



**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)

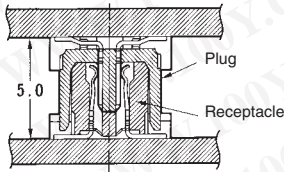
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

0.8mm Free Height (FH) Connectors



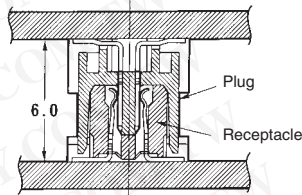
**Board-to-Board Stacking Heights (By Plug/Receptacle Combinations)**

Part No.: 5177984-□  
(Page 74)



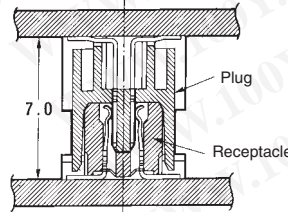
Part No.: 5177983-□  
(Page 78)  
5 [.197] Stacking Height

Part No.: 5179029-□  
(Page 75)



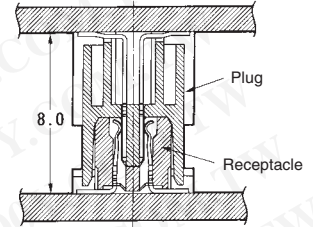
Part No.: 5177983-□  
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6 [.236] Stacking Height

Part No.: 5179030-□  
(Page 76)



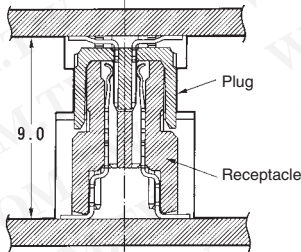
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(Page 78)  
7 [.276] Stacking Height

Part No.: 5179031-□  
(Page 77)



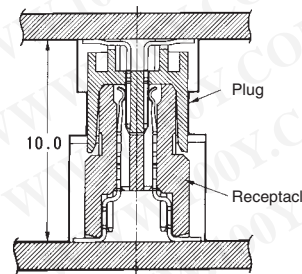
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(Page 78)  
8 [.315] Stacking Height

Part No.: 5177984-□  
(Page 74)



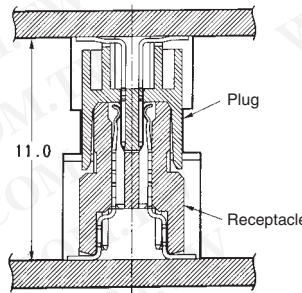
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(Page 79)  
9 [.354] Stacking Height

Part No.: 5179029-□  
(Page 75)



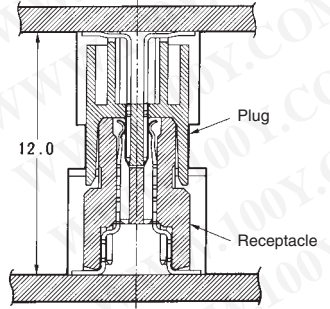
Part No.: 5-5179009-□  
(Page 79)  
10 [.394] Stacking Height

Part No.: 5179030-□  
(Page 76)



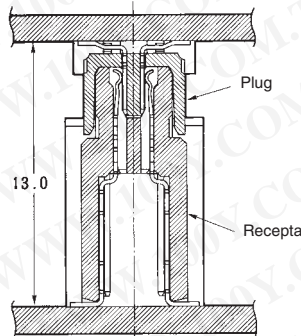
Part No.: 5-5179009-□  
(Page 79)  
11 [.433] Stacking Height

Part No.: 5179031-□  
(Page 77)



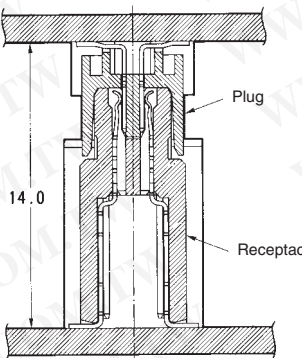
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(Page 79)  
12 [.472] Stacking Height

Part No.: 5177984-□  
(Page 74)



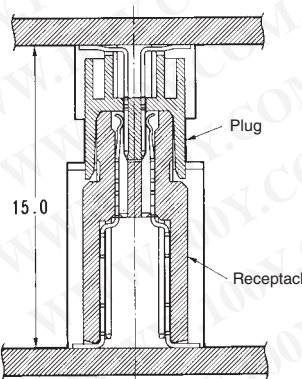
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(Page 80)  
13 [.512] Stacking Height

Part No.: 5179029-□  
(Page 75)



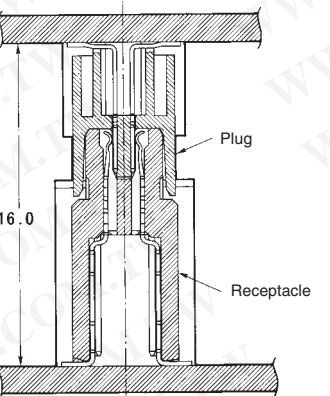
Part No.: 5-5179010-□  
(Page 80)  
14 [.551] Stacking Height

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

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

0.8mm Product Tree		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.	
5H	8µ"	Tape and Reel	Yes	No	5177983-1	5177983-2	5177983-3	5177983-4	5177983-5	5177983-6	5177983-8	5177983-9	1-5177983-0	
			Yes	Yes	5179229-1	5179229-2	5179229-3	5179229-4	5179229-5	5179229-6	5179229-8	5179229-9	1-5179229-0	
			Yes	No	5177985-1	5177985-2	5177985-3	5177985-4	5177985-5	5177985-6	5177985-8	—	—	—
9H	30µ"	Tape and Reel	Yes	No	6123000-1	6123000-2	6123000-3	6123000-4	6123000-5	6123000-6	6123000-8	6123000-9	1-6123000-0	
			Yes	Yes	5353999-1	5353999-2	5353999-3	5353999-4	5353999-5	5353999-6	5353999-8	—	—	—
			Yes	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	—
13H	8µ"	Tape and Reel	Yes	Yes	5-5179232-1	5-5179232-2	5-5179232-3	5-5179232-4	5-5179232-5	5-5179232-6	5-5179232-8	5-5179232-9	6-5179232-0	
			Yes	Yes	5-5179180-1	5-5179180-2	5-5179180-3	5-5179180-4	5-5179180-5	5-5179180-6	—	—	—	
			Yes	No	5084613-1	5084613-2	5084613-3	5084613-4	5084613-5	5084613-6	5084613-8	5084613-9	1-5084613-0	—
5H	30µ"	Tape and Reel	Yes	Yes	7-5179180-1	7-5179180-2	7-5179180-3	7-5179180-4	7-5179180-5	7-5179180-6	—	—	—	
			Yes	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	—
			Yes	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	—
6H	8µ"	Tape and Reel	Yes	Yes	5084616-1	5084616-2	5084616-3	5084616-4	5084616-5	5084616-6	5084616-8	5084616-9	—	
			Yes	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	—
			Yes	Yes	—	—	—	—	—	—	—	—	—	7-6123212-0
5H	30µ"	Tape and Reel	Yes	Yes	5084618-1	5084618-2	5084618-3	5084618-4	5084618-5	5084618-6	5084618-8	5084618-9	—	
			Yes	No	5177984-1	5177984-2	5177984-3	5177984-4	5177984-5	5177984-6	5177984-8	5177984-9	1-5177984-0	—
			Yes	Yes	5179230-1	5179230-2	5179230-3	5179230-4	5179230-5	5179230-6	5179230-8	5179230-9	1-5179230-0	—
6H	8µ"	Tape and Reel	Yes	Yes	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	—	—	
			Yes	No	5084614-1	5084614-2	5084614-3	5084614-4	5084614-5	5084614-6	5084614-8	5084614-9	1-5084614-0	—
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
7H	30µ"	Tape and Reel	Yes	Yes	5-5177986-1	5-5177986-2	5-5177986-3	5-5177986-4	5-5177986-5	5-5177986-6	5-5177986-8	—	—	
			Yes	No	5179029-1	5179029-2	5179029-3	5179029-4	5179029-5	5179029-6	5179029-8	5179029-9	1-5179029-0	—
			Yes	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	—
8H	8µ"	Tape and Reel	Yes	Yes	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	—	—	—	
			Yes	No	5084615-1	5084615-2	5084615-3	5084615-4	5084615-5	5084615-6	5084615-8	5084615-9	1-5084615-0	—
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
8H	30µ"	Tape and Reel	Yes	Yes	6-5177986-1	6-5177986-2	6-5177986-3	6-5177986-4	6-5177986-5	6-5177986-6	—	—	—	
			Yes	No	5179030-1	5179030-2	5179030-3	5179030-4	5179030-5	5179030-6	5179030-8	5179030-9	1-5179030-0	—
			Yes	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	—
R/A	8µ"	Tape and Reel	Yes	Yes	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	—	—	—	
			Yes	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	—
			Yes	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	—
R/A	8µ"	Tape and Reel	Yes	No	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5179031-0	
			Yes	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	—
			Yes	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	—	—
R/A	30µ"	Tape and Reel	Yes	No	6123002-1	6123002-2	6123002-3	6123002-4	6123002-5	6123002-6	6123002-8	6123002-9	1-6123002-0	
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
			Yes	No	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**

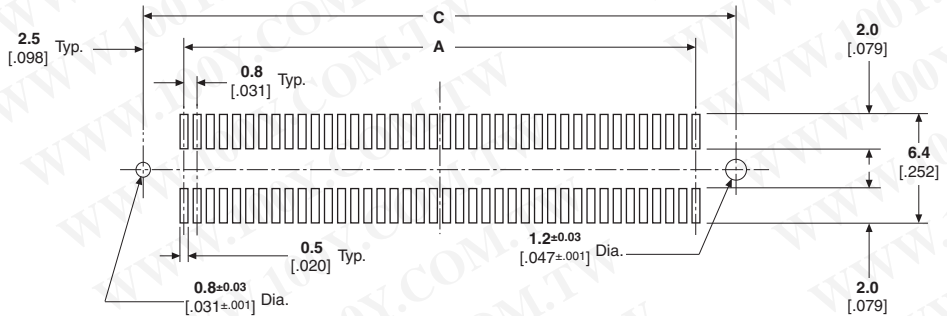
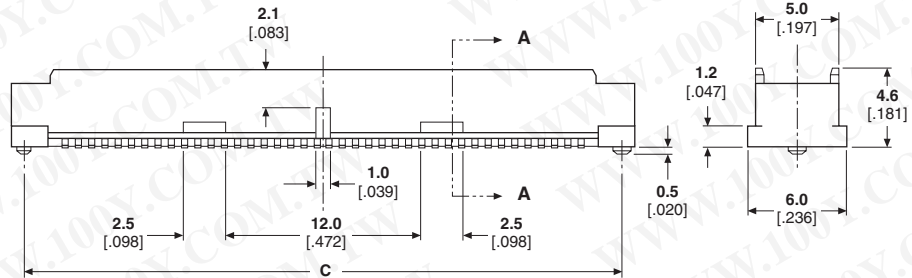
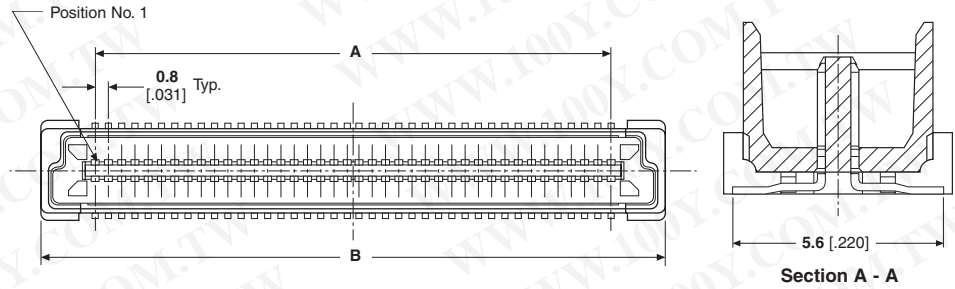
**Housing** — High temperature thermo-plastic, natural color, 94V-0 rated  
**Contacts** — Brass; duplex plated 0.00020 [.000008] min. gold on contact area, 0.00100 [.000039] min. tin on solder area, with entire contact underplated 0.00130 [.000051] min. nickel

