Fine Pitch SMT Stacking Connectors (Parallel Board-to-Board)

AMP

tyco

Fine Pitch SMT Stacking Connectors (Parallel Board-to-Board)



Electronics

Stacking Height Guide for Parallel Board-to-Board Applications

Electronics

Stacking Height Guide for Parallel Board-to-Board Applications (Continued)

Stacking Height	Connector Description	Pitch		Connector Sizes (I										nector Sizes (No							
mm inch		.4mm	10 12 14 1	3 20 22 24	30	34 38	40 46 50	54	4 56 60	64 70	76	80 84	100 114	120 140	152 160	180	190 2	200 220	228 240 2	66 280	320 440
1.00 0.039 1.50 0.059	.4mm Fine Stack .4mm Fine Stack	.4mm												+ + -	+ +						
1.50 0.059	.5mm Fine Stack	.5mm																			
3.00 0.118	.8mm Fine Stack	.8mm																			
3.90 0.154 4.00 0.157	.8mm Fine Stack .5mm Fine Mate	.8mm .5mm									\rightarrow			+ + -		+				_	
4.00 0.157	.6mm Free Height	.6mm																			
4.00 0.157	.8mm Fine Mate	.8mm																			
4.20 0.165	.8mm Fine Stack	.8mm		\rightarrow					-		_		_	+						_	
4.50 0.177 4.50 0.177	.5mm Fine Mate .8mm Fine Mate	.5mm									-					+ +					
4.70 0.185	.8mm Fine Stack	.8mm																			
5.00 0.197	.5mm Free Height	.5mm																			
5.00 0.197 5.00 0.197	.6mm Free Height .8mm Fine Stack	.6mm									\rightarrow										
5.00 0.197	.8mm Free Height	.8mm																			
5.50 0.217	.5mm Fine Mate	.5mm																			
5.90 0.232	.8mm Fine Stack	.8mm																			
6.00 0.236 6.00 0.236	.5mm Fine Mate .5mm Free Height	.5mm									_			+ + -	+ + -	+					
6.00 0.236	.6mm Free Height	.6mm																			
6.00 0.236	.8mm Free Height	.8mm																			
6.35 0.250 6.60 0.260	AMPMODU 50/50 MICTOR	.050"						ļ													+
7.00 0.276	.5mm Free Height	.025" .5mm	+ + + +	+ + +	_			+		+ + +						+					+
7.00 0.276	.6mm Free Height	.6mm																			
7.00 0.276	.8mm Fine Stack	.8mm																			
7.00 0.276 8.00 0.315	.8mm Free Height .5mm Free Height	.8mm	+ + + + + + + + + + + + + + + + + + + +	 	+	 													- 		
8.00 0.315	.6mm Free Height	.6mm	+ + + +	+ + +	_	 			+ +	+ + +	$\overline{}$								 		
8.00 0.315	.8mm Free Height	.8mm																			
8.00 0.315 8.13 0.320	1mm Free Height AMPMODU 50/50	1mm .050"														+					+
9.00 0.354	.5mm Free Height	.5mm									_			+ + -	1	+ +					
9.00 0.354	.8mm Fine Stack	.8mm																			
9.00 0.354	.8mm Free Height	.8mm									_									_	
9.00 0.354 9.00 0.354	1mm Free Height MICTOR	.025"			+											+ +					+ + -
9.91 0.390	AMPMODU 50/50	.050"																			
10.00 0.394	.6mm Free Height	.6mm																			
10.00 0.394 10.00 0.394	.8mm Free Height 1mm Free Height	.8mm 1mm			_						_									_	
10.92 0.430	MICTOR	.025"																			
11.00 0.433	.5mm Free Height	.5mm																			
11.00 0.433	.6mm Free Height	.6mm									_									_	
11.00 0.433 11.00 0.433	.8mm Free Height 1mm Free Height	.8mm 1mm																			
12.00 0.472	.5mm Free Height	.5mm																			
12.00 0.472	.6mm Free Height	.6mm																			
12.00 0.472 12.00 0.472	.8mm Free Height 1mm Free Height	.8mm 1mm		 	+	 					_									_	+ + +
12.57 0.495	MICTOR	.025"																			
13.00 0.512	.6mm Free Height	.6mm																			
13.00 0.512 13.00 0.512	.8mm Free Height 1mm Free Height	.8mm 1mm	+ + + +		-	 					_									-	
13.08 0.515	AMPMODU System 50	.050"												+ +	+ +	+ +			 		+ + -
14.00 0.551	.6mm Free Height	.6mm																			
14.00 0.551 14.00 0.551	.8mm Free Height	.8mm 1mm	+ + + + + +		-			 			_										+
15.00 0.551	1mm Free Height .5mm Free Height	.5mm	+ + + +	+ + +	_	+ + +		+			-+				+ + -	+ +		+	+++	-	+ + -
15.00 0.591	.6mm Free Height	.6mm																			
15.00 0.591	.8mm Free Height	.8mm				 		ļ													+
15.00 0.591 15.61 0.615	1mm Free Height MICTOR	.025"	+ + + + + + + + + + + + + + + + + + + +	 	+				+ + -							+ +					+
16.00 0.630	.5mm Free Height	.5mm						<u> </u>													
16.00 0.630	.6mm Free Height	.6mm																			
16.00 0.630 17.96 0.707	.8mm Free Height MICTOR	.8mm .025"			-															_	+
18.00 0.709	.6mm Free Height	.025 .6mm	+ + + +	 				 		+ + +								 			+ + -
18.00 0.709	MICTOR	.025"																			
18.75 0.738 20.00 0.787	MICTOR	.025" .6mm			+							-				+					
20.00 0.787	.6mm Free Height MICTOR	.6mm .025"	+ + + +	+ + +	+				++-	+ + +						+					
21.60 0.850	MICTOR	.025"																			
22.86 0.900	MICTOR	.025"																			
27.00 1.063 27.80 1.094	MICTOR MICTOR	.025"	+ + + + + + + + + + + + + + + + + + + +	 	+				++-	+ + +						+		-			+ + -
3 29.00 1.142	MICTOR	.025"																			
31.90 1.255	MICTOR	.025"																			



