

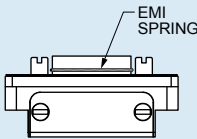
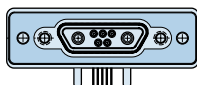
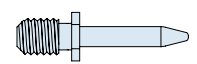


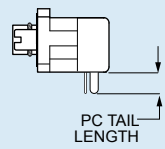
### PANEL MOUNT PLUGS, SOCKET CONTACTS, 90° PCB TERMINATION, 790-037S



Lightweight, rugged right angle headers feature gold-plated PC tail contacts for thru-hole printed circuit board termination. 790-037S connectors are designed for rear-panel mounting and are supplied with conductive panel gaskets. Contacts are permanently installed and are sealed with epoxy. Shells are aluminum alloy. EMI shroud improves shielding performance. 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.

### HOW TO ORDER

Sample Part Number

790-037S	H-5P5	M	E	P	B
Part Number	Shell Size - Insert Arr.	Shell Finish	EMI Spring	Hardware Option	PC Tail Length
<p><b>790-037S</b> Rear Panel Mounted Plug with 90° PC Tail Contacts for Termination to Backplanes or Flexible Circuits</p>	<p>See Table 1 for Available Insert Arrangements</p>	<p><b>M</b> Electroless Nickel <i>general purpose applications</i></p> <p><b>MT</b> Nickel-PTFE <i>1000 Hour Grey™ maximum corrosion protection and durability (non-reflective grey)</i></p> <p><b>ZNU</b> 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><b>E</b> EMI Spring</p> <p><b>N</b> No Spring</p> 	 <p><b>N</b> No Hardware</p>  <p><b>G</b> Guide Pin</p>  <p><b>P</b> Female Jackpost</p>  <p><b>S</b> Female Guide Socket</p>	<p><b>A</b> .125 Inch (3.2 mm.)</p> <p><b>B</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, gold plated, with stainless steel hood
Insulator	Liquid crystal polymer (LCP)
PCB Tray	Thermoplastic
EMI Shroud	Aluminum alloy
Hardware	300 series stainless steel
Panel Gasket	Fluorosilicone, conductive
Encapsulant	Epoxy

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

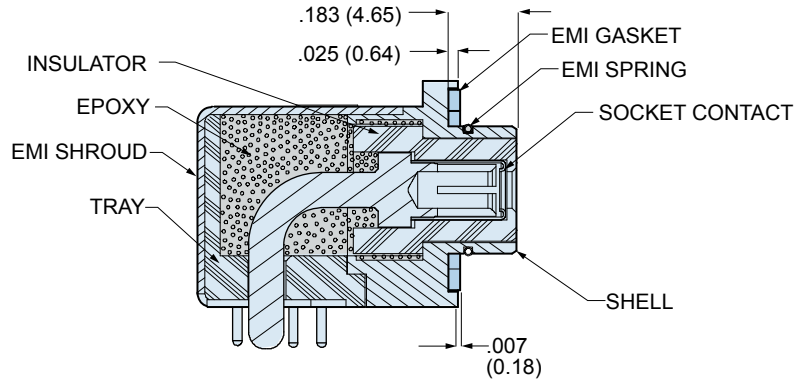
# Series 79 Micro-Crimp Section G: Right Angle Printed Circuit Board Connectors



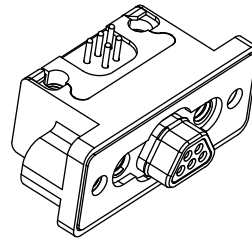
**Table 1  
Contact Arrangements**

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 790-037S**



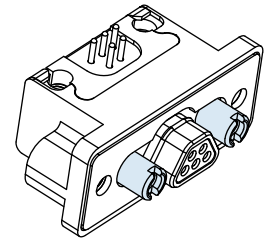
**TABLE 2  
HARDWARE OPTION**



**N**

**No Mating Hardware**

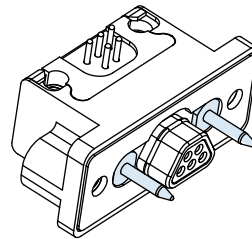
Connector is supplied with blind, tapped holes. Shell sizes H and L have 6-32 UNC-2B thread, other sizes are #4-40. Minimum thread depth is .150" (3.81).



