

Wire-to-Board Crimp Snap-In Contact Receptacles .100 [2.54] Centers

Dimensioning:
 Dimensions are in inches and millimeters.
 Values in brackets are metric equivalents.
 Charts contains dimensions in inches
 over millimeters.

Housings

Material:

Unreinforced nylon, 94V-0 rated

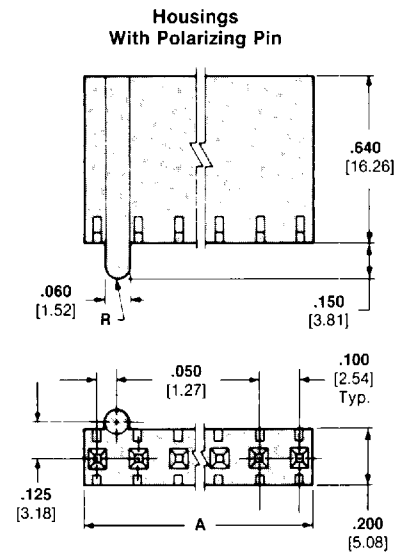
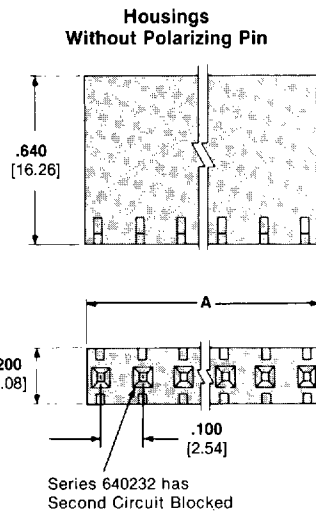
Related Product Data:

Mating Posts and Headers—Non-polarized housings with polarizing pin mate with posts on page 5 and non-polarized headers on pages 6 and 7.

Polarized housings without polarizing pin mate with posts on page 5 and polarized headers with posts omitted on page 6.

Housings with polarizing pin mate with posted on page 5 and polarized headers on pages 6 and 7. Housing contact cavities accept an maximum insulation diameter of .070 [1.78]

Technical Documents—page 1

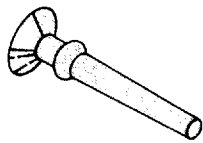


Keying Plug

(Use with non-polarized housings)

Material: Nylon

Part No. 641620-1



A Dim.	Without Polarizing Pin				With Polarizing Pin	
	Non-Polarized		Polarized		No. of Circuits	Part Number
	No. of Circuits	Part Number	No. of Circuits	Part Number		
.200 5.08	2	640235-2	—	—	2	640234-2
.400 10.16	—	—	3	640232-3	—	—
.500 12.7	5	640235-5	4	640232-4	5	640234-5
.600 15.24	6	640235-6	—	—	—	—
.700 17.78	7	640235-7	—	—	—	—
.900 22.86	9	640235-9	—	—	9	640234-9
1.000 25.4	10	1-640235-0	—	—	—	—
1.100 27.94	11	1-640235-1	—	—	—	—
1.200 30.48	—	—	—	—	12	1-640234-2
2.000 50.8	20	2-640235-0	—	—	—	—

Crimp Snap-In Contacts

Material and Finish:

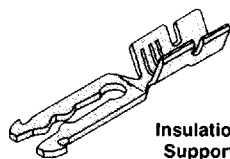
Brass, tin-plated

Related Product Data:

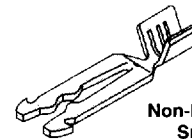
These contacts are for use in housings above.

Application Tooling—page 8

Technical Documents—page 1



Insulation Support



Non-Insulation Support

Wire Size Range AWG/mm ²	Type	Ins. Dia. Range	Stock Thickness	Contact Part Numbers		Tooling Part Numbers	
				Strip Form	Loose Form	Quick-Change Applicator	Hand Tool
26-20 0.12-0.6	Insulation Support	.035-.060 0.89-1.52	.014 0.36	640230-1	640276-1	466471-1* 466471-2**	90339-1
24-18 0.2-0.9	Non-Insulation Support	.070 1.78 Max.	.020 0.51	350090-1†	350556-1†	466726-1* 466726-2**	90062

* Applicator for use with the AMPOMATOR machine.

** Applicator for use with the AMP-O-ELECTRIC bench machine.

† High force contact for maximum retention.

Note: Use Contact Extraction Tool Part No. 457445-1 to remove contacts from housing.

For drawings, technical data or samples, contact your AMP sales engineer or call the AMP Product Information Center 1-800-522-6752.

