

1470-19 (3/13)

Stacking Height Guide for Parallel Board-to-Board Applications

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

Stacking Height mm inch		Connector Description	Pitch	Connector Sizes (No. of Positions)																Connector Sizes (No. of Positions) <i>Continued</i>																				
				10	12	14	16	20	22	24	30	34	38	40	46	50	54	56	60	64	70	76	80	84	100	114	120	140	152	160	180	190	200	220	228	240	266	280	320	440
1.00	0.039	.4mm Fine Stack	.4mm																																					
1.50	0.059	.4mm Fine Stack	.4mm																																					
1.50	0.059	.5mm Fine Stack	.5mm																																					
3.00	0.118	.8mm Fine Stack	.8mm																																					
3.90	0.154	.8mm Fine Stack	.8mm																																					
4.00	0.157	.5mm Fine Mate	.5mm																																					
4.00	0.157	.6mm Free Height	.6mm																																					
4.00	0.157	.8mm Fine Mate	.8mm																																					
4.20	0.165	.8mm Fine Stack	.8mm																																					
4.50	0.177	.5mm Fine Mate	.5mm																																					
4.50	0.177	.8mm Fine Mate	.8mm																																					
4.70	0.185	.8mm Fine Stack	.8mm																																					
5.00	0.197	.5mm Free Height	.5mm																																					
5.00	0.197	.6mm Free Height	.6mm																																					
5.00	0.197	.8mm Fine Stack	.8mm																																					
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	.5mm Fine Mate	.5mm																																					
6.00	0.236	.5mm Free Height	.5mm																																					
6.00	0.236	.6mm Free Height	.6mm																																					
6.00	0.236	.8mm Free Height	.8mm																																					
6.35	0.250	AMPMODU 50/50	.050"																																					
6.60	0.260	MICTOR	.025"																																					
7.00	0.276	.5mm Free Height	.5mm																																					
7.00	0.276	.6mm Free Height	.6mm																																					
7.00	0.276	.8mm Fine Stack	.8mm																																					
7.00	0.276	.8mm Free Height	.8mm																																					
8.00	0.315	.5mm Free Height	.5mm																																					
8.00	0.315	.6mm Free Height	.6mm																																					
8.00	0.315	.8mm Free Height	.8mm																																					
8.00	0.315	1mm Free Height	1mm																																					
8.13	0.320	AMPMODU 50/50	.050"																																					
9.00	0.354	.5mm Free Height	.5mm																																					
9.00	0.354	.8mm Fine Stack	.8mm																																					
9.00	0.354	.8mm Free Height	.8mm																																					
9.00	0.354	1mm Free Height	1mm																																					
9.00	0.354	MICTOR	.025"																																					
9.91	0.390	AMPMODU 50/50	.050"																																					
10.00	0.394	.6mm Free Height	.6mm																																					
10.00	0.394	.8mm Free Height	.8mm																																					
10.00	0.394	1mm Free Height	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	.8mm Free Height	.8mm																																					
11.00	0.433	1mm Free Height	1mm																																					
12.00	0.472	.5mm Free Height	.5mm																																					
12.00	0.472	.6mm Free Height	.6mm																																					
12.00	0.472	.8mm Free Height	.8mm																																					
12.00	0.472	1mm Free Height	1mm																																					
12.57	0.495	MICTOR	.025"																																					
13.00	0.512	.6mm Free Height	.6mm																																					
13.00	0.512	.8mm Free Height	.8mm																																					
13.00	0.512	1mm Free Height	1mm																																					
13.08	0.515	AMPMODU System 50	.050"																																					
14.00	0.551	.6mm Free Height	.6mm																																					
14.00	0.551	.8mm Free Height	.8mm																																					

0.8mm Free Height (FH) Connectors

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



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)

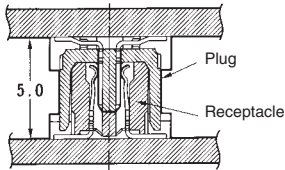
Dielectric Withstanding Voltage — 500 VAC (1 minute)

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

0.8mm Free Height (FH) Connectors (Continued)

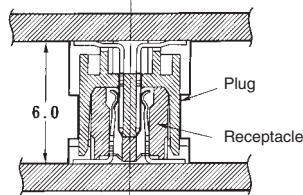
Board-to-Board Stacking Heights (By Plug/Receptacle Combinations)

Part No.: 5177984-□
(Page 74)



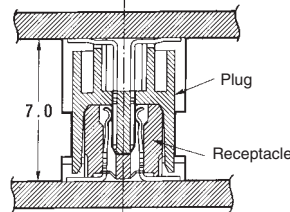
Part No.: 5177983-□
(Page 78)
5 [.197] Stacking Height

Part No.: 5179029-□
(Page 75)



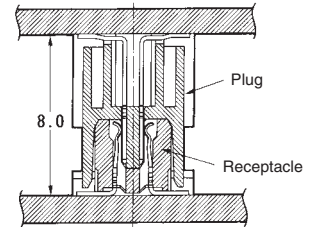
Part No.: 5177983-□
(Page 78)
6 [.236] Stacking Height

Part No.: 5179030-□
(Page 76)