**P**

**Jackposts**

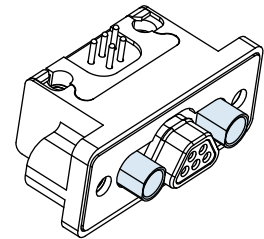
Connector is supplied with non-removable jackposts. Shell sizes H and L have #4-40 UNC-2B thread, other sizes have #2-56 thread.



**G**

**Male Guide Pins**

Connector is supplied with stainless steel guide pins to mate with code S guide sockets. Pins are non-removable.



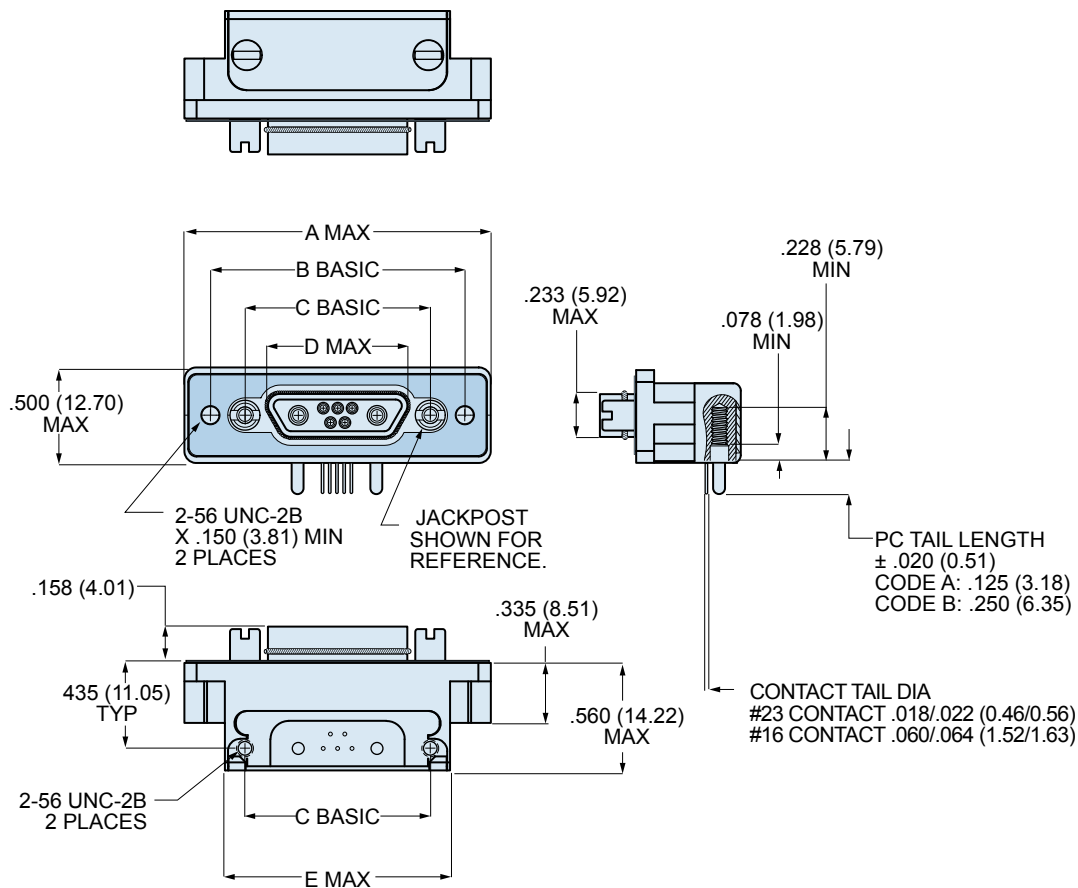
**S**

**Female Guide Sockets**

Connector is supplied with stainless steel guide sockets to mate with code G guide pins. Sockets are non-removable.

