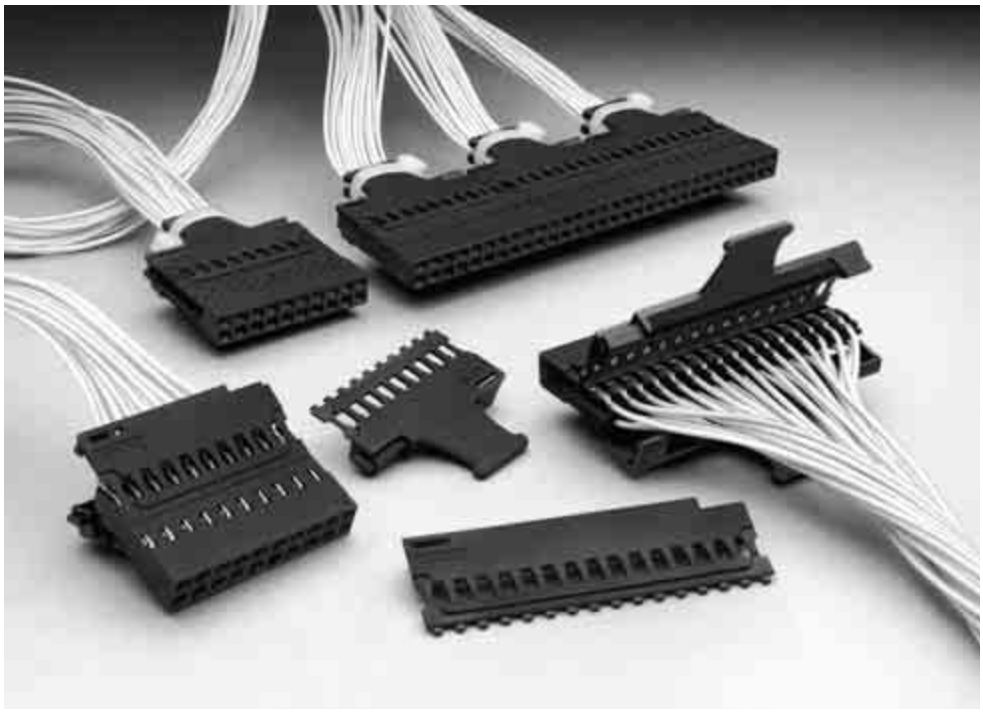
Level V IDC Connectors, .125 x .125 [3.18 x 3.18] Centerline

Product Facts

- **Termination of discrete wire sizes 26-22 AWG [0.12-0.3 mm²] as well as jacketed cable and bonded ribbon cable (conductors separated)**
- **Connectors stackable end-to-end and side-to-side on .125 [3.18] centers**
- **Connectors preloaded with insulation displacement receptacle contacts**
- **Contact design employs dual cantilever beams, redundant insulation displacement slots, built-in post stop and wire support crimp**
- **Copper alloy contacts are duplex plated**
- **Snap-on covers with or without cable tie paddles**
- **Full line of mass termination tooling offers lowest installed costs for most production needs**
- **Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476**
- **Certified by Canadian Standards Association, File No. LR 7189**



AMPMODU Level V IDC connectors provide cost effective discrete wire connections that are compatible with today's telecommunications packaging techniques. These connectors are designed to mate with .025 [0.64] sq. posts on .125 x .125 [3.18 x 3.18] centers and are comprised of double-row housings preloaded with insulation displacement receptacle contacts, snap-on hermaphroditic covers, and a full line of mass termination tooling to meet virtually every production need. For modular flexibility, connectors can be stacked end-to-end or side-to-side, maintaining a .125 x .125 [3.18 x 3.18] centerline spacing.

Covers can be furnished with and without a cable tie paddle. The covers are simply snapped onto a housing after the connector has been terminated.

The receptacle contacts feature the Tyco Electronics insulation displacement crimp technique for achieving top quality, low cost terminations. These contacts employ dual cantilever beams for redundant interface with a mating post, an integral post stop to limit post mating depth and protect the crimp termination, and a wire support (strain relief) crimp to prevent accidental wire pull-out. The contacts are made of high conductivity copper alloy and are duplex plated.

Performance Characteristics

Contact Current Rating — 3 amperes

Termination Resistance — 12 milliohms (max.)

Durability — Ref. Product Specification 108-25028 (Interconnection System, Insulation Displacement Connector, IDC Level)

Application Specification
114-25020 (Interconnection System, IDC Level V, Application of)

Catalog 1307819
Revised 8-08

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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: 44-8706-080-208a

Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centerline

Housings Preloaded with Insulation Displacement Crimp Receptacle Contacts



Material and Finish

Housing — Black thermoplastic, flame retardant

Contacts — Copper alloy, duplex plated .000050 [0.00127] gold on contact area, .000100 [0.00254] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

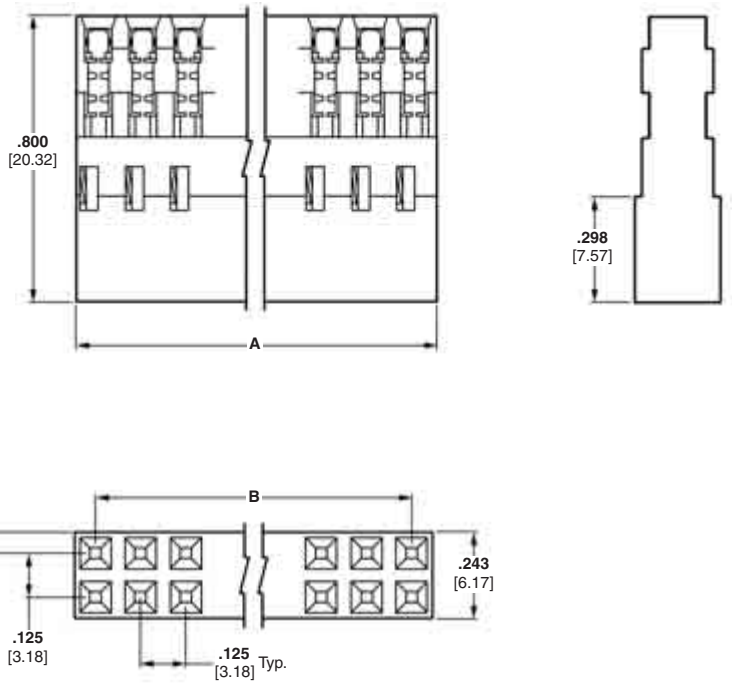
Note: Preloaded contacts accept max. insulation dia. of .050 [1.27]. The minimum point of contact, as measured from front edge of housing, is .095 [2.41].

Technical Documents — pages 277, 278

Product Specification
108-25028

Application Specification
114-25020

Receptacle assemblies can be stacked end-to-end and side-to-side on .125 x .125 [3.18 x 3.18] centers.