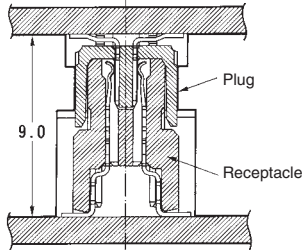
Part No.: 5177983-□
(Page 78)
7 [.276] Stacking Height

Part No.: 5179031-□
(Page 77)



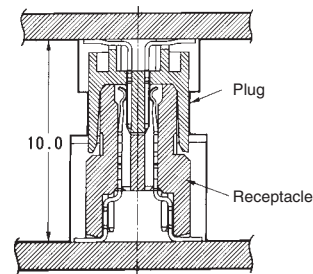
Part No.: 5177983-□
(Page 78)
8 [.315] Stacking Height

Part No.: 5177984-□
(Page 74)



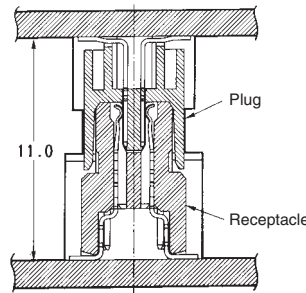
Part No.: 5-5179009-□
(Page 79)
9 [.354] Stacking Height

Part No.: 5179029-□
(Page 75)



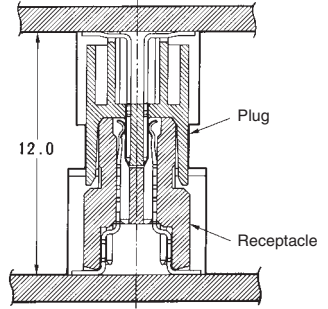
Part No.: 5-5179009-□
(Page 79)
10 [.394] Stacking Height

Part No.: 5179030-□
(Page 76)



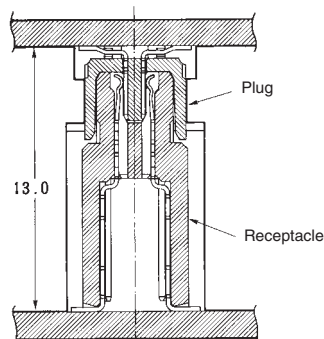
Part No.: 5-5179009-□
(Page 79)
11 [.433] Stacking Height

Part No.: 5179031-□
(Page 77)



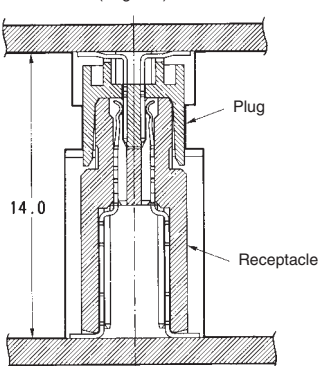
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(Page 79)
12 [.472] Stacking Height

Part No.: 5177984-□
(Page 74)



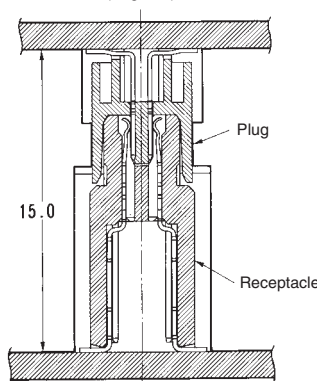
Part No.: 5-5179010-□
(Page 80)
13 [.512] Stacking Height

Part No.: 5179029-□
(Page 75)



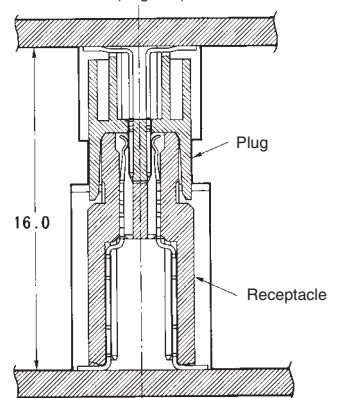
Part No.: 5-5179010-□
(Page 80)
14 [.551] Stacking Height

Part No.: 5179030-□
(Page 76)



Part No.: 5-5179010-□
(Page 80)
15 [.591] Stacking Height

Part No.: 5179031-□
(Page 77)



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.

0.8mm Free Height (FH) Connectors (Continued)