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

790-037S DIMENSIONS: SHELL SIZE A-F, J AND K



790-037S SHELL SIZES A-F, J AND K

Shell Size	A Max.		B Basic		C Basic		D Max.		E Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
A	1.211	30.76	.925	23.50	.565	14.35	.335	8.51	.760	19.30
B	1.361	34.57	1.075	27.31	.715	18.16	.485	12.32	.910	21.11
C	1.511	38.38	1.225	31.12	.865	21.97	.635	16.13	1.060	26.92
D	1.611	40.92	1.325	33.66	.965	24.51	.735	18.67	1.160	29.46
E	1.761	44.73	1.475	37.47	1.115	28.32	.885	22.48	1.310	33.27
F	1.911	48.54	1.625	41.28	1.265	32.13	1.035	26.29	1.460	37.08
J	2.261	57.43	1.975	50.17	1.615	41.02	1.380	35.05	1.810	45.97
K	2.661	67.59	2.375	60.33	2.015	51.18	1.783	45.29	2.210	56.13

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

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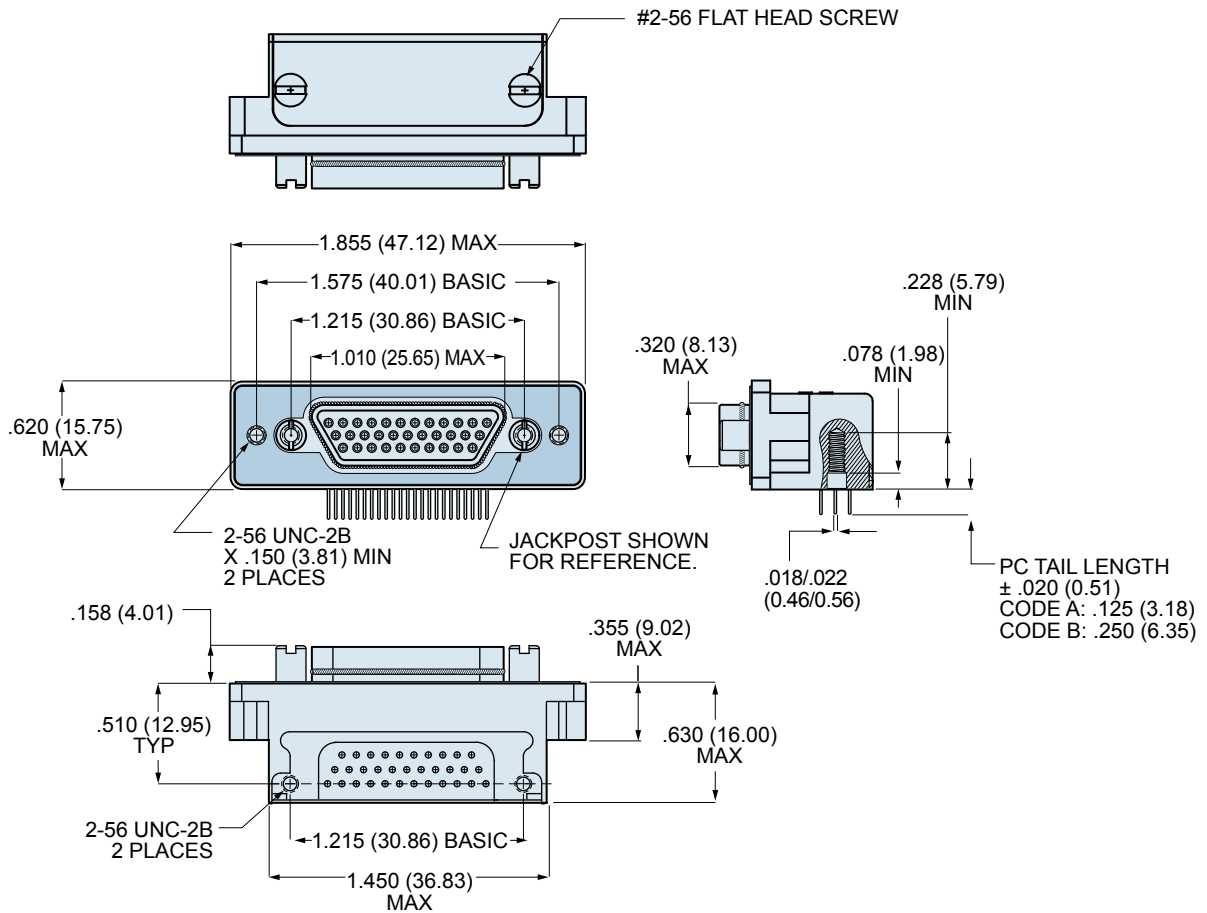
E-Mail: sales@glenair.com

