

AMPLIMITE .050 Series Cable Assemblies, Series III



IPI-2 and HIPPI

Charles and

Amplication	Assembly	Part Numbers			
Application	Assembly	2 Feet	2 Meters	3 Meters	
SCSI-2	50 pos050 Series Plug to 50 pos050 Series Plug	750254-1	5750254-2	750254-3	
SCSI-2*	68 pos050 Series Plug to 68 pos050 Series Plug	_	5750732-2	5750732-4	
RS-232 (Alternate)	26 pos050 Series Plug to 26 pos050 Series Plug	—	750255-2	750255-3	

Application Assembly		Part Numbers			
Application	Assembly	5 Meters	15 Meters	25 Meters	
IPI-2 and HIPPI	100 pos050 Series Plug to 100 pos050 Series Plug	749755-2	—	—	

*This version has spring latches. Consult TE for availability of jackscrew version.

Note: .050 centerline ribbon cable assemblies are available in single or double ended versions. These assemblies are made using AMPLIMITE .050 Series panel mount connectors, AMPLIMITE .050 Series all-plastic connectors and AMP-LATCH Novo receptacles. Consult TE.

SCSI-Small Computer Systems Interface

HIPPI—High Performance Parallel Interface

IPI—Intelligent Peripheral Interface

Note: All part numbers are RoHS compliant.

To meet Standard Applications the following 106 ohm, black jacketed cable assemblies are available. For AMPLIMITE .050 Series cable assemblies that meet other impedance requirements or other lengths consult TE.

Catalog 82068 Revised 4-12 www.te.com

6

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Right-Angle Receptacle Headers, Series III



Materials:

Housing — Thermoplastic, 94V-0 rated, black. SMT compatible

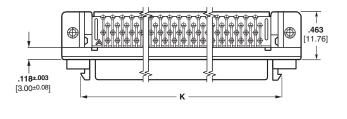
Shell — Steel, plated bright nickel over copper

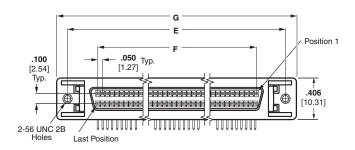
Bracket — Zinc, plated nickel over copper

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 Application Specifications — 114-40029





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

					Shown With	Boardlocks	Shown With	Boardlocks	Π	wn With Boa	ardlocks
						1 - 4 - 6 - 6 6		Part Numbers		Delle/e Let	
No. of		Dime	nsions			Latchblocks 10 [2.54]		/ Latchblocks 10 [2.54]		Rails, w/o Lat 00 [2.54]	With .120 [3.05]
Pos.	E	F	G	K		r Tails		r Tails		r Tails	Solder Tails
					Without Boardlocks	With Boardlocks	Without Boardlocks	With Boardlocks	Without Boardlocks	With Boardlocks	With Boardlocks
40	1.580 40.13	.950 24.13	1.815 46.10	1.415 35.94	_	1761028-2	_	5787082-3	_	5787170-4*	_
50	1.830 46.48	1.200 30.48	2.065 52.45	1.665 42.29	5787190-5	1761028-3	5787394-5	5787082-5	_	5787170-5*	5787362-5*
50	1.830 46.48	1.200 30.48	2.065 52.45	1.665 42.29	_	5787266-5*	_	5787395-5*	_	—	—
68	2.280 57.91	1.650 41.91	2.515 63.88	2.115 53.72	5787190-7	1761028-4	5787394-7	5787082-7	5787169-7*	5787170-7*	5787362-7*
100	3.080 78.23	2.450 62.23	3.315 84.20	2.915 74.04	—	1761028-5	_	5787082-9	5787169-9*	5787170-9*	5787362-9*

*Has 4-40 threaded mating holes (2 places), for use with female screwlock Part No. 750644-1.

Note: All part numbers are RoHS compliant.

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 Catalog 82068 Dimensions are shown for Dimensions are in inches and Revised 4-12 reference purposes only. Specifications subject millimeters unless otherwise specified. USA: +1 (800) 522-6752 to change.



AMPLIMITE .050 Series Vertical Receptacle Headers With Through-Hole Tails, Series III



Materials:

Housing—Thermoplastic, 94V-0 rated, black. SMT compatible

Shell—Steel, plated bright nickel over copper

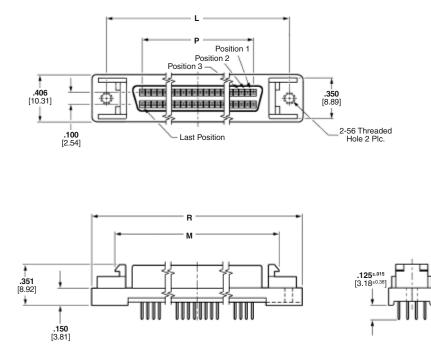
Bracket—Zinc, plated nickel over copper

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

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 TE Customer drawings and Application Spec for PCB & panel layouts.



Part Number 749069-5

Part Number 749721-5

Part Number 749070-7

No. of		Dime	nsions		P	art Numbers	
Pos.	L	М	Р	R	w/ Rails & Latchblocks	w/ Latchblocks	Plain
20	1.080 27.43	.915 23.24	.450 11.43	1.315 33.40	5749069-1	_	_
26	1.230 31.34	1.065 27.05	.600 15.24	1.465 37.21	5749069-2	_	_
28	1.280 32.51	1.115 28.32	.650 16.51	1.515 38.48	_	5749721-3	_
40	1.580 40.13	1.415 35.94	.950 24.13	1.815 46.10	5749069-4	_	_
50	1.830 46.48	1.665 42.29	1.200 30.48	2.065 52.45	5749069-5	5749721-5	5749070-5
68	2.280 57.91	2.115 53.72	1.650 41.91	2.515 63.88	5749069-7	5749721-7	5749070-7
80	2.580 65.53	2.415 61.34	1.950 49.53	2.815 71.50	5749069-8	_	_
100	3.080 78.23	2.915 74.04	2.450 62.23	3.315 84.20	5749069-9	_	5749070-9

Note: All part numbers are RoHS compliant.

AMPLIMITE .050 Series Connectors, Series III

Catalog 82068 Revised 4-12

8

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Vertical Receptacle Headers With Through-Hole Tails, Series III (Continued)

.120 [3.05] Solder Tail Length



Materials:

Housing—Thermoplastic, 94V-0 rated, black. SMT compatible

Shell—Steel, plated bright nickel 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

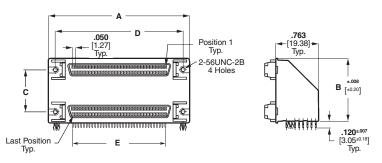
Related Product Data:

Required Hardware—page 26

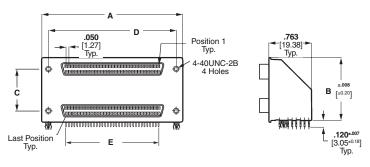
Technical Documents:

Product Specifications—108-1228-1 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.



Rails and Latch Blocks



Flat Top Configuration

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

No. of		Dimensions						
Pos.	Α	В	С	D	E	Part No.		
50/50	2.085 52.96	.874 22.20	.500 12.70	1.830 46.48	1.200 30.48	5787656-1		
68/68	2.535 64.39	1.124 28.55	.750 19.05	2.280 57.91	1.650 41.91	5787678-1		
68/68	2.535 64.39	1.124 28.55	.750 19.05	2.280 57.91	1.650 41.91	5787679-1*		

*Flat-top configuration.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



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 Laboratories, Inc., File No. E28476
- Certified by Canadian Standards Association, 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

10

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



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

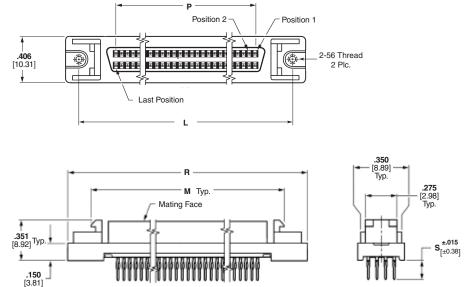
Bracket—Zinc, plated nickel over copper

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 TE Customer drawings and Application Spec for PCB & panel layouts.



