Pin Headers



High Temperature, Thru-Hole (SMT Compatible) Universal Ejection Style Pin Header .100 \times .100 [2.54 \times 2.54], .025 [0.64] Sq. Posts



Straight-Thru-4-Sided



Right Angle-4-Sided

Material and Finish:

Housing—Red thermoplastic, 94V-0 rated

Contacts—Phosphor bronze or brass (at AMP's option), duplex plated .000030 [0.00076] gold on mating end, .000150 [0.0038] min. matte tin-lead on solder tail, with entire contact underplated .000050 [0.00127] nickel

Related Product Data:

Electrical Characteristics—page 5

Mateable Receptacles:

Pages 10 thru 15

Accessories:

Snap-In Polarizer—page 22

Technical Documents:

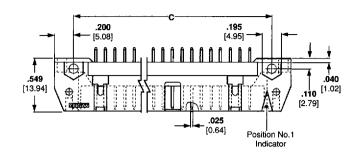
Product Specifications—

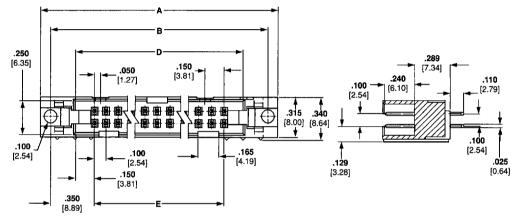
108-40018 Pin Headers 108-40004 Ribbon Cable, PVC Insulated, AMP

Instruction Sheets:

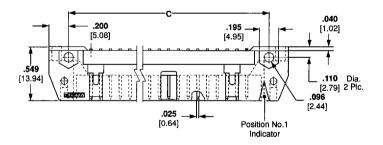
Instructional material covering operation, setup, maintenance, repair, etc. is included with each machine, tool or die set. If this material is required prior to receiving your tooling, call the AMP Tooling Assistance Hotling

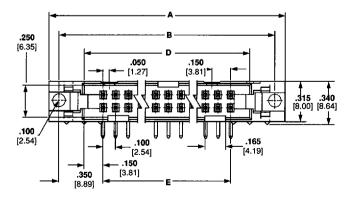
Tooling Assistance Hotline
1-800-722-1111 for the applicable documents.

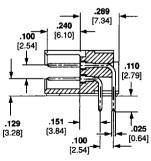




Straight-Thru-4-Sided







Right Angle—4-Sided

62

Latches

Material:

Red thermoplastic, 94V-0 Rated

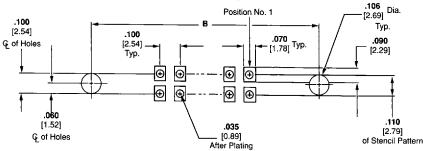
in Headers

High Temperature, Thru-Hole (SMT Compatible) Universal Ejection Style Pin Header .100 x .100 [2.54 x 2.54], .025 [0.64] Sq. Posts (Continued)

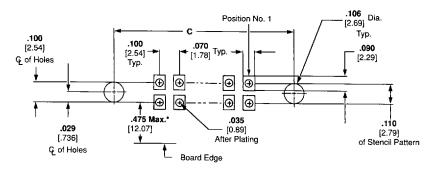
No. of Pos.	Dimensions					Part Nos.	
	A	В	С	D	E	Straight-Thru	Right-Angle
10	1.260 32.00	1.100 27.94	. 860 21.84	. 700 17.78	.400 10.16	111008-1	111105-1
14	1.460 37.08	1.300 33.02	1.060 26.92	. 900 22.86	.600 15.24	111008-2	111105-2
16	1.560 39.62	1.400 35.56	1.160 29.46	1.000 25.40	. 700 17.78	111008-3	111105-3
20	1.760 44.70	1.600 40.64	1.360 34.54	1.200 30.48	. 900 22.86	111008-4	111105-4
24	1.960 49.78	1.800 40.64	1.560 39.62	1.400 35.56	1.100 27.94	111008-5	111105-5
26	2.060 52.32	1 .900 48.26	1.660 42.16	1.500 38.10	1.200 30.48	111008-6	111105-6
34	2.460 62.48	2.300 58.42	2.060 52.32	1.900 48.26	1.600 40.64	111008-8	111105-8
40	2.760 70.10	2.600 66.04	2.360 59.94	2.200 55.88	1. 900 48.26	111008-9	111105-9
50	3.260 82.80	3.100 78.74	2.860 72.64	2.700 68.58	2.400 60.98	1-111008-0	1-111105-0
60	3.760 95.50	3.600 91.44	3.360 85.34	3.200 81.28	2.900 73.66	1-111008-1	1-111105-1
64	3.960 100.58	3.800 96.52	3.560 90.42	3.400 86.36	3.100 78.74	1-111008-2	1-111105-2