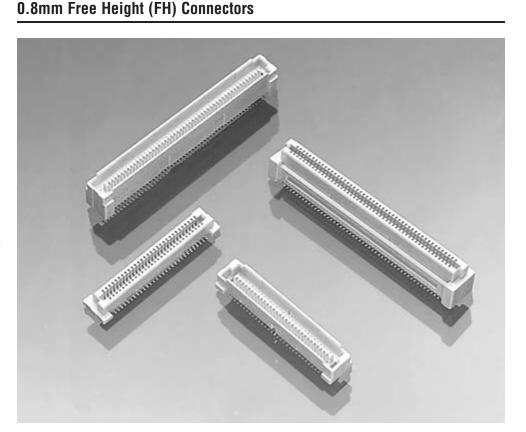


Product Facts

- For parallel board stacking applications
- High density packaging on 0.8 [.031] centerline spacing
- Available sizes from 40 to 200 positions (in 20 position increments)
- Board stacking heights available from 5 [.197] to 16 [.630] (in 1 [.039] increments)
- Bellows type spring contacts are resistant to scooping and stubbing during mating and unmating
- Positioning bosses for proper on-board orientation
- Available packaged on"tape-and-reel" for automatic placement per EIA standards
- Recognized under the Component Program of Underwriter Laboratories Inc., File No. E28476

(Parallel Board-to-Board)





Tyco Electronics 0.8mm FH surface-mount connectors are designed for parallel board stacking applications using subminiature connectors to meet today's electronic industry requirements for high density packaging.

It is possible to save more than 50% of the required board space when compared to conventional 1.27 [.050] centerline connectors.

0.8mm FH connectors are ideally suited for application downsizing, such as notebook PCs, pen pads, cellular telephones and other electronic equipment requiring miniature connector packaging.

Vertical board-mount plugs and receptacles are available. By mating combinations of plug and receptacle housing heights, board-to-board stacking heights from 5 [.197] to 16 [.630] (in 1 [.039] increments) can be achieved.

The receptacles are preloaded with the Tyco Electronics unique bellows-type spring contacts for reliable electrical connection with the plugs.

In addition, right angle plugs are available which mate to standard receptacles.

Performance Characteristics

Voltage Rating — 100 VAC

Current Rating — 0.5 ampere

Contact Resistance — 30 milliohms max. (initial)

Dielectric Withstanding Voltage — 500 VAC (1 minute)

Operating Temperature — -40°C to +85°C (Including terminal temperature rise)

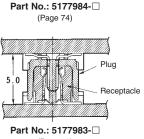


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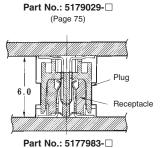
Electronics

0.8mm Free Height (FH) Connectors (Continued)

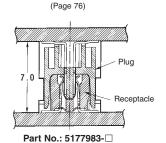
Board-to-Board Stacking Heights (By Plug/Receptacle Combinations)



Part No.: 5177983- ☐ (Page 78) 5 [.197] Stacking Height



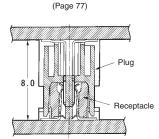
(Page 78)
6 [.236] Stacking Height



Part No.: 5179030-

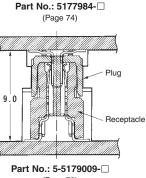
(Page 78)
7 [.276] Stacking Height

Part No.: 5179030-□

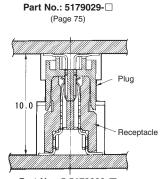


Part No.: 5179031-

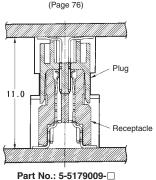
Part No.: 5177983-□ (Page 78) 8 [.315] Stacking Height



(Page 79)
9 [.354] Stacking Height

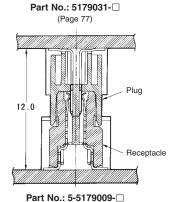


Part No.: 5-5179009-□ (Page 79) 10 [.394] Stacking Height



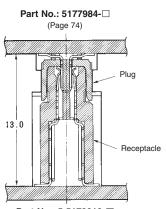
(Page 79)

11 [.433] Stacking Height

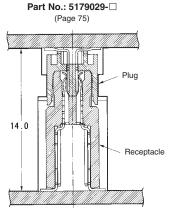


(Page 79)
12 [.472] Stacking Height

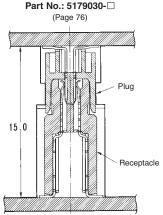
Part No.: 5179031-□

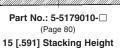


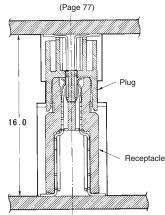
Part No.: 5-5179010-□ (Page 80) 13 [.512] Stacking Height



Part No.: 5-5179010-□ (Page 80) 14 [.551] Stacking Height







Part No.: 5-5179010-□ (Page 80) 16 [.630] Stacking Height

Notes: For specific dash nos. of sizes 40 to 200 positions (in 20-position increments), see pages 73 thru 81.

