

MICRO-CRIMP RECTANGULAR CONNECTORS

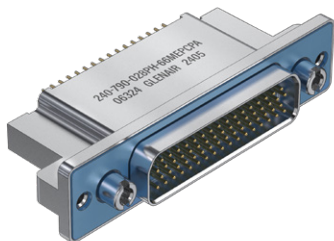
Series 790 High-Density

SERIES™
790
HD

240-790-028

Panel Receptacle, Filtered, Straight PC Tails

- ◆ Straight PCB termination
- ◆ Rear panel mount
- ◆ Pin contacts



240-790-028 rear panel mount receptacle has ceramic filter array to attenuate unwanted signals. Straight PC tail contacts. Available with two filter types (C, Pi) and 11 filter classes ranging from 35 pF to 240K pF. Conductive fluorosilicone panel gasket provides low resistance panel bonding and ingress protection. Machined aluminum shell has rear threads for attaching connector to PC board.

- Aerospace-grade microminiature PCB connector with M39029-type signal and power contacts
- Epoxy sealed PC terminals
- Conductive panel gasket
- Environmental

INSERT ARRANGEMENTS

Insert Arrangement	No. of Contacts			
	#23	#16	#12	#8
A-5	5			
B-2P2		2		
B-9	9			
C-13	13			
D-15	15			
D-3P3		3		
D-7P2	5	2		
E-11P2	9	2		
E-19	19			
E-7P3	4	3		
F-14P3	11	3		
F-15P2	13	2		
F-23	23			
F-5P5		5		
G-13P2	11		2	
G-21P1	20		1	
G-3P3			3	
G-33	33			
H-10P4	6		4	
H-29P7	22	7		
H-36P2	34		2	
H-51P1	50		1	
H-54P2	52	2		
H-5P5			5	
H-66	66			
J-17P4	13	4		
J-25P2	23	2		
J-33	33			
J-7P7		7		
K-27P4	23	4		
K-35P2	33	2		
K-43	43			
K-9P9		9		
L-22P4	18		4	
L-48P2	46		2	
L-6P6			6	
L-78	78			
M-17P17		17		
M-102	102			

HOW TO ORDER

Sample Part Number

	240-790-028P	H-66	ME	P	C	G	A
Basic Part Number	240-790-028P Panel Receptacle, PC Tails, Filtered, Pin Contacts						
Shell Size-Insert Arr.	See "Insert Arrangements" Table						
Shell Finish	ME Electroless Nickel MT Nickel / PTFE N Olive Drab Cadmium TZ Tin-Zinc ZR Black Zinc-Nickel						
Filter Type	C C Circuit P Pi Circuit						
Filter Capacitance Class	See "Filter Capacitance Class" Table						
Hardware Option Table 1	N No Hardware Threaded holes G Guide Pins For blind mating P Female Jackposts S Guide Sockets For blind mating						
PC Tail Length	A .125 inch (3.2mm) B .250 inch (6.4mm) C .375 inch (9.5mm)						

FILTER CAPACITANCE CLASS

Filter Class	Capacitance Range (pF)	
	Filter Type P	Filter Type C
X*†	160,000-240,000	80,000-120,000
Y*	80,000-120,000	40,000-60,000
Z*	60,000-90,000	30,000-45,000
A	38,000-56,000	19,000-28,000
B	32,000-45,000	16,000-22,500
C	18,000-33,000	9,000-16,500
D	8,000-12,000	4,000-6,000
E	3,300-5,000	1,650-2,500
F	800-1,300	400-650
G	400-600	200-300
J	70-120	35-60

* Filter classes X, Y and Z are 250 VDC. All others are 500 VDC.
† Class X filters not available for arrangements with 3 or more rows of contacts.

TABLE 1 HARDWARE OPTIONS

 N No Hardware Threaded Blind Holes	 P Female Jackpost
 G Guide Pin	 S Guide Socket