No. of Pos.	Dimensions		Receptacle Assembly (Stamped[1]) for 26-22 AWG [0.12-0.3 mm²] Wire
	A	B	
8	**.493** [12.52]	**.375** [9.52]	102935-4
10	**.618** [15.70]	**.500** [12.70]	102935-6
12	**.743** [18.87]	**.625** [15.88]	102935-8
16	**.993** [25.22]	**.875** [22.23]	1-102935-2
20	**1.243** [31.57]	**1.125** [28.58]	1-102935-6
24	**1.493** [37.92]	**1.375** [34.93]	1-102935-9
30	**1.868** [47.45]	**1.750** [44.45]	1-102935-3
32	**1.993** [50.62]	**1.875** [47.63]	2-102935-8
40	**2.493** [63.32]	**2.375** [60.33]	3-102935-6

[1]White ink stamped, one side—8- thru 12-position with AMP and arrow; 14- and 16-position with AMP, part no., and arrow; 18- thru 40-position with AMP, part no., date code and arrow.

Notes: 1. Covers for these housings are shown on pages 281 & 282.
2. Termination tooling for these connectors are shown on page 273-275.
3. 14- and 18-position receptacle assemblies, as well as other sizes, can be made available upon request. Consult Tyco Electronics.

Note: All part numbers are RoHS compliant.

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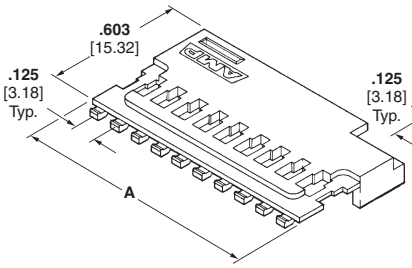
South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208a

Hermaphroditic Covers for Level V IDC Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centerline

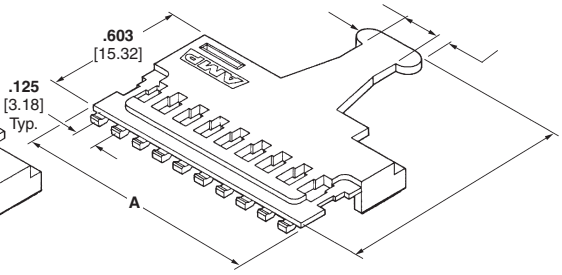
All covers illustrated here and on the following page can be used on the double-row Level V IDC connectors shown on page 280.

Material

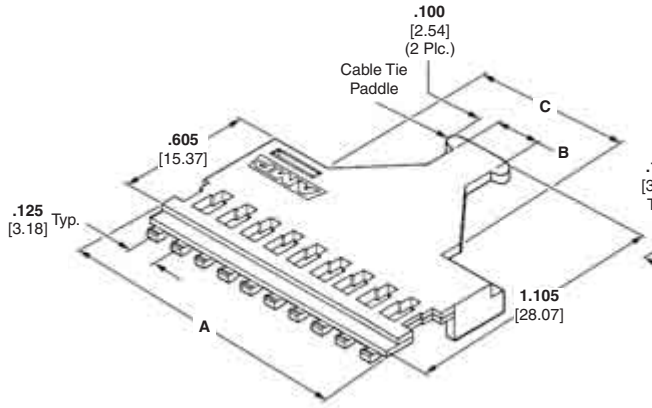
Black thermoplastic, flame retardant, 94V-0 rated



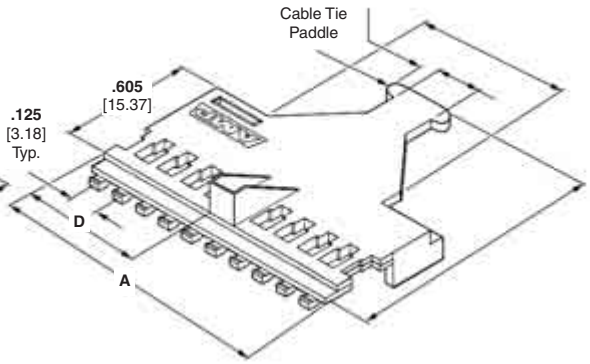
Cover 103056 Series without Cable Tie Paddle



Cover 103058 Series with Cable Tie Paddle



Cover 103349 Series with Wide Cable Tie Paddle



Cover 103350 Series with Wide Cable Tie Paddle and Polarization

No. of Pos. (Housing Size)	Dimensions					Cover Part Nos.			
	A	B	C	D	E	Without Cable Tie Paddle	With Cable Tie Paddle	With Wide Cable Tie Paddle	With Wide Cable Tie Paddle and Polarization
8	**.491** [12.47]	**.150** [3.81]	**.285** [7.24]	**.166** [4.22]	**.125** [3.18]	—	—	103349-4	103350-4
10	**.616** [15.65]	—	—	—	**.125** [3.18]	—	103058-3	—	—
12	**.741** [18.82]	—	—	—	**.200** [5.08]	—	103058-4	—	—
16	**.991** [25.17]	**.300** [7.62]	**.592** [15.04]	**.416** [10.57]	—	—	—	103349-1	103350-1
20	**1.241** [31.52]	**.300** [7.62]	**.592** [15.04]	**.541** [13.74]	—	—	—	103349-5	103350-5
24	**1.491** [37.87]	—	—	—	**.400** [10.16]	1-103056-0	1-103058-0	—	—
32	**1.991** [50.57]	**.600** [15.24]	**1.312** [33.32]	**.916** [23.27]	—	—	—	103349-2	103350-2
40	**2.491** [63.27]	**.750** [19.05]	**1.820** [46.23]	**1.166** [29.61]	—	—	—	103349-3	103350-3
64	See page 282 for Double Cable Tie Paddle versions.								

Notes: 1. Two hermaphroditic covers of any style can be installed on a double-row connector housing.
2. Other sizes can be made available upon request.

Note: All part numbers are RoHS compliant.