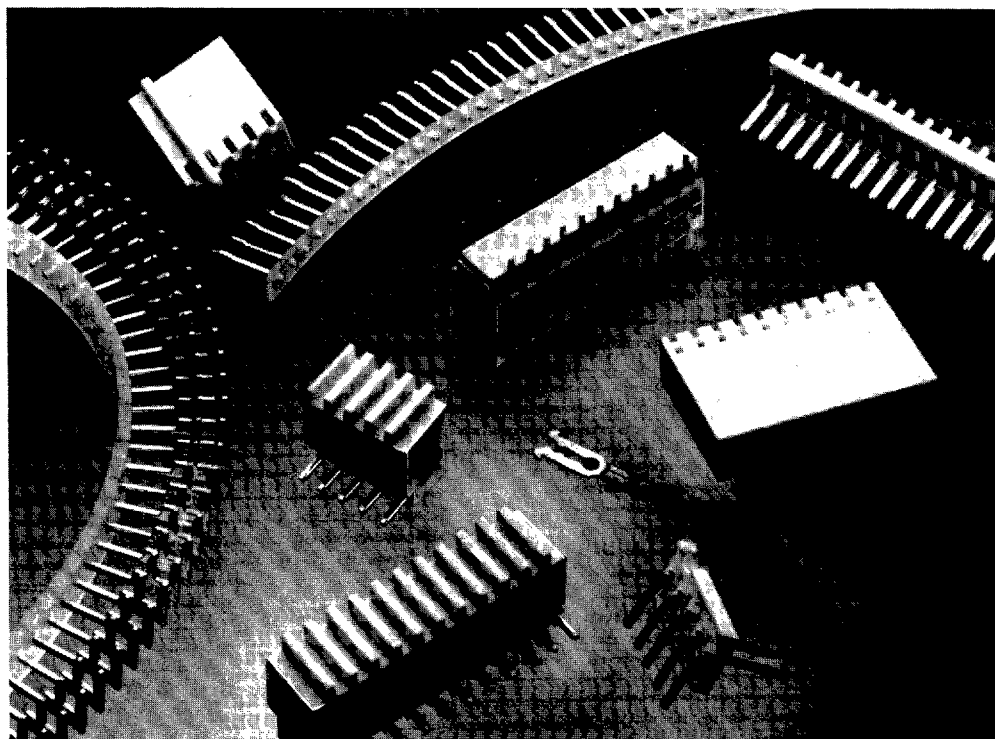
A-61-21



Commercial Interconnection System (Modular Board-to-Board and Wire-to-Board System)

Catalog
73-108
Streamlined 6-89

82001



Product Facts

- High reliability
- Two-piece interconnection system
- High pressure fork-type female contacts:
2.25 lb. [10 N] Part No. 350090-1; 0.6 lb. [2.5 N] Part No. 640230-1; 0.67 lb. [3 N] receptacle assemblies
- Low-cost, tin-plated system
- Extreme versatility allowing for electronic packaging flexibility
- Contact spacings .100 [2.54] and .150 [3.81] centerline, single row
- Posts available for gang insertion via zip strip or as post headers
- Application cost savings through product design and application tooling
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E-28476

Technical Documents

- Product Specifications:
108-1045—Wire-to-Board
108-1086—Board-to-Board
- Application Specifications:
114-1017—Crimp Snap-In Contacts
114-1029—F Posts
- Instruction Sheets:
IS 7687—F Posts
IS 7697—Straight Posts
IS 7793—Crimp Hand Tool

Dimensioning:
Dimension are in inches and millimeters. Values in brackets are metric equivalents. Metric symbols used:
mm (millimeter)
mm² (square millimeter)
N (newton)

Specifications subject to change. Consult AMP Incorporated for latest design specifications.

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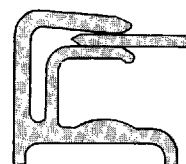
Significant cost savings can be accrued by the use of this low-cost, two-piece, tin-plated interconnection system. The board-to-board system features preloaded connector housings with specially designed cavities to support and protect the forked-type female redundant metal-to-metal high pressure contact, assuring positive electrical integrity for signal level applications. The mating half consists of a post designed to provide significant contact travel and insure positive wiping action. A variety of tooled configurations for board-to-board and wire-to-board applications offers packaging flexibility.

For board-to-board applications, preassembled receptacles are available on .100 [2.54] or .150 [3.81] centerline contact spacings and are made of UL recognized 94V-0 flame retardant material. Contacts are brass with bright tin over nickel plating

to provide excellent solderability. These assemblies are supplied in top, side and bottom post entry versions allowing a high level of design options.