Part Numbers are RoHS compliant.

AMP

0.8mm Free Height (FH) Connectors (Continued)

		Plating Au	Packade	Pickin									
Gender	Height	Thickness	Type	Cap	40 Pos.	60 Pos.	80 Pos.	100 Pos.	120 Pos.	140 Pos.	160 Pos.	180 Pos.	200 Pos.
			Tube	No	5177983-1	5177983-2	5177983-3	5177983-4	5177983-5	5177983-6	5177983-8	5177983-9	1-5177983-0
		8µ"	Tube	Yes	5179229-1	5179229-2	5179229-3	5179229-4	5179229-5	5179229-6	5179229-8	5179229-9	1-5179229-0
	7		Tape and Reel	Yes	5177985-1	5177985-2	5177985-3	5177985-4	5177985-5	5177985-6	5177985-8	1	1
	5		Tube	No	6123000-1	6123000-2	6123000-3	6123000-4	6123000-5	6123000-6	6123000-8	6123000-9	1-6123000-0
		30µ"	Tube	Yes	1	1	1	1	1	1	1	1	1
			Tape and Reel	Yes	5353999-1	5353999-2	5353999-3	5353999-4	5353999-5	5353999-6	5353999-8	-	1
			Tube	No	5-5179009-1	5-5179009-2	5-5179009-3	5-5179009-4	5-5179009-5	5-5179009-6	5-5179009-8	5-5179009-9	6-5179009-0
		8µ"	Tube	Yes	1	5-5179232-2	5-5179232-3	5-5179232-4	5-5179232-5	5-5179232-6	5-5179232-8	5-5179232-9	6-5179232-0
000	2		Tape and Reel	Yes	5-5179180-1	5-5179180-2	5-5179180-3	5-5179180-4	5-5179180-5	5-5179180-6	1	1	1
ncpr.	E S		Tube	8 N	5084613-1	5084613-2	5084613-3	5084613-4	5084613-5	5084613-6	5084613-8	5084613-9	1-5084613-0
		30h"	Tube	Yes	1	I	1	I	1	1	I	I	I
			Tape and Reel	Yes	7-5179180-1	7-5179180-2	7-5179180-3	7-5179180-4	7-5179180-5	7-5179180-6	I	I	ı
			Tube	No	5-5179010-1	5-5179010-2	5-5179010-3	5-5179010-4	5-5179010-5	5-5179010-6	5-5179010-8	5-5179010-9	6-5179010-0
		8µ"	Tube	Yes	5-5179233-1	5-5179233-2	5-5179233-3	5-5179233-4	5-5179233-5	5-5179233-6	5-5179233-8	5-5179233-9	6-5179233-0
	-		Tape and Reel	Yes	5084616-1	5084616-2	5084616-3	5084616-4	5084616-5	5084616-6	5084616-8	5084616-9	1
	E 2		Tube	8	5-6123212-1	5-6123212-2	5-6123212-3	5-6123212-4	5-6123212-5	5-6123212-6	5-6123212-8	5-6123212-9	6-6123212-0
		30µ"	Tube	Yes	1	I	1	1		1	ı	I	7-6123212-0
			Tape and Reel	Yes	5084618-1	5084618-2	5084618-3	5084618-4	5084618-5	5084618-6	5084618-8	5084618-9	ı
			Tube	_S	5177984-1	5177984-2	5177984-3	5177984-4	5177984-5	5177984-6	5177984-8	5177984-9	1-5177984-0
		8µ"	Tube	Yes	5179230-1	5179230-2	5179230-3	5179230-4	5179230-5	5179230-6	5179230-8	5179230-9	1-5179230-0
	ī		Tape and Reel	Yes	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	I	1
	E O		Tube	8	5084614-1	5084614-2	5084614-3	5084614-4	5084614-5	5084614-6	5084614-8	5084614-9	1-5084614-0
		30µ"	Tube	Yes	I	I	I	1	1	I	1	I	1
			Tape and Reel	Yes	5-5177986-1	5-5177986-2	5-5177986-3	5-5177986-4	5-5177986-5	5-5177986-6	5-5177986-8	1	
			Tube	No	5179029-1	5179029-2	5179029-3	5179029-4	5179029-5	5179029-6	5179029-8	5179029-9	1-5179029-0
		8µ"	Tube	Yes	2-5179230-1	2-5179230-2	2-5179230-3	2-5179230-4	2-5179230-5	2-5179230-6	2-5179230-8	2-5179230-9	3-5179230-0
	IJ		Tape and Reel	Yes	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	1	1	1
	5		Tube	No	5084615-1	5084615-2	5084615-3	5084615-4	5084615-5	5084615-6	5084615-8	5084615-9	1-5084615-0
		30h"	Tube	Yes	1	I	1	I	1	1	1-5084615-8	1-5084615-9	2-5084615-0
			Tape and Reel	Yes	6-5177986-1	6-5177986-2	6-5177986-3	6-5177986-4	6-5177986-5	6-5177986-6	I	I	
Plug			Tube	°N	5179030-1	5179030-2	5179030-3	5179030-4	5179030-5	5179030-6	5179030-8	5179030-9	1-5179030-0
		8µ"	Tube	Yes	4-5179230-1	4-5179230-2	4-5179230-3	4-5179230-4	4-5179230-5	4-5179230-6	4-5179230-8	4-5179230-9	5-5179230-0
	7		Tape and Reel	Yes	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	1	1	1
	=		Tube	No	1-5179030-1	1-5179030-2	1-5179030-3	1-5179030-4	1-5179030-5	1-5179030-6	1-5179030-8	1-5179030-9	2-5179030-0
		30h"	Tube	Yes	2-5179030-1	2-5179030-2	2-5179030-3	2-5179030-4	2-5179030-5	2-5179030-6	2-5179030-8	2-5179030-9	3-5179030-0
			Tape and Reel	Yes	1	1	1	1	1	1	1	-	1
			Tube	No	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5179031-0
		8µ"	Tube	Yes	6-5179230-1	6-5179230-2	6-5179230-3	6-5179230-4	6-5179230-5	6-5179230-6	6-5179230-8	6-5179230-9	7-5179230-0
	0		Tape and Reel	Yes	3-5177986-1	3-5177986-2	3-5177986-3	3-5177986-4	3-5177986-5	3-5177986-6	3-5177986-8	3-5177986-9	1
	<u> </u>		Tube	No	6123002-1	6123002-2	6123002-3	6123002-4	6123002-5	6123002-6	6123002-8	6123002-9	1-6123002-0
		30µ"	Tube	Yes	1	1	1	1	1	1	1	1	1
			Tape and Reel	Yes	6123001-1	6123001-2	6123001-3	6123001-4	6123001-5	6123001-6	6123001-8	6123001-9	1
	B/A	8µ"	Tube	No	1	316229-3	316229-2	1	1	1	1	1	1
Stack Heigh example: [(1	t = [(Rcp 3H Rcpt.	t. Height + Plu + 6H Plug) - 5	Stack Height = [(Rcpt. Height + Plug Height) - 5] example: [(13H Rcpt. + 6H Plug) - 5] = [(13 + 6) - 5]		= 14mm stack height								
Note: Part N	umbers a	re RoHS comp	pliant.										