Rev. 04-July-2009

# Series 79 Micro-Crimp Section G: Right Angle Printed Circuit Board Connectors

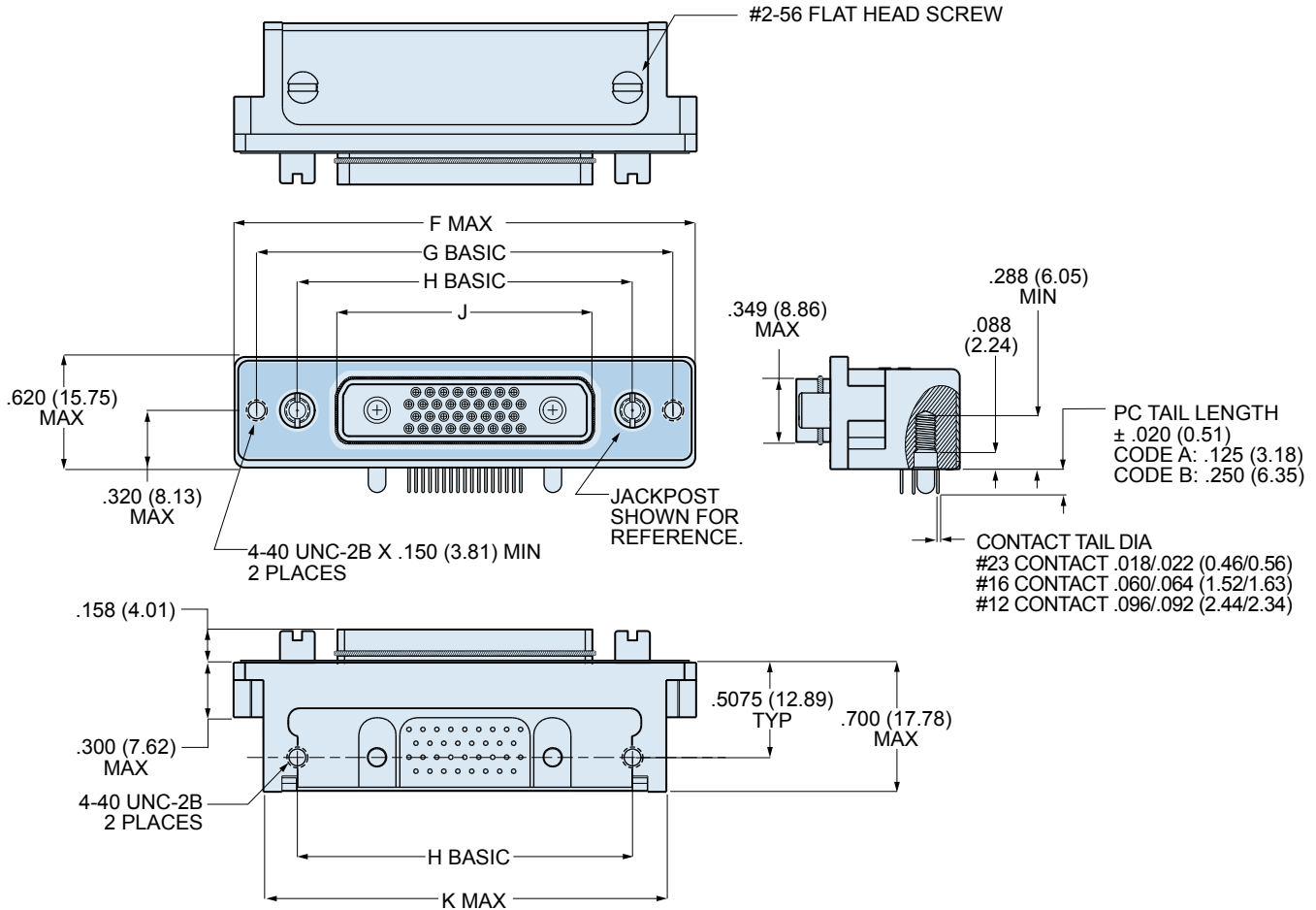


## 790-037S DIMENSIONS: SHELL SIZE G



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

**790-037S DIMENSIONS: SHELL SIZE H AND L**



**790-037S SHELL SIZES H AND L**

Shell Size	F Max.		G Basic		H Basic		J Max.		K Max.	
	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.
<b>H</b>	2.500	63.50	2.236	56.79	1.800	45.72	1.385	35.18	2.175	55.25
<b>L</b>	2.736	69.49	2.472	62.79	2.036	51.71	1.623	41.22	2.411	61.24

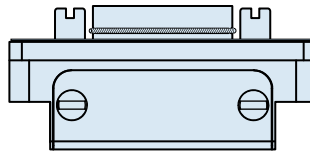
Dimensions in inches (millimeters) and are subject to change without notice.

# Series 79 Micro-Crimp Section G: Right Angle Printed Circuit Board Connectors



## PCB Hole Patterns for 790-037S and 790-042S Plugs

This section contains printed circuit board footprints for right angle 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.



CONNECTOR ORIENTATION

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

### 790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
A-5	
B-2P2	
B-9	
C-13	

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

790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
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 G: Right Angle Printed Circuit Board Connectors



## 790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
E-7P3	
F-15P2	
F-23	
F-5P5	
G-33	

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



790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
