

**Headers**  
**.100 [2.54] Centerline**

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

**.025 [0.64] Square Straight Posts**

**Material and Finish:**

**Housing**—Thermoplastic polyester, 94V-0 rated  
**Posts**—Copper alloy, pre-tin plated

**Related Product Data:**

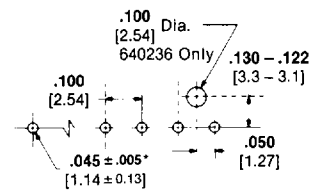
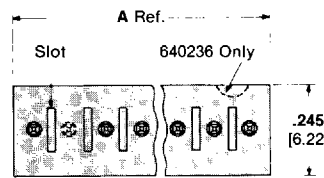
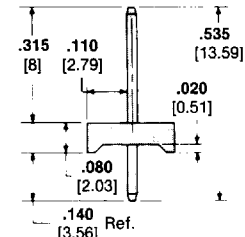
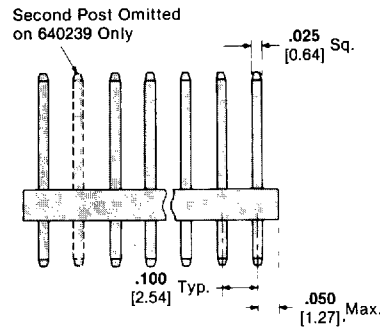
**Mating Receptacles—**

Non-polarized headers mate with .100 [2.54] centerline receptacles on page 3 and non-polarized receptacles without polarizing pin on page 4.

Polarized headers mate with receptacles with polarizing pin on page 4.

Polarized headers with post omitted mate with polarized receptacles without polarizing pin in page 4.

Technical Documents—page 1



**Recommended Mounting Hole Pattern for .062 [1.59] Thk. Pc Board**

\*Tolerance applies to solder side of board.

A Dim.	Non-Polarized		Polarized			
	No. of Posts	Part Number	Standard No. of Posts	Part Number	With Post Omitted	
					No. of Posts	Part Number
.200 5.08	2	640098-2	2	640236-2	—	—
.300 7.62	3	640098-3	—	—	—	—
.400 10.16	4	640098-4	—	—	—	—
.500 12.7	5	640098-5	5	640236-5	—	—
.600 15.24	6	640098-6	6	640236-6	—	—
.700 17.78	7	640098-7	7	640236-7	—	—
.800 20.32	8	640098-8	8	640236-8	—	—
.900 22.86	9	640098-9	—	—	—	—
1.000 25.4	10	1-640098-0	—	—	9	640239-9
1.100 27.94	11	1-640098-1	—	—	—	—
1.200 30.48	12	1-640098-2	—	—	—	—
1.300 33.02	13	1-640098-3	—	—	—	—
1.400 35.56	14	1-640098-4	—	—	—	—
1.500 38.1	—	—	—	—	14	1-640239-4
1.600 40.64	16	1-640098-6	—	—	15	1-640239-5
2.000 50.8	20	2-640098-0	—	—	—	—