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Revised 8-08

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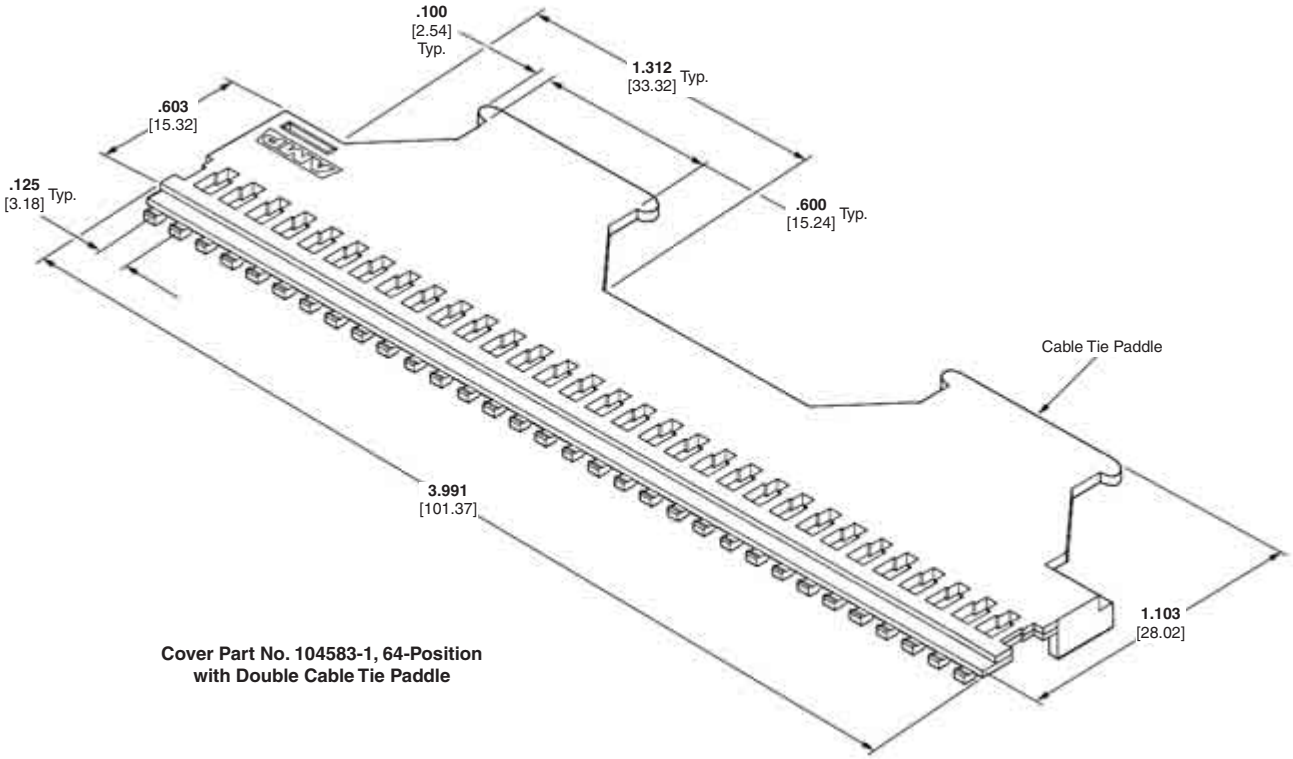
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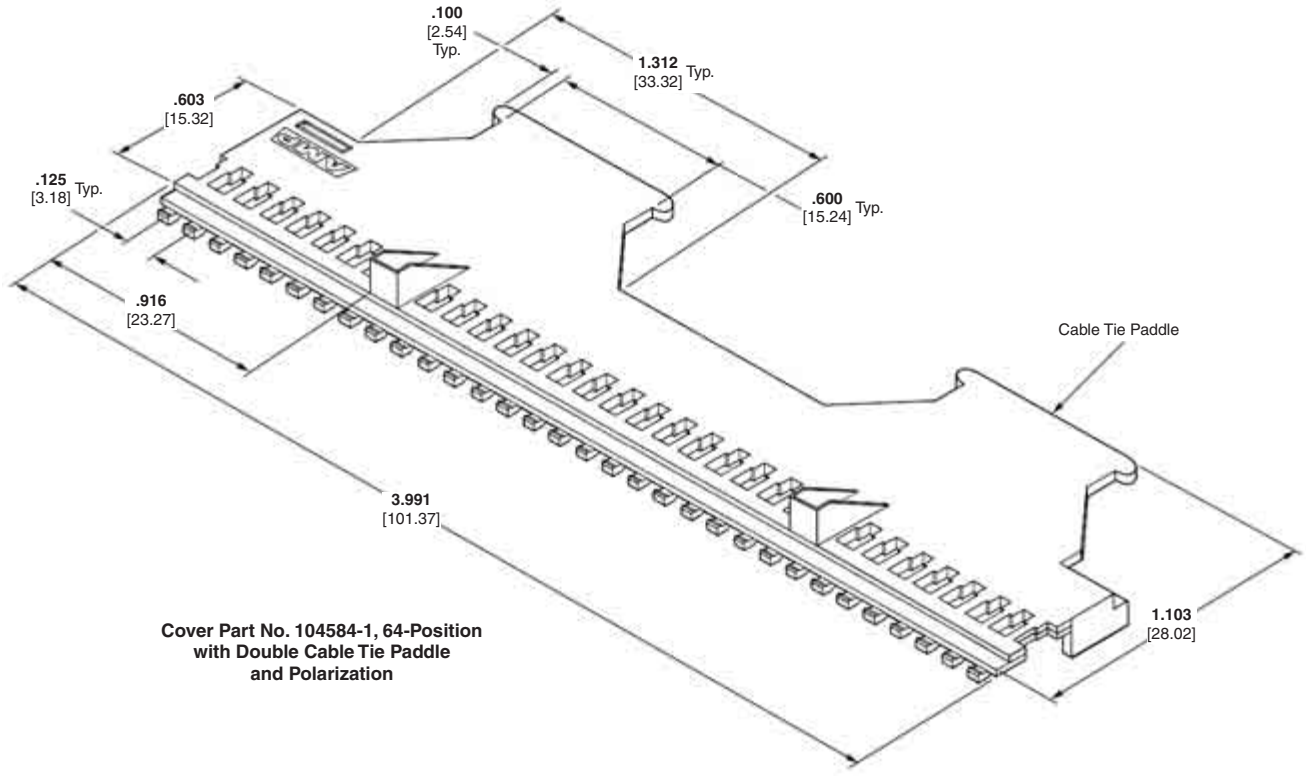
USA: 1-800-522-6752
Canada: 1-905-470-4425
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South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208a

Hermaphroditic Covers for Level V IDC Receptacle Assemblies, Double-Row, .125 x .125 [3.18 x 3.18] Centerline (Continued)



Cover Part No. 104583-1, 64-Position with Double Cable Tie Paddle



Cover Part No. 104584-1, 64-Position with Double Cable Tie Paddle and Polarization

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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UK: 44-8706-080-208a

AMPMODU .031 x .062 [0.79 x 1.57] Interconnection System

Product Facts

- **Rugged connector system featuring .031 x .062 [0.79 x 1.57] posts with mating receptacles**
- **Current rating 5 amps max per contact. Varies due to ambient temperature, wire size and duty cycles.**
- **Available for board-to-board and wire-to-board applications**
- **Posts available on strip for machine application directly to pc board or in housings for board mounting**
- **Receptacles available for board mounting or wire crimping**
- **Contacts available in both tin and gold plating**
- **Flame retardant thermoplastic housings 94V-0 rated**
- **Locking Clip contacts available to mate with .031 x .062 [0.79 x 1.57] posts**
- **Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476**
- **Certified by Canadian Standards Association, File No. LR 16455**



The .031 x .062 [0.79 x 1.57] interconnection system has served as an industry standard for modular packaging for over three decades. It is a rugged, large scale system designed for board-to-board and board-to-wire or cable applications that has offered millions of reliable interconnections and countless mating cycles. This versatile interconnection system successfully meets the requirements for most modular power supply packaging.

