

MICRO-CRIMP RECTANGULAR CONNECTORS

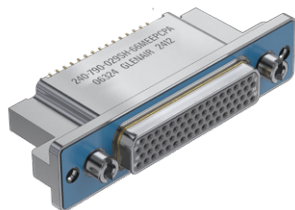
Series 790 High-Density

SERIES
790
HD

240-790-029

Panel Plug, Filtered, Straight PC Tails

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



240-790-029 plug for rear panel mounting has ceramic filter array to attenuate unwanted signals. Straight PC tail socket 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.

- Aerospace-grade microminiature PCB connector with M39029-type signal and power contacts
- Planar array ceramic filter
- 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

240-790-029S G-33 ME E P C S A

Basic Part Number	240-790-029S	Panel Plug, Filtered, Socket Contacts, PC Tail
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	
EMI Spring	E EMI Spring <i>Shell finishes ME and MT only</i> N No EMI Spring	
Filter Type	C C Circuit P Pi Circuit	
Filter Capacitance Class	See "Filter Capacitance Class " Table	
Hardware Option <i>Table 1</i>	N No Hardware <i>Threaded holes</i> G Guide Pins <i>For blind mating</i> P Female Jackposts S Guide Sockets <i>For blind mating</i>	
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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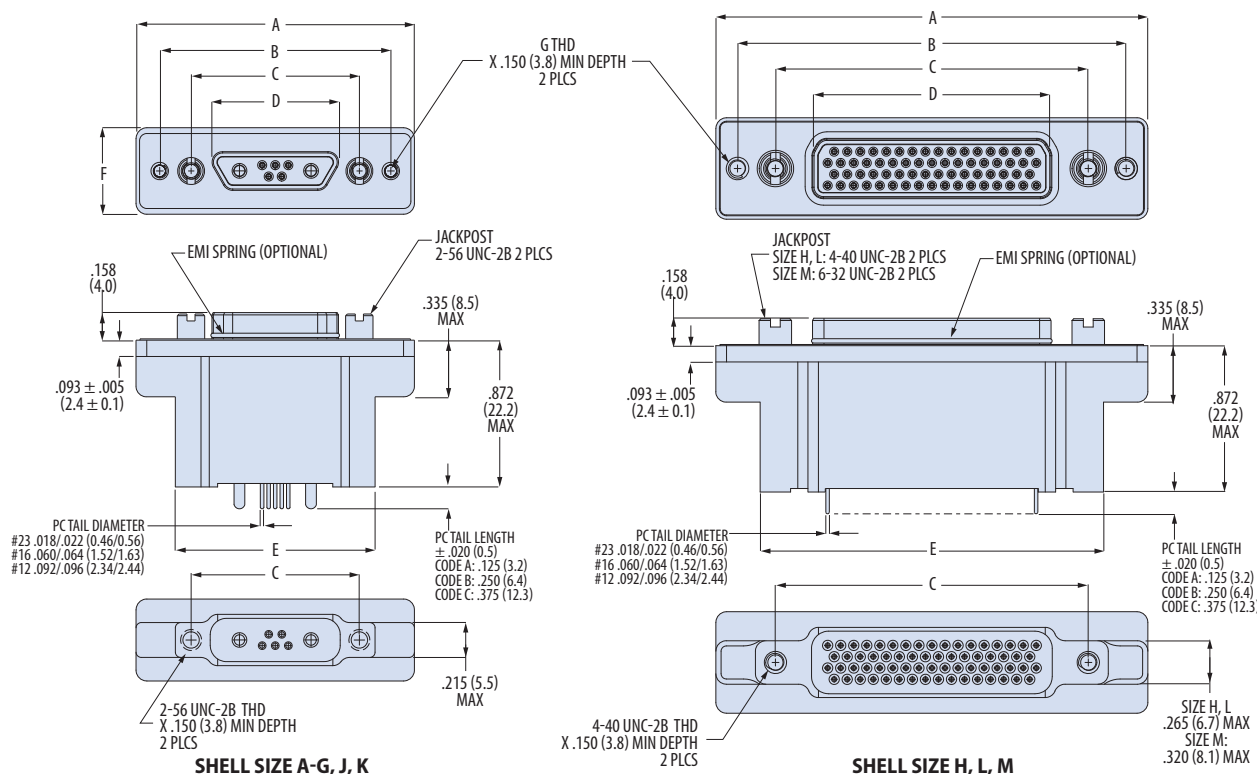


240-790-029

Panel Plug, Filtered, Straight PC Tails

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

SERIES 790 HIGH-DENSITY



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	UNC-2B
A	1.211	30.8	.925	23.5	.565	14.4	.335 (8.5)
B	1.361	34.6	1.075	27.3	.715	18.2	.485 (12.3)
C	1.511	38.4	1.225	31.1	.865	22.0	.635 (16.1)
D	1.611	40.9	1.325	33.7	.965	24.5	.735 (18.7)
E	1.761	44.7	1.475	37.5	1.115	28.3	.885 (22.5)
F	1.911	48.5	1.625	41.3	1.265	32.1	1.035 (26.3)
G	1.861	47.3	1.575	40.0	1.215	30.9	1.010 (25.7)
H	2.500	63.5	2.236	56.8	1.800	45.7	1.385 (35.2)
J	2.261	57.4	1.975	50.2	1.615	41.0	1.390 (35.3)
K	2.661	67.6	2.375	60.3	2.015	51.2	1.795 (45.6)
L	2.736	69.5	2.472	62.8	2.036	51.7	1.623 (41.2)
M	3.085	78.4	2.770	70.4	2.200	55.9	1.675 (42.5)

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
- Panel gasket: Cho-Seal 1287 silver-plated aluminum filled fluorosilicone
- EMI spring: Stainless steel, gold plated
- Hardware: Stainless steel



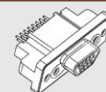
Application Note

See page A-60 for panel cutout dimensions.

BLIND MATE TOLERANCES

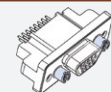
Shell Size	Allowable Misalignment from Centerline
A - G, J, K	± .030 (0.8)
H, L	± .040 (1.0)
M, N	± .050 (1.3)

HARDWARE DETAILS



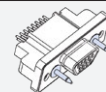
N No Hardware

Tapped holes. Size A-G, J, K = 4-40, H, L = 6-32, M = 8-32. .150 (3.8) min. depth



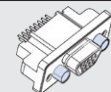
P Female Jackposts

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.



S Guide Sockets

Guide sockets for blind mate applications. Non-removable.



Application Note PCB Footprints

See Section G for PC board layouts.