0.8mm Product Tree

2.5

[.098]





5mm Plugs for 5 [.197], 9 [.354] and 13 [.512] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

Related Product Data

Performance Characteristics — page 71

Stacking Height Combinations — page 72

Mating Receptacles — pages 78 thru 80

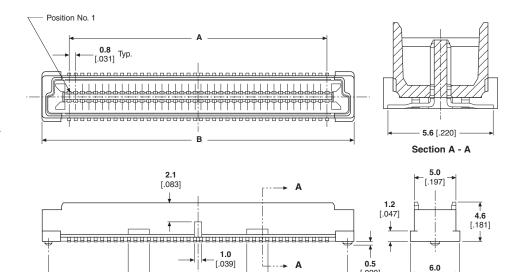
Technical Documents (page 113) **Product Specification** 108-5390

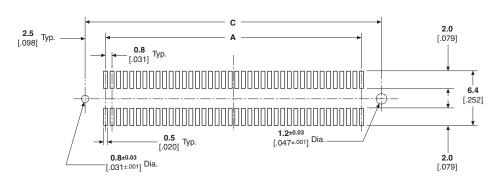


0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch

12.0

[.472]





[.098]

[.020]

[.236]

Recommended PC Board Layout

	imension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5177984-1	5179230-1	5177986-1
.598	.858	.795	40	30µ" Au	5084614-1	_	5-5177986-1
23.20	29.80	28.20	60	8µ" Au	5177984-2	5179230-2	5177986-2
.913	1.173	1.110	00	30µ" Au	5084614-2	_	5-5177986-2
31.20	37.80	36.20	80	8µ" Au	5177984-3	5179230-3	5177986-3
1.228	1.488	1.425	80	30µ" Au	5084614-3	_	5-5177986-3
39.20	45.80	44.20	100	8µ" Au	5177984-4	5179230-4	5177986-4
1.543	1.803	1.740	100	30µ" Au	5084614-4	_	5-5177986-4
47.20	53.80	52.20	120	8µ" Au	5177984-5	5179230-5	5177986-5
1.858	2.118	2.055	120	30µ" Au	5084614-5	_	5-5177986-5
55.20	61.80	60.20	140	8µ" Au	5177984-6	5179230-6	5177986-6
2.173	2.433	2.370	140	30µ" Au	5084614-6	_	5-5177986-6
63.20	69.80	68.20	160	8µ" Au	5177984-8	5179230-8	5177986-8
2.488	2.748	2.685	100	30µ" Au	5084614-8	_	5-5177986-8
71.20	77.80	76.20	180	8µ" Au	5177984-9	5179230-9	_
2.803	3.063	3.000	100	30µ" Au	5084614-9		
79.20	85.80	84.20	200	8µ" Au	1-5177984-0	1-5179230-0	_
3.118	3.378	3.315	200	30µ" Au	1-5084614-0	_	_



6mm Plugs for 6 [.236], 10 [.394] and 14 [.551] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