Part Number 786554-1

Part Number 786554-7

Part Number 786155-7

No. of		1	Dimension	S		Part Numbers				
Pos.	L	Μ	Р	R	S	w/ Rails & Latchblocks	w/ Latchblocks	Plain		
20	1.080 27.43	.915 23.24	.450 11.43	1.315 33.40	.173 4.39	5786554-1	_	_		
26	1.230 31.34	1.065 27.05	.600 15.24	1.465 37.21	.173 4.39	5786554-2	_	—		
50	1.830	1.665	1.200	2.065	.173 4.39	5786554-5	5786155-5	5786555		
50	46.48	42.29	30.48	52.45	52.45	52.45	.280 7.11	5786556-5	_	_
68	2.280	2.115	1.650	2.515	.173 4.39	5786554-7	5786155-7	5786555		
00	57.91	53.72	41.91	63.88	.280 7.11	_	786155-7	5786557		
100	3.080 78.23	2.915 74.04	2.450 62.23	3.315 84.20	.173 4.39	5786554-9	_	5786555		
120	3.580 90.93	3.415 86.74	2.950 74.93	3.815 96.90	.173 4.39	1-5786554-0	_	_		

Note: All part numbers are RoHS compliant.

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



AMPLIMITE .050 Series Cable Plug Connectors, Series III

B

Shielded Plugs

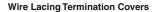
AMPLIMITE .050 Series Connectors, Series III





.050 [1.27] Тур. .100 [2.54] **.224** [5.69] Тур D A ±.003 [±0.08] Mating Face Shell Тур. 0 0 0 0 0 0 .588±.010 [14.94^{±0.25}] Typ. UPP PPP 백백백백백 .327 +.003 8.31+0.08 Housing http://philiphic.

ահրարին



Materials:

Housing and Covers-

Thermoplastic, 94V-0 rated, black or gray

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

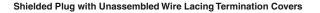
Shell-Steel, plated tin-nickel alloy over nickel over min. copper

Recommended wire size-28 AWG [0.08-0.09mm2] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter.

Technical Documents:

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

Instruction Sheet—408-9427



Connector With Unassembled Wire Lacing Termination Covers

ահորդությո

				Part Nu	umbers
No. of		Dimensions		.032036	.029031
Pos.	Α	В	D	[0.81-0.91] Outer Wire Dia. Black	[0.74-0.79] Outer Wire Dia. Gray
26	.293 7.44	.600 15.24	.979 24.87	5750913-2	1-5750913-2
50	.293 7.44	1.200 30.48	1.579 40.11	5750913-5	1-5750913-5
68	.293 7.44	1.650 41.91	2.029 51.54	5750913-7	1-5750913-7
100	.373 9.47	2.450 62.23	2.829 71.86	_	1-5750913-9

Termination

Area Typ.

Notes: 1. Plug connector requires backshell kit for complete assembly. Refer to pages 16-19 for backshell kit part numbers.

2. For termination, cover closing and wire lacing tooling, see page 14.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

www.te.com

12

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

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Cable Plug Connectors, Series III (Continued)

Shielded Plugs



Shielded Plug with Unassembled Standard Termination Covers



Shielded Plug with Assembled Standard Termination Covers

Materials:

Housing and Covers—

Thermoplastic, 94V-0 rated, black

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

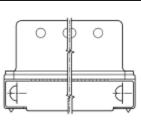
Shell—Steel, plated tin-nickel alloy over nickel over copper

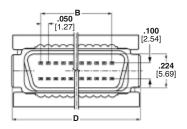
Recommended wire size³ —

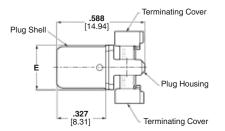
28 AWG [0.08-0.09mm²] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter.

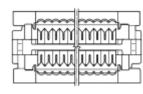
Technical Documents: Product Specifications—108-1228 Application Specifications— 114-40029

Instruction Sheet—408-9427









Shielded Plug with Assembled or Unassembled Standard Termination Covers

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

Connectors With Standard Termination Covers

No. of		Dimensions		Part Num	nbers
Pos.	В	D	E	w/Rails & Latchblocks	w/Latchblocks
20	.450 11.43	.829 21.06	.293 7.44	5749111-1	5749621-1
26	.600 15.24	.979 24.87	.293 7.44	1-5749111-0	5749621-2
28	.650 16.50	1.029 26.14	.293 7.44	_	5749621-3
40	.950 24.13	1.329 33.76	.293 7.44	5749111-3	5749621-4
50	1.200 30.48	1.579 40.11	.293 7.44	5749111-4	5749621-5
68	1.650 41.91	2.029 51.54	.293 7.44	5749111-6	5749621-7
80	1.950 49.53	2.329 59.16	.373 9.47	5749111-7	5749621-8
100	2.450 62.23	2.829 71.86	.373 9.47	5749111-8	5749621-9
120	2.950 74.93	3.329 84.56	.373 9.47	5749111-9	1-5749621-0

Notes: 1. Plug connector requires backshell kit for complete assembly and must use round jacketed cable (discrete or laminated). Refer to pages 16-19 for backshell kit part numbers.

2. For termination tooling, see pages 28 & 29

3. The CHAMPOMATOR 2.5 Automatic Termination Machine will accept diameters as low as .023 [0.58].

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



AMPLIMITE .050 Series Cable Plug Connectors, Series III (Continued)

AMPLIMITE .050 Series Connector Application Tooling for Use with Wire Lacing Termination Covers

Manual Arbor Frame Assembly—Part No. 58024-1

Equipped with Cover Lacing Assembly—**Part No. 91293-1** (Includes Seating Bars for 50 and 100 Positions). See Table 3 for Seating Bar Part Numbers.

Extra Lacing Stations available for use with Lacing Assembly—**Part No. 91293-1** Order Lower Tooling Assembly—**Part No. 543481-1**

Note: AMP Manual Miniature Applicator Frame Assembly, Cover Closing Kit, and Staple Insertion Kit each must be ordered separately by part number.



Arbor Frame, Part No. 58024-1 Equipped with Cover Lacing Assembly, Part No. 91293-1

Lower Tooling Assembly Part No. 543481-1



Seatings Bars



Miniature Applicator Frame Assembly Part No. 91295-1 y Equipped with Cover Closing Kit Part No. 543508-1

Table Number 3

No. of Pos.	Seating Bar Part No.
26	543494-2
40	543494-3
50	543494-1
68	543502-2
100	543502-1

Note: All Tooling must be ordered separately by part number.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

14

www.te.com

reference purposes only. Specifications subject to change.

Dimensions are shown for

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

AMPLIMITE .050 Series Connectors, Series III



AMPLIMITE .050 Series Cable Receptacle Connectors, Series III

Shielded Receptacles



Shielded Receptacle with Assembled **Termination Covers**

Materials:

Housing and Covers-

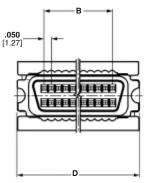
Thermoplastic, 94V-0 rated, black **Contacts**—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, tin on termination end, all underplated nickel

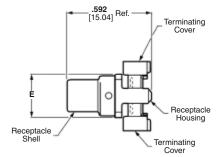
Shell-Steel, plated bright tin over copper

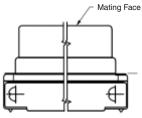
Recommended wire size— 28 AWG [0.08-0.09mm²] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter.

