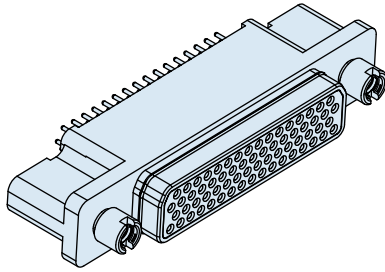


Series 79 Micro-Crimp

Section F: Straight Printed Circuit Board Connectors



PLUGS WITH SOCKET CONTACTS, STRAIGHT PCB TERMINATION, 790-044S



Free-standing, rugged vertical mount headers feature gold-plated PC tail contacts for thru-hole printed circuit board termination. Contacts are permanently installed and are sealed with epoxy. Shells are aluminum alloy. Threaded board mounting holes and integral standoffs simplify installation. Available in 29 different contact arrangements, these connectors feature size #23 signal contacts along with #16 and #12 power contacts for up to 23 amps current rating. Optional EMI spring improves shell-to-shell conductivity and shielding performance. Stainless steel jackposts are non-removable.

HOW TO ORDER

Sample Part Number

790-044S	D-15	MT	E	P	B
Part Number	Shell Size - Insert Arr.	Shell Finish	EMI Spring	Hardware Option	PC Tail Length
<p>790-044S Plug with Straight Thru-Hole PC Tail Contacts for Termination to Backplanes or Flexible Circuits</p>	<p>See Table 1 for Available Insert Arrangements</p>	<p>M Electroless Nickel <i>general purpose applications</i></p> <p>MT Nickel-PTFE <i>1000 Hour Grey™ maximum corrosion protection and durability (non-reflective grey)</i></p> <p>ZNU Zinc-Nickel with Black Chromate <i>tactical applications (non-reflective black)</i></p> <p style="text-align: center;">Additional shell finishes are listed on page C-9.</p>	<p>E EMI Spring</p> <p>N No Spring</p>	<p>N No Hardware</p> <p>P Female Jackpost</p>	<p>A .125 Inch (3.2 mm.)</p> <p>B .250 inch (6.4 mm.)</p>

SPECIFICATIONS

Current Rating	#23 5 AMPS, #16 13 A., #12 23 A.
Dielectric Withstanding Voltage	#23 500 VAC RMS, #12 and #16 1800 VAC RMS
Insulation Resistance	5000 megohms minimum
Operating Temperature	-65° C. to +150° C.
Shock	300 g.
Vibration	37 g.

MATERIALS AND FINISHES

Shell	Aluminum alloy
Contacts	Copper alloy, 50 microinches gold plated, stainless steel hood
Insulator	Liquid crystal polymer (LCP)
Jackposts	300 series stainless steel
Encapsulant	Epoxy

Dimensions in inches (millimeters) and are subject to change without notice.

Table 1 Contact Arrangements

Layout	Contact Quantity			Face View
	#23	#16	#12	
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-15P2	13	2		
F-23	23			
F-5P5		5		
G-33	33			
H-10P4	6		4	
H-29P7	22		7	
H-36P2	34		2	
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-6P6			6	

CROSS-SECTIONAL VIEW OF 790-044S

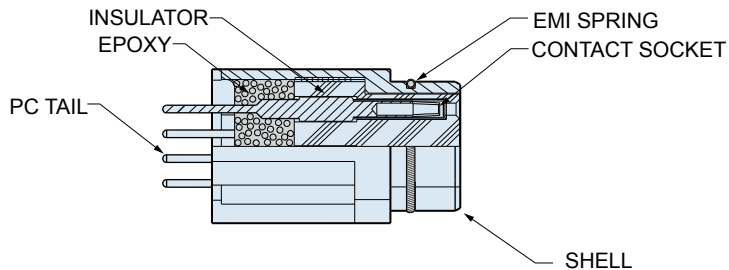
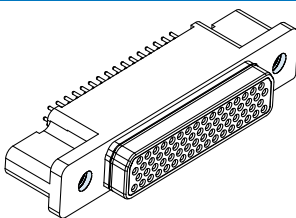


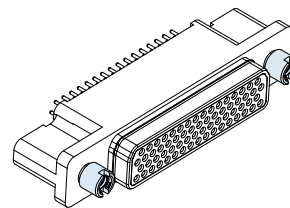
TABLE 2 HARDWARE OPTION



N

No Mating Hardware

Connector is supplied with threaded holes. Shell sizes H and L have #6-32 threads, other sizes have #4-40 threads. Thread depth is .150" (3.8).