**Related Product Data**

- 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**

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

**Note:** Part Numbers are RoHS compliant.

0.8mm Free Height (FH) Connectors



**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**

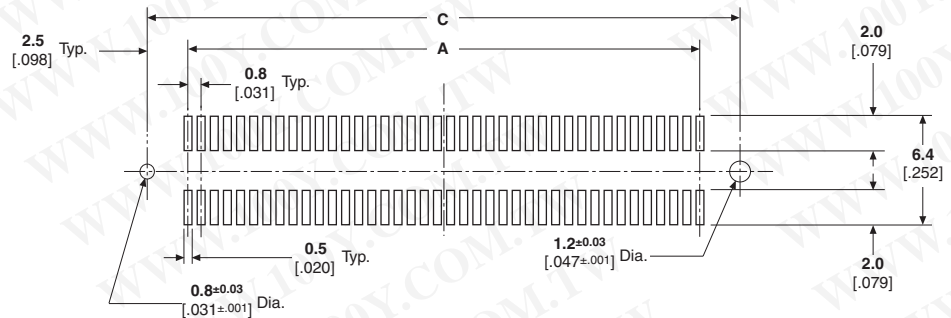
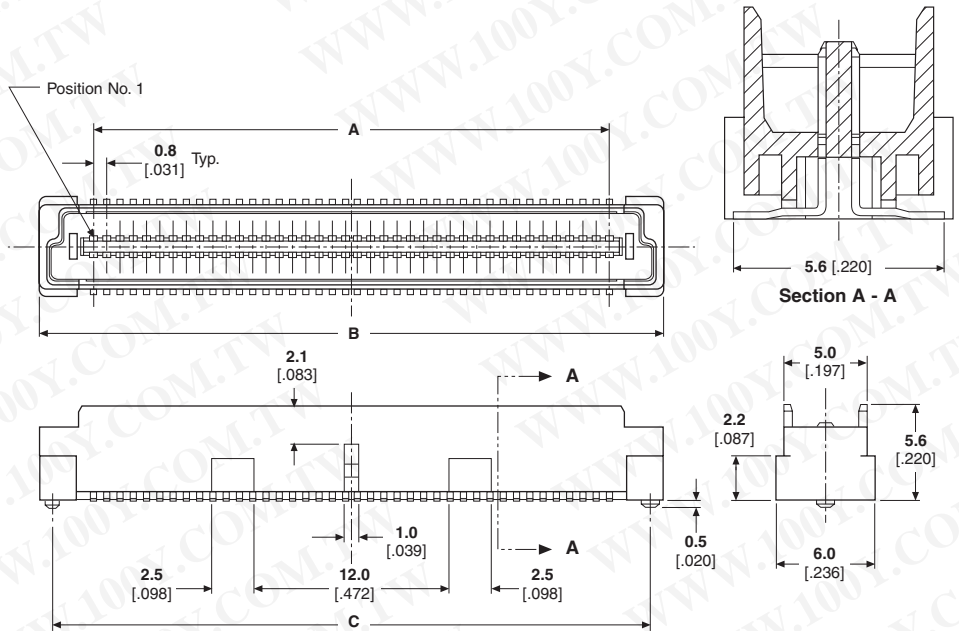
**Housing** — High temperature thermo-plastic, natural color, 94V-0 rated  
**Contacts** — Brass; duplex plated 0.00020 [ .000008 ] min. gold on contact area, 0.00100 [ .000039 ] min. tin on solder area, with entire contact underplated 0.00130 [ .000051 ] min. nickel

**Related Product Data**

**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**

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	5179029-1 5084615-1	2-5179230-1 —	1-5177986-1 6-5177986-1
23.20 .913	29.80 1.173	28.20 1.110	60	8µ" Au 30µ" Au	5179029-2 5084615-2	2-5179230-2 —	1-5177986-2 6-5177986-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8µ" Au 30µ" Au	5179029-3 5084615-3	2-5179230-3 —	1-5177986-3 6-5177986-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8µ" Au 30µ" Au	5179029-4 5084615-4	2-5179230-4 —	1-5177986-4 6-5177986-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8µ" Au 30µ" Au	5179029-5 5084615-5	2-5179230-5 —	1-5177986-5 6-5177986-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8µ" Au 30µ" Au	5179029-6 5084615-6	2-5179230-6 —	1-5177986-6 6-5177986-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8µ" Au 30µ" Au	5179029-8 5084615-8	2-5179230-8 1-5084615-8	— —
71.20 2.803	77.80 3.063	76.20 3.000	180	8µ" Au 30µ" Au	5179029-9 5084615-9	2-5179230-9 1-5084615-9	— —
79.20 3.118	85.80 3.378	84.20 3.315	200	8µ" Au 30µ" Au	1-5179029-0 1-5084615-9	3-5179230-0 2-5084615-0	— —

**Note:** Part Numbers are RoHS compliant.

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

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

**Material and Finish**

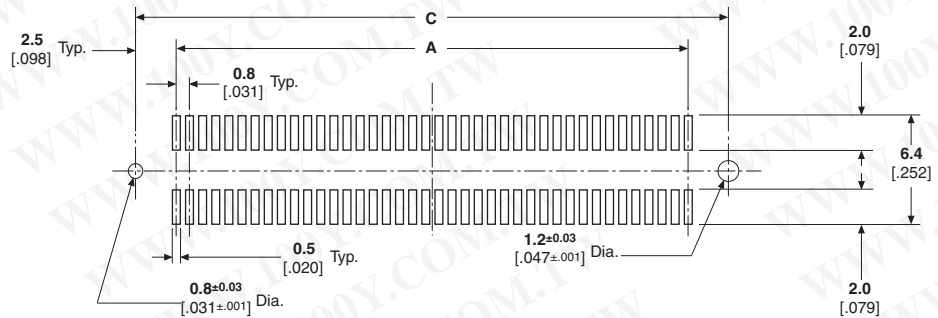
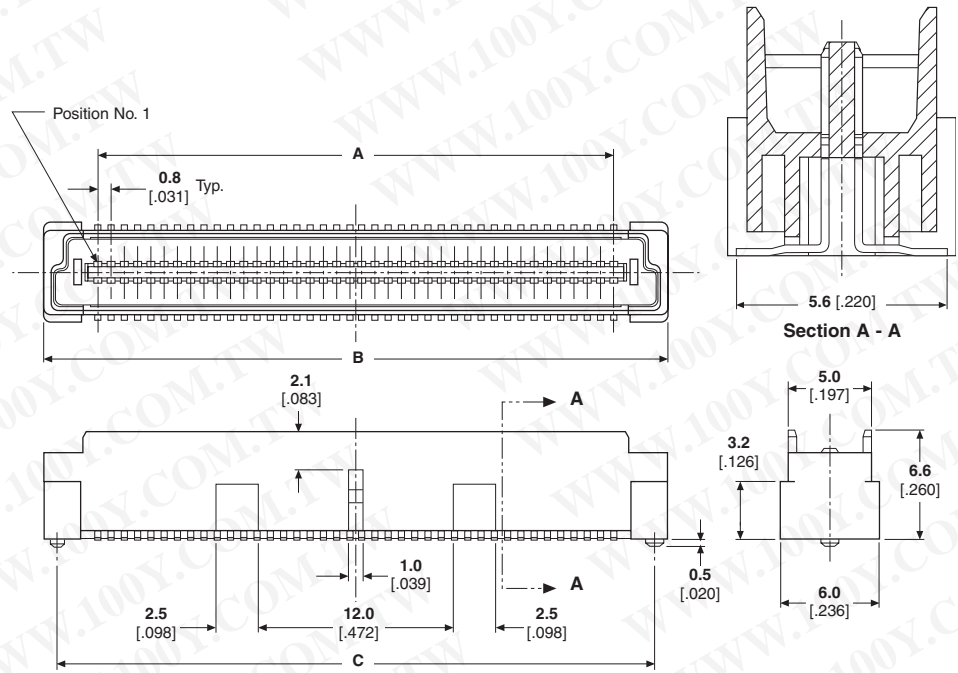
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**Contacts** — Brass; duplex plated 0.00020 [ .000008 ] min. gold on contact area, 0.00100 [ .000039 ] min. tin on solder area, with entire contact underplated 0.00130 [ .000051 ] min. nickel

**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**

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.

0.8mm Free Height (FH) Connectors

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

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

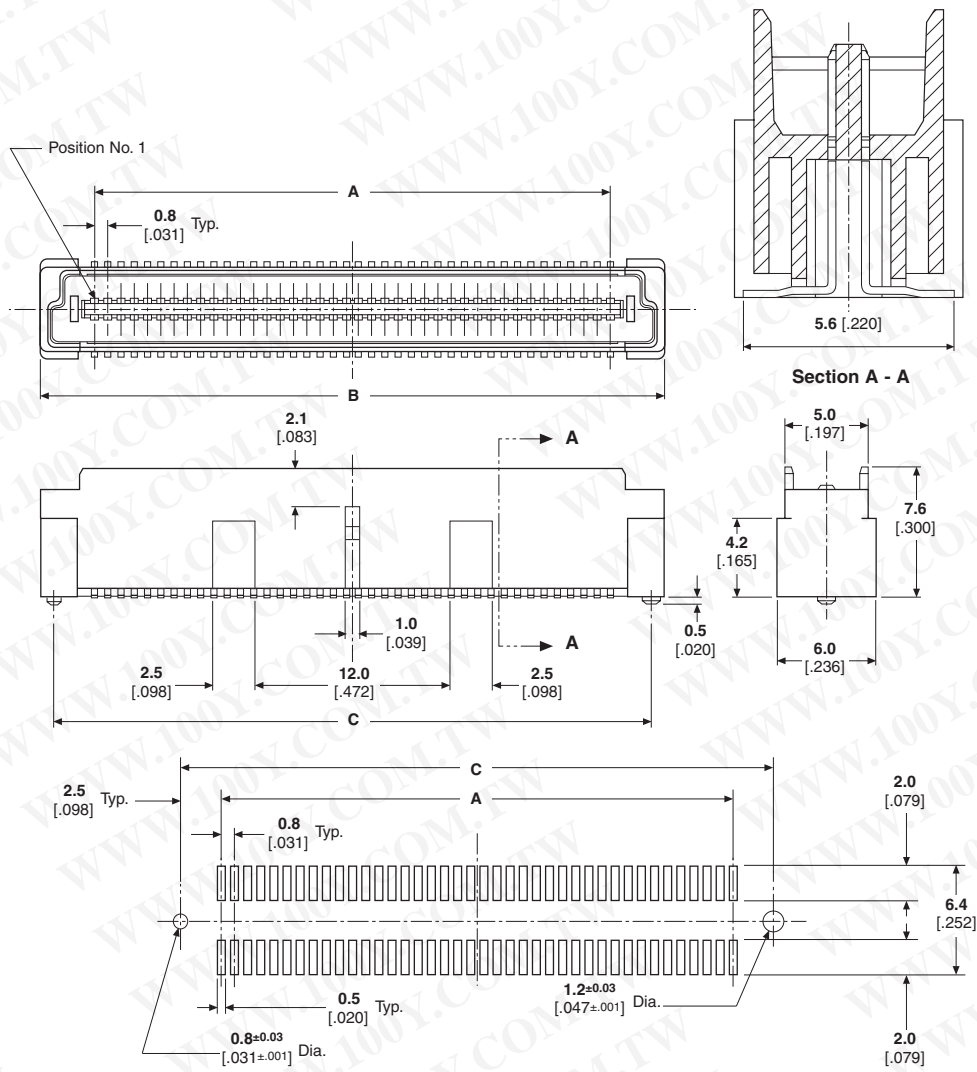
**Material and Finish**

**Housing** — High temperature 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** — 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 (FH)  
Connectors**