Technical Documents: Product Specifications—108-1228

Application Specifications-114-40029







	m
21 mm	
4	

N (Dimensions		Part	lumbers
No. of Pos.			Connectors With Standard Termination Cover		
103.	В	D	E	Assembled Covers	Unassembled Covers
40	.950 24.13	1.329 33.76	.293 7.44	_	_
50	1.200 30.48	1.579 40.11	.293 7.44	5749210-5	5749699-5
68	1.650 41.91	2.029 51.54	.293 7.44	5749210-7	5749699-7
100	2.450 62.23	2.829 71.86	.373 9.47	—	5749699-8

Notes: 1. Receptacle connector requires backshell kit for complete assembly. Refer to pages 16-19 for backshell kit part numbers.

For termination, cover closing and wire lacing tooling, see page 14.
For Termination Tooling other than Wire Lacing see pages 28 & 29.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

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

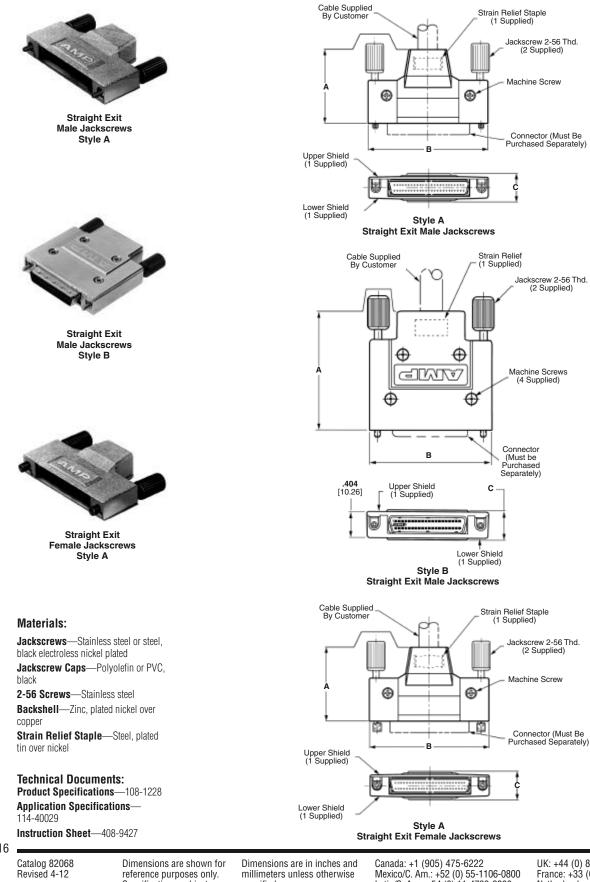
Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



AMPLIMITE .050 Series Shielded Backshell Kits, With Jackscrews, Series III



UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

16

www.te.com

Specifications subject to change.

specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Shielded Backshell Kits, With Jackscrews, Series III (Continued)

No. of	01.1		Dimensions			Max.	Male with	Female with
Pos. Style	А	В	С	Pkg.	O.D.	#2-56 Threads	#2-56 Threads	
					Bulk	.450 11.43	5787543-1	5787543-7
40	В	1.822 46.25	1.830 46.48	.456 11.58	Bulk	.400 10.16	5787543-2	5787543-8
			_	Bulk	.350 8.89	5787543-3	5787543-9	
50	1.270	.270 2.085 .4	.480 12.19	Individual	.400 10.16	5749080-1	—	
50	A	32.26 52.96 12.19 Bu	52.96 12.19	52.96 12.19	Bulk	.400 10.16	5749080-2	_
68	В	1.887 47.93	2.645 67.18	.660 16.76	Bulk	.550 13.97	5750752-3	_
08	В	1.822 46.28	2.525 64.14	.564 14.33	Individual	.550 13.97	5786152-3	_
100	А	2.082 52.88	3.325 84.46	.615 15.62	Individual	.500 12.70	5749854-1	_
100	A	1.695 43.05	3.325 84.46	.595 15.11	Individual	.500 12.70	5749081-1	_

Notes: 1. Each backshell kit includes upper and lower backshells, two male or female jackscrews, one strain relief staple and two or four #2-56 screws. All are packaged unassembled. 2. For Staple Insertion Tooling see page 29.

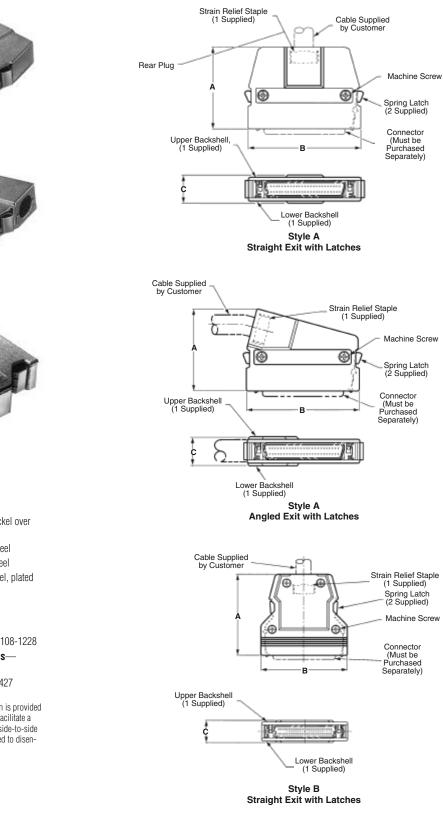
Note: All part numbers are RoHS compliant.

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Shielded Backshell Kits, With Spring Latches, Series III



Style A Angled Exit

with Latches

Style A Straight Exit with Latches

Style B Straight Exit with Latches

Materials:

Backshell—Zinc, plated nickel over copper Spring Latch—Stainless steel 2-56 Screws—Stainless steel Strain Relief Staple—Steel, plated tin over nickel

Technical Documents:

Product Specifications—108-1228 Application Specifications— 114-40029 Instruction Sheet—408-9427

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

18

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Shielded Backshell Kits, With Spring Latches, Series III (Continued)

No. of	<u> </u>		Dimensions		-	Max.	Straight Exit	Angled Exi		
Pos.	Style	Α	В	С	Pkg.	O.D.	with Latches	with Latches		
20	А	1.290 32.77	1.215 30.86	.400 10.16	Individual	.270 6.86	5749190-1	5749199-1		
06	А	1.290 32.77	1.365 34.67	.400 10.16	Individual	.270 6.86	—	5749609-1		
26	В	1.290 32.77	1.335 33.91	.400 10.16	Individual	.270 6.86	749608-2	—		
40	А	1.290	1.715	.400	Individual	.320 8.13	—	5749201-1		
40	A	32.77	43.56	10.16	mumuuai	.320 8.13	5749192-1	—		
					Individual	.400 10.16	—	5749202-2		
	А	1.395 1.965 35.43 49.91		480	.480	Bulk	.400 10.16	5749202-3	—	
50	~			49.91	35.43 49.91 12.19	12.19	12.19	Individual	.355 9.02	5749193-1
							mannadar	.400 10.16	5749193-2	—
	В	1.800	1.965	.492	Bulk	.480 12.19	5749889-3	—		
	В	45.72	49.91	12.50		12.50	Individual	.480 12.18	5749889-4	—
68	A	1.405	2.415	.520	Individual	.400 10.16	_	5749204-1		
00	A	35.69	61.34	13.21	mumuuai	.440 11.18	5749195-2	5749204-2		
	А	1.600	2.715	.565 14.35	Individual	.420 10.67	_	5749205-1		
80	A	40.64	68.96		mumuuai	.500 12.70	749196-2	_		
100	А	1.725 43.82	3.215 81.66	.615 15.62	Individual	.500 12.70	5749197-1	5749206-1		
120	А	1.725 43.82	3.715 94.36	.665 16.89	Individual	.550 13.97	5749198-1	5749207-1		

Note: All part numbers are RoHS compliant.