Notes: 1. 10- and 14-position pinless headers have only one slot for snap-in polarizer (military polarization).

2. 10-position pinless headers have only one slot for dual polarization.

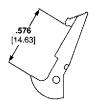


Recommended Pc Board Mounting Pattern for Straight-Thru Header



Recommended Pc Board Mounting Pattern for Right-Angle Header *Max. distance from edge of Pc board for daisy chain applications

Latch Part No. 111338-1 (for use with receptacles with recessed cover and strain relief.)



Latch Part No. 111293-1 (for use with receptacles with recessed cover.)





Electrical Characteristics and Introduction

Electrical Characteristics

Contact Current Rating-1 ampere (continuous)

Operating Temperature— -55°C to +105°C

Dielectric Withstanding Voltage— Receptacles (all)—1000 Volts, RMS Card Edge Connectors—1000 Volts, RMS DIP Plugs—300 Volts, RMS Paddle Board Connectors—500 Volts, RMS Pin Connectors—500 Volts, RMS Ejection Style Pin Headers (all)— 1000 Volts, RMS Ribbon Cable—2000 Volts, RMS

No. of	Cable	PCB	Mating
Positions	Centerlines	Area	Height
	.050	0.47 in.2	0.565
	1.27	303 mm ²	14.35
20	.039	0.134 in. ²	0.390
	1.00	86.64 mm ²	9.91
	.025	0.213 in.2	0.584
	0.64	137 mm ²	14.83
-	.050	1.01 in.2	0.565
	1.27	645 mm ²	14.25
50	.039	0.335 in. ²	0.390
	1.00	216 mm ²	9.91
	.025	0.426 in. ²	0.584
	0.64	275 mm ²	14.83

Chart gives an example of a 20-position and a 50-position configuration showing the optimum pc board space and mating connector system height. These factors are of prime importance when you consided the premium placed on system space.

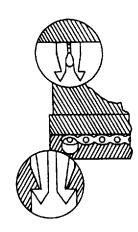
AMP-LATCH Connectors and Mass Termination

AMP-LATCH connectors use insulation displacement contacts (IDC), where each contact has a slotted-beam geometry to mass terminate the conductors. As a wire is pressed down into the slot, the beam tips pierce and displace the insulation. As the conductor is pressed farther into the slot, the contact provides sufficient conductor deformation to achieve a gastight interface.

The design of the contact supplies residual spring pressure to maintain a long term gastight connection. Since the connector **is** gastight, it will not corrode or otherwise degrade from normal environmental exposures.

Just as AMP-LATCH connectors help users derive the full benefits of ribbon cable, one-step application tooling allows them to realize the full productivity of mass termination. AMP offers a full range of die sets and tools, from hand tools to automatic cable assembly machines, to meet every production requirement.

Latching feature of AMP-LATCH Connectors



AMP-LATCH connectors have an additional feature not found in competitive connectors: Contact Latching. As the cable is terminated, a cover snaps down over the contacts.

Each contact individually latches to the cover. Where cable shearing occurs because of inappropriate handling AMP offers the following to protect the cable:

- Pull Tabs
- Strain Reliefs
- Ejection Latches (Mounted on the Headers and Pin Connectors)

In AMP-LATCH connectors, the normal force (the amount of residual spring pressure the contact exerts against the conductor to maintain a gastight connection) is not supported by the plastic in the cover and is obtained solely by the contact design. The latching is **not** related to IDC normal force.