<p>H-10P4</p>	
<p>H-29P7</p>	
<p>H-36P2</p>	
<p>H-54P2</p>	
<p>H-5P5</p>	

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

# Series 79 Micro-Crimp Section G: Right Angle Printed Circuit Board Connectors



## 790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
H-66	<p>1.800 (45.72)</p> <p>.900 (22.86)</p> <p>.125 ± .003 (3.18 ± 0.08) 2x</p> <p>.075 (1.91) TYP</p> <p>.0375 (0.95) TYP</p> <p>(HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 66x)</p>
J-17P4	<p>1.615 (41.02)</p> <p>.8075 (20.51)</p> <p>.3725 (9.46)</p> <p>.094 ± .003 (2.39 ± 0.08) 2x</p> <p>.075 (1.91) TYP</p> <p>.0375 (0.95) TYP</p> <p>.175 (4.45) TYP</p> <p>(HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 13x)</p>
J-25P2	<p>1.615 (41.02)</p> <p>.8075 (20.51)</p> <p>.5475 (13.91)</p> <p>.094 ± .003 (2.39 ± 0.08) 2x</p> <p>.075 (1.91) TYP</p> <p>.0375 (0.95) TYP</p> <p>(HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 23x)</p>
J-33	<p>1.615 (41.02)</p> <p>.8075 (20.51)</p> <p>.075 (1.91) TYP</p> <p>.0375 (0.95) TYP</p> <p>(HOLE TO ACCEPT .022 (0.56) MAX DIA CONTACT 33x)</p>
J-7P7	<p>1.615 (41.02)</p> <p>.8075 (20.51)</p> <p>.094 ± .003 (2.39 ± 0.08) 2x</p> <p>.175 (4.45) 6x</p> <p>(HOLE TO ACCEPT .064 (1.63) MAX DIA CONTACT 7x)</p>

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

790-037S AND 790-042S PRINTED CIRCUIT BOARD PATTERNS

Insert Arr.	Component Mounting Side of PCB Mating Face of Connector is Toward Top of Page
K-27P4	
K-35P2	
K-43	
K-9P9	
L-6P6	

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