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**

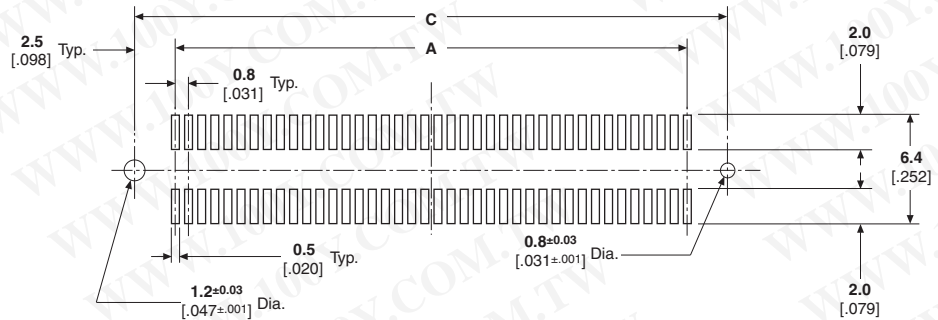
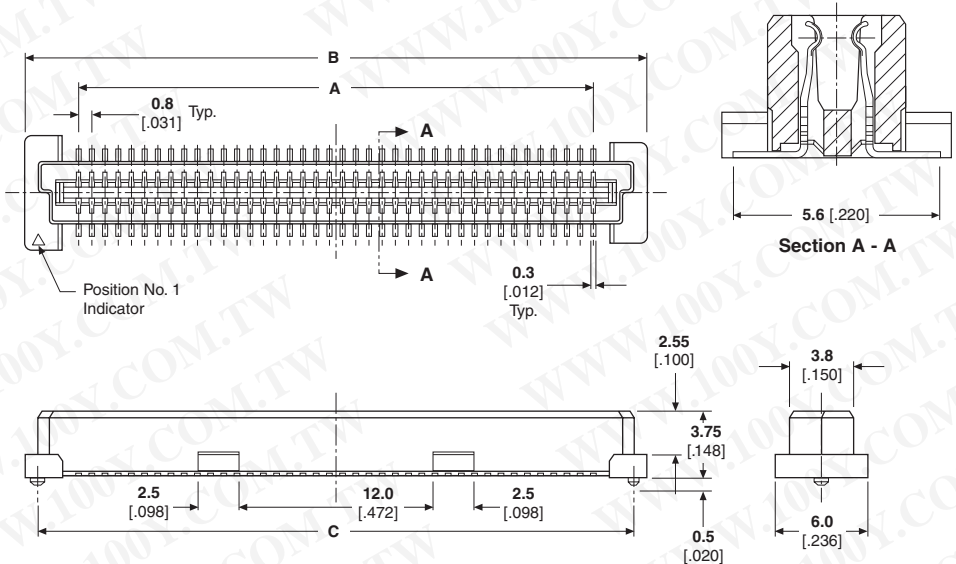
**Performance Characteristics** — page 71

**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**

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	5177983-1 6123000-1	5179229-1 —	5177985-1 5353999-1
23.20 .913	29.80 1.173	28.20 1.110	60	8µ" Au 30µ" Au	5177983-2 6123000-2	5179229-2 —	5177985-2 5353999-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8µ" Au 30µ" Au	5177983-3 6123000-3	5179229-3 —	5177985-3 5353999-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8µ" Au 30µ" Au	5177983-4 6123000-4	5179229-4 —	5177985-4 5353999-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8µ" Au 30µ" Au	5177983-5 6123000-5	5179229-5 —	5177985-5 5353999-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8µ" Au 30µ" Au	5177983-6 6123000-6	5179229-6 —	5177985-6 5353999-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8µ" Au 30µ" Au	5177983-8 6123000-8	5179229-8 —	5177985-8 5353999-8
71.20 2.803	77.80 3.063	76.20 3.000	180	8µ" Au 30µ" Au	5177983-9 6123000-9	5179229-9 —	— —
79.20 3.118	85.80 3.378	84.20 3.315	200	8µ" Au 30µ" Au	1-5177983-0 1-6123000-0	1-5179229-0 —	— —

**Note:** Part Numbers are RoHS compliant.

**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 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**

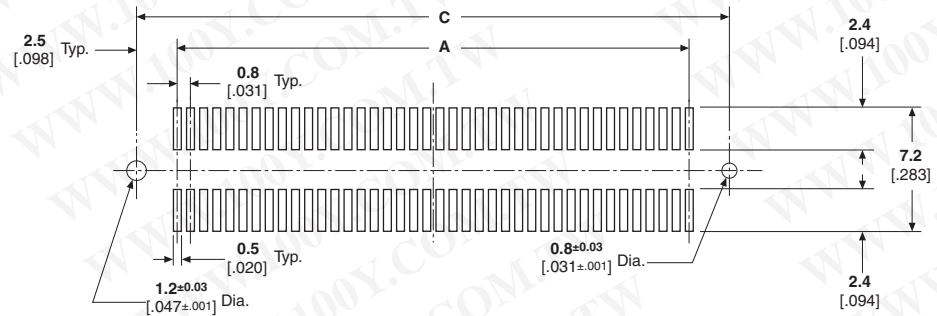
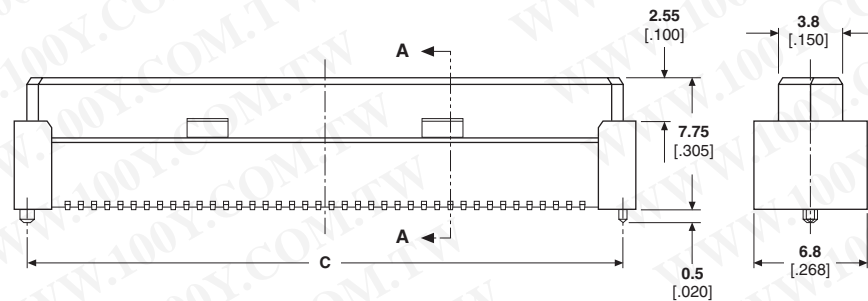
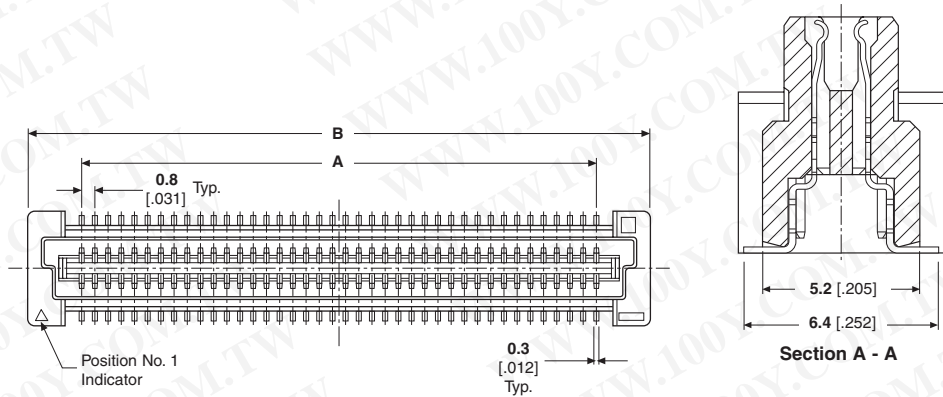
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Plugs** — pages 74 thru 77, and 81

**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	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.

**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 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**

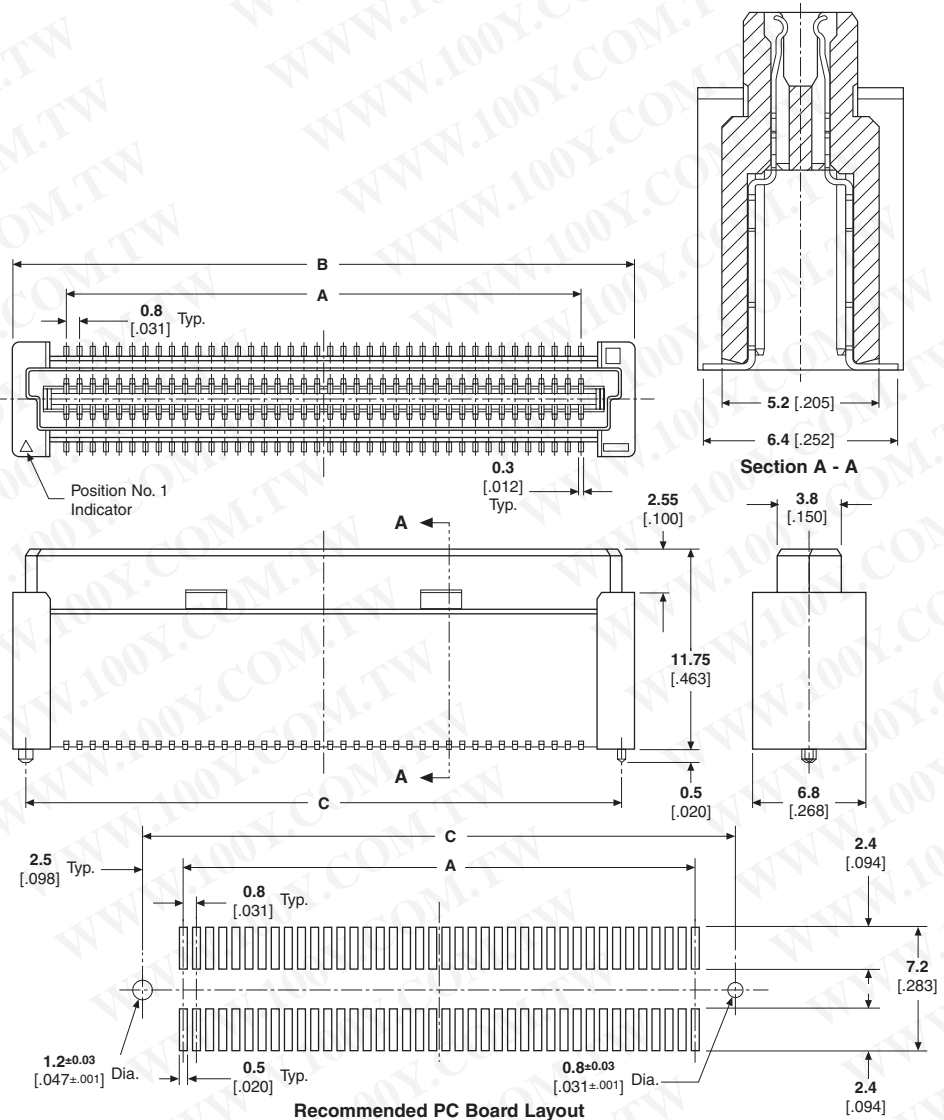
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Plugs** — pages 74 thru 77, and 81