Board mounted receptacles and receptacle assemblies are available in various geometries, offering packaging interconnections that include perpendicular, parallel and stacking capabilities. Machine applied terminations, through matched application equipment, are geared to virtually any production requirement, assuring the lowest possible applied cost.

Crimp snap-in receptacles for 26-18 AWG [0.12 – 0.9mm^2] wire provide excellent discrete wire terminations. Housings for these contacts provide for ease of handling terminations in high density applications.

AMPMODU mating posts are supplied typically as header assemblies. They are available in various sizes to meet the interconnection and packaging requirements of your system. However, in instances where packaging configurations do not lend themselves to the economies of assemblies, Tyco Electronics can provide for the discrete location of individual posts and receptacles.

If your interconnections require Top Entry, Bottom Entry and/or Side Entry for perpendicular, parallel and stacked configurations, the .031 x .062 [0.79 x 1.57] interconnection system can fulfill your needs with the lowest applied cost through efficient interconnections and supporting application equipment.

Catalog 1307819
Revised 8-08

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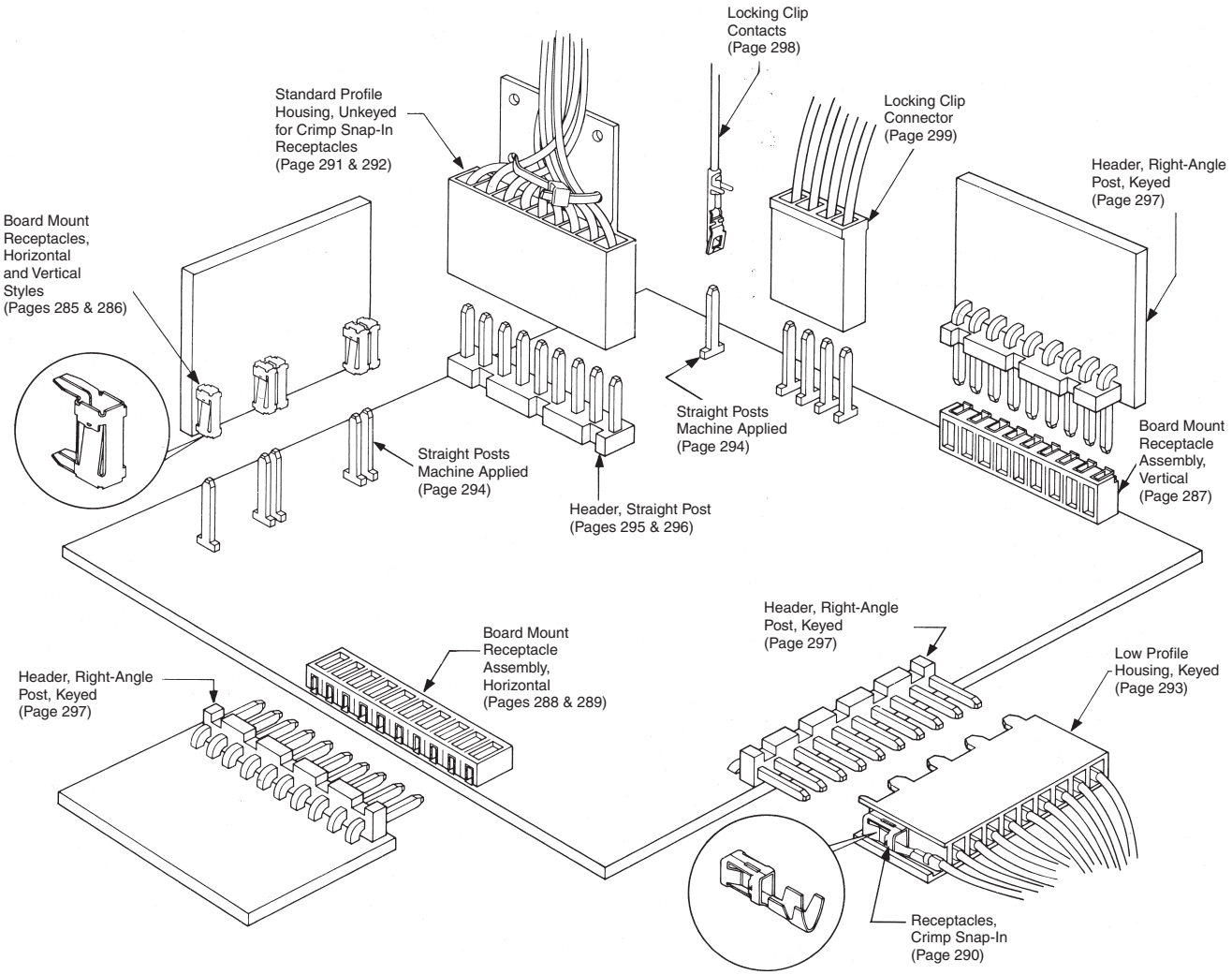
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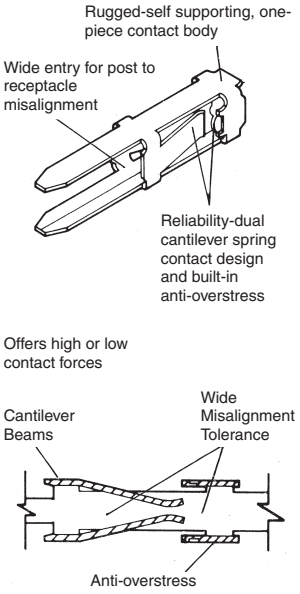
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AMPMODU .031 x .062 [0.79 x 1.57] Interconnection System (Continued)

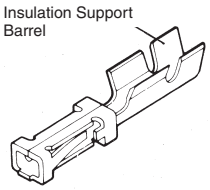




The AMPMODU receptacle cross-section is primarily rectangular, with rounded corners. Two integral cantilever beams contact the mating square or rectangular posts. Deflection of these spring members is limited by anti-overstress and excessive permanent deformation is prevented. This feature allows a wide range of tolerances for misalignment of mating contacts. The configuration of the receptacle completely encloses the spring members preventing damage during handling and assembly and makes the system compatible with automatic application techniques.

This design also permits the use of the receptacles without housings or encapsulation.

Note: Application of a contact lubricant is part of the manufacturing process of all AMPMODU tin-plated crimp products. However, it is not part of the manufacturing process of products that customers will solder, then clean. For these products, Tyco Electronics recommends that customers purchase a contact lubricant. (See application specification 114-25004 for further information.)