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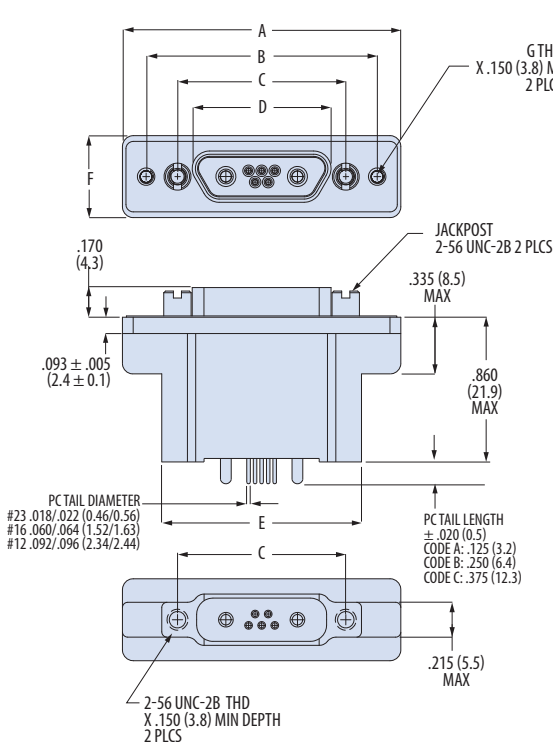
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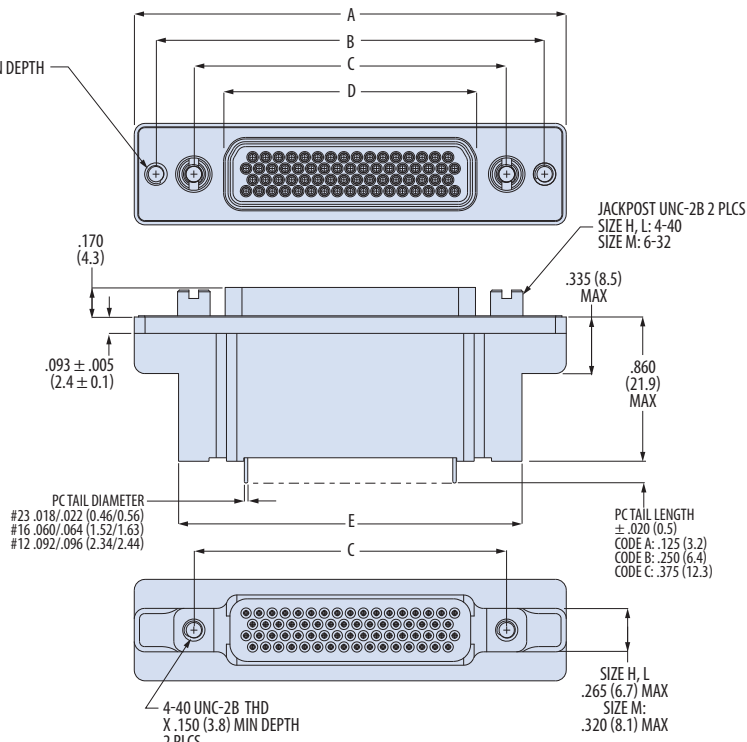
240-790-028

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- ◆ Rear panel mount
- ◆ Pin contacts



SHELL SIZE A-G, J, K



SHELL SIZE H, L, M

Shell Size	A Max		B ± .005 (0.1)		C ± .005 (0.1)		D Max		E Max		F Max		G Thd
	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
A	1.211	30.8	.925	23.5	.565	14.4	.401	10.2	.760	19.3	.485	12.3	2-56
B	1.361	34.6	1.075	27.3	.715	18.2	.551	14.0	.910	23.1	.485	12.3	2-56
C	1.511	38.4	1.225	31.1	.865	22.0	.701	17.8	1.060	26.9	.485	12.3	2-56
D	1.611	40.9	1.325	33.7	.965	24.5	.801	20.3	1.160	29.5	.485	12.3	2-56
E	1.761	44.7	1.475	37.5	1.115	28.3	.951	24.2	1.310	33.3	.485	12.3	2-56
F	1.911	48.5	1.625	41.3	1.265	32.1	1.101	28.0	1.460	37.1	.485	12.3	2-56
G	1.861	47.3	1.575	40.0	1.215	30.9	1.079	27.4	1.410	35.8	.575	14.6	2-56
H	2.500	63.5	2.236	56.8	1.800	45.7	1.450	36.8	2.045	51.9	.600	15.2	4-40
J	2.261	57.4	1.975	50.2	1.615	41.0	1.460	37.1	1.810	46.0	.485	12.3	2-56
K	2.661	67.6	2.375	60.3	2.015	51.2	1.860	47.2	2.210	56.1	.485	12.3	2-56
L	2.736	69.5	2.472	62.8	2.036	51.7	1.686	42.8	2.281	57.9	.600	15.2	4-40
M	3.085	78.4	2.770	70.4	2.200	55.9	1.745	44.3	2.485	63.1	.660	16.8	6-32

RATINGS

- Voltage (DWV): 500 VDC. Class X, Y, Z: 250 VDC.
- Current rating for arrangements with all contacts the same size: #23 5A, #16 13A, #12 23A
- Current rating for arrangements with mixed contact sizes: #23 5A, #16 7.5A, #12 13A
- Operating temperature: -55 to +125 °C
- Durability: 500 mating cycles
- Shock: 300 g
- Vibration: 20 g random
- Insulation resistance: 5000 megohm @ 200 VDC. Class X, Y, Z: 1000 megohm @ 83 VDC

CONSTRUCTION

- Contacts: Copper alloy, gold over nickel finish
- Shell: Aluminum
- Insulators: High performance dielectric
- Interfacial seal: Fluorosilicone/silicone blend
- Panel gasket: Cho-Seal 1287 silver-plated aluminum filled fluorosilicone
- Hardware: Stainless steel



Application Note PCB Footprints

See Section G for PC board layouts.

BLIND MATE TOLERANCES

Shell Size	Allowable Misalignment from Centerline
A - G, J, K	± .030 (0.8)
H, L	± .040 (1.0)
M, N	± .050 (1.3)

HARDWARE DETAILS

N No Hardware Tapped holes. Size A-G, J, K = 4-40, H, L = 6-32, M = 8-32. .150 (3.8) min. depth	P Female Jackposts Jackposts are non-removable. Size A-G, J, K = 2-56, H, L = 4-40, M = 6-32.
G Guide Pins Guide pins for blind mate applications. Non-removable. Requires guide socket (S) on mating plug.	S Guide Sockets Guide sockets for blind mate applications. Non-removable. Requires guide pins (G) on mating plug.



Application Note

See page A-60 for panel cutout dimensions.