**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 30µ" Au	5-5179010-1 5-6123212-1	5-5179233-1 —	5084616-1 5084618-1
23.20 .913	29.80 1.173	28.20 1.110	60	8µ" Au 30µ" Au	5-5179010-2 5-6123212-2	5-5179233-2 —	5084616-2 5084618-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8µ" Au 30µ" Au	5-5179010-3 5-6123212-3	5-5179233-3 —	5084616-3 5084618-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8µ" Au 30µ" Au	5-5179010-4 5-6123212-4	5-5179233-4 —	5084616-4 5084618-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8µ" Au 30µ" Au	5-5179010-5 5-6123212-5	5-5179233-5 —	5084616-5 5084618-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8µ" Au 30µ" Au	5-5179010-6 5-6123212-6	5-5179233-6 —	5084616-6 5084618-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8µ" Au 30µ" Au	5-5179010-8 5-6123212-8	5-5179233-8 —	5084616-8 5084618-8
71.20 2.803	77.80 3.063	76.20 3.000	180	8µ" Au 30µ" Au	5-5179010-9 5-6123212-9	5-5179233-9 —	5084616-9 5084618-9
79.20 3.118	85.80 3.378	84.20 3.315	200	8µ" Au 30µ" Au	6-5179010-0 6-6123212-0	6-5179233-0 7-6123212-0	— —

**Note:** Part Numbers are RoHS compliant.

0.8mm Free Height (FH) Connectors

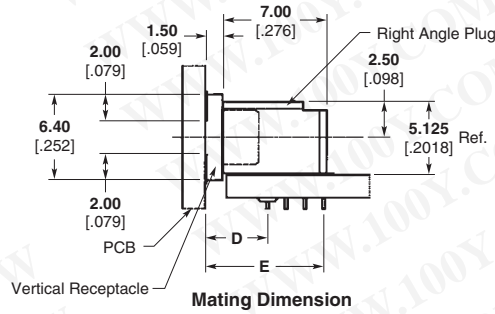


**0.8mm Free Height Right Angle Plugs, 0.8 [0.031] Pitch**

**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 [0.00008] min. gold on contact area, 0.00100 [0.00039] min. tin on solder area, with entire contact underplated 0.00130 [0.00051] min. nickel

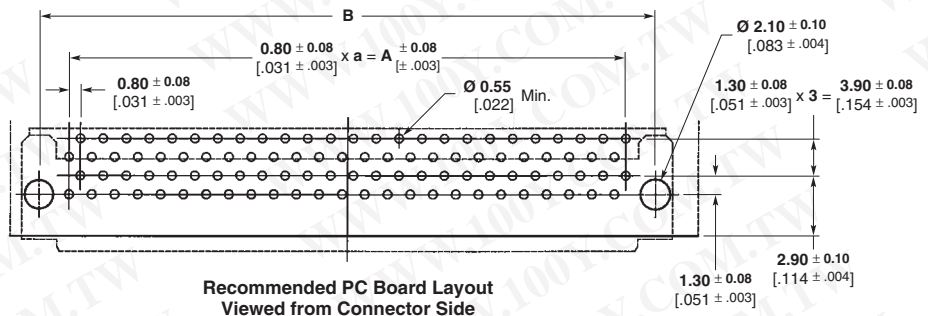
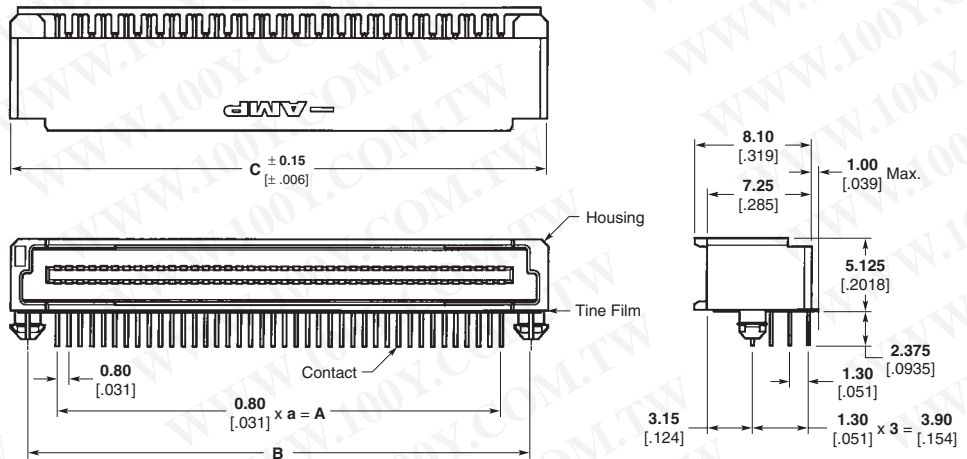


**Related Product Data**

- Performance Characteristics** — page 71
- Stacking Height Combinations** — page 72
- Mating Receptacles** — pages 78 thru 80

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

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

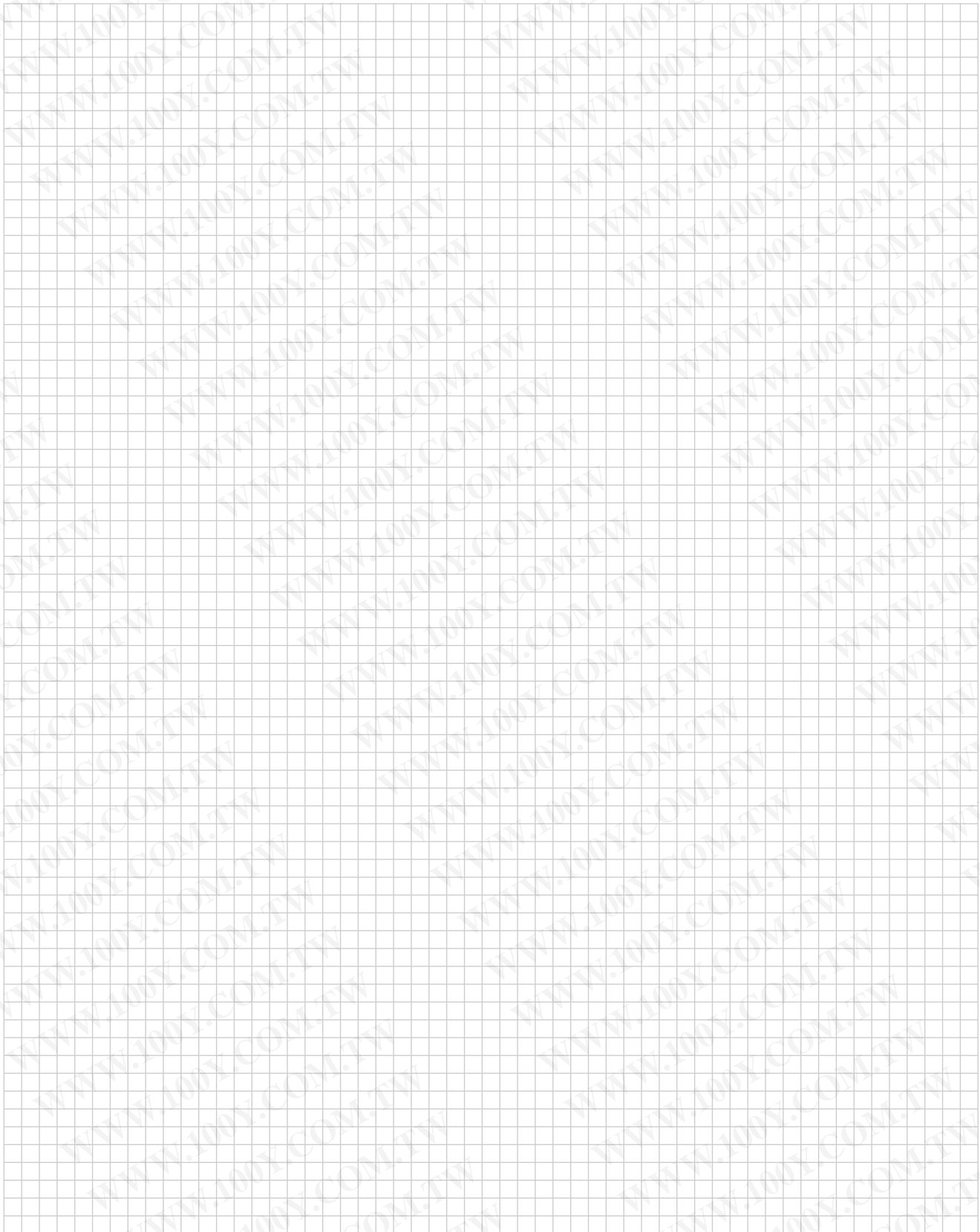


**Recommended PC Board Layout  
Viewed from Connector Side**

Dimension				No. of Positions	Part Number
A	B	C	a		
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

**Note:** Part Numbers are RoHS compliant.

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



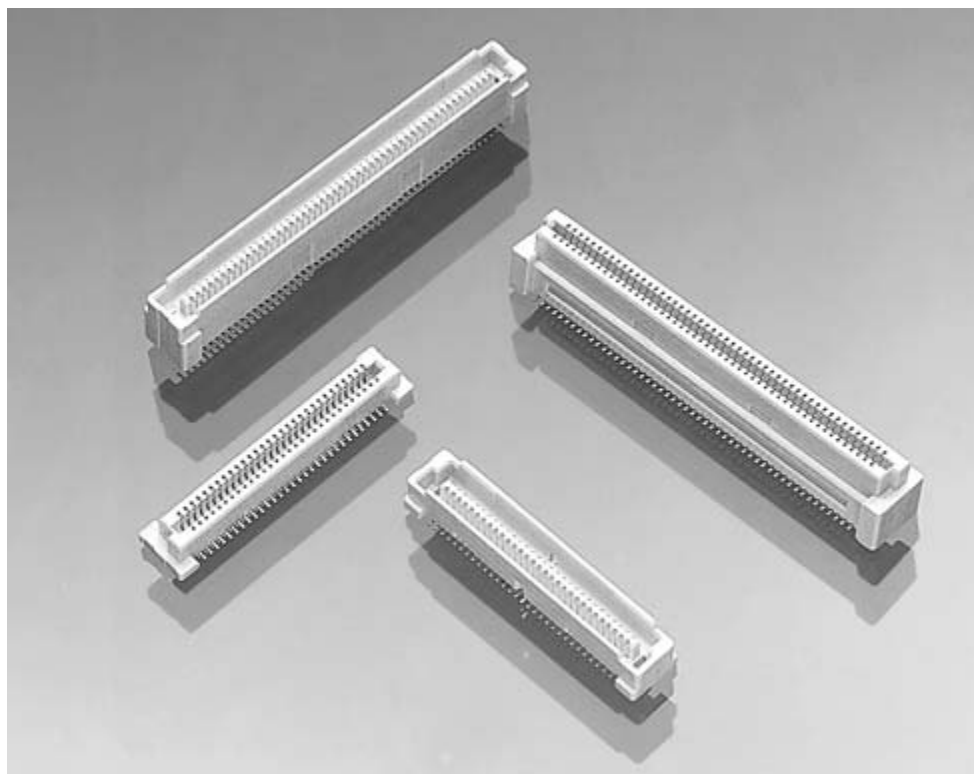




**0.8mm Free Height (FH) Connectors**

**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)

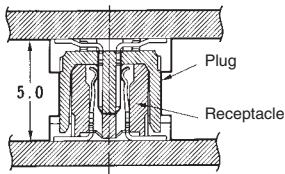
**Dielectric Withstanding Voltage** — 500 VAC (1 minute)