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Shielded Enclosure Kits, With Male Jackscrews, Series III

68-Position

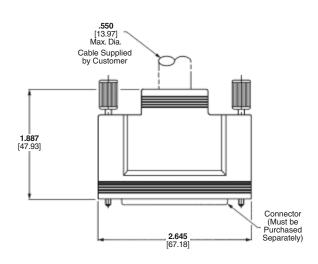
Material and Finish:

Backshells—Zinc Boot—PVC. black Jackscrews-Stainless steel and PVC, black Staple—Carbon steel, plated tin over nickel Screws—Stainless steel, #2-56 threads

Technical Documents:

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







No. of	Part Number	Part Number
Pos.	Male 2-56 Jackscrews	Male 4-40 Jackscrews
68	5750752-1	5750752-2

Notes: 1. Each enclosure kit contains two backshells, one boot, two jackscrews, one staple and two screws. All are packaged unassembled.

For staple insertion tooling see page 29.
Meets SCSI-3 standards.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

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

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

www.te.com



AMPLIMITE .050 Series Panel Mount Receptacle Assemblies Without Rails, With Latch Blocks, Series III



Materials:

Housing and Termination Covers-Thermoplastic, 94V-0 rated, black

Shell-Steel, plated bright nickel over copper

Bracket-Zinc, plated nickel over copper

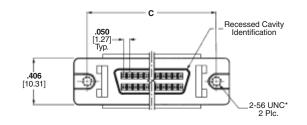
Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, bright tin in termination area, all nickel underplated

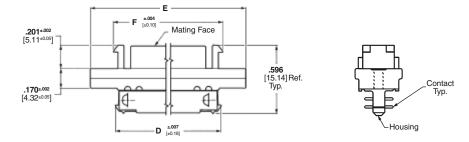
Recommended wire size-28 AWG [0.08-0.09mm²] or

30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter or .050 [1.27] centerline, 28 AWG [0.08-0.09mm²] stranded, PVC, flat ribbon cable.

Technical Documents:

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





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

					Part N	umbers	
No. of		Dimer	nsions			Connectors With Wire Lacing Term	
Pos.	С	D	E	F	Connectors With Assembled Standard Termination Covers	.032036 [0.81-0.91] Outer Wire Dia.	.029031 [0.74-0.79] Outer Wire Dia.
50	1.830 46.48	1.629 41.38	2.065 52.45	1.665 42.29	1-749656-1	5-786862-5	6-786862-5
50	1.830 46.48	1.629 41.38	2.065 52.45	1.665 42.29	5-750640-1*	5-786865-5*	_
68	2.280 57.91	2.079 52.81	2.515 63.88	2.115 53.72	1-749656-2	_	_
120	3.580 90.93	3.379 85.83	3.815 96.90	3.415 86.74	6-749656-0	_	_

*Part Numbers 5-750640-1 and 5-786865-5 have 4-40 threaded holes. All others have 2-56 threaded holes.

Note: For termination, cover closing and wire lacing tooling, see page 14.

For termination tooling other than wire lacing see pages 28 & 29.

Note: All part numbers are RoHS compliant.

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

21

Revised 4-12 www.te.com

Catalog 82068

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

millimeters unless otherwise specified. USA: +1 (800) 522-6752

Dimensions are in inches and



AMPLIMITE .050 Series Panel Mount Flat Top Receptacle Assemblies Without Rails and Latch Blocks, Series III



Materials:

Housing and Termination Covers—

Thermoplastic, 94V-0 rated, black **Shell**—Steel, plated bright nickel over copper

Bracket—Zinc, plated nickel over copper

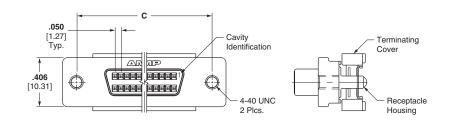
Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end; tin on solder end; all nickel underplated

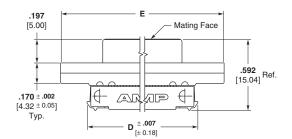
Recommended wire size—

28 AWG [0.08-0.09mm²] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter or .050 [1.27] centerline, 28 AWG [0.08-0.09mm²] stranded, PVC, flat ribbon cable

Technical Documents: Product Specifications—108-1228

Application Specifications— 114-40029





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

Pos.		Dimensions		Part Numbers
No. of	С	D	E	Connectors With Assembled Standard Termination Covers
50	1.830 46.48	1.629 41.38	2.065 52.45	5-749877-5
68	2.280 57.91	2.079 52.81	2.515 63.88	5-749877-7
100	3.080 78.23	2.879 73.13	3.315 84.20	5-749877-9

Note: For termination, cover closing and wire lacing tooling, see page 14. For termination tooling other than wire lacing see pages 28 & 29.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

22

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



Plug

AMPLIMITE .050 Series Panel Mount Plug Assemblies With Rails, Latch Blocks, Series III



Materials:

Housing and Termination Covers—

Thermoplastic, 94V-0 rated, black **Bracket**—Zinc, plated nickel over copper

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, bright tin in termination area, all nickel underplated

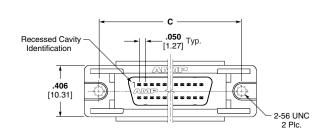
Recommended wire size-

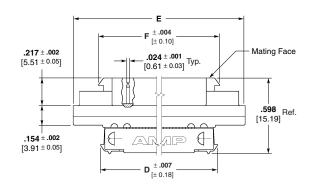
28 AWG [0.08-0.09mm²] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter or .050 [1.27] centerline, 28 AWG [0.08-0.09mm²] stranded, PVC, flat ribbon cable.

Technical Documents:

Product Specifications—108-1228 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.





No. of		Dimen	nsions		Part
Positions	С	D	Е	F	Numbers
50	1.830 46.48	1.629 41.38	2.065 52.45	1.665 42.29	5-749878-5
68	2.280 57.91	2.079 52.81	2.515 63.88	2.115 53.72	5-749878-7
100	3.080 78.23	2.879 73.13	3.315 84.20	2.915 74.04	5-749878-9

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Panel Mount Plug Assemblies With Rails, Latch Blocks, Series III (Continued)



Materials:

Housing and Termination Covers—

Thermoplastic, 94V-0 rated, black **Shell**—Steel, plated bright nickel over copper

Bracket—Zinc, plated nickel over copper

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, bright tin in termination area, all nickel underplated

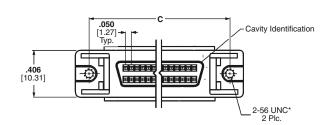
Recommended wire size-

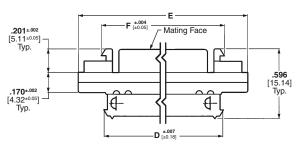
28 AWG [0.08-0.09mm²] or 30 AWG [0.05mm²], solid or 7 strand, with a .029-.036 [0.74-0.89] insulation diameter or .050 [1.27] centerline, 28 AWG [0.08-0.09mm²] stranded, PVC, flat ribbon cable.