Related Product Data

Performance Characteristics — page 71

Stacking Height Combinations — page 72

Mating Receptacles — pages 78 thru 80

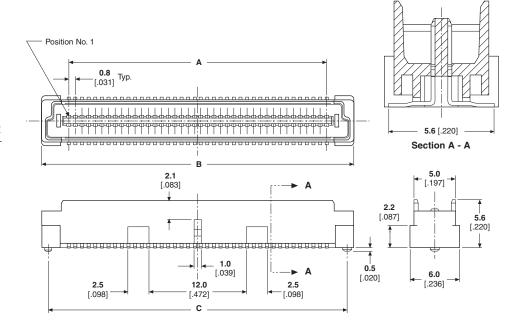
Technical Documents (page 113)

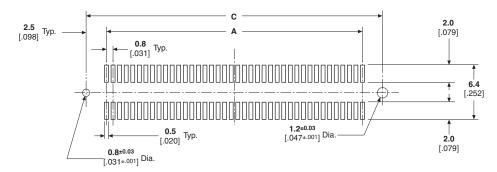
Product Specification

108-5390

AMP

0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)





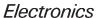
Recommended PC Board Layout

	imension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5179029-1	2-5179230-1	1-5177986-1
.598	.858	.795	40	30µ" Au	5084615-1	_	6-5177986-1
23.20	29.80	28.20	60	8µ" Au	5179029-2	2-5179230-2	1-5177986-2
.913	1.173	1.110	60	30μ" Au	5084615-2	_	6-5177986-2
31.20	37.80	36.20	80	8µ" Au	5179029-3	2-5179230-3	1-5177986-3
1.228	1.488	1.425	00	30µ" Au	5084615-3	_	6-5177986-3
39.20	45.80	44.20	100	8µ" Au	5179029-4	2-5179230-4	1-5177986-4
1.543	1.803	1.740	100	30µ" Au	5084615-4	_	6-5177986-4
47.20	53.80	52.20	120	8µ" Au	5179029-5	2-5179230-5	1-5177986-5
1.858	2.118	2.055	120	30µ" Au	5084615-5	_	6-5177986-5
55.20	61.80	60.20	140	8µ" Au	5179029-6	2-5179230-6	1-5177986-6
2.173	2.433	2.370	140	30µ" Au	5084615-6	_	6-5177986-6
63.20	69.80	68.20	160	8µ" Au	5179029-8	2-5179230-8	_
2.488	2.748	2.685	100	30µ" Au	5084615-8	1-5084615-8	_
71.20	77.80	76.20	180	8µ" Au	5179029-9	2-5179230-9	_
2.803	3.063	3.000	100	30µ" Au	5084615-9	1-5084615-9	_
79.20	85.80	84.20	200	8µ" Au	1-5179029-0	3-5179230-0	_
3.118	3.378	3.315	200	30µ" Au	1-5084615-9	2-5084615-0	_

Note: Part Numbers are RoHS compliant.

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7mm Plugs for 7 [.276], 11 [.433] and 15 [.591]

Material and Finish

Stacking Heights

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

Related Product Data

Performance Characteristics — page 71

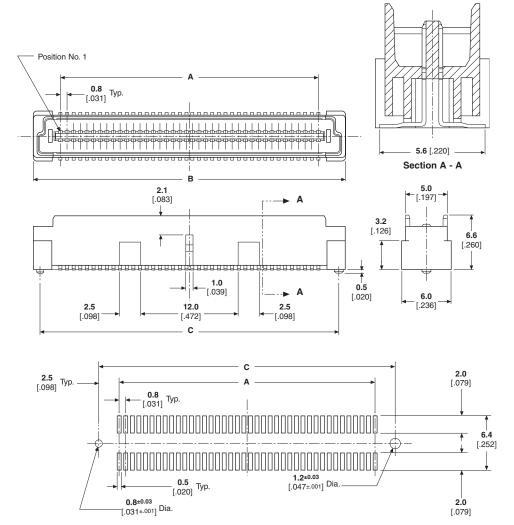
Stacking Height Combinations — page 72

Mating Receptacles — pages 78 thru 80

Technical Documents (page 113) **Product Specification** 108-5390

AMP

0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)



Recommended PC Board Layout

	imension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5179030-1	4-5179230-1	2-5177986-1
.598	.858	.795	40	30µ" Au	1-5179030-1	2-5179030-1	_
23.20	29.80	28.20	60	8µ" Au	5179030-2	4-5179230-2	2-5177986-2
.913	1.173	1.110	60	30μ" Au	1-5179030-2	2-5179030-2	_
31.20	37.80	36.20	80	8µ" Au	5179030-3	4-5179230-3	2-5177986-3
1.228	1.488	1.425	80	30µ" Au	1-5179030-3	2-5179030-3	_
39.20	45.80	44.20	100	8µ" Au	5179030-4	4-5179230-4	2-5177986-4
1.543	1.803	1.740	100	30µ" Au	1-5179030-4	2-5179030-4	_
47.20	53.80	52.20	120	8µ" Au	5179030-5	4-5179230-5	2-5177986-5
1.858	2.118	2.055	120	30µ" Au	1-5179030-5	2-5179030-5	_
55.20	61.80	60.20	140	8µ" Au	5179030-6	4-5179230-6	2-5177986-6
2.173	2.433	2.370	140	30µ" Au	1-5179030-6	2-5179030-6	_
63.20	69.80	68.20	160	8µ" Au	5179030-8	4-5179230-8	2-5177986-8
2.488	2.748	2.685	100	30µ" Au	1-5179030-8	2-5179030-8	_
71.20	77.80	76.20	180	8µ" Au	5179030-9	4-5179230-9	2-5177986-9
2.803	3.063	3.000	100	30µ" Au	1-5179030-9	2-5179030-9	_
79.20	85.80	84.20	200	8µ" Au	1-5179030-0	5-5179230-0	3-5177986-0
3.118	3.378	3.315	200	30µ" Au	2-5179030-0	3-5179030-0	_