0.8mm Product Tree

Gender	Height	Plating Au Thickness	Package Type	Pickup Cap	40 Pos.	60 Pos.	80 Pos.	100 Pos.	120 Pos.	140 Pos.	160 Pos.	180 Pos.	200 Pos.
Rcpt.	5H	8µ"	Tube	No	5177983-1	5177983-2	5177983-3	5177983-4	5177983-5	5177983-6	5177983-8	5177983-9	1-5177983-0
			Tube	Yes	5179229-1	5179229-2	5179229-3	5179229-4	5179229-5	5179229-6	5179229-8	5179229-9	1-5179229-0
			Tape and Reel	Yes	5177985-1	5177985-2	5177985-3	5177985-4	5177985-5	5177985-6	5177985-8	—	—
			Tube	No	6123000-1	6123000-2	6123000-3	6123000-4	6123000-5	6123000-6	6123000-8	6123000-9	1-6123000-0
	9H	8µ"	Tube	Yes	—	—	—	—	—	—	—	—	—
			Tape and Reel	Yes	5353999-1	5353999-2	5353999-3	5353999-4	5353999-5	5353999-6	5353999-8	—	—
			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
			Tube	Yes	—	5-5179232-2	5-5179232-3	5-5179232-4	5-5179232-5	5-5179232-6	5-5179232-8	5-5179232-9	6-5179232-0
	13H	8µ"	Tape and Reel	Yes	5-5179180-1	5-5179180-2	5-5179180-3	5-5179180-4	5-5179180-5	5-5179180-6	—	—	—
			Tube	No	5084613-1	5084613-2	5084613-3	5084613-4	5084613-5	5084613-6	5084613-8	5084613-9	1-5084613-0
			Tube	Yes	—	—	—	—	—	—	—	—	—
			Tape and Reel	Yes	7-5179180-1	7-5179180-2	7-5179180-3	7-5179180-4	7-5179180-5	7-5179180-6	—	—	—
Plug	5H	8µ"	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
			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	—
			Tube	No	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
	6H	8µ"	Tube	Yes	—	—	—	—	—	—	—	—	—
			Tape and Reel	Yes	5084618-1	5084618-2	5084618-3	5084618-4	5084618-5	5084618-6	5084618-8	5084618-9	—
			Tube	No	5177984-1	5177984-2	5177984-3	5177984-4	5177984-5	5177984-6	5177984-8	5177984-9	1-5177984-0
			Tube	Yes	5179230-1	5179230-2	5179230-3	5179230-4	5179230-5	5179230-6	5179230-8	5179230-9	1-5179230-0
	7H	8µ"	Tape and Reel	Yes	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	—	—
			Tube	No	5084615-1	5084615-2	5084615-3	5084615-4	5084615-5	5084615-6	5084615-8	5084615-9	1-5084615-0
			Tube	Yes	—	—	—	—	—	—	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	—	—	—
R/A	8H	8µ"	Tube	No	5179030-1	5179030-2	5179030-3	5179030-4	5179030-5	5179030-6	5179030-8	5179030-9	1-5179030-0
			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
			Tape and Reel	Yes	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	—	—	—
			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
	R/A	8µ"	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	—	—	—	—	—	—	—	—	—
			Tube	No	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5179031-0
			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
	R/A	8µ"	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	—
			Tube	No	6123002-1	6123002-2	6123002-3	6123002-4	6123002-5	6123002-6	6123002-8	6123002-9	1-6123002-0
			Tube	Yes	—	—	—	—	—	—	—	—	—
			Tape and Reel	Yes	6123001-1	6123001-2	6123001-3	6123001-4	6123001-5	6123001-6	6123001-8	6123001-9	—

Stack Height = [(Rcpt. Height + Plug Height) - 5]
 example: [(13H Rcpt. + 6H Plug) - 5] = [(13 + 6) - 5] = 14mm stack height
 Note: Part Numbers are RoHS compliant.

**0.8mm Free Height (FH)
Connectors**

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

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

Material and Finish

Housing — High temperature thermo-plastic, 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

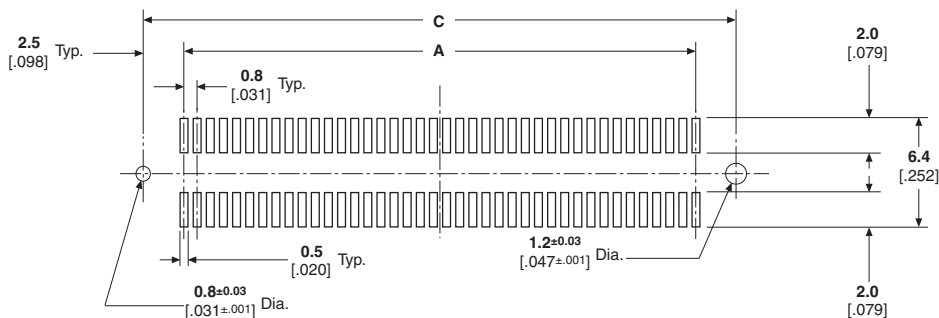
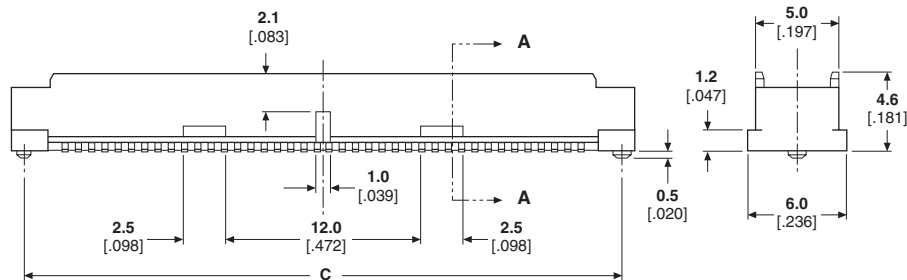
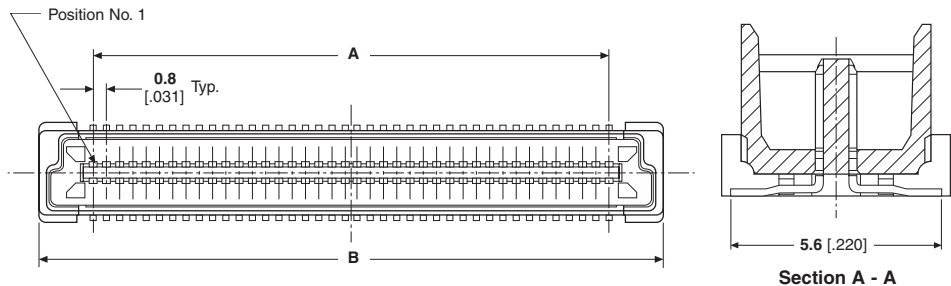
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Mating Receptacles — pages 78
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Product Specification
108-5390