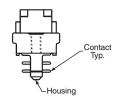
Technical Documents: Product Specifications—108-1228

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 TE Customer drawings and Application Spec for PCB & panel layouts.

No. of		Dimensions			Part Numbers
Pos.	С	D	E	F	Connectors With Assembled Standard Termination Covers
20	1.080 27.43	.879 22.33	1.315 33.40	.915 23.24	5-749611-2
26	1.230 31.24	1.029 26.14	1.465 37.21	1.065 27.05	5-749611-1
50	1.830 46.48	1.629 41.38	2.065 52.45	1.665 42.29	5-749611-5
50	1.830 46.48	1.629 41.38	2.065 52.45	1.665 42.29	5-750450-1*
100	3.080 78.23	2.879 73.13	3.315 84.20	2.915 74.04	5-749611-9

*Part Number 750450-1 has 4-40 threaded holes. All others have 2-56 threaded holes. Note: For termination, cover closing and wire lacing tooling, see page 14.

For termination tooling other than wire lacing see pages 28 & 29.

Note: All part numbers are RoHS compliant.

AMPLIMITE .050 Series Connectors, Series III

Catalog 82068

24

Revised 4-12

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



AMPLIMITE .050 Series Plug Assemblies Unshielded for .025 [0.64] Centerline Ribbon Cable, Series III

Plug Assembly



Materials:

Housing and Termination Covers-Thermoplastic, 94V-0 rated, black

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, bright tin on termination end, all over nickel underplating

Recommended wire size-

.025 [0.64] centerline, 30 AWG [0.05mm²] solid or 7 strand, PVC, flat ribbon cable. Note: Cable must be approved by

TE Engineering. **Technical Documents for**

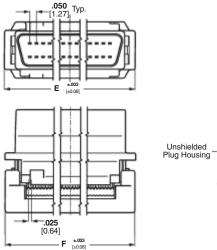
5786090-7 only:

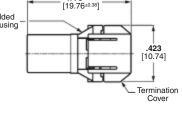
Plug

rated, black

Plug

Product Specifications—108-1359 Application Specifications— 114-40049





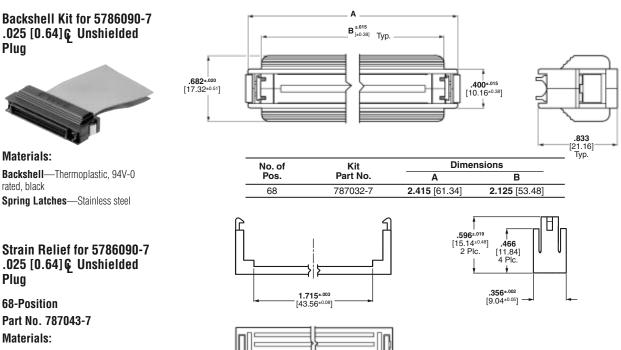
.778±.015

No. of	Dimer	sions	Part
Pos.	E	F	No.
50	1.578 40.07	1.578 40.07	5390377-5 ¹
68	2.029 51.54	2.023 51.30	5786090-7

Note: Termination Tooling: Manual Arbor Press Part No. 91085-2 or Pneumatic Press Part No. 91112-3, Universal Base Tool Part No. 768338-4, and Connector Specific Kit Part No. 679235-2. Refer to page 29.

¹ Accepts 32 AWG Flat Ribbon Cable. Selection of compatible ribbon cable is the responsibility of the user.

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



Thermoplastic, 94V-0 rated, black

Note: Pull tab Part No. 88450-8 can be used with this strain relief. Must be ordered separately.

Note: All part numbers are RoHS compliant.

2.109 ±.009 [53.57±0.23]

Catalog 82068 Revised 4-12

www.te.com

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

Dimensions are in inches and millimeters unless otherwise specified USA: +1 (800) 522-6752

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



AMPLIMITE .050 Series Hardware and Dust Covers, Series III

.187 [4.75]

Screwlock Kits

Materials:

Stainless steel (female) Steel, zinc plated black (male)

Related Product Data: Used with the following

connectors: Right-Angle Receptacle Header page 7 Vertical Receptacle Header pages 8-11 Panel Mount Plug and Receptacle Headers—pages 21 & 22

Technical Documents: Product Specifications—108-1228

Application Specifications— 114-40029



Male Part No. 749086-1 (Includes two screwlocks)



Female (Includes two screwlocks)

Dim. A	Dim. B	Individual Kits Part No.	Bulk Part No.
.562 14.27	.157 3.99	749087-1	—
.380 9.65	.157 3.99	749087-21	749087-3
.562 14.27	.165 4.19	749087-4	749087-8

¹ Recommended for right-angle board mount connectors.



Female (Includes two screwlocks)

Threa	d Size	Kits	Bulk
Α	В	Part No.	Part No.
4-40	.110 2.79	750644-1	_
2-56	.090 2.29	786585-2	786585-3

Recommended for pc board mount of panel mount connectors with latches or latches and rails. Permits cable connectors to be spring latch-type or jackscrew-type

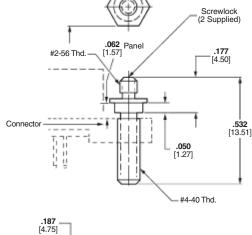
Note: All part numbers are RoHS compliant.

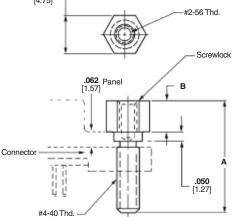
Catalog 82068 Din Revised 4-12 refe

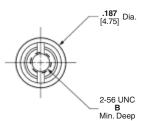
26

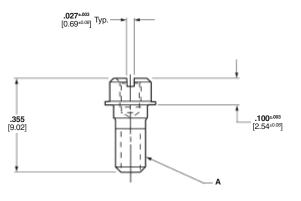
www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752









Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

AMPLIMITE .050 Series Connectors, Series III



AMPLIMITE .050 Series Performance Specifications and Technical Documents

Performance Specifications for Right-Angle, Vertical and .050 Centerline Cable Products Mating Cycles (Durability): 500 max.

Current Rating (30°C T-Rise): 1A max., 50% energized

Termination Resistance (Mated): 25 milliohms max.

Insulation Resistance: 1000 megohms min.

Dielectric Withstanding Voltage: 500 VAC

Header Processing Temperature: +220°C max. for 3 minutes

Temperature Range: -55°C to 105°C

Performance Specifications for .025 [1.27] Centerline Ribbon Cable Product. Same as above except: **Current Rating (30°C T-Rise):** 1A max. center four contacts energized (two from top row, two from bottom row)

Termination Resistance (Mated): 50 milliohms max.