0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)

8mm Plugs for 8 [.315], 12 [.472] and 16 [.630] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

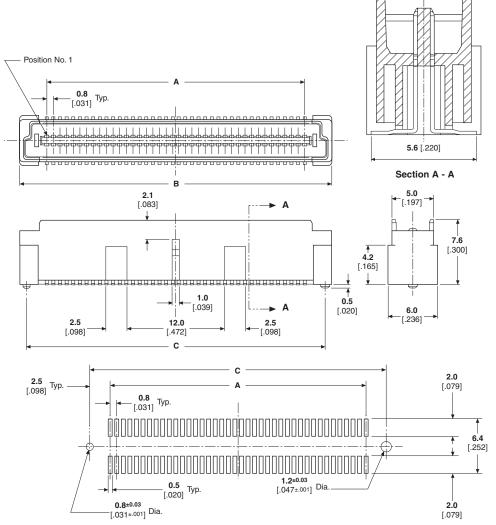
Related Product Data

Performance Characteristics — page 71

Stacking Height Combinations — page 72

Mating Receptacles — pages 78 thru 80

Technical Documents (page 113) **Product Specification** 108-5390



Recommended PC Board Layout

	Dimension	S	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5179031-1	6-5179230-1	3-5177986-1
.598	.858	.795	40	30µ" Au	6123002-1	_	6123001-1
23.20	29.80	28.20	60	8µ" Au	5179031-2	6-5179230-2	3-5177986-2
.913	1.173	1.110	60	30µ" Au	6123002-2	_	6123001-2
31.20	37.80	36.20	00	8µ" Au	5179031-3	6-5179230-3	3-5177986-3
1.228	1.488	1.425	80	30µ" Au	6123002-3	_	6123001-3
39.20	45.80	44.20	100	8µ" Au	5179031-4	6-5179230-4	3-5177986-4
1.543	1.803	1.740	100	30µ" Au	6123002-4	_	6123001-4
47.20	53.80	52.20	120	8µ" Au	5179031-5	6-5179230-5	3-5177986-5
1.858	2.118	2.055	120	30µ" Au	6123002-5	_	6123001-5
55.20	61.80	60.20	140	8µ" Au	5179031-6	6-5179230-6	3-5177986-6
2.173	2.433	2.370	140	30µ" Au	6123002-6	_	6123001-6
63.20	69.80	68.20	160	8µ" Au	5179031-8	6-5179230-8	3-5177986-8
2.488	2.748	2.685	100	30µ" Au	6123002-8	_	6123001-8
71.20	77.80	76.20	180	8µ" Au	5179031-9	6-5179230-9	3-5177986-9
2.803	3.063	3.000	100	30µ" Au	6123002-9	_	6123001-9
79.20	85.80	84.20	200	8µ" Au	1-5179031-0	7-5179230-0	_
3.118	3.378	3.315	200	30µ" Au	1-6123002-0	_	_



5mm Receptacles for 5 [.197], 6 [.236], 7 [.276] and 8 [.315] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Beryllium copper; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

Related Product Data

Performance Characteristics — page 71

Stacking Height Combinations — page 72

Mating Plugs — pages 74 thru 77, and 81

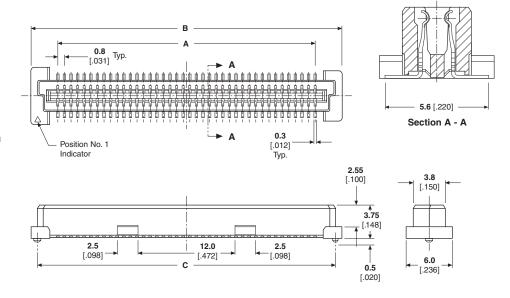
Technical Documents (page 113)

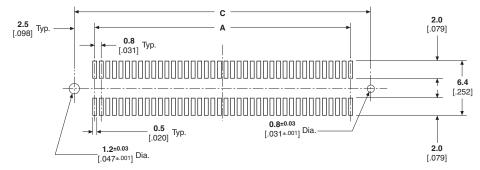
Product Specification 108-5390

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0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)





Recommended PC Board Layout

	imension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5177983-1	5179229-1	5177985-1
.598	.858	.795	40	30µ" Au	6123000-1	_	5353999-1
23.20	29.80	28.20	60	8µ" Au	5177983-2	5179229-2	5177985-2
.913	1.173	1.110	60	30µ" Au	6123000-2	_	5353999-2
31.20	37.80	36.20	80	8µ" Au	5177983-3	5179229-3	5177985-3
1.228	1.488	1.425	80	30µ" Au	6123000-3	_	5353999-3
39.20	45.80	44.20	100	8µ" Au	5177983-4	5179229-4	5177985-4
1.543	1.803	1.740	100	30μ" Au	6123000-4	_	5353999-4
47.20	53.80	52.20	120	8µ" Au	5177983-5	5179229-5	5177985-5
1.858	2.118	2.055	120	30µ" Au	6123000-5	_	5353999-5
55.20	61.80	60.20	140	8µ" Au	5177983-6	5179229-6	5177985-6
2.173	2.433	2.370	140	30µ" Au	6123000-6	_	5353999-6
63.20	69.80	68.20	160	8µ" Au	5177983-8	5179229-8	5177985-8
2.488	2.748	2.685	100	30µ" Au	6123000-8	_	5353999-8
71.20	77.80	76.20	180	8µ" Au	5177983-9	5179229-9	_
2.803	3.063	3.000	180	30µ" Au	6123000-9	_	_
79.20	85.80	84.20	200	8µ" Au	1-5177983-0	1-5179229-0	_
3.118	3.378	3.315	200	30µ" Au	1-6123000-0	_	_

