## AMPLIMITE .050 Series Vertical Receptacle Headers, Series III, with ACTION PIN Contacts (.050 x .100 [1.27 x 2.54] Centerlines)

## **Product Facts**

AMPLIMITE .050 Series Connectors, Series III

- Recognized under the **Component Program of** the Underwriters **F** Laboratories. Inc.. File No. E28476
- Certified by Canadian **Standards** Association, S₽∘ File No. 1088108 (LR 7189A-207)
- Produced under a Quality Management System certified to ISO 9001

A copy of the certificate is available upon request



Shielded AMPLIMITE .050 Series headers with ACTION PIN contacts offer a high-density D type interface, and a solderless board-mount interconnection. These vertical mount headers are available in 20, 26, 50, 68 and 100 contact sizes. Choice of configurations includes; headers with rails and latch blocks, with latch blocks only, and without rails and latch blocks.

ACTION PIN contact tails are available in two lengths; .173 [4.39] for pc boards with a nominal thickness of .062 [1.56] to .093 [2.36], and .280 [7.11] for pc boards with a nominal thickness of .125 [3.18] to .200 [5.08].

AMPLIMITE .050 Series headers with ACTION PIN contacts are compatible with SCSI-2, SCSI-3, EIA RS-232, IPI-2 and HIPPI standards.

## Principle of the AMPLIMITE .050 Series Compliant ACTION PIN Contact

When an AMPLIMITE .050 Series compliant ACTION PIN contact is inserted into a platedthrough-hole, two spring members are compressed, exerting force against the hole for a gas-tight connection. The diameter of the hole is smaller than the diagonal size of the pin.

The beam characteristics of the pin are designed so that a plastic, as well as an elastic, deformation takes place during insertion. The two spring members compress to different degrees to accommodate hole tolerances. The compliant pin also reduces strain on the board. With a rigid pin, the elastic strain energy is stored entirely in the board, leading to damage of the platedthrough holes. With the

AMPLIMITE .050 Series compliant ACTION PIN contact, the residual force of the elastic deformation maintains stored energy to produce a gas-tight contact zone between the pin and the plated-through-hole. This ensures long term electrical and mechanical reliability of the interconnection.

## **Technical Documents:** Product Specification— 108-1228-2

Application Specification-114-40029

#### Instruction Sheets-

408 6923—AMP Manual Arbor Frame Assembly 408 9027-AMP Adapter Kit for Greenerd Frame Assemblies 3A and 3B 408 9757—Seating Instructions and Tooling 408 6927-Recommendations for pc board support

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Catalog 82068 Revised 1-08

www.tycoelectronics.com

Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208

# AMPLIMITE .050 Series Vertical Receptacle Headers, with ACTION PIN Tails, Series III



## Materials:

Housings—Thermoplastic, 94V-0 rated, black, SMT compatible

**Shell**—Carbon steel, plated bright tin over copper

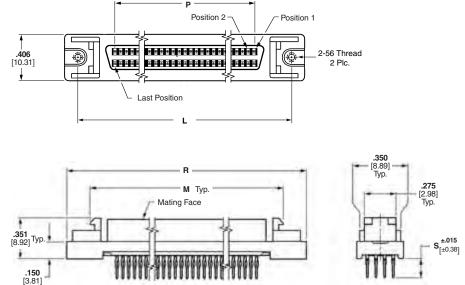
Bracket—Zinc, plated nickel over copper

**Contacts**—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end; tin on solder end; all underplated nickel

## **Technical Documents:**

Product Specifications— 108-1228-2 Application Specifications— 114-40029

**Note:** Extra pin contact protection is provided by rails, which facilitate a straight-out unmating motion. A side-to-side rocking motion should not be used to disengage the connector system.



Note: Refer to Tyco Electronics Customer drawings and Application Spec for PCB & panel layouts.



#### Part Number 786554-1

Part Number 786554-7

Part Number 786155-7

No. of Pos.	Dimensions					Part Numbers		
	L	Μ	Р	R	S	w/ Rails & Latchblocks	w/ Latchblocks	Plain
20	<b>1.080</b> 27.43	<b>.915</b> 23.24	<b>.450</b> 11.43	<b>1.315</b> 33.40	<b>.173</b> 4.39	5786554-1	_	_
26	<b>1.230</b> 31.34	<b>1.065</b> 27.05	<b>.600</b> 15.24	<b>1.465</b> 37.21	<b>.173</b> 4.39	5786554-2	_	_
50	<b>1.830</b> 46.48	<b>1.665</b> 42.29	<b>1.200</b> 30.48	<b>2.065</b> 52.45	<b>.173</b> 4.39	5786554-5	5786155-5	5786555
					<b>.280</b> 7.11	5786556-5	_	_
68	<b>2.280</b> 57.91	<b>2.115</b> 53.72	<b>1.650</b> 41.91	<b>2.515</b> 63.88	<b>.173</b> 4.39	5786554-7	5786155-7	5786555
					<b>.280</b> 7.11	_	786155-7	5786557
100	<b>3.080</b> 78.23	<b>2.915</b> 74.04	<b>2.450</b> 62.23	<b>3.315</b> 84.20	<b>.173</b> 4.39	5786554-9	_	5786555
120	<b>3.580</b> 90.93	<b>3.415</b> 86.74	<b>2.950</b> 74.93	<b>3.815</b> 96.90	<b>.173</b> 4.39	1-5786554-0	_	_

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 1-08 Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents. Dimensions are shown for reference purposes only. Specifications subject to change. USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208 11