P

Jackposts

Connector is supplied with non-removable stainless steel jackposts. Shell sizes H and L have #4-40 UNC thread, other sizes have #2-56 thread.

Dimensions in inches (millimeters) and are subject to change without notice.

CAGE Code 06324

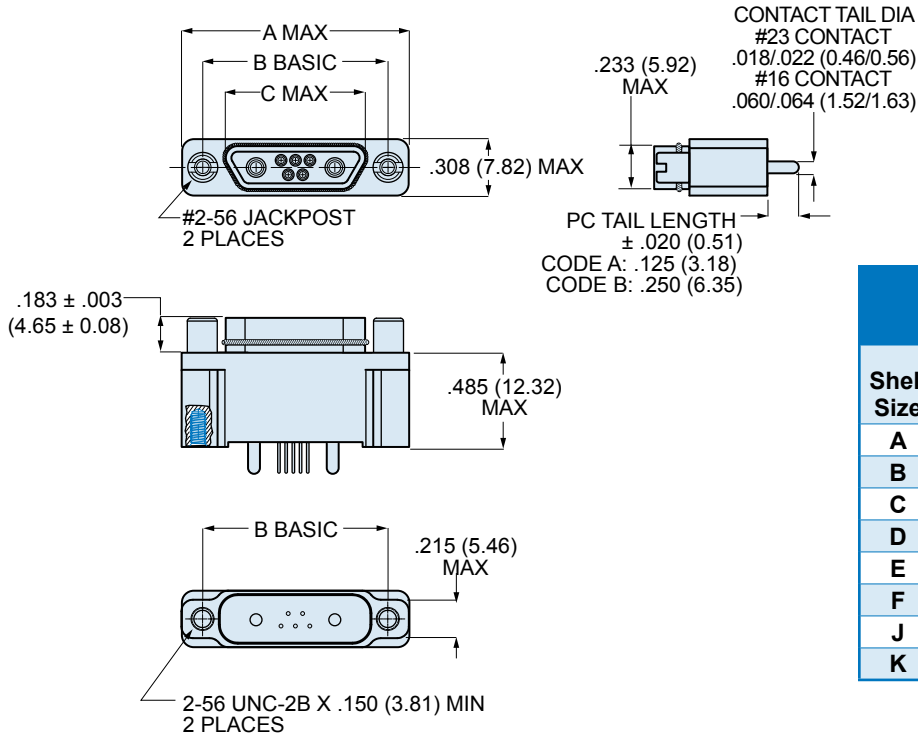
Printed in U.S.A.