Product Specifications:

108-1228	AMPLIMITE .050 Series Printed Circuit Board Mounted and Cable Applied
108-1359	AMPLIMITE .050 Series .025 [0.64] Centerline Connectors
108-1228	AMPLIMITE .050 Series Stacked Connectors
108-1228-2	AMPLIMITE .050 Series ACTION PIN Connectors
108-1228-3	AMPLIMITE .050 Series SBus Connectors

Application Specifications:

114-40029	AMPLIMITE .050 Series Printed Circuit Board Mounted and Cable Applied
	Connectors

114-40049 AMPLIMITE .050 Series .025 [0.64] Centerline Connectors

Instruction Sheets:

- 408-6923 AMP Manual Arbor Frame Assembly
- 408-6927 TE Design Recommendations for Printed Circuit Board Support Fixture
- 408-9200 AMP Single Wire Insertion Tool
- 408-9822 Wire Termination Tooling Kit for CHAMPOMATOR 2.5 Machine
- 408-9820 AMP Cover Closing and Staple Inserter Kits
- 408-9663 AMP Mass Insertion Tool
- 408-9750 AMP Cover Lacing Fixture
- 408-9757 AMP Tooling Assembly for ACTION PIN Receptacles
- 408-9817 AMP Manual Miniature Applicator Frame Assembly
- 408-9427 Round-to-Flat Cable Termination
- 408-9875 AMP Universal Base Tool for .025 [0.64] Connectors
- 408-9892 AMP Tool Kit for .025 [0.64] & Connectors

Customer Manuals:

- 409-5839 CHAMPOMATOR 2.5 Machine
- 409-5791 Control Unit for CHAMPOMATOR 2.5 Machine

to change.

reference purposes only. Specifications subject Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 AMPLIMITE .050 Series Connectors, Series III

Catalog 82068



AMPLIMITE .050 Series Application Tooling, Series III

Discrete Wire Application Tooling

To meet medium to high volume production of dis-crete wire terminations. TE offers the following tooling:

The CHAMPOMATOR Model 2.5 Bench Terminating Machine-Part No. 354786-1, used in conjunction with Control Module-Part No. 852423-D, and Tie Bar-Part No. 762637-D (Table No. 1).



Control Module Part No. 852423-1 120 VAC 852423-2 100 VAC 852423-3 230 VAC

CHAMPOMATOR 2.5 Machine Tool Kit Part No. 354786-1

Note: The CHAMPOMATOR 2.5 Machine includes plug and receptacle nests, as well as wire setup gauge.

Table Number 1

Tie Bar Part No.
762637-1
1-762637-1
1-762637-2
762637-3
762637-4
762637-5
762637-6
762637-7
762637-9
1-762637-0



Arbor Frame Part No. 58024-1 Equipped with Applicator Part No. 91291-🗆

Note: All part numbers are RoHS compliant.

Dimensions are in inches and specified.

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

Discrete Wire Application Tooling

For low to medium volume production use the AMP Arbor Frame Assembly— Part No. 58024-1 equipped with Applicator—Part No. 91291-1 for .032-.035 [0.81-0.89] Conductor Insulation O.D. and Applicator-Part No. 91291-2 for .029-.032 [0.74-0.81] Conductor Insulation O.D. Note: AMP Arbor Frame Assembly and Applicator Kit must be ordered separately.

28

www.te.com

Catalog 82068

Revised 4-12

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

millimeters unless otherwise ÚSA: +1 (800) 522-6752



AMPLIMITE .050 Series Application Tooling, Series III (Continued)

Cover Closing/ Termination Tooling

Manual Miniature Applicator Frame Assembly— Part No. 91295-1

This Frame requires Cover Closing Kit—Part No. 543508-1

Cable Staple Tooling

To provide cable strain relief use Manual Miniature Applicator Frame Assembly— **Part No. 91295-1**. This Frame requires Staple Insertion Kit—**Part No. 543515-1** to install staples into lower backshells of connector kits and assemblies.



Miniature Applicator Frame Assembly Part No. 91295-1 Equipped with Cover Closing Kit Part No. 543508-1

Arbor Frame, Part No. 58024-1 Equipped with Cover Lacing Assembly, Part No. 91293-1

Note: AMP Manual Miniature Applicator Frame Assembly, Cover Closing Kit, and Staple Insertion Kit each must be ordered separately by part number.



Seatings Bars

Table Number 3

No. of Pos.	Seating Bar Part No.
26	543494-2
50	543494-1
68	543502-2
100	543502-1

Notes: All Tooling must be ordered separately by part number. Two seating bars required per tool assembly.

Termination Tooling for .025 [0.64] Centerline Ribbon Cable

Used with Manual Arbor Tool **Part No. 91085-2**, or Pneumatic Arbor Tool **Part No. 91112-3** and Universal Base Tool **Part No. 768338-4**.

No. of Pos.	Plug/Receptacle Upper Tooling Kit
50	679235-2
68	070200 2

AMPLIMITE .050 Series Connectors, Series III

AMPLIMITE .050 Series Connector Application Tooling for Use with Wire Lacing Terminating Covers

Manual Arbor Frame Assembly—Part No. 58024-1

Equipped with Cover Lacing Assembly—**Part No. 91293-1 (Includes Seating Bars for 50 and 100 Positions)**. See Table 3 for Seating Bar Part Numbers.

Extra Lacing Stations available for use with Lacing Assembly—**Part No. 91293-1** Order Lower Tooling Assembly—**Part No. 543481-1**



Lower Tooling Assembly Part No. 543481-1

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 29



Product Facts

- Compact design, profile for the right-angle header
 1.230 x .588 [31.24 x 14.94], vertical header 1.230 x .433
 [31.24 x 11.00], right-angle stacked headers 1.230 x .803 [31.24 x 20.40]
- Housings and covers made of UL 94V-0 rated thermoplastic
- Headers are compatible with surface mount reflow solder processes
- Header footprint for rightangle and stacked configurations is .100 x .050
 [2.54 x 1.27] staggered centerlines
- Right-angle and stacked headers feature integral boardlocks for positive board retention and grounding
- Stacked headers reduce overall total header volume by 48% and PC board area by 38%
- Stacked headers offer optional contact shield for additional EMI/RFI protection
- Plugs preloaded with insulation displacement contacts (IDC) provide fast, reliable and economical terminations
- Aesthetically designed backshell kits feature easy-to-use finger grip jackscrews to secure mated connectors
- Listed and complies with UL 1863, Communication Circuit Accessories, File No. E81956
- Certified by Canadian Standards Association 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



mount reflow solder processes. Right-angle and stacked PCB headers feature con-tact footprints on .100 x .050 [2.54 x 1.27] staggered centerlines. The compact design of the **right-angle header** package measures only 1.230 W x .588 D x .300 H [31.24 W x

Shielded AMPLIMITE .050

answer today's industry

requirement for higher

consists of 26 position,

shielded right-angle, 26

mating 26 position plug

made of UL 94V-0 rated

Series, Slimline Connectors

density in a smaller overall

package. The present line

position right-angle stacked

PCB receptacle header, and

connectors. All header, plug

and backshell housings are

thermoplastic. PCB headers

are compatible with surface

.588 D x .300 H [31.24 W x 14.94 D x 7.62 H] for maximum board real estate conservation. Right-angle PCB headers feature integral boardlocks for positive board retention and grounding.

Right-angle stacked headers provide 52 contacts in a package only .635 [16.13] high, allowing parallel (board-over-board) board spacing of .800 [20.32]. Centerlines between the top connector and the bottom connector measure .335 [8.51] when compared to .400 [10.16] on the standard .050 Series stacked headers. This results in an over-all reduction of total header volume, in comparison to the standard AMPLIMITE .050 Series header, of 48%, and a comparative reduction in PC board area of 38%.

Stacked header board retention and stabilization is provided by two boardlocks and four grounding posts. In addition, an optional rear contact shield is available for additional EMI/RFI protection.

The mating plug connector

consists of a thermoplastic housing, preloaded with insulation displacement contacts (IDC) for fast, reliable terminations that offer greater applied cost savings. TE offers a choice of termination equipment to meet your production requirements.

The backshell hardware kit includes a two-piece, aesthatiaally designed, thermal

thetically designed, thermoplastic cover over an inner and outer shield and two, high strength #2-56 male jackscrews with insulated heads (easy finger grip caps) to secure mated connectors.

The AMPLIMITE .050 Series, Slimline family of connectors offers **keyed coupling**. This feature eliminates the problem of mismatch mating of plug and receptacle, particularly in stacked applications.



Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999





Right-Angle Header, Receptacle



Part No. 750823-1

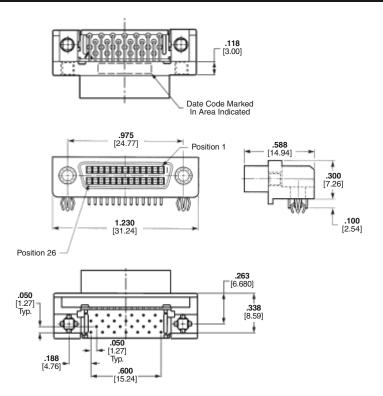
Material and Finish

Housing—UL 94V-0 rated thermoplastic, black

Bracket—Zinc, plated tin or tin over copper

Metal-Shell—Carbon steel, plated tin over copper

Boardlocks—Copper alloy, tin plated Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, tin plated on solder end, all over nickel



Notes:

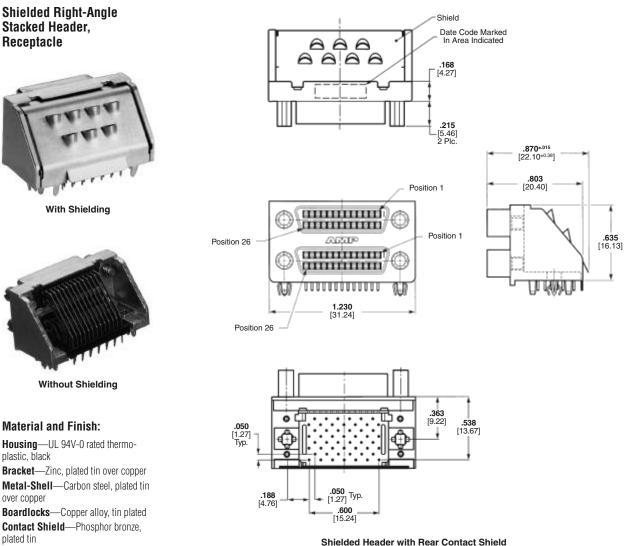
- 1. Rear panel mounting only.
- 2. Female screwlocks to be used with connectors mounted to panels having a thickness of .047 [1.19].
- 3. See Application Specification 114-40036 for the most up-to-date detailed panel cutout and recommended PC Board hole pattern.
- Female screwlocks are not included with receptacles and must be ordered separately. See page 33 for screwlock kit information.

Note: All part numbers are RoHS compliant.

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 31

www.te.com





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

	Part Numbers			
No. of Positions	Std. Rc Rear Cor	Std. Rcpt. without Rear Contact Shield		t. with tact Shield ³
	Keyed ¹	Unkeyed ²	Keyed ¹	Unkeyed ²
26/26	_	5786200-1	5750821-1	5750820-1

¹Lower header unkeyed with 4-40 threaded holes, upper header keyed in keying position 1. See page 33 for keying code.

²Both headers unkeyed with 4-40 threaded holes.

³Receptacle includes a metal contact shield for added RFI protection to the rear of the receptacle assembly.

Note: See Application Specification 114-40036 for the most up-to-date detailed panel cutout and recommended PC Board hole pattern.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12 www.te.com

32

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

Cable Connector, Plug



Part No. 750833-1 Material and Finish:

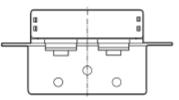
Housing and Termination Covers— UL 94V-0 rated thermoplastic, black

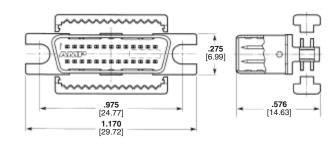
Shell—Steel, plated bright tin over copper

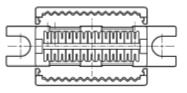
Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end, bright tin on termination end, all underplated nickel

Bracket—Zinc, plated nickel over copper

Recommended Wire Size—28 AWG [0.08 mm²] with max. 0.D. .032 [0.813]. PVC or polyolefin insulation.







Note: Cable Connectors must be used with Backshell Kits. See page 34.

Keying Code, Receptacle

Keying Code, Plug



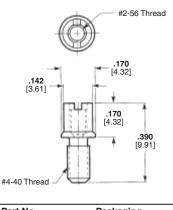
Position 1 (Up)

Accessories

Female Screwlock Kit

Material—Stainless Steel

Note: Female screwlocks to be used with connectors mounted to panels having a thickness of .047 [1.19]



Part No.	Packaging
750831-1	Individually Packed Kit (2 Screwlocks per kit)

^{*}Minimum order is 510 kits.

Note: All part numbers are RoHS compliant.

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

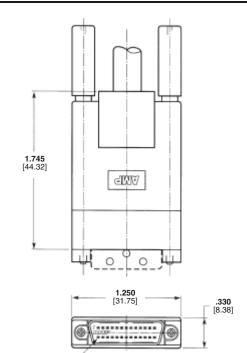


Backshell Kits

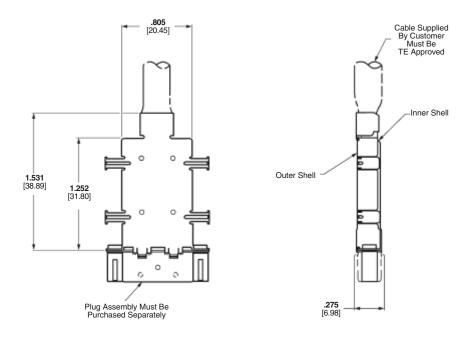


Material and Finish:

Backshells—Copper-nickel alloy Jackscrews—Steel, plated tin over copper, handles covered with ABS, gray Keyed and Unkeyed Inserts—Zinc, plated tin over copper Outside Covers—ABS, gray



Connector shown for illustration purposes only, must be purchased separately.



Backshell Kits

Unkeyed Kit Part No.	Cable Dia.	Packaging*				
750850-1	.250280	Individually Packed Kit				
750850-2	6.35-7.11	Bulk Packed Kit				
750850-3	.280310 7.11-7.87	Individually Packed Kit				

*Bulk packaging—100 kits per box.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

34

te com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999

Control Module Part No. 852423-1 120 VAC 852423-2 100 VAC

Wire Insulation Dia.

852423-3 230 VAC

mm

0.66-0.71

0.74-0.79

0.81-0.89



Discrete Wire Application Tooling

To meet medium to high volume production of discrete wire terminations, TE offers the following tooling:

The CHAMPOMATOR Model 2.5 Bench Terminating Machine— **Part No. 354786-1**, used in conjunction with Control Module—**Part No. 852423-**, and Tie Bar—**Part No. 1-762637-3.**

Note: CHAMPOMATOR 2.5 Machine and Control Module must be ordered separately by part number.

Discrete Wire Application Tooling

For low to medium volume production use the TE Arbor Tool—**Part No. 58024-1** equipped with Applicator— **Part No. 91291-1** and Special Locator—**Part No. 543506-1**.

Cable-to-Shell Staple Tooling (For discrete wire jacketed cable only)

To meet medium to high volume production use TE Pneumatic Crimper— Part No. 312522-3 equipped with Die Holder Assembly— Part No. 58449-1 and Die— Part No. 90437-1 to crimp outer backshells onto inner backshells of connector kits and assemblies.

For low volume use Manual Arbor Tool—**Part No. 91085-2,** equipped with Backshell Crimper Assembly Tool— **Part No. 856684-1.**

For tooling information call Tooling Assistance Center 1-800-722-1111.



Wire Setup Gauge

in.