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

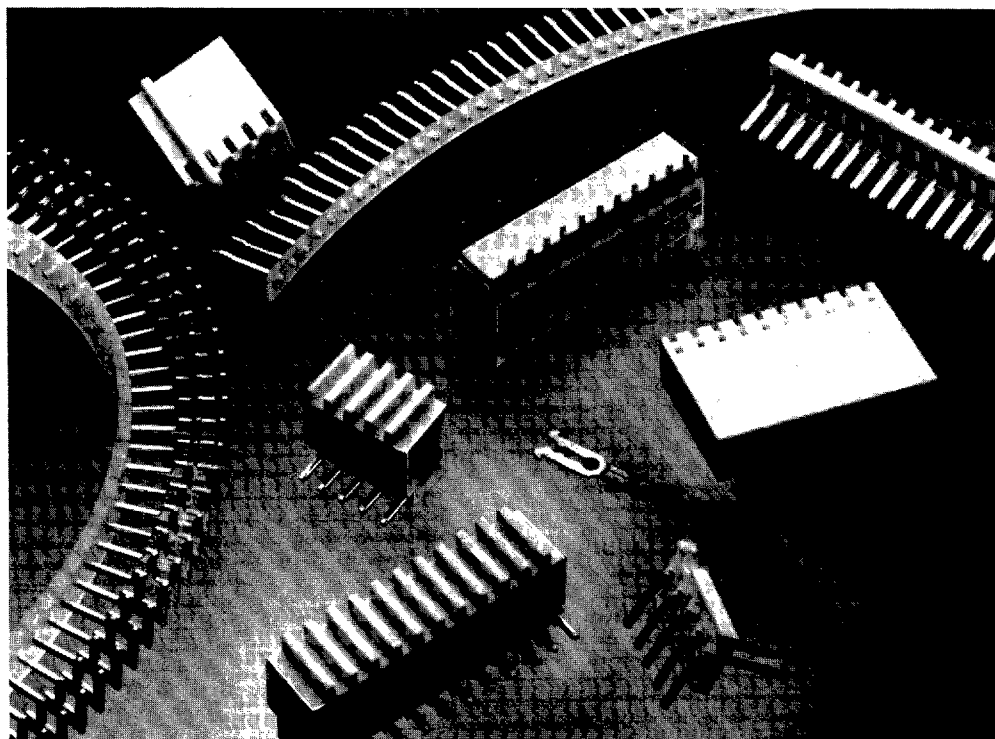
A-61-21



## 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)  
mm<sup>2</sup> (square millimeter)  
N (newton)

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

© Copyright 1972, 1976, 1978, 1980, 1984, 1986 and 1989 by AMP Incorporated. All International Rights Reserved.

AMP, AMPOMATOR, AMP-O-LECTRIC, CERTI-CRIMP—Trademarks of AMP Incorporated.

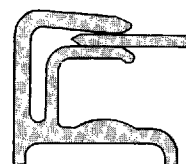
Significant cost savings can be accrued by the use of this low-cost, two-piece, tin-plated interconnection system. The board-to-board system features preloaded connector housings with specially designed cavities to support and protect the forked-type female redundant metal-to-metal high pressure contact, 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**

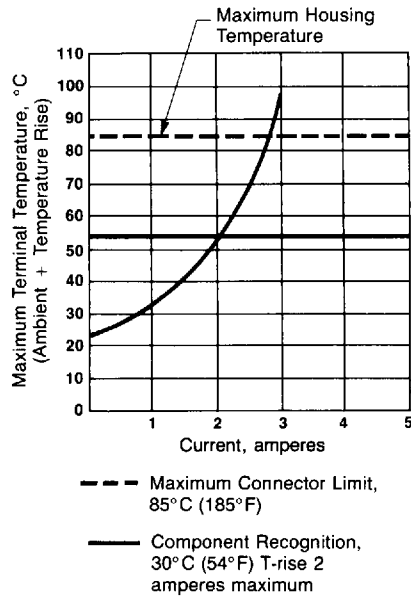
**Current Ratings:**

**Board-to-Board Receptacles—2.0 amperes maximum**

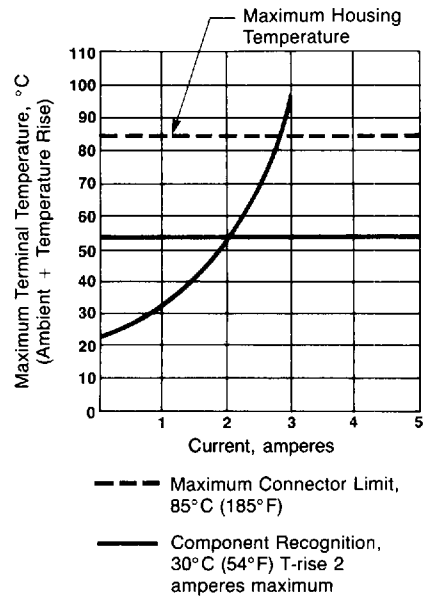
**Wire-to-Board Receptacles—4.0 amperes maximum**

**Board-to-Board Receptacles**

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

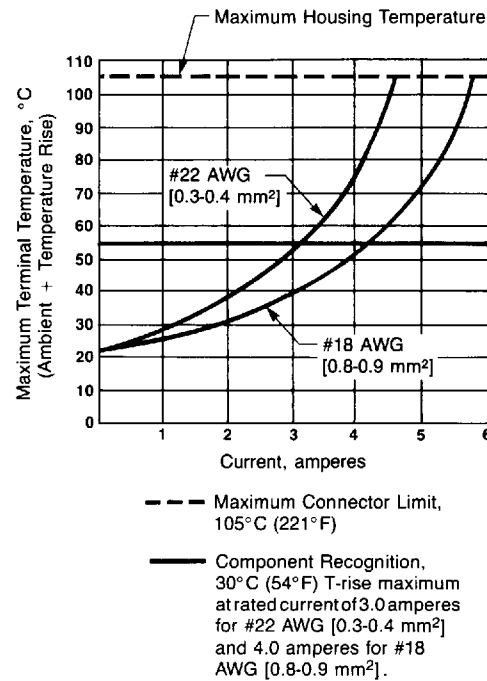


**Contact Temperature vs Current/Circuit  
.150 Centerline 9 Circuit System**



**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**