Series 79 Micro-Crimp

Section F: Straight Printed Circuit Board Connectors



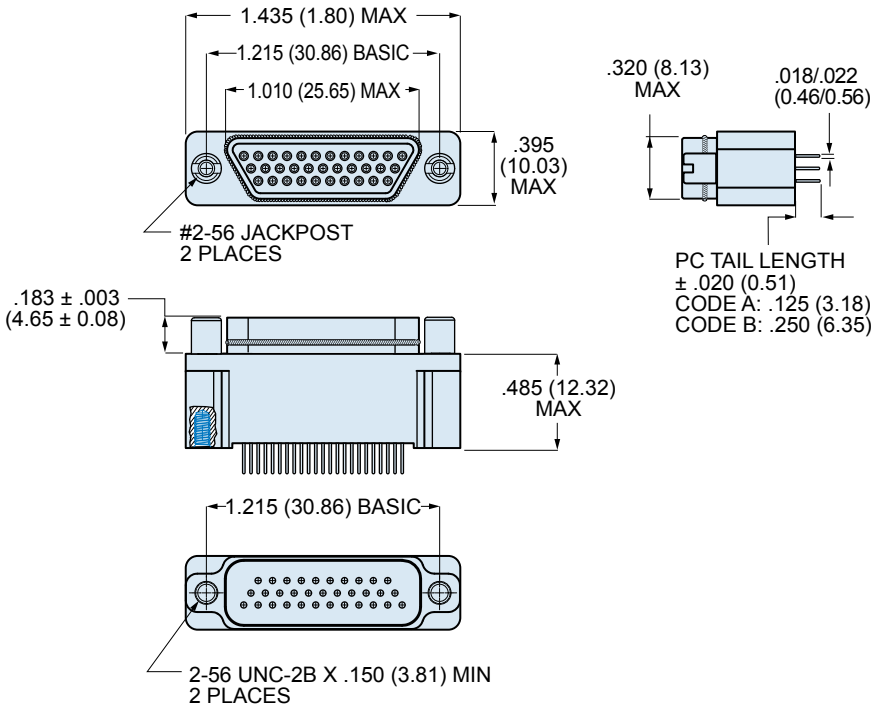
790-044S SHELL SIZE A,B,C,D,E,F,J,K DIMENSIONS



790-044S DIMENSIONS SHELL SIZE A-G, J,K

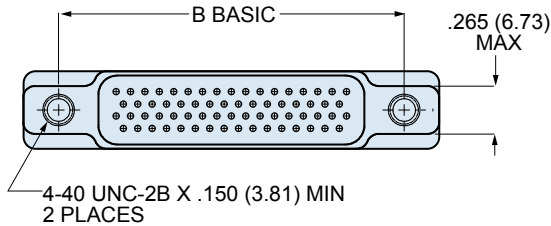
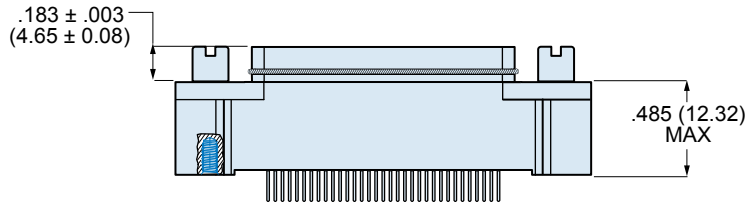
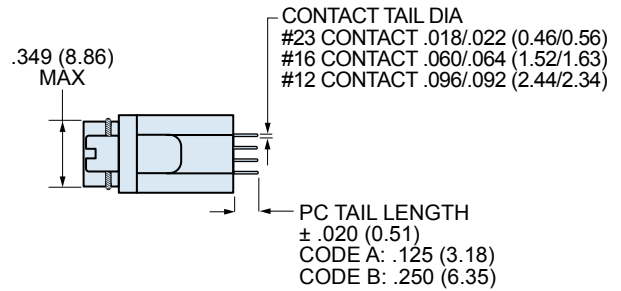
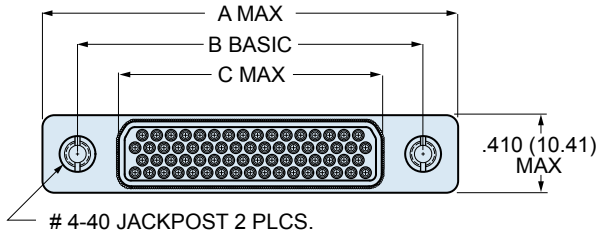
Shell Size	A Max.		B Basic		C Max.	
	In.	mm.	In.	mm.	In.	mm.
A	.785	19.94	.565	14.35	.335	8.51
B	.935	23.75	.715	18.16	.485	12.32
C	1.085	27.56	.865	21.97	.635	16.13
D	1.185	30.10	.965	24.51	.735	18.67
E	1.335	33.91	1.115	28.32	.885	22.48
F	1.485	37.72	1.265	32.13	1.035	26.29
J	1.845	46.86	1.615	41.02	1.390	35.61
K	2.240	56.90	2.015	51.18	1.795	45.59

790-044S SHELL SIZE G DIMENSIONS



Dimensions in inches (millimeters) and are subject to change without notice.

