	69.49	.725	18.42	1.852	47.04	1.534	38.96	1.594	40.49	.329	8.36	.389	9.88	2.292	58.22	1.386	35.20
4	3.385	85.98	.725	18.42	2.500	63.50	2.182	55.42	2.242	56.95	.329	8.36	.389	9.88	2.940	74.68	2.034	51.66
5	3.289	83.54	.837	21.26	2.406	61.11	2.079	52.81	2.139	54.33	.441	11.20	.501	12.73	2.846	72.29	1.987	50.47

### **NOTES**

- 1. Contacts are factory-installed, non-removable and are potted with epoxy.
- HiPer-D connectors are available with a wide variety of materials and finishes. See About Series 28 HiPer-D Shell Plating Options for additional choices. Glenair offers the industry's widest selection of plating and material choices with no setup charge, no minimum order quantity and no schedule impact.
- 3. For panel cutout dimensions, refer to Panel Cutouts and Printed Circuit Board Footprints.
- 4. For printed circuit board mounting dimensions, refer to Panel Cutouts and Printed Circuit Board Footprints.
- 5. Combo HiPer-D connectors meet the applicable requirements of MIL-DTL-24308 and are intermateable with standard M24308-type D-Subminiature combo connectors with corresponding contact arrangements and type.
- Additional electrical, mechanical and environmental specifications are listed in HiPer-D Product Specification.