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

0.8mm Free Height (FH) Connectors

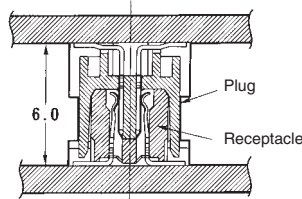
**Board-to-Board Stacking Heights (By Plug/Receptacle Combinations)**

Part No.: 5177984-□  
(Page 74)



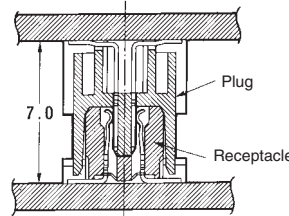
Part No.: 5177983-□  
(Page 78)  
5 [.197] Stacking Height

Part No.: 5179029-□  
(Page 75)



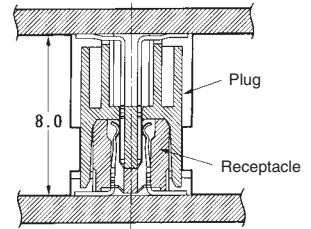
Part No.: 5177983-□  
(Page 78)  
6 [.236] Stacking Height

Part No.: 5179030-□  
(Page 76)



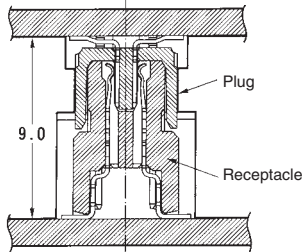
Part No.: 5177983-□  
(Page 78)  
7 [.276] Stacking Height

Part No.: 5179031-□  
(Page 77)



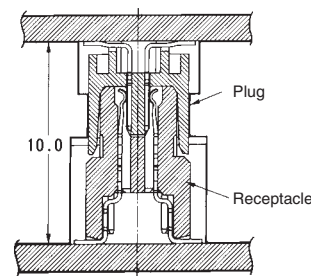
Part No.: 5177983-□  
(Page 78)  
8 [.315] Stacking Height

Part No.: 5177984-□  
(Page 74)



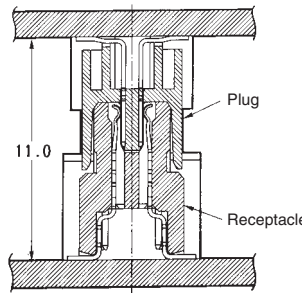
Part No.: 5-5179009-□  
(Page 79)  
9 [.354] Stacking Height

Part No.: 5179029-□  
(Page 75)



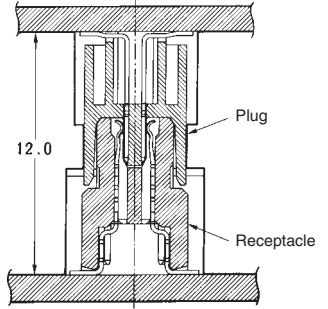
Part No.: 5-5179009-□  
(Page 79)  
10 [.394] Stacking Height

Part No.: 5179030-□  
(Page 76)



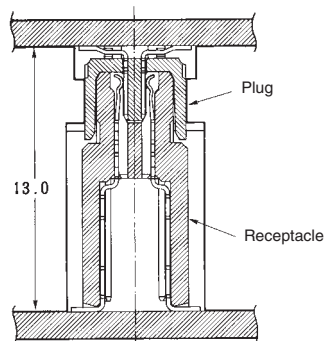
Part No.: 5-5179009-□  
(Page 79)  
11 [.433] Stacking Height

Part No.: 5179031-□  
(Page 77)



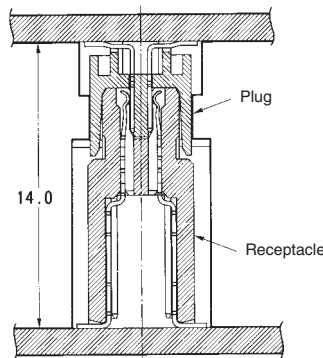
Part No.: 5-5179009-□  
(Page 79)  
12 [.472] Stacking Height

Part No.: 5177984-□  
(Page 74)



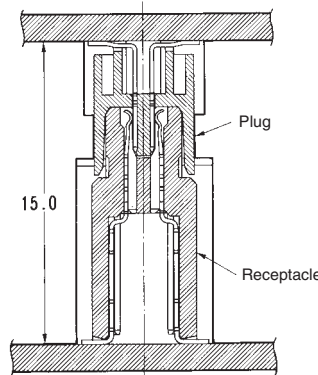
Part No.: 5-5179010-□  
(Page 80)  
13 [.512] Stacking Height

Part No.: 5179029-□  
(Page 75)



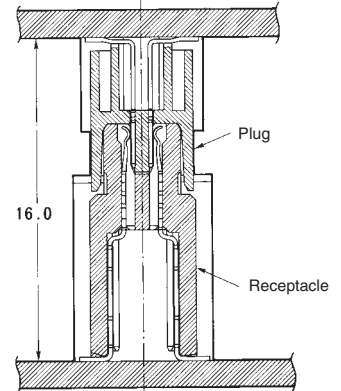
Part No.: 5-5179010-□  
(Page 80)  
14 [.551] Stacking Height

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

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

0.8mm Product Tree		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.	
5H	8µ"	Tape and Reel	Yes	No	5177983-1	5177983-2	5177983-3	5177983-4	5177983-5	5177983-6	5177983-8	5177983-9	1-5177983-0	
			Yes	Yes	5179229-1	5179229-2	5179229-3	5179229-4	5179229-5	5179229-6	5179229-8	5179229-9	1-5179229-0	
			Yes	Yes	5177985-1	5177985-2	5177985-3	5177985-4	5177985-5	5177985-6	5177985-8	—	—	—
			No	No	6123000-1	6123000-2	6123000-3	6123000-4	6123000-5	6123000-6	6123000-8	6123000-9	1-6123000-0	
9H	30µ"	Tape and Reel	Yes	Yes	5353999-1	5353999-2	5353999-3	5353999-4	5353999-5	5353999-6	5353999-8	—	—	
			No	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	
			Yes	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	
			Yes	Yes	5-5179180-1	5-5179180-2	5-5179180-3	5-5179180-4	5-5179180-5	5-5179180-6	—	—	—	
13H	8µ"	Tape and Reel	Yes	No	5084613-1	5084613-2	5084613-3	5084613-4	5084613-5	5084613-6	5084613-8	5084613-9	1-5084613-0	
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
			Yes	Yes	7-5179180-1	7-5179180-2	7-5179180-3	7-5179180-4	7-5179180-5	7-5179180-6	—	—	—	
			No	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	
5H	30µ"	Tape and Reel	Yes	Yes	5084616-1	5084616-2	5084616-3	5084616-4	5084616-5	5084616-6	5084616-8	5084616-9	—	
			No	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	
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
			Yes	Yes	5084618-1	5084618-2	5084618-3	5084618-4	5084618-5	5084618-6	5084618-8	5084618-9	—	
6H	8µ"	Tape and Reel	Yes	No	5177984-1	5177984-2	5177984-3	5177984-4	5177984-5	5177984-6	5177984-8	5177984-9	1-5177984-0	
			Yes	Yes	5179230-1	5179230-2	5179230-3	5179230-4	5179230-5	5179230-6	5179230-8	5179230-9	1-5179230-0	
			Yes	Yes	5177986-1	5177986-2	5177986-3	5177986-4	5177986-5	5177986-6	5177986-8	—	—	
			No	No	5084614-1	5084614-2	5084614-3	5084614-4	5084614-5	5084614-6	5084614-8	5084614-9	1-5084614-0	
7H	30µ"	Tape and Reel	Yes	Yes	5-5177986-1	5-5177986-2	5-5177986-3	5-5177986-4	5-5177986-5	5-5177986-6	5-5177986-8	—	—	
			No	No	5179029-1	5179029-2	5179029-3	5179029-4	5179029-5	5179029-6	5179029-8	5179029-9	1-5179029-0	
			Yes	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	
			Yes	Yes	1-5177986-1	1-5177986-2	1-5177986-3	1-5177986-4	1-5177986-5	1-5177986-6	—	—	—	
8H	8µ"	Tape and Reel	Yes	No	5084615-1	5084615-2	5084615-3	5084615-4	5084615-5	5084615-6	5084615-8	5084615-9	1-5084615-0	
			Yes	Yes	—	—	—	—	—	—	—	—	—	—
			Yes	Yes	6-5177986-1	6-5177986-2	6-5177986-3	6-5177986-4	6-5177986-5	6-5177986-6	—	—	—	
			No	No	5179030-1	5179030-2	5179030-3	5179030-4	5179030-5	5179030-6	5179030-8	5179030-9	1-5179030-0	
R/A	30µ"	Tape and Reel	Yes	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	
			Yes	Yes	2-5177986-1	2-5177986-2	2-5177986-3	2-5177986-4	2-5177986-5	2-5177986-6	—	—	—	
			No	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	
			Yes	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	
R/A	8µ"	Tape and Reel	Yes	No	5179031-1	5179031-2	5179031-3	5179031-4	5179031-5	5179031-6	5179031-8	5179031-9	1-5179031-0	
			Yes	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	
			Yes	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	—	
			No	No	6123002-1	6123002-2	6123002-3	6123002-4	6123002-5	6123002-6	6123002-8	6123002-9	1-6123002-0	
R/A	8µ"	Tape and Reel	Yes	Yes	6123001-1	6123001-2	6123001-3	6123001-4	6123001-5	6123001-6	6123001-8	6123001-9	—	
			No	No	—	316229-3	—	—	—	—	—	—	—	—