790-044S SHELL SIZE H & L DIMENSIONS



790-044S DIMENSIONS
SHELL SIZE H & L

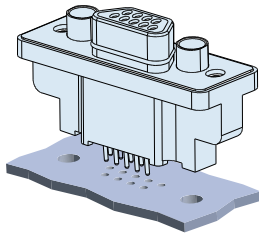
Shell Size	A Max.		B Basic		C Max.	
	In.	mm.	In.	mm.	In.	mm.
H	2.175	55.25	1.800	45.72	1.385	35.18
L	2.420	61.47	2.036	51.71	1.623	41.22

Dimensions in inches (millimeters) and are subject to change without notice.

Series 79 Micro-Crimp Section F: Straight Printed Circuit Board Connectors



PCB Hole Patterns for 790-029S and 790-044S Plugs



This section contains printed circuit board footprints for vertical mounted Series 79 plugs. The contact identification numbers are shown for the connector mounting side of the PC board. Contact tails are gold over nickel plated.

Contact Size	PC Tail Diameter	
	In.	Ø Diameter mm.
#23	.018-.022	0.46-0.56
#16	.060-.064	1.52-1.63
#12	.092-.096	2.34-2.44

790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
A-5	
B-2P2	
B-9	
C-13	

Dimensions in inches (millimeters) and are subject to change without notice.

790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
D-15	
D-3P3	
D-7P2	
E-11P2	
E-19	

Dimensions in inches (millimeters) and are subject to change without notice.

Series 79 Micro-Crimp Section F: Straight Printed Circuit Board Connectors



790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
E-7P3	
F-15P2	
F-23	
F-5P5	
G-33	

Dimensions in inches (millimeters) and are subject to change without notice.

790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
H-10P4	
H-29P7	
H-36P2	
H-54P2	
H-5P5	

Dimensions in inches (millimeters) and are subject to change without notice.

Series 79 Micro-Crimp

Section F: Straight Printed Circuit Board Connectors



790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
H-66	
J-17P4	
J-25P2	
J-33	
J-7P7	

Dimensions in inches (millimeters) and are subject to change without notice.

790-029S AND 790-044S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB
K-27P4	<p>Dimensions: .595 (15.11), .4325 (10.99), .2575 (6.54), 2.015 (51.18), .075 (1.91) TYP, .0375 (0.95) TYP, 1.150 (29.21), 1.500 (38.1), .0325 (0.83) TYP, .065 (1.65) TYP.</p> <p>Notes: (HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 23x), (HOLE TO ACCEPT .064 (1.63) MAX DIA CONTACT 4x), $\phi \varnothing .003 \text{ (M) (A)}$.</p>
K-35P2	<p>Dimensions: .2575 (6.54), .4075 (10.35), 2.015 (51.18), .075 (1.91) TYP, .0375 (0.95) TYP, 1.500 (38.1), .0325 (0.83) TYP, .065 (1.65) TYP.</p> <p>Notes: (HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 33x), (HOLE TO ACCEPT .064 (1.63) MAX DIA CONTACT 2x), $\phi \varnothing .003 \text{ (M) (A)}$.</p>
K-43	<p>Dimensions: .220 (5.59), 2.015 (51.18), .075 (1.91) TYP, .0375 (0.95) TYP, .065 (1.65) TYP, .0325 (0.83) TYP.</p> <p>Notes: (HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 43x), $\phi \varnothing .003 \text{ (M) (A)}$.</p>
K-9P9	<p>Dimensions: .3075 (7.81), .175 (4.45), 2.015 (51.18).</p> <p>Notes: (HOLE TO ACCEPT .064 (1.63) MAX DIA CONTACT 9), $\phi \varnothing .003 \text{ (M) (A)}$.</p>
L-6P6	<p>Dimensions: .428 (10.87), .236 (5.99) 5x, 2.036 (51.71).</p> <p>Notes: (HOLE TO ACCEPT .096 (2.44) MAX DIA CONTACT 6x), $\phi \varnothing .003 \text{ (M) (A)}$.</p>

Dimensions in inches (millimeters) and are subject to change without notice.