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

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

Material and Finish

Housing — High temperature thermo-plastic, 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

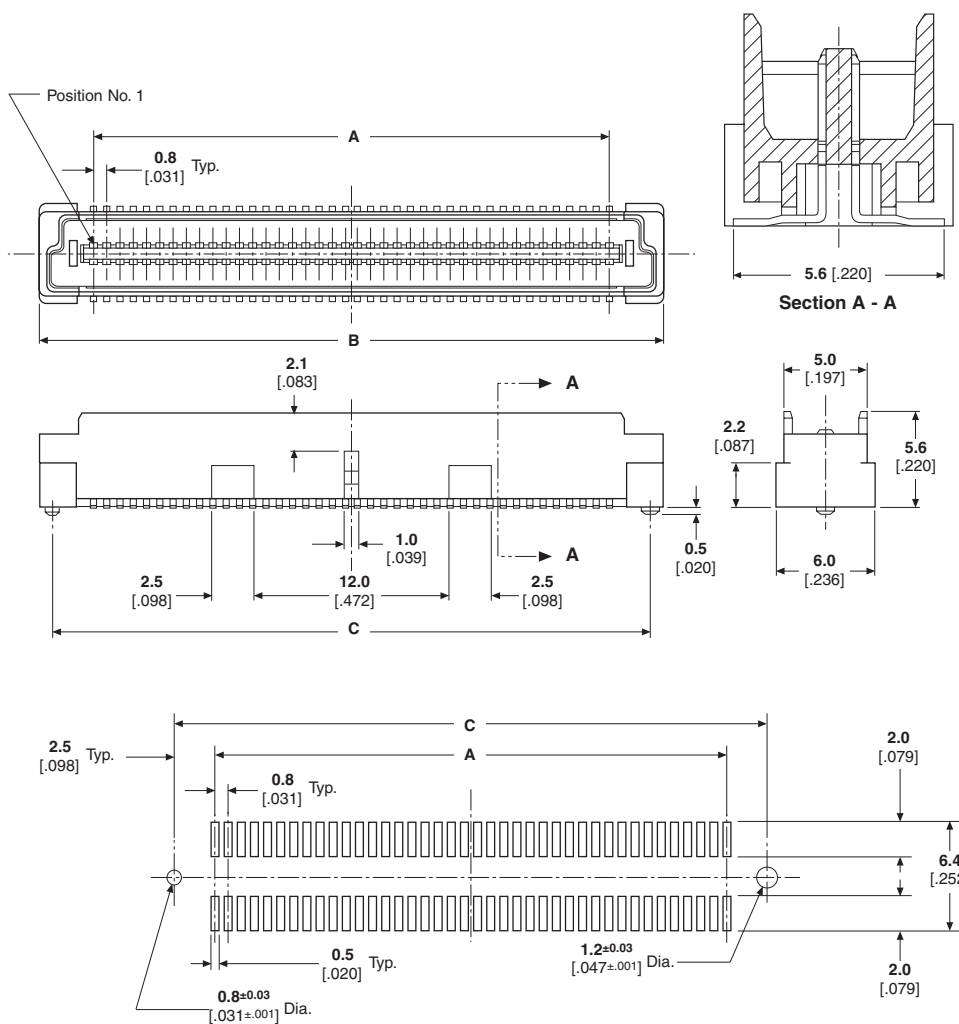
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Technical Documents (page 113)