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**

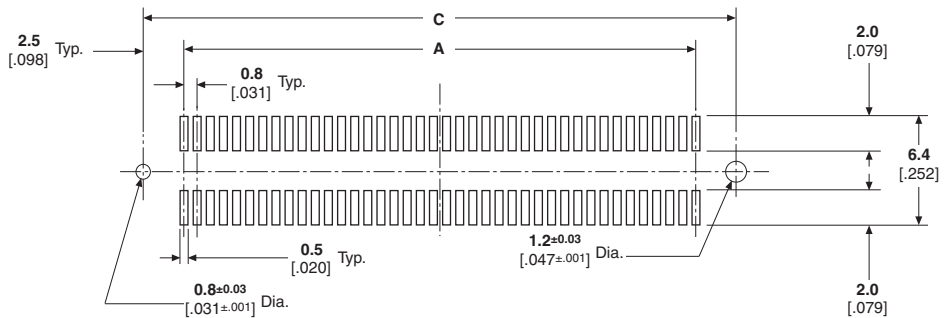
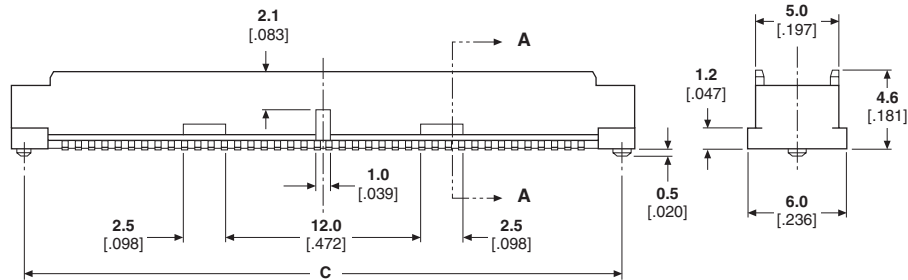
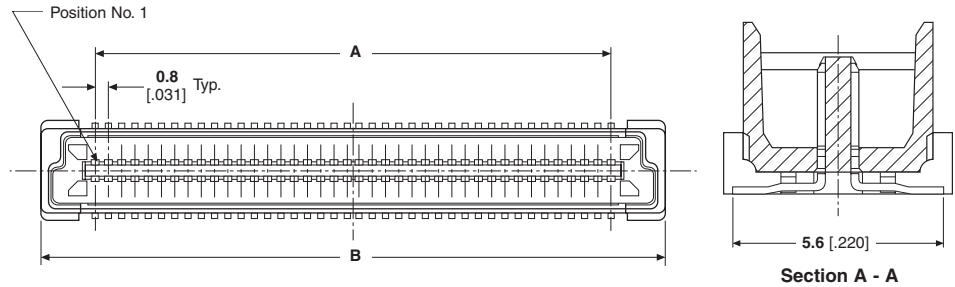
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Receptacles** — pages 78 thru 80

**Technical Documents** (page 113)

**Product Specification**  
108-5390



**Recommended PC Board Layout**

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

**Note:** Part Numbers are RoHS compliant.

0.8mm Free Height (FH) Connectors

**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**

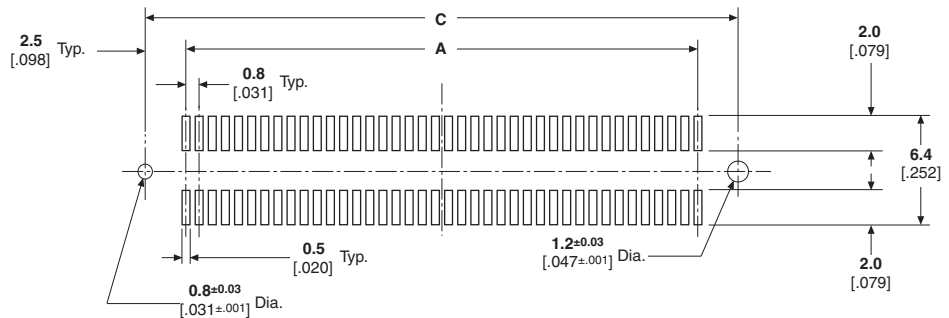
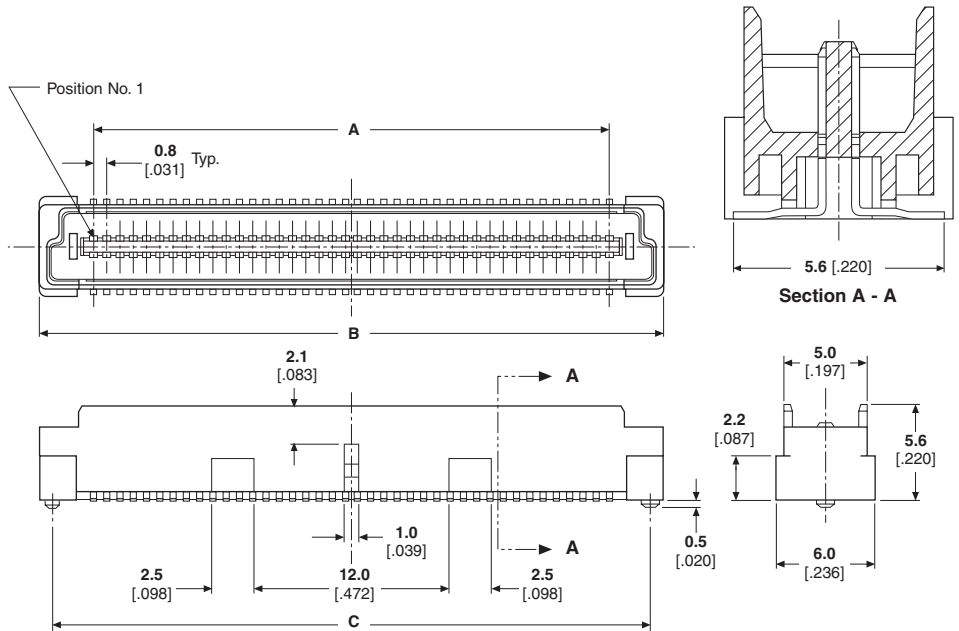
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**Stacking Height Combinations** — page 72

**Mating Receptacles** — pages 78 thru 80

**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 30µ" Au	5179029-1 5084615-1	2-5179230-1 —	1-5177986-1 6-5177986-1
23.20 .913	29.80 1.173	28.20 1.110	60	8µ" Au 30µ" Au	5179029-2 5084615-2	2-5179230-2 —	1-5177986-2 6-5177986-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8µ" Au 30µ" Au	5179029-3 5084615-3	2-5179230-3 —	1-5177986-3 6-5177986-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8µ" Au 30µ" Au	5179029-4 5084615-4	2-5179230-4 —	1-5177986-4 6-5177986-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8µ" Au 30µ" Au	5179029-5 5084615-5	2-5179230-5 —	1-5177986-5 6-5177986-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8µ" Au 30µ" Au	5179029-6 5084615-6	2-5179230-6 —	1-5177986-6 6-5177986-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8µ" Au 30µ" Au	5179029-8 5084615-8	2-5179230-8 1-5084615-8	— —
71.20 2.803	77.80 3.063	76.20 3.000	180	8µ" Au 30µ" Au	5179029-9 5084615-9	2-5179230-9 1-5084615-9	— —
79.20 3.118	85.80 3.378	84.20 3.315	200	8µ" Au 30µ" Au	1-5179029-0 1-5084615-9	3-5179230-0 2-5084615-0	— —

**Note:** Part Numbers are RoHS compliant.

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

**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**

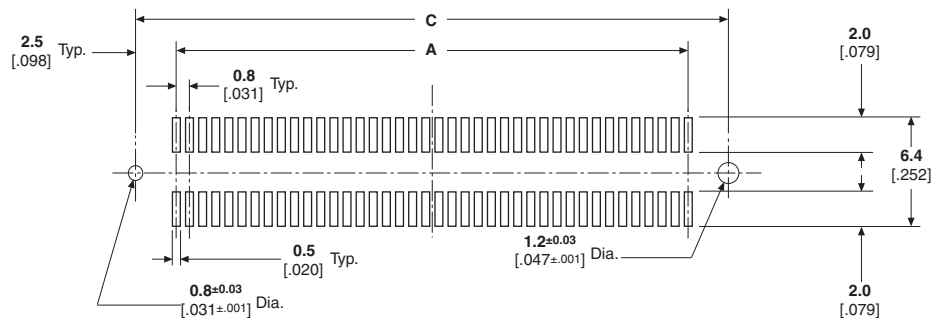
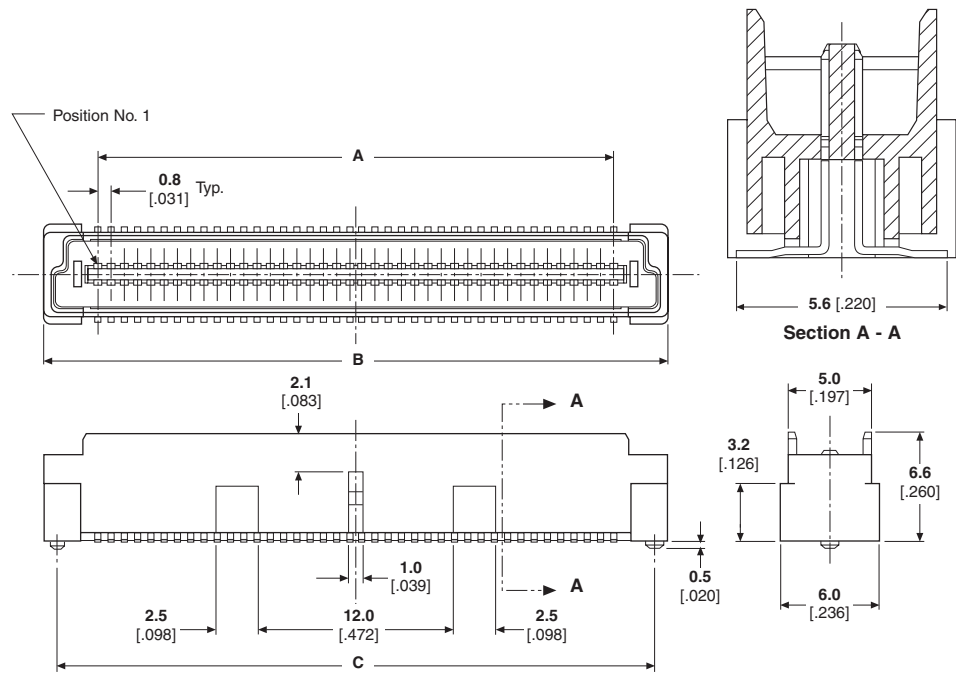
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Receptacles** — pages 78 thru 80

**Technical Documents** (page 113)

**Product Specification**  
108-5390



**Recommended PC Board Layout**

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.