[.283]

[.094]



Electronics

0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)

9mm Receptacles for 9 [.354]. 10 [.394], 11 [.433] and 12 [.472] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Beryllium copper; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

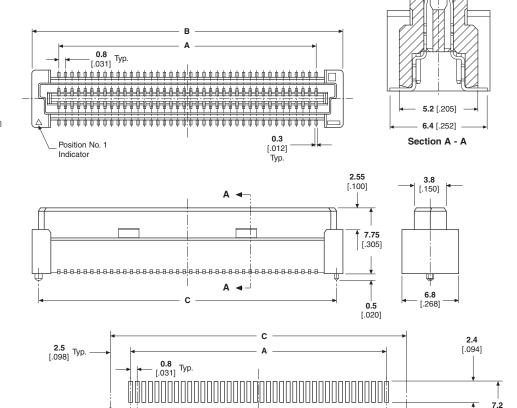
Related Product Data

Performance Characteristics — page 71

Stacking Height Combinations — page 72

Mating Plugs — pages 74 thru 77, and 81

Technical Documents (page 113) **Product Specification** 108-5390



Recommended PC Board Layout

0.8±0.03 [.031±.001] Dia.

	Dimension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5-5179009-1	_	5-5179180-1
.598	.858	.795	40	30µ" Au	5084613-1	_	7-5179180-1
23.20	29.80	28.20	60	8µ" Au	5-5179009-2	5-5179232-2	5-5179180-2
.913	1.173	1.110	60	30µ" Au	5084613-2	_	7-5179180-2
31.20	37.80	36.20	80	8µ" Au	5-5179009-3	5-5179232-3	5-5179180-3
1.228	1.488	1.425	80	30µ" Au	5084613-3	_	7-5179180-3
39.20	45.80	44.20	100	8µ" Au	5-5179009-4	5-5179232-4	5-5179180-4
1.543	1.803	1.740	100	30µ" Au	5084613-4	_	7-5179180-4
47.20	53.80	52.20	120	8µ" Au	5-5179009-5	5-5179232-5	5-5179180-5
1.858	2.118	2.055	120	30µ" Au	5084613-5	_	7-5179180-5
55.20	61.80	60.20	140	8µ" Au	5-5179009-6	5-5179232-6	5-5179180-6
2.173	2.433	2.370	140	30µ" Au	5084613-6	_	7-5179180-6
63.20	69.80	68.20	160	8µ" Au	5-5179009-8	5-5179232-8	_
2.488	2.748	2.685	160	30µ" Au	5084613-8	_	_
71.20	77.80	76.20	180	8µ" Au	5-5179009-9	5-5179232-9	_
2.803	3.063	3.000	100	30µ" Au	5084613-9	_	_
79.20	85.80	84.20	200	8µ" Au	6-5179009-0	6-5179232-0	_
3.118	3.378	3.315	200	30µ" Au	1-5084613-0	_	_

Note: Part Numbers are RoHS compliant.

Dimensions are in millimeters

and inches unless otherwise

specified. Values in brackets

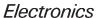
are standard equivalents.

0.5 [.020]

1.2±0.03 [.047±.001] Dia.

79





0.8mm Free Height Vertical Plugs, 0.8 [.031] Pitch (Continued)

13mm Receptacles for 13 [.512], 14 [.551], 15 [.591] and 16 [.630] **Stacking Heights**

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Beryllium copper; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