Product Specification
108-5390



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

Material and Finish

Housing — High temperature thermo-plastic, 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 —
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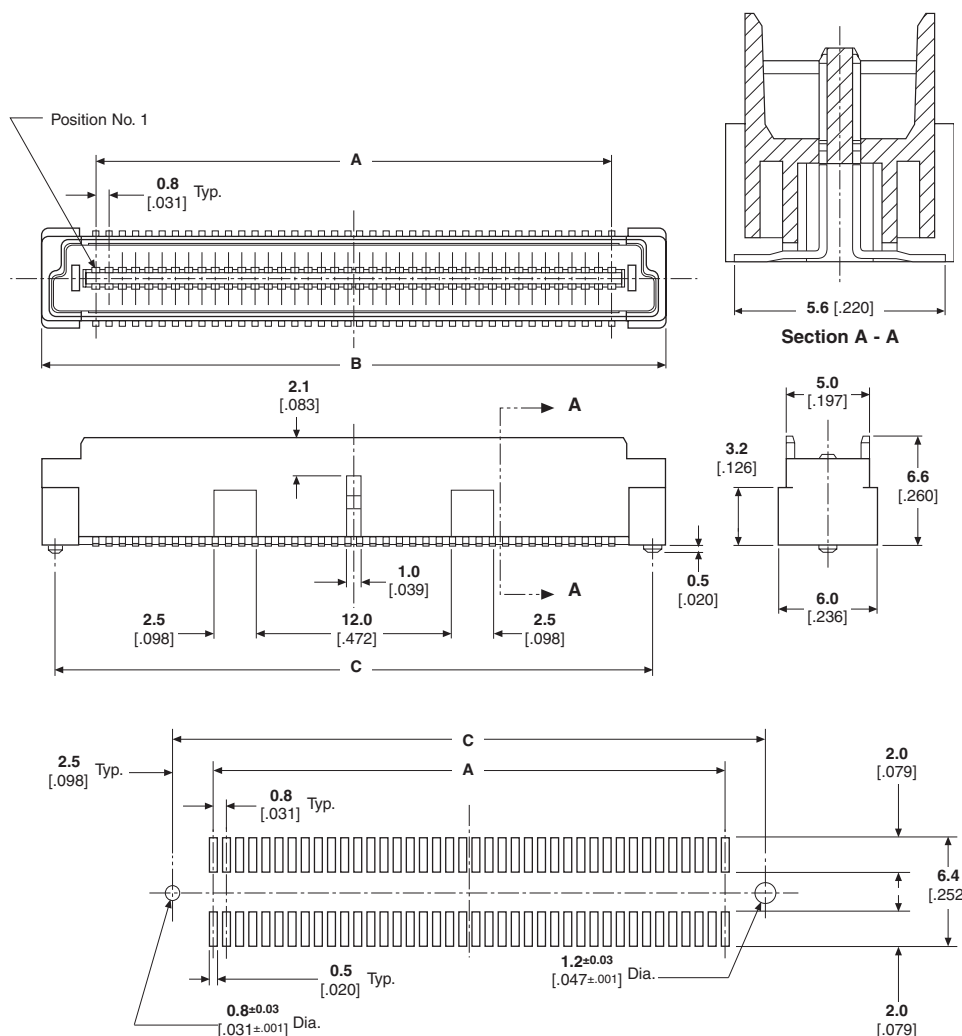
Stacking Height Combinations —
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Mating Receptacles — pages 78
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Technical Documents (page 113)