0.8mm Free Height (FH) Connectors



**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 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**

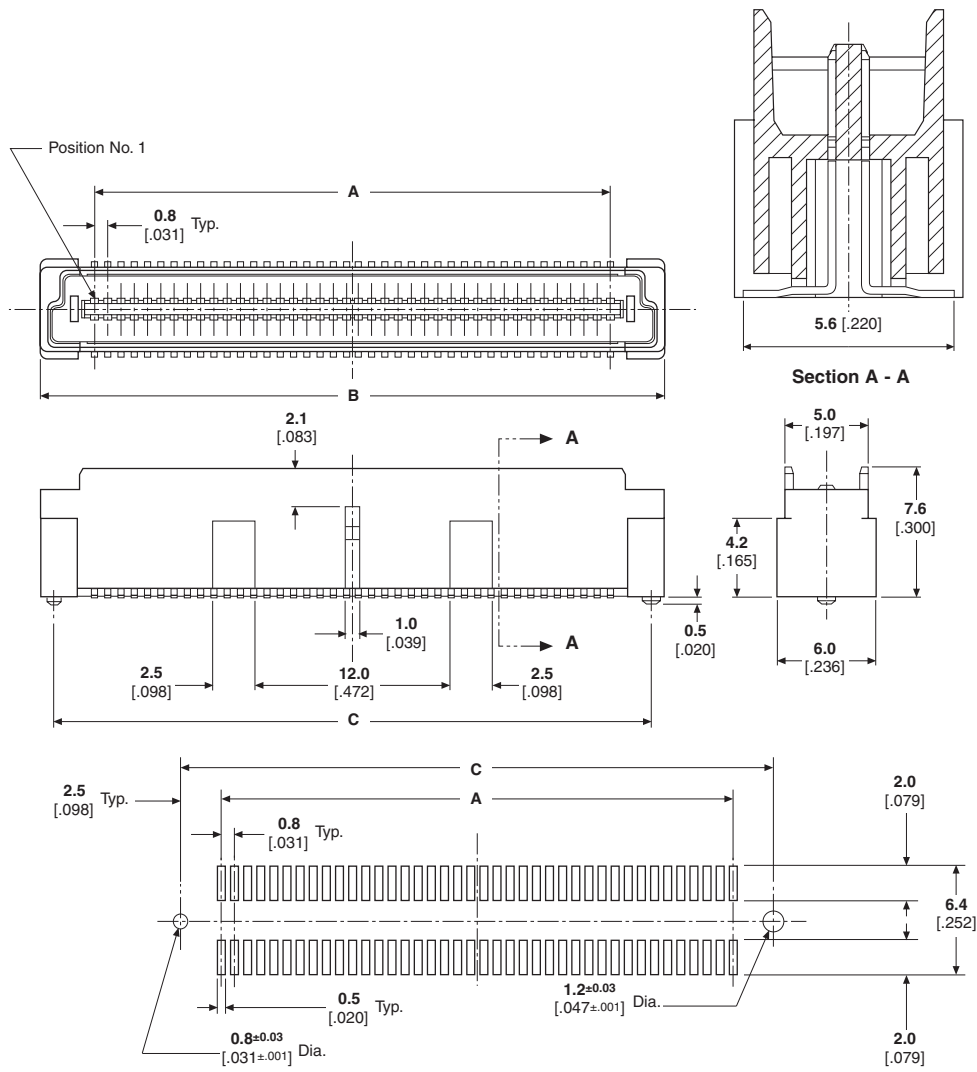
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**Stacking Height Combinations** —  
page 72

**Mating Receptacles** — pages 78  
thru 80

**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
<b>15.20</b> .598	<b>21.80</b> .858	<b>20.20</b> .795	40	8µ" Au 30µ" Au	5179031-1 6123002-1	6-5179230-1 —	3-5177986-1 6123001-1
<b>23.20</b> .913	<b>29.80</b> 1.173	<b>28.20</b> 1.110	60	8µ" Au 30µ" Au	5179031-2 6123002-2	6-5179230-2 —	3-5177986-2 6123001-2
<b>31.20</b> 1.228	<b>37.80</b> 1.488	<b>36.20</b> 1.425	80	8µ" Au 30µ" Au	5179031-3 6123002-3	6-5179230-3 —	3-5177986-3 6123001-3
<b>39.20</b> 1.543	<b>45.80</b> 1.803	<b>44.20</b> 1.740	100	8µ" Au 30µ" Au	5179031-4 6123002-4	6-5179230-4 —	3-5177986-4 6123001-4
<b>47.20</b> 1.858	<b>53.80</b> 2.118	<b>52.20</b> 2.055	120	8µ" Au 30µ" Au	5179031-5 6123002-5	6-5179230-5 —	3-5177986-5 6123001-5
<b>55.20</b> 2.173	<b>61.80</b> 2.433	<b>60.20</b> 2.370	140	8µ" Au 30µ" Au	5179031-6 6123002-6	6-5179230-6 —	3-5177986-6 6123001-6
<b>63.20</b> 2.488	<b>69.80</b> 2.748	<b>68.20</b> 2.685	160	8µ" Au 30µ" Au	5179031-8 6123002-8	6-5179230-8 —	3-5177986-8 6123001-8
<b>71.20</b> 2.803	<b>77.80</b> 3.063	<b>76.20</b> 3.000	180	8µ" Au 30µ" Au	5179031-9 6123002-9	6-5179230-9 —	3-5177986-9 6123001-9
<b>79.20</b> 3.118	<b>85.80</b> 3.378	<b>84.20</b> 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**

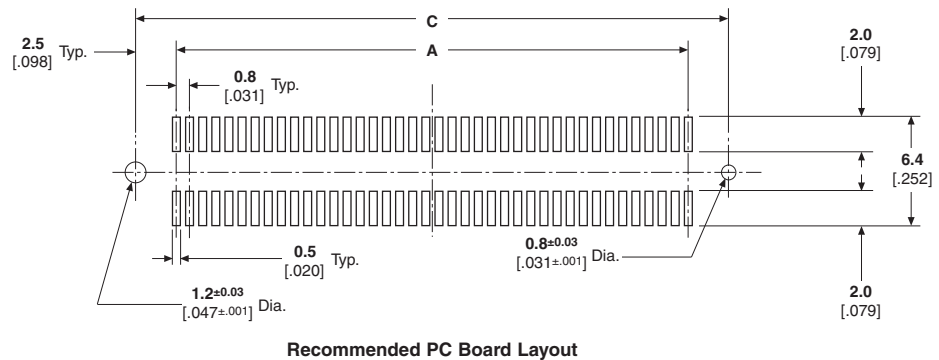
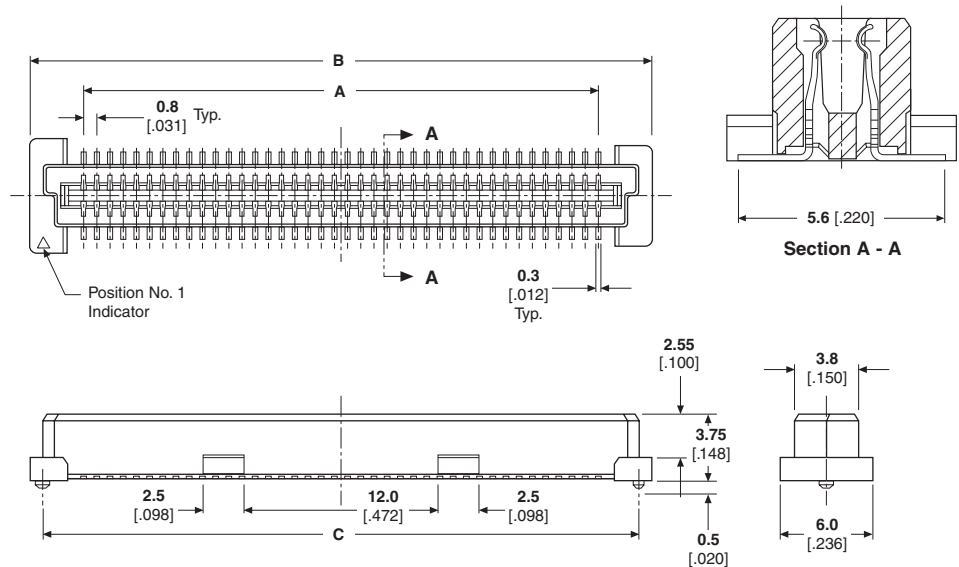
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Plugs** — pages 74 thru 77, and 81

**Technical Documents** (page 113)

**Product Specification**  
108-5390



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	5177983-1 6123000-1	5179229-1 —	5177985-1 5353999-1
23.20 .913	29.80 1.173	28.20 1.110	60	8μ" Au 30μ" Au	5177983-2 6123000-2	5179229-2 —	5177985-2 5353999-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8μ" Au 30μ" Au	5177983-3 6123000-3	5179229-3 —	5177985-3 5353999-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8μ" Au 30μ" Au	5177983-4 6123000-4	5179229-4 —	5177985-4 5353999-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8μ" Au 30μ" Au	5177983-5 6123000-5	5179229-5 —	5177985-5 5353999-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8μ" Au 30μ" Au	5177983-6 6123000-6	5179229-6 —	5177985-6 5353999-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8μ" Au 30μ" Au	5177983-8 6123000-8	5179229-8 —	5177985-8 5353999-8
71.20 2.803	77.80 3.063	76.20 3.000	180	8μ" Au 30μ" Au	5177983-9 6123000-9	5179229-9 —	— —
79.20 3.118	85.80 3.378	84.20 3.315	200	8μ" Au 30μ" Au	1-5177983-0 1-6123000-0	1-5179229-0 —	— —

**Note:** Part Numbers are RoHS compliant.

0.8mm Free Height (FH) Connectors

**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 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**

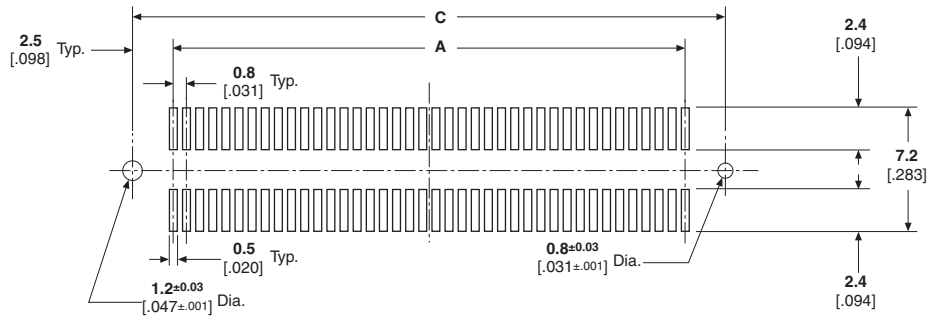
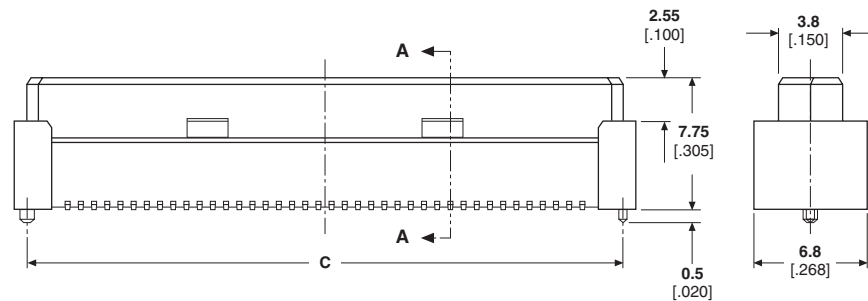
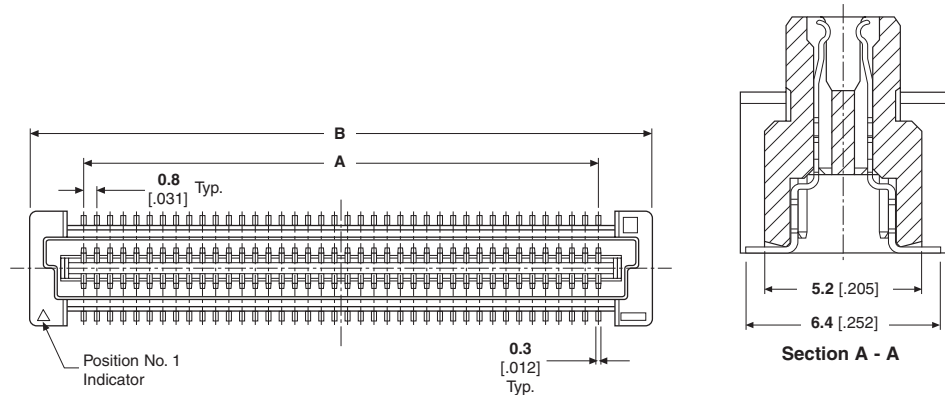
**Performance Characteristics** — page 71