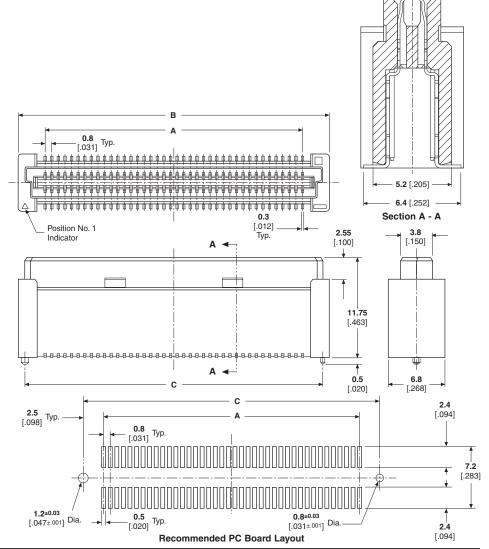
Related Product Data

Performance Characteristics page 71

Stacking Height Combinations page 72

Mating Plugs — pages 74 thru 77, and 81

Technical Documents (page 113) **Product Specification** 108-5390



	Dimension	s	No. of	Plating		Part Numbers	
Α	В	С	Positions	Type	Tube	Tube w/ Pickup Cap	Tape and Reel
15.20	21.80	20.20	40	8µ" Au	5-5179010-1	5-5179233-1	5084616-1
.598	.858	.795	40	30μ" Au	5-6123212-1	_	5084618-1
23.20	29.80	28.20	60	8µ" Au	5-5179010-2	5-5179233-2	5084616-2
.913	1.173	1.110	60	30μ" Au	5-6123212-2	_	5084618-2
31.20	37.80	36.20	00	8µ" Au	5-5179010-3	5-5179233-3	5084616-3
1.228	1.488	1.425	80	30μ" Au	5-6123212-3	_	5084618-3
39.20	45.80	44.20	100	8µ" Au	5-5179010-4	5-5179233-4	5084616-4
1.543	1.803	1.740	100	30μ" Au	5-6123212-4	_	5084618-4
47.20	53.80	52.20	120	8µ" Au	5-5179010-5	5-5179233-5	5084616-5
1.858	2.118	2.055	120	30μ" Au	5-6123212-5	_	5084618-5
55.20	61.80	60.20	140	8µ" Au	5-5179010-6	5-5179233-6	5084616-6
2.173	2.433	2.370	140	30μ" Au	5-6123212-6	_	5084618-6
63.20	69.80	68.20	160	8µ" Au	5-5179010-8	5-5179233-8	5084616-8
2.488	2.748	2.685	160	30μ" Au	5-6123212-8	_	5084618-8
71.20	77.80	76.20	180	8µ" Au	5-5179010-9	5-5179233-9	5084616-9
2.803	3.063	3.000	160	30μ" Au	5-6123212-9	_	5084618-9
79.20	85.80	84.20	200	8µ" Au	6-5179010-0	6-5179233-0	_
3.118	3.378	3.315	200	30µ" Au	6-6123212-0	7-6123212-0	_

Note: Part Numbers are RoHS compliant.

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8mm Plugs for 5 [.197], 9 [.354] and 13 [.512] Stacking Heights

Material and Finish

Housing — High temperature thermoplastic, natural color, 94V-0 rated

Contacts — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

Related Product Data

Performance Characteristics page 71

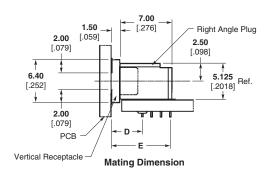
Stacking Height Combinations page 72

Mating Receptacles — pages 78 thru 80

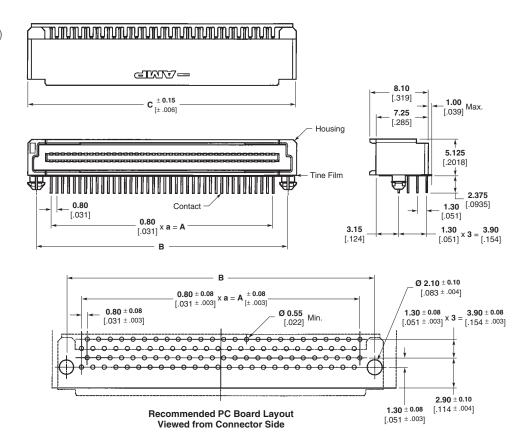
Technical Documents (page 113) **Product Specification** 108-5390



0.8mm Free Height Right Angle Plugs, 0.8 [.031] Pitch



Receptacle Height	Dime	nsion
Height	D	E
5.00	4.40	8.30
.197	.173	.327
9.00	8.40	12.30
.354	.331	.484
13.00 .512	12.40 .488	16.30 .642



	Dimen	sion		No. of	Part Number
Α	В	С	а	Positions	Part Number
23.20 .913	27.40 1.079	29.80 1.173	29	60	316229-2
31.20 1.228	35.40 1.394	37.80 1.488	39	80	316229-3

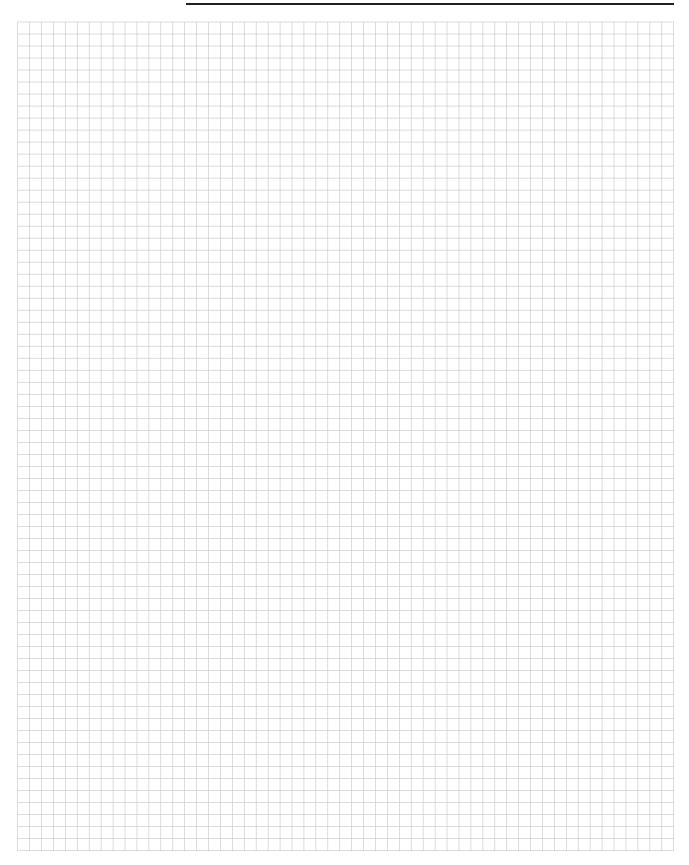




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Engineering Notes



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