Wire Crimp Receptacle

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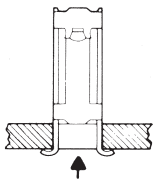
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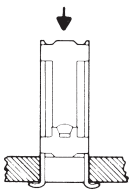
Mod I Receptacles, Board Mount, .031 x .062 [0.79 x 1.57] Centerline

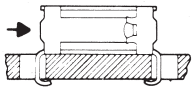
Vertical and Horizontal Board Mount



Bottom
Post Entry
Type A

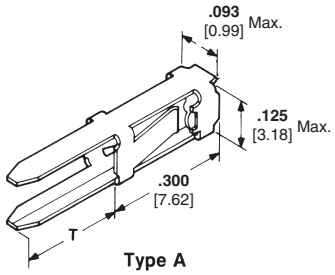
Top
Post Entry
Type B



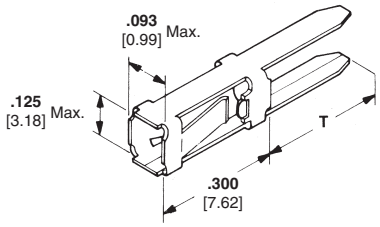


Horizontal
Post Entry
Type C

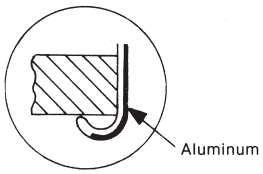
Receptacle Styles



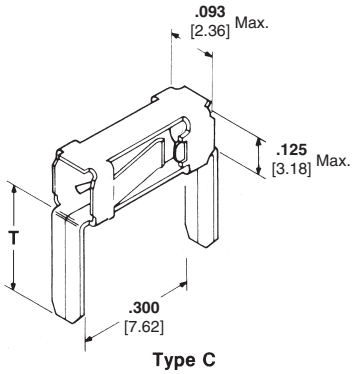
Type A



Type B



Typical
Solder Resist Tab
(Type A or B)



Type C

Related Product Data

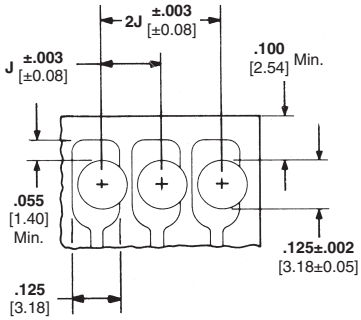
Recommended Board Layout for Type C — page 288
Mates with —
Machine Applied Posts — page 294
Headers — pages 295-297
Application Tooling — pages 300-304
Performance Specifications — page 305
Technical Documents — page 305

Keying Plug



Part No. 86181-2
Use in Board Mount Receptacles

Recommended Board Layout for Receptacle Assemblies and Individual Receptacles (Type A and B)



Round Hole
(Post Entry Type A or B)

J-Receptacle centers may vary depending on requirements. For individual receptacles, minimum nominal centerline spacing between adjacent receptacles is .150 [3.81]; for receptacle assemblies, centerline spacing between adjacent receptacles is .156 [3.96]. The .003 [0.08] tolerances are not to accumulate over length of board. For solder mask, see Tyco Electronics Instruction Sheet 408-7411.

Note: Drawings depict normal use of the contact in a one or two-sided circuit board. When using plated thru-holes, refer to Tyco Electronics Engineering Report ER-001 and Tyco Electronics Instruction Sheet 408-7411. For solder mask, see Tyco Electronics Instruction Sheet 408-7411.

Note: All part numbers are RoHS compliant.

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Mod I Receptacles, Board Mount, .031 x .062 [0.79 x 1.57] Centerline (Continued)

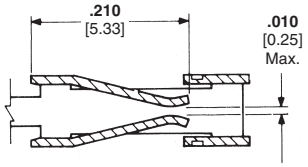
Material and Finish

Copper alloy, plated as follows:

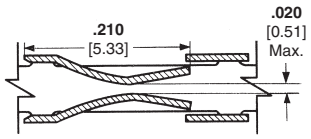
Plating A — Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B — .000079 [0.00201] min. tin on entire contact

Plating C — (Solder Resist) — .000030 [0.00076] gold over .000050 [0.00127] nickel on contact area, .000500 [0.01270] aluminum on inside area of solder tines; remainder of contact unfinished



Standard Pressure Receptacle



High Pressure Receptacle

Type	Board Thickness Range	Dimension T (*Ref. Pg. 285*)	Finish	Standard Pressure Part Nos.		High Pressure Part Nos.		Insertion Applicator No. for "U" Frame Machine
				Strip Form	Loose Piece	Strip Form	Loose Piece	
A	**.070-.055** [1.78-1.40]	**.112** [2.84]	Plating A	86477-2	86480-2	—	—	466376-1
			Plating B	86477-3	—	87316-3	—	466376-1
			Plating C (Solder Resist)	87772-2	—	—	—	466376-1
B	**.070-.055** [1.78-1.40]	**.112** [2.84]	Plating A	87003-1	87105-1	—	—	466376-1
			Plating B	87003-2	—	—	—	466376-1
			Plating C (Solder Resist)	87774-2	—	—	—	466376-1
C	**.103-.055** [2.62-1.40]	**.145** [3.68]	Plating A	85487-4	85493-4	86432-8	86434-6	565967-3
			Plating B	85487-3	—	86432-1	86434-1	

Notes: 1. All strip form parts in packaged quantities of 5,000 each.
2. All loose piece parts in packaged quantities of 500 each.

Note: All part numbers are RoHS compliant.

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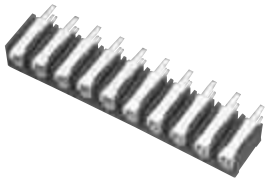
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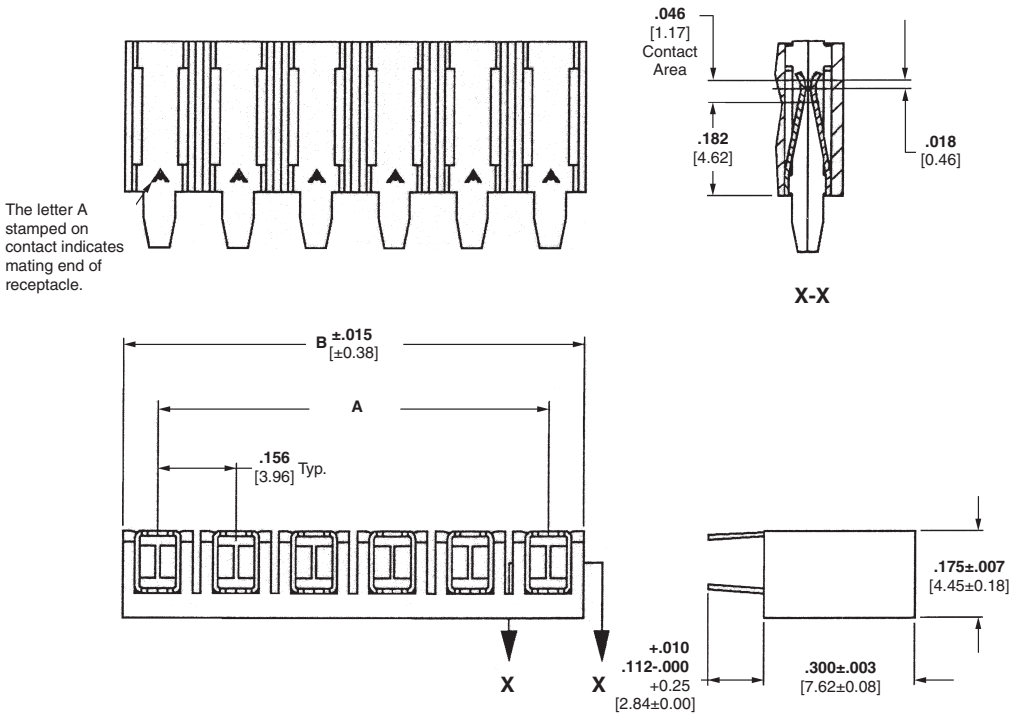
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South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208a

