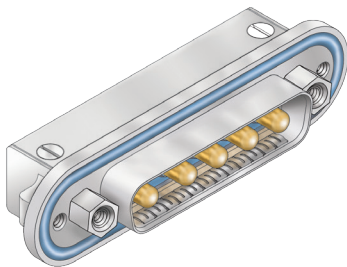


280-052P right angle PC tail combo pin connectors with O-ring flange for rear panel mounting



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. Aluminum alloy EMI cover. 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	280-052P	3-5P5	ME	G	B	B
Basic Part Number	280-052P					
Shell Size-Contact Arrangement	See Shell Size - Contact Arrangements Table					
Shell Finish	ME = Electroless Nickel JF = Cadmium with Yellow Chromate Z1 = Passivated Stainless Steel		MT = Nickel-PTFE Z2 = Gold			
Ground Spring	G = Supplied with EMI Ground Spring		N = No Ground Spring			
Mating Hardware	N = No Hardware G = Male Guide Pins		P = #4-40 Female Jackposts B = Female Guide Bushings			
PC Tail Length	A = .125 (3.18) Tail Length		B = .250 (6.35) Tail Length			

Contact Arrangements		
Shell Size-Contact Arr.	Contact Size and Qty	
	#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

Mating Hardware	
N No Hardware #8-32 tapped hole	P Female Jackposts #4-40, Non-removable
B Female Guide Bushings Non-removable	G Male Guide Pins Non-removable

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.
Shock	300 g.
Vibration, Random	43.92 g.

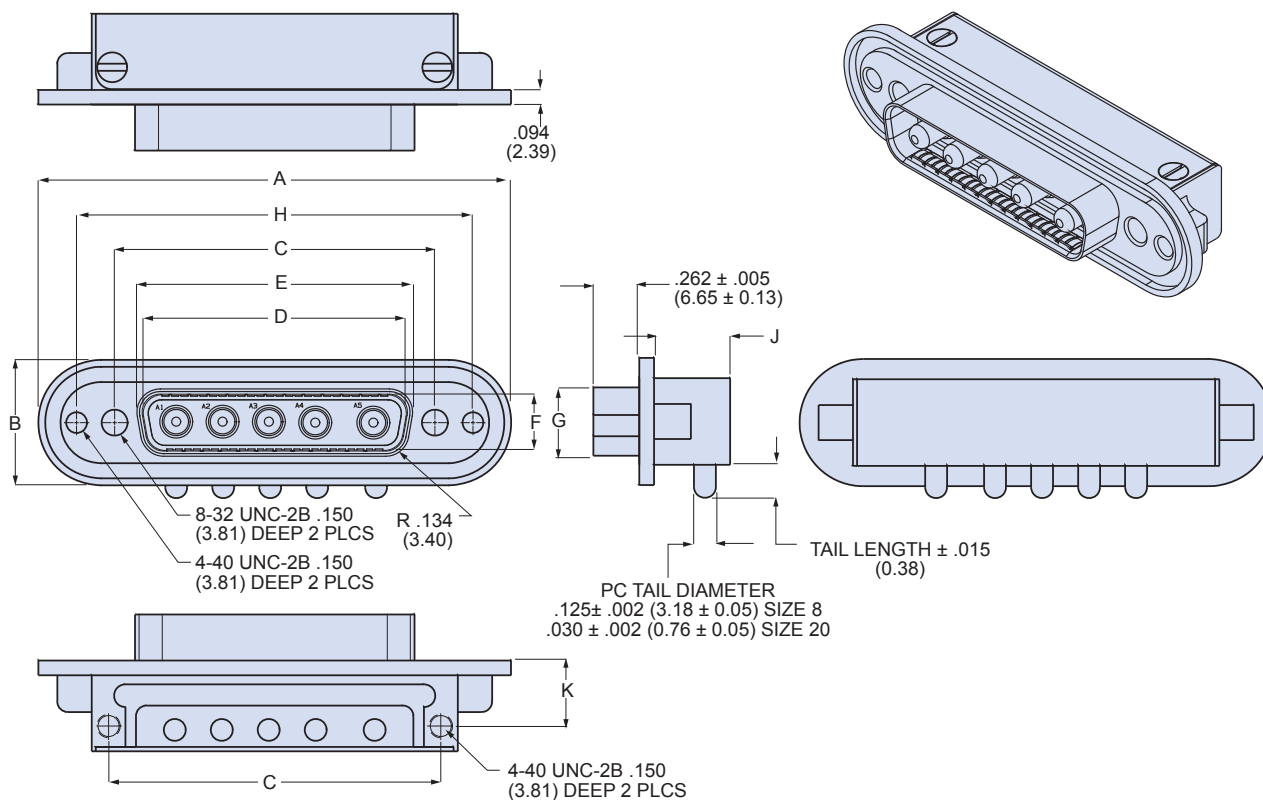
Materials and Finishes	
Shell	Aluminum alloy
Contacts	Copper alloy, 50 microinches gold
Insulator	Thermoset epoxy
Potting Compound	Epoxy
EMI Spring	Copper alloy, nickel plated
Face Seal, O-ring	Fluorosilicone rubber
Hardware	300 series stainless steel
Shroud	Stainless steel

SERIES 28 HiPer-D® Combo Connectors



280-052P right angle PC tail combo connectors
with O-ring flange for rear panel mounting

280-052P DIMENSIONS



Dimensions																				
Shell Size	A		B		C Basic		D		E		F		G		H Basic		J		K	
	in ± .015	mm ± 0.38	in ± .015	mm ± 0.38	in.	mm	in ± .005	mm ± 0.13	in ± .005	mm ± 0.13	in ± .005	mm ± 0.13	in ± .015	mm ± 0.38	in	mm	in ± .005	mm ± 0.13	in ± .005	mm ± 0.13
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	.518	13.16	.374	9.50
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	.518	13.16	.374	9.50
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	.518	13.16	.374	9.50
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	.518	13.16	.374	9.50
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	.630	16.00	.430	10.92

NOTES

1. Contacts are factory-installed, non-removable and are potted with epoxy.
2. 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 .
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.
6. Additional electrical, mechanical and environmental specifications are listed in [HiPer-D® Product Specification](#).