Product Specification
108-5390

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



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

Material and Finish

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

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

Related Product Data

Performance Characteristics —
page 71

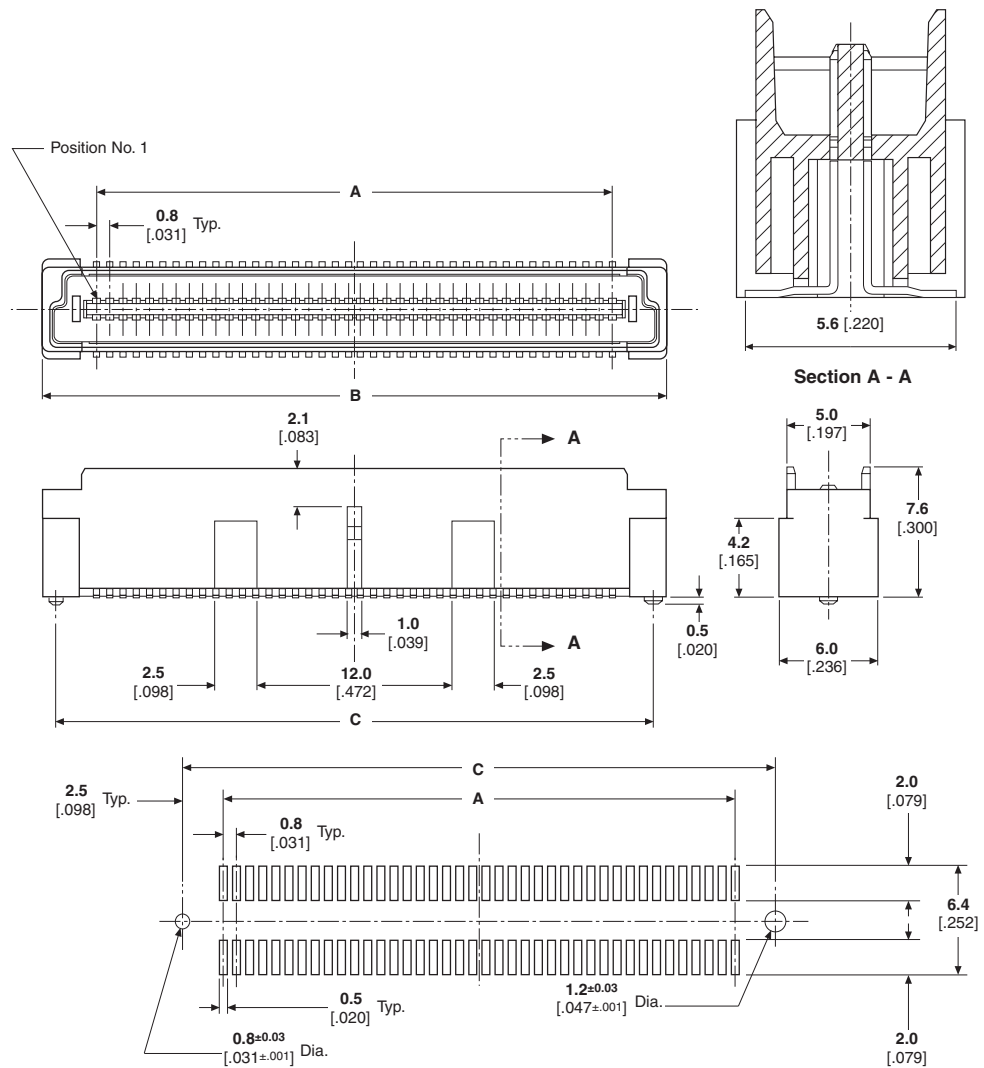
Stacking Height Combinations —
page 72

Mating Receptacles — pages 78
thru 80

Technical Documents (page 113)

Product Specification
108-5390

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



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

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

Material and Finish

Housing — High temperature thermo-plastic, 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

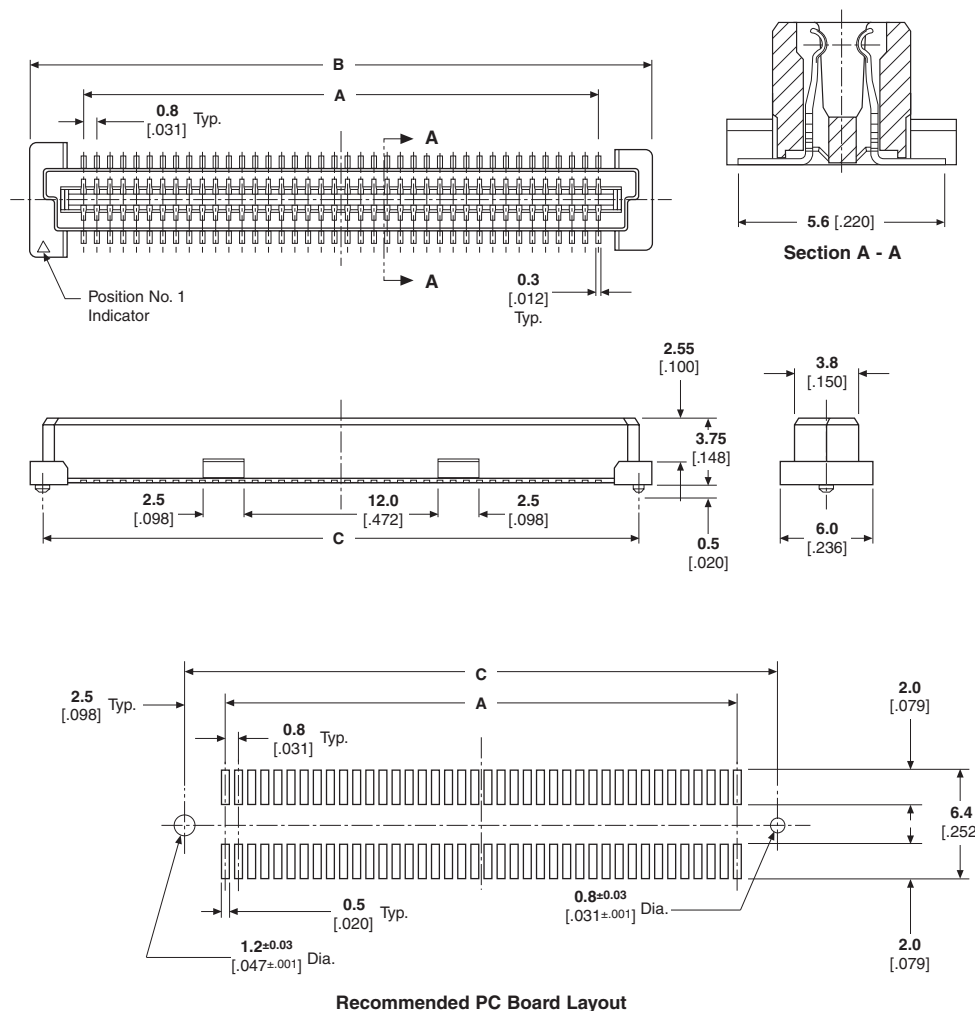
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Stacking Height Combinations —
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Mating Plugs — pages 74 thru 77,
and 81

Technical Documents (page 113)

Product Specification
108-5390



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

Note: Part Numbers are RoHS compliant.