Mod I Receptacle Assemblies, Vertical Board Mount, .031 x .062 [0.79 x 1.57] Centerline

Single Row .156 [3.96] Centerline





Material and Finish

Housing — Black thermoplastic, 94V-0 rated

Contacts — Copper alloy, plated as follows:

Plating A — Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B — .000079 [0.00201] min. tin on entire contact

Plating C — (Solder Resist) — .000030 [0.00076] gold over .000050 [0.00127] nickel on contact area, .000500 [0.01270] aluminum on inside area of solder tines; remainder of contact unfinished

Related Product Data

Recommended Board Layout — page 288

Mates with —

Machine Applied Posts — page 294

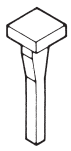
Headers — pages 295-297

Performance Specifications — page 305

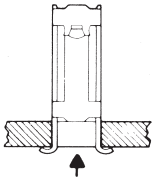
Technical Documents — page 305

No. of Pos.	Dimensions		Type A				Type B		
			Standard Pressure			High Pressure	Standard Pressure		
	A	B	Plating A	Plating B	Plating C	Plating B	Plating A	Plating B	Plating C
2	**.156** [3.96]	**.312** [7.92]	87984-2	87983-2	87989-2	87993-2	87986-2	87985-2	87990-2
3	**.312** [7.92]	**.468** [11.89]	87984-3	87983-3	87989-3	87993-3	87986-3	87985-3	87990-3
4	**.468** [11.89]	**.624** [15.85]	87984-4	87983-4	87989-4	87993-4	87986-4	87985-4	87990-4
5	**.624** [15.85]	**.780** [19.81]	87984-5	87983-5	87989-5	87993-5	87986-5	87985-5	87990-5
6	**.780** [19.81]	**.936** [23.77]	87984-6	87983-6	87989-6	87993-6	87986-6	87985-6	87990-6
7	**.936** [23.77]	**1.092** [27.74]	87984-7	87983-7	87989-7	87993-7	87986-7	87985-7	87990-7
8	**1.092** [27.74]	**1.248** [31.70]	87984-8	87983-8	87989-8	87993-8	87986-8	87985-8	87990-8
9	**1.248** [31.70]	**1.404** [35.66]	87984-9	87983-9	87989-9	87993-9	87986-9	87985-9	87990-9
10	**1.404** [35.66]	**1.560** [39.62]	1-87984-0	1-87983-0	1-87989-0	1-87993-0	1-87986-0	1-87985-0	1-87990-0
11	**1.560** [39.62	**1.716** [43.59]	1-87984-1	1-87983-1	1-87989-1	1-87993-1	1-87986-1	1-87985-1	1-87990-1
12	**1.716** [43.59]	**1.872** [47.55]	1-87984-2	1-87983-2	1-87989-2	1-87993-2	1-87986-2	1-87985-2	1-87990-2
13	**1.872** [47.55]	**2.028** [51.51]	1-87984-3	1-87983-3	1-87989-3	1-87993-3	1-87986-3	1-87985-3	1-87990-3
14	**2.028** [51.51]	**2.184** [55.47]	1-87984-4	1-87983-4	1-87989-4	1-87993-4	1-87986-4	1-87985-4	1-87990-4
15	**2.184** [55.47]	**2.340** [59.44]	1-87984-5	1-87983-5	1-87989-5	1-87993-5	1-87986-5	1-87985-5	1-87990-5
16	**2.340** [59.44]	**2.496** [63.40]	1-87984-6	1-87983-6	1-87989-6	1-87993-6	1-87986-6	1-87985-6	1-87990-6
17	**2.496** [63.40]	**2.652** [67.36]	1-87984-7	1-87983-7	1-87989-7	1-87993-7	1-87986-7	1-87985-7	1-87990-7
18	**2.652** [67.36]	**2.808** [71.32]	1-87984-8	1-87983-8	1-87989-8	1-87993-8	1-87986-8	1-87985-8	1-87990-8
19	**2.808** [71.32]	**2.964** [75.29]	1-87984-9	1-87983-9	1-87989-9	1-87993-9	1-87986-9	1-87985-9	1-87990-9
20	**2.964** [75.29]	**3.120** [79.25]	2-87984-0	2-87983-0	2-87989-0	2-87993-0	2-87986-0	2-87985-0	2-87990-0

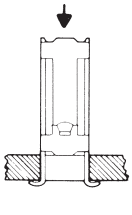
Keying Plug



Part No. 86181-2
(Use in Board Mount Receptacles)



Post Entry Type A



Post Entry Type B

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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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: 44-8706-080-208a

Mod I Receptacle Assemblies, Horizontal Board Mount, .031 x .062 [0.79 x 1.57] Centerline

Single Row .156 [3.96] Centers

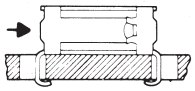
Material and Finish

Housing — Black thermoplastic, 94V-0 rated

Contacts — Copper alloy, plated as follows:

Plating A — Selectively plated .000030 [0.00076] gold contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B — .000079 [0.00201] min. tin on entire contact