.026-.028

.029-.031

.032-.035

Arbor Tool Part No. 58024-1 Equipped with Applicator Part No. 91291-1



Pneumatic Bench Tool No. 312522-3 (Requires Die Set Holder No. 58449-1)

Note: All part numbers are RoHS compliant.



Miniature Applicator Frame Assembly Part No. 91295-1 Equipped with Cover Closing Kit Part No. 543508-1

CHAMPOMATOR 2.5 Machine Part No. 354786-1

26 Position Tie Bar 1-762637-3

Part No.

763382-3

763382-4

763382-5



Staple Insertion Kit Part No. 543515-1 (For use with Miniature Applicator Frame Assembly Part No. 91295-1)

Backshell Tooling and Cover Tooling

To assemble backshell into plastic housing use Manual Miniature Applicator Frame Assembly—Part No. 91295-1 equipped with Part No. 543521-1. To assemble upper cover on lower cover use Part No. 91295-1 equipped with Part No. 543522-1. AMPLIMITE .050 Series Connectors, Series III

Catalog 82068 Revised 4-12

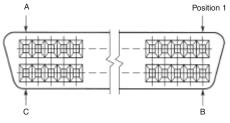
www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015



Shielded AMPLIMITE .050 Series Contact Arrangements, Performance Specifications, Technical Documents—Slimline Connectors

Contact Arrangements



Note: Mating face of receptacle is shown, plug is mirror image.

No. of	Position No.			
Pos.	Α	В	С	
26	13	14	26	

Performance Specifications	Mating Cycles (Durability): 500 max. Current Rating (30°C T-Rise): 1A max., 50% loading Termination Resistance (Mated): 25 milliohms max. Insulation Resistance: 1000 megohms min. Dielectric Withstanding Voltage: 500 VAC Header Processing Temperature: +220°C max. for 3 minutes Temperature Range: -55°C to +105°C			
Technical Documents	characteristi	fications describe technical performance cs and verification tests. They are intended for Component and Quality Engineer. Shielded AMPLIMITE .050 Series, Slimline Connectors		
	the product i mation. They	pplication Specifications describe requirements for using ne product in its intended application and/or termination infor- nation. They are intended for the Packaging and		
	Design Engli 114-40036	neer and the Setup person. Shielded AMPLIMITE .050 Series, Slimline Connectors		
		eets provide instructions for assembling or duct. They are intended for Manufacturing r Operator.		
	408-9663 408-6923 408-9701	Ass Insertion Tooling- Part No. 91291- AMP Manual Arbor Frame- Part No. 58024-1 Wire Termination Tooling Kit for CHAMPOMATOR 2.5 Machine- Part No. 1-762661-4		
	408-7777 408-9746 408-9200 408-9721	AMP Manual Arbor Frame w/Slide-Part No. 91085-2 Crimper Assembly-Part No. 856684-1 Single Wire Insertion Tool-Part No. 58430-1 Die Holder Assembly for Pneumatic Crimper-		
	408-9788 408-9898	Part No. 58449- Die Assembly-Part No. 90437-1 Backshell and Cover Tooling Assemblies- Part No. 543521-1 and 543522-1		
	Customer Mai equipment. 7 Operators.	nuals provide information on TE termination They are intended for Manufacturing Assemblers or		
	409-5786 409-5791	CHAMPOMATOR 2.5 Machine CHAMPOMATOR 2.5 Control Module– Part No. 852423-		
	409-5822 409-5843	Pneumatic Crimper– Part No. 312522-3 Pneumatic Power Unit		
	Note: All part numbers are RoHS compliant.			

Catalog 82068 Revised 4-12

36

to change.

Dimensions are shown for

Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 reference purposes only. Specifications subject

Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999



.025 [0.64]

±.003 [±0.08]

F

AMPLIMITE .050 Series Panel Mount Receptacle Assemblies for .025 [0.64] Centerline Ribbon Cable, Series III



Materials:

Housing and Termination Covers— Thermoplastic, 94V-0 rated, black

Shell—Steel, plated bright tin over copper

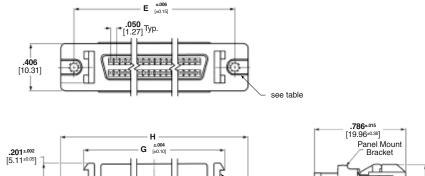
Bracket—Zinc, plated nickel over copper

Contacts—Phosphor bronze, duplex plated .000030 [0.00076] min. gold on mating end; tin on solder end; all nickel underplated .170±.002 [4.32±0.05]

Recommended wire size— .025 [0.64] centerline, 30 AWG [0.05mm²] and 32 AWG [0.03mm²] solid or 7 strand, PVC, flat ribbon cable. Selection of compatible ribbon cable is the responsibility of the user.

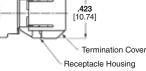
Technical Documents: See customer drawings for Product Performance criteria.

- Recognized under the Component Program of Underwriters Laboratories, Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189



latch

blocks



No. of	Dimensions			Gold	Matin a Haudarana	D. IN	
Pos.	E	F	G	Н	Plating Mating Hardware		Part No.
	1.831 46.50	1.602 40.70	N/A	2.066 52.47	15µ	w/ 4-40 threaded holes	1-5390378-5
	1.831 46.50	1.602 40.70	N/A	2.066 52.47	30µ	w/ 4-40 threaded holes	5390378-5
50	1.831 46.50	1.602 40.70	1.664 42.27	2.066 52.47	flash	w/ latch blocks and 4-40 threaded holes	2-5390399-5
00	1.831 46.50	1.602 40.70	1.664 42.27	2.066 52.47	15µ	w/ latch blocks and 4-40 threaded holes	1-5390399-5
	1.831 1.602 46.50 40.70	1.664 42.27	2.066 52.47	30µ	w/ latch blocks and 4-40 threaded holes	5390399-5	
	1.831 46.50	1.602 40.70	1.664 42.27	2.066 52.47	30µ	w/ latch blocks and 2-56 threaded holes	5390379-5
	2.281 57.93	2.018 51.50	N/A	2.516 63.90	15µ	w/ 4-40 threaded holes	1-5390378-7
	2.281 2.018 57.93 51.50 N/A	2.516 63.90	30µ	w/ 4-40 threaded holes	5390378-7		
68	2.281 57.93	2.018 51.50	2.114 53.70	2.516 63.90	flash	w/ latch blocks and 4-40 threaded holes	2-5390399-7
00	2.281 57.93	2.018 51.50	2.114 53.70	2.516 63.90	15µ	w/ latch blocks and 4-40 threaded holes	1-5390399-7
	2.281 57.93	2.018 51.50	2.114 53.70	2.516 63.90	30µ	w/ latch blocks and 4-40 threaded holes	5390399-7

Note: Termination Tooling: Manual Arbor Press Part No. 91085-2 or Pneumatic Press Part No. 91112-3, Universal Base Tool Part No. 768338-4, and Connector Specific Kit Part No. 1490479-1.

Note: All part numbers are RoHS compliant.

Catalog 82068 Revised 4-12

www.te.com

Dimensions are shown for reference purposes only. Specifications subject to change. Dimensions are in inches and millimeters unless otherwise specified. USA: +1 (800) 522-6752 Canada: +1 (905) 475-6222 Mexico/C. Am.: +52 (0) 55-1106-0800 Latin/S. Am.: +54 (0) 11-4733-2200 Germany: +49 (0) 6251-133-1999 UK: +44 (0) 800-267666 France: +33 (0) 1-3420-8686 Netherlands: +31 (0) 73-6246-999 China: +86 (0) 400-820-6015

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TE Connectivity: 5390379-5