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

Material and Finish

Housing — High temperature thermo-plastic, 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

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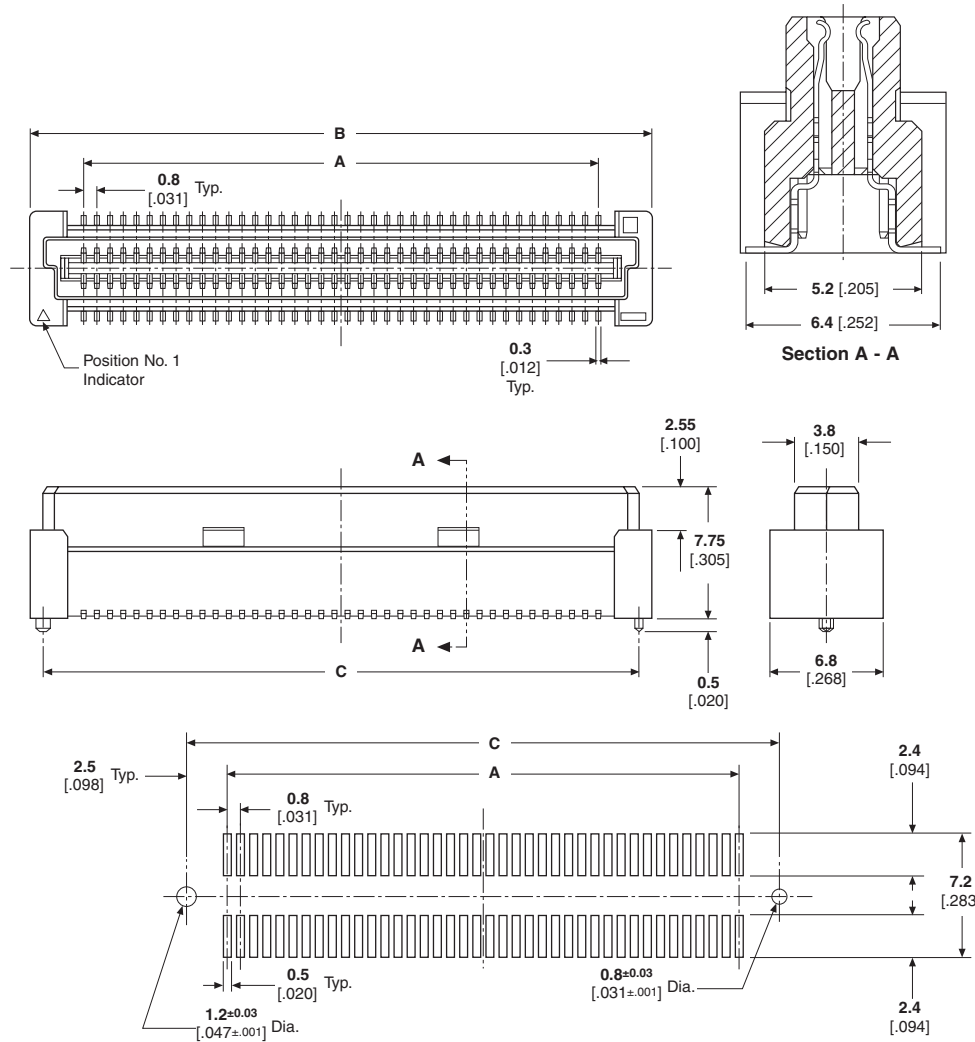
Stacking Height Combinations —
page 72

Mating Plugs — pages 74 thru 77,
and 81

Technical Documents (page 113)

Product Specification
108-5390

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



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

Material and Finish

Housing — High temperature thermo-
plastic, 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

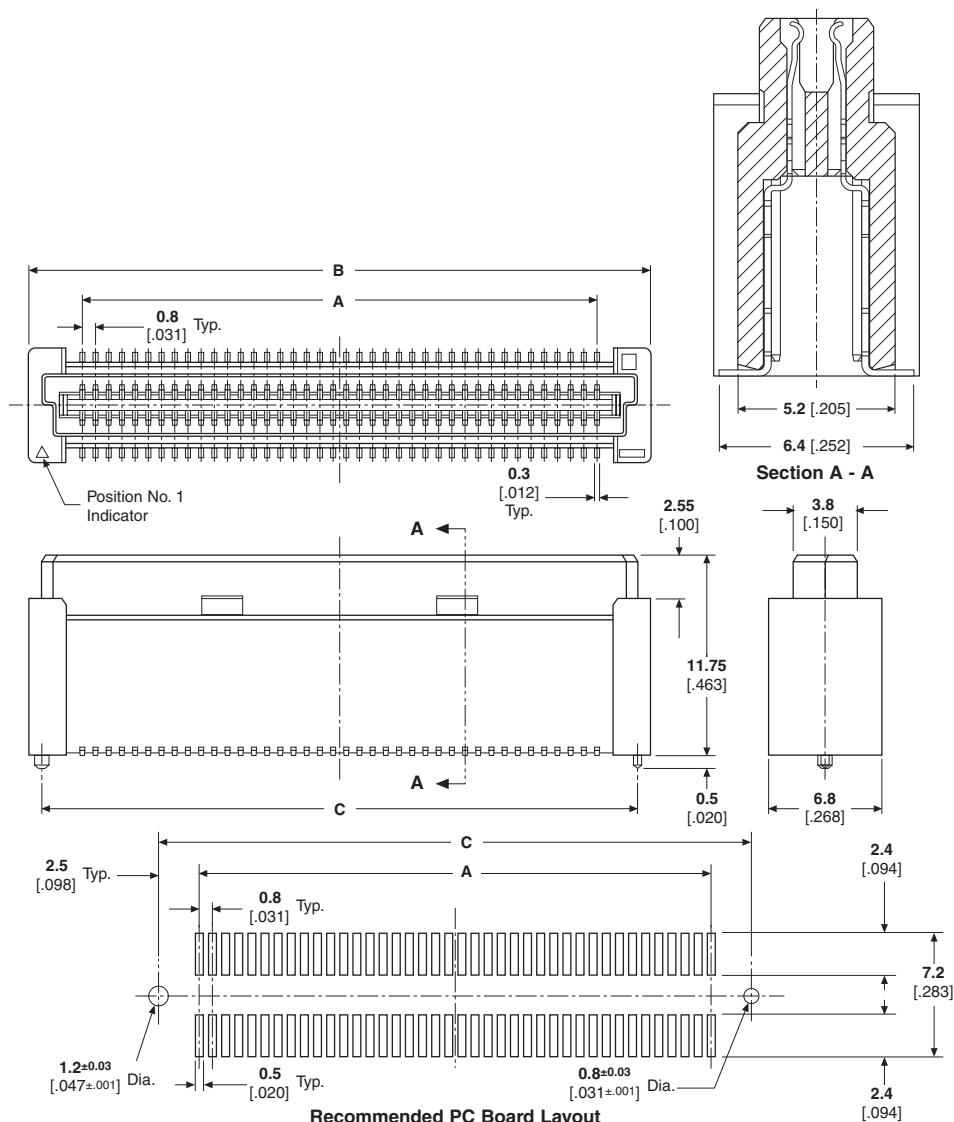
Stacking Height Combinations —
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and 81