**Stacking Height Combinations** — page 72

**Mating Plugs** — pages 74 thru 77, and 81

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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 30µ" Au	5-5179009-1 5084613-1	— —	5-5179180-1 7-5179180-1
23.20 .913	29.80 1.173	28.20 1.110	60	8µ" Au 30µ" Au	5-5179009-2 5084613-2	5-5179232-2 —	5-5179180-2 7-5179180-2
31.20 1.228	37.80 1.488	36.20 1.425	80	8µ" Au 30µ" Au	5-5179009-3 5084613-3	5-5179232-3 —	5-5179180-3 7-5179180-3
39.20 1.543	45.80 1.803	44.20 1.740	100	8µ" Au 30µ" Au	5-5179009-4 5084613-4	5-5179232-4 —	5-5179180-4 7-5179180-4
47.20 1.858	53.80 2.118	52.20 2.055	120	8µ" Au 30µ" Au	5-5179009-5 5084613-5	5-5179232-5 —	5-5179180-5 7-5179180-5
55.20 2.173	61.80 2.433	60.20 2.370	140	8µ" Au 30µ" Au	5-5179009-6 5084613-6	5-5179232-6 —	5-5179180-6 7-5179180-6
63.20 2.488	69.80 2.748	68.20 2.685	160	8µ" Au 30µ" Au	5-5179009-8 5084613-8	5-5179232-8 —	— —
71.20 2.803	77.80 3.063	76.20 3.000	180	8µ" Au 30µ" Au	5-5179009-9 5084613-9	5-5179232-9 —	— —
79.20 3.118	85.80 3.378	84.20 3.315	200	8µ" Au 30µ" Au	6-5179009-0 1-5084613-0	6-5179232-0 —	— —

**Note:** Part Numbers are RoHS compliant.



**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 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**

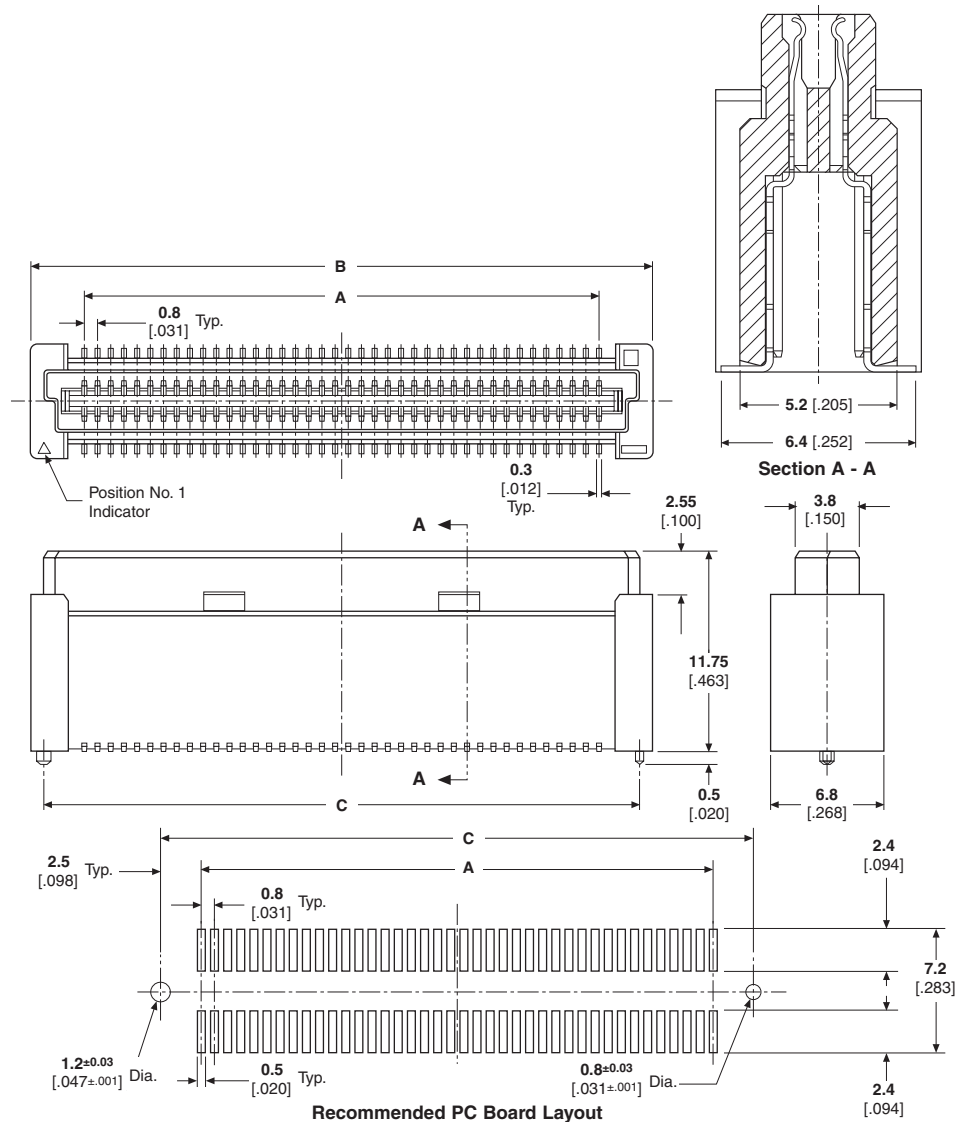
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**Mating Plugs** — pages 74 thru 77, and 81

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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
<b>15.20</b> .598	<b>21.80</b> .858	<b>20.20</b> .795	40	8µ" Au	5-5179010-1	5-5179233-1	5084616-1
				30µ" Au	5-6123212-1	—	5084618-1
<b>23.20</b> .913	<b>29.80</b> 1.173	<b>28.20</b> 1.110	60	8µ" Au	5-5179010-2	5-5179233-2	5084616-2
				30µ" Au	5-6123212-2	—	5084618-2
<b>31.20</b> 1.228	<b>37.80</b> 1.488	<b>36.20</b> 1.425	80	8µ" Au	5-5179010-3	5-5179233-3	5084616-3
				30µ" Au	5-6123212-3	—	5084618-3
<b>39.20</b> 1.543	<b>45.80</b> 1.803	<b>44.20</b> 1.740	100	8µ" Au	5-5179010-4	5-5179233-4	5084616-4
				30µ" Au	5-6123212-4	—	5084618-4
<b>47.20</b> 1.858	<b>53.80</b> 2.118	<b>52.20</b> 2.055	120	8µ" Au	5-5179010-5	5-5179233-5	5084616-5
				30µ" Au	5-6123212-5	—	5084618-5
<b>55.20</b> 2.173	<b>61.80</b> 2.433	<b>60.20</b> 2.370	140	8µ" Au	5-5179010-6	5-5179233-6	5084616-6
				30µ" Au	5-6123212-6	—	5084618-6
<b>63.20</b> 2.488	<b>69.80</b> 2.748	<b>68.20</b> 2.685	160	8µ" Au	5-5179010-8	5-5179233-8	5084616-8
				30µ" Au	5-6123212-8	—	5084618-8
<b>71.20</b> 2.803	<b>77.80</b> 3.063	<b>76.20</b> 3.000	180	8µ" Au	5-5179010-9	5-5179233-9	5084616-9
				30µ" Au	5-6123212-9	—	5084618-9
<b>79.20</b> 3.118	<b>85.80</b> 3.378	<b>84.20</b> 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 (FH) Connectors

**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 solder area, with entire contact underplated 0.00130 [.000051] min. nickel

**Related Product Data**

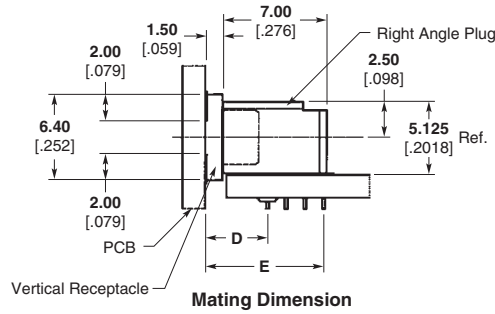
**Performance Characteristics** — page 71

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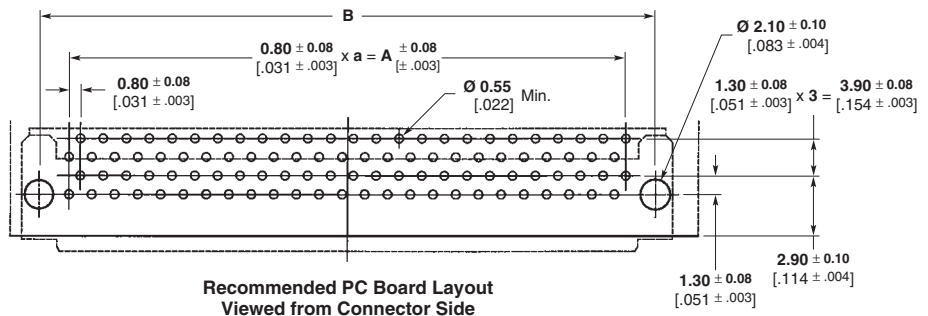
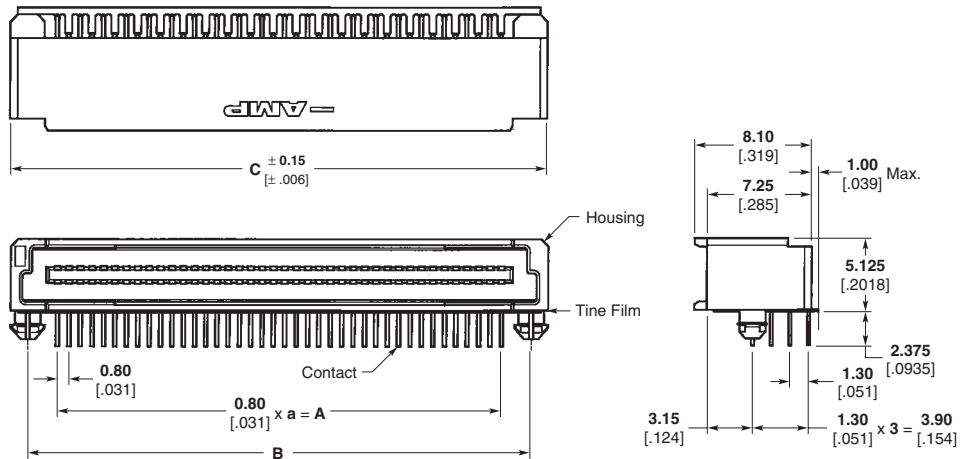
**Mating Receptacles** — pages 78 thru 80

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**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



Dimension				No. of Positions	Part Number
A	B	C	a		
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

Note: Part Numbers are RoHS compliant.

0.8mm Free Height (FH) Connectors

**Engineering Notes**