Post Entry Type C

Related Product Data

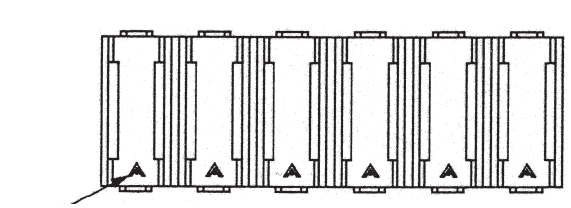
Mates with —

Machine Applied Posts — page 294

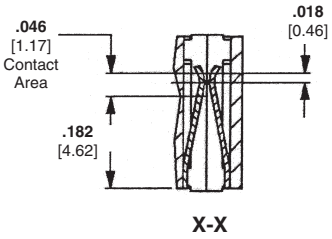
Headers — pages 295-297

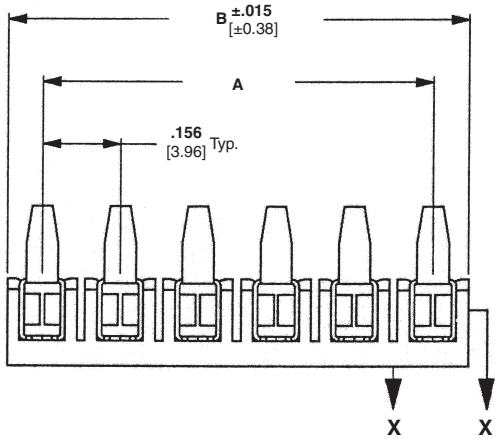
Performance Specifications — page 305

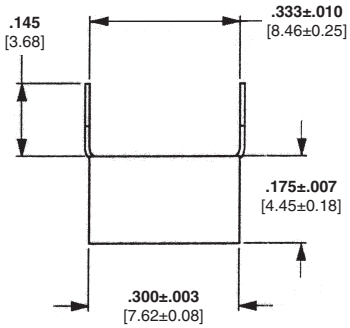
Technical Documents — page 305



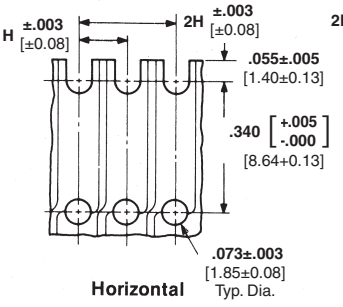
The letter A stamped on contact indicates mating end of receptacle.



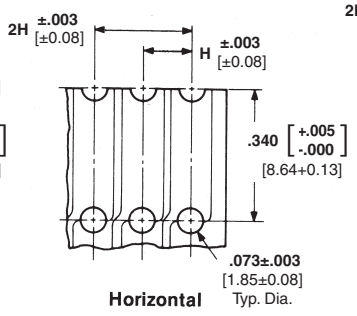




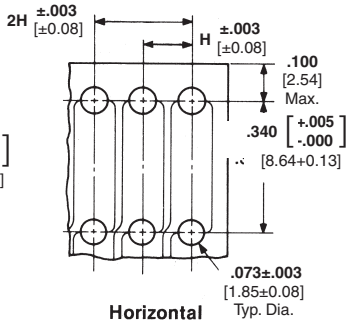
Recommended Board Layouts for Receptacle Assemblies and Individual Receptacles (Type C)



This configuration recommended for use with machine applied posts or headers with a .405 [10.29] minimum mating end post length.*

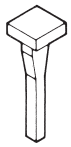


This configuration recommended for use with machine applied posts or headers with a .345 [18.76] minimum mating end post length.*



This configuration recommended for use with machine applied posts or headers with a .500 [12.70] minimum mating end post length.*

Keying Plug



Part No. 86181-2
(Use in Board Mount Receptacles)

The mating post length is depicted by the A dimension on page 294 (machine applied posts) and the C dimension on pages 295-297 (headers).

H-Receptacle centers may vary depending on requirements. For individual receptacles, minimum nominal centerline spacing between adjacent receptacles is .125 [3.18] for receptacle assemblies, centerline spacing between adjacent receptacles is .156 [3.96]. The .003 [0.08] tolerances are not to accumulate over length of board.

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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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.

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Japan: 81-44-844-8013
UK: 44-8706-080-208a

Mod I Receptacle Assemblies, Horizontal Board Mount, .031 x .062 [0.79 x 1.57] Centerline (Continued)

No. of Pos.	Dimensions		Standard Pressure		High Pressure
	A	B	Plating A	Plating B	Plating B
2	**.156** [3.96]	**.312** [7.92]	87988-2	87987-2	87995-2
3	**.312** [7.92]	**.468** [11.89]	87988-3	87987-3	87995-3
4	**.468** [11.89]	**.624** [15.85]	87988-4	87987-4	87995-4
5	**.624** [15.85]	**.780** [19.81]	87988-5	87987-5	87995-5
6	**.780** [19.81]	**.936** [23.77]	87988-6	87987-6	87995-6
7	**.936** [23.77]	**1.092** [27.74]	87988-7	87987-7	87995-7
8	**1.092** [27.74]	**1.248** [31.70]	87988-8	87987-8	87995-8
9	**1.248** [31.70]	**1.404** [35.66]	87988-9	87987-9	87995-9
10	**1.404** [35.66]	**1.560** [39.62]	1-87988-0	1-87987-0	1-87995-0
11	**1.560** [39.62]	**1.716** [43.59]	1-87988-1	1-87987-1	1-87995-1
12	**1.716** [43.59]	**1.872** [47.55]	1-87988-2	1-87987-2	1-87995-2
13	**1.872** [47.54]	**2.028** [51.51]	1-87988-3	1-87987-3	1-87995-3
14	**2.028** [51.51]	**2.184** [55.47]	1-87988-4	1-87987-4	1-87995-4
15	**2.184** [55.47]	**2.340** [59.44]	1-87988-5	1-87987-5	1-87995-5
16	**2.340** [59.44]	**2.496** [63.40]	1-87988-6	1-87987-6	1-87995-6
17	**2.496** [63.40]	**2.652** [67.36]	1-87988-7	1-87987-7	1-87995-7
18	**2.652** [67.36]	**2.808** [71.32]	1-87988-8	1-87987-8	1-87995-8
19	**2.808** [71.32]	**2.964** [75.29]	1-87988-9	1-87987-9	1-87995-9
20	**2.964** [75.29]	**3.120** [79.25]	2-87988-0	2-87987-0	2-87995-0

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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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.

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

Mod I Receptacles, Crimp Snap-In (Wire Applied), .031 x .062 [0.79 x 1.57] Centerline

Material and Finish

Copper alloy, plated as follows:

Plating A — Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

Plating B — .000016 [0.00041] min. tin on entire contact

Related Product Data

Housings used in — pages 291-293

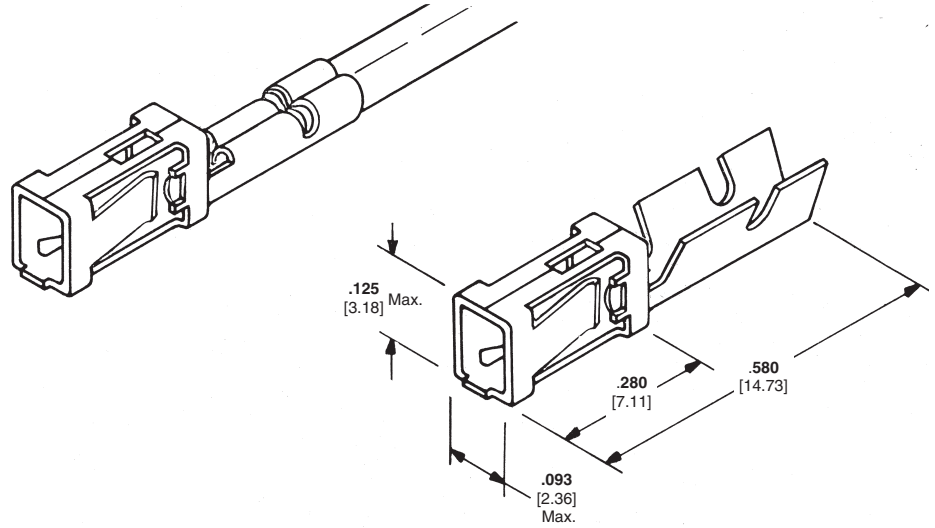
Mate with Machine Applied Posts — page 294