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Product Specification
108-5390

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



Recommended PC Board Layout

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

Note: Part Numbers are RoHS compliant.

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

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

Material and Finish

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

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

Related Product Data

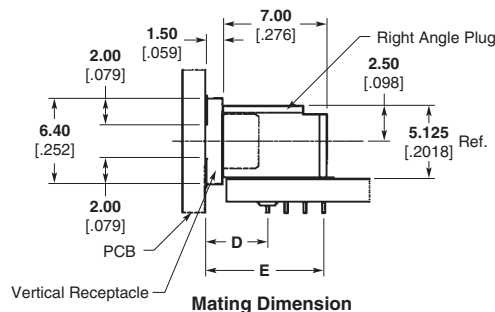
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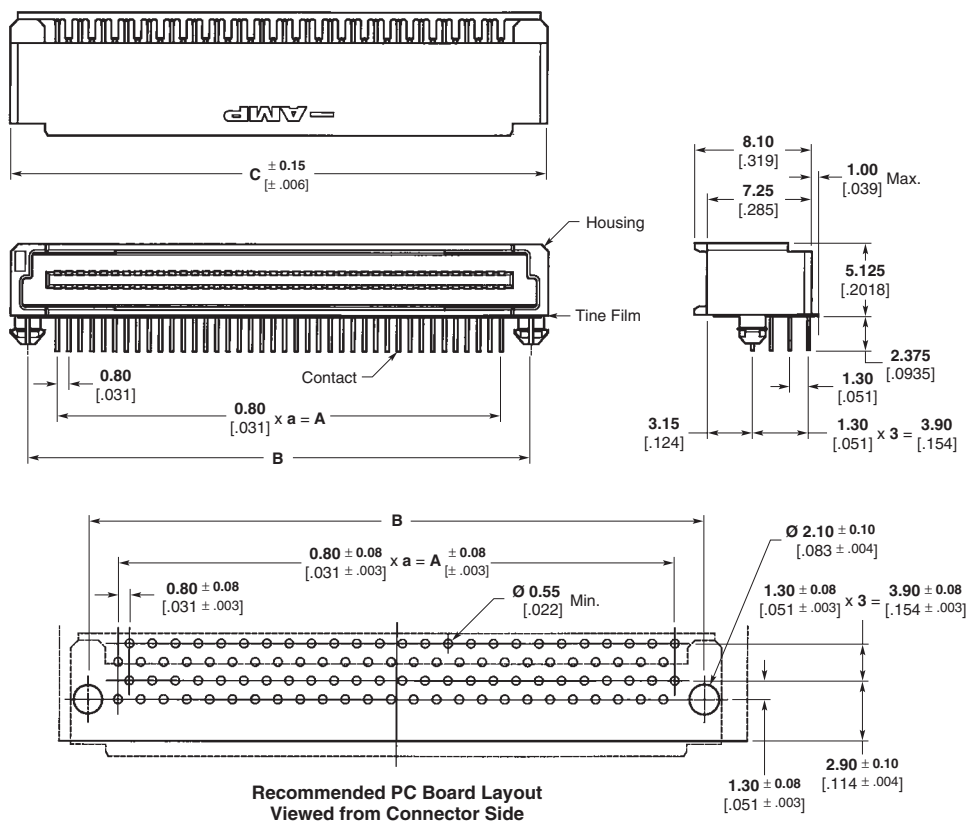
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Technical Documents (page 113)

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



**Recommended PC Board Layout
Viewed from Connector Side**

Dimension			No. of Positions	Part Number
A	B	C		
23.20 .913	27.40 1.079	29.80 1.173	29	60
31.20 1.228	35.40 1.394	37.80 1.488	39	80

Note: Part Numbers are RoHS compliant.

**0.8mm Free Height (FH)
Connectors**

Engineering Notes