For wire-to-board use, crimp snap-in contact receptacle housings coupled with the headers and free-standing posts provide horizontal or vertical entry to the pc board, anywhere on the board. By design, these housings control discrete wiring to the board and insure reliability and continuity by their two-piece, redundant, metal-to-metal, positive wipe action crimp snap-in contacts. These contacts are available in both insulation support and non-insulation support configurations. AMP quick-change applicators used in conjunction with semi-automatic AMP-O-LECTRIC machines or fully automatic AMPOMATOR machines insure low applied cost harnessing.

Pc board-mating, free-standing posts are supplied in straight and right-angle versions. They come mounted on plastic carrier strips for high-speed gang insertion on .100 [2.54] and .150 [3.81] centers. Machine application is particularly valuable where staggered or random post locations are required. Post headers are also available, with or without polarization features.



Redundant Metal-to-Metal Contact

Note: Does not rely on housing material for contact force.

Commercial Interconnection System

Dimensioning:
Dimensions are in inches and millimeters.
Values in brackets are metric equivalents.

Performance Characteristics

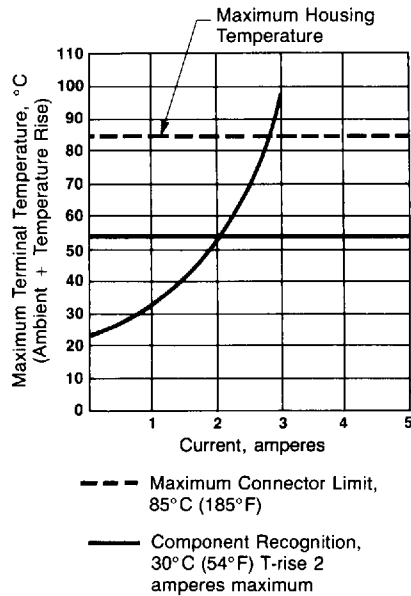
Current Ratings:

Board-to-Board Receptacles—2.0 amperes maximum

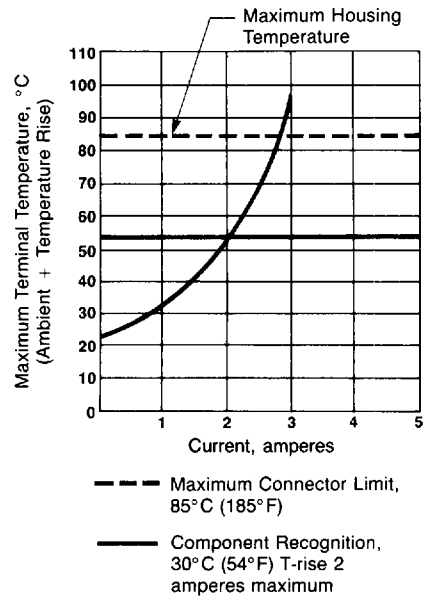
Wire-to-Board Receptacles—4.0 amperes maximum

Board-to-Board Receptacles

**Contact Temperature vs Current/Circuit
.100 Centerline 12 Circuit System**

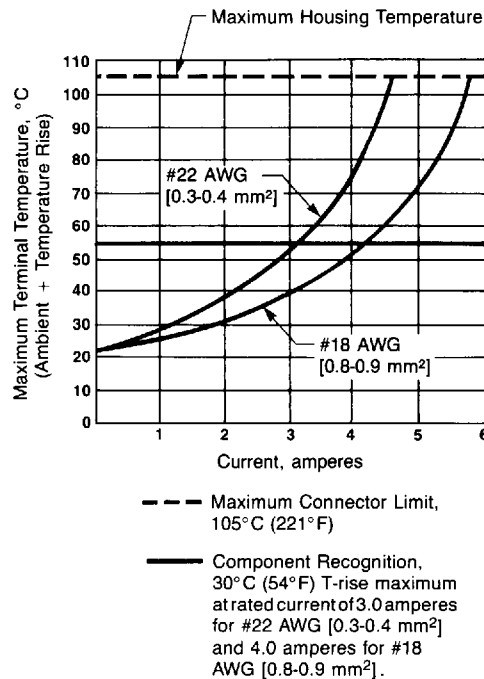


**Contact Temperature vs Current/Circuit
.150 Centerline 9 Circuit System**



Wire-to-Board Receptacles

**Terminal Temperature vs Current/Circuit,
.020 [0.51] Thick Stock Contact
20 Circuit Housing**



**Terminal Temperature vs Current/Circuit,
.014 [0.36] Thick Stock Contact,
20 Circuit Housing**