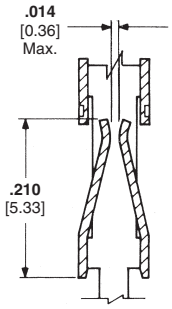
Headers — pages 295-297

Application Tooling — page 300-304

Performance Specification — page 305

Technical Documents — page 305



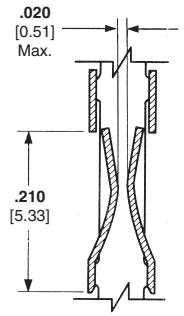


Standard Pressure Receptacle

Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Standard Pressure			
			Strip Form		Loose Piece	
			Packaged Quantities	Part Nos.	Packaged Quantities	Part Nos.
22-18 [0.3-0.9]	**.051-.090** [1.30–2.29]	Plating A	5,000	102099-2	500	102103-2
		Plating B	5,000	102099-5	500	102103-3

Wire Size Range AWG [mm²]	Applicator (Standard Pressure)			Premium CERTI-CRIMP Hand Tool Part Number
	Part Number	Type	Used With Machine	
22-18 [0.3-0.9]	466764-3	HDM	Model "G" (AMP-O-LECTRIC)	90274-2
	466764-2	HDM	Model "K" (AMP-O-LECTRIC)	
	466764-1	HDM	CLS IV+ (AMPOMATOR)	
	466937-1	SCA	Stripper-Crimper (AMP-O-MATIC)	

AMP-O-LECTRIC KII Machine. Applicators also available for AMPOMATOR Lead Making Machines and Stripper/Crimper Machines. Consult Tyco Electronics.



High Pressure Receptacle

Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	High Pressure			
			Strip Form		Loose Piece	
			Packaged Quantities	Part Nos.	Packaged Quantities	Part Nos.
22-18 [0.3-0.9]	**.051-.090** [1.30–2.29]	Plating A	5,000	102100-2	500	102104-2
		Plating B	5,000	102100-5	500	102104-3
26-22 [0.12-0.4]	**0.42-.073** [1.07-1.85]	Plating A	5,000	102102-2	500	102106-2
		Plating B	5,000	102102-5	500	102106-3

Wire Size Range AWG [mm²]	Applicator (High Pressure)			Premium CERTI-CRIMP Hand Tool Part Number
	Part Number	Type	Used With Machine	
22-18 [0.3-0.9]	466764-3	HDM	Model "G" (AMP-O-LECTRIC)	90274-2
	466764-2	HDM	Model "K" (AMP-O-LECTRIC)	
	466764-1	HDM	CLS IV+ (AMPOMATOR)	
26-22 [0.12-0.4]	466937-1	SCA	Stripper-Crimper (AMP-O-MATIC)	90328-1
	466763-2	HDM	Model "K" (AMP-O-LECTRIC)	
	466763-1	HDM	CLS IV+ (AMPOMATOR)	

AMP-O-LECTRIC KII Machine. Applicators also available for AMPOMATOR Lead Making Machines and Stripper/Crimper Machines. Consult Tyco Electronics.



Extraction Tool Part No. 843473-1
Part Instruction Sheet 408-9451

Note: All part numbers are RoHS compliant.

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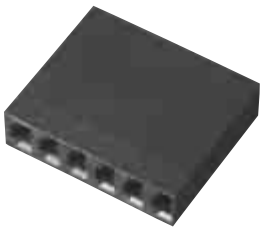
Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

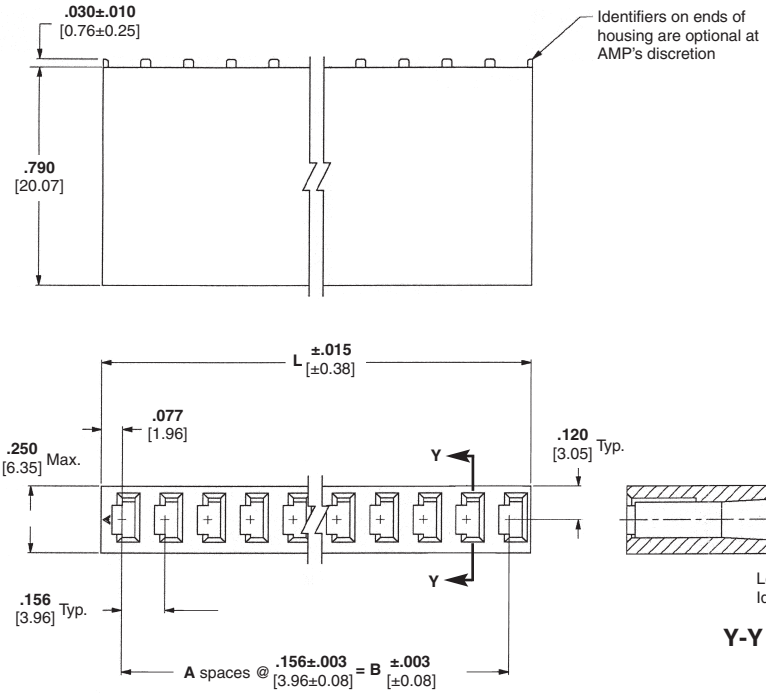
Dimensions are shown for reference purposes only. Specifications subject to change.

USA: 1-800-522-6752
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C. America: 52-55-1106-0803
South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208a

Mod I Receptacle Housings, Standard Profile, Unkeyed, .031 x .062 [0.79 x 1.57] Centerline

Single Row, .156 [3.96] Centers, Without Strain Relief





Material

Black thermoplastic, flame retardant, 94V-0 rated

Related Product Data

Contacts used with — page 290
Mate with —
Machine Applied Posts — page 294
Headers — pages 295-297
Performance Specifications — page 305

Technical Documents — page 305

No. of Pos.	Dimensions			Housing Part Nos.	
	A	B	L	Stamped[1]	Unstamped[2]
2	1	**.156** [3.96]	**.312** [7.92]	—	2-87025-5
3	2	**.312** [7.92]	**.468** [11.89]	—	2-87025-1
4	3	**.468** [11.89]	**.624** [15.85]	—	1-87025-3
5	4	**.624** [15.85]	**.780** [19.81]	—	2-87025-3
6	5	**.780** [19.81]	**.936** [23.77]	87025-1	87025-2
7	6	**.936** [23.77]	**1.092** [27.74]	—	3-87025-4
8	7	**1.092** [27.74]	**1.248** [31.70]	—	1-87025-6
9	8	**1.248** [31.70]	**1.404** [35.66]	87025-9	1-87025-0
10	9	**1.404** [35.66]	**1.560** [39.62]	1-87025-7	1-87025-8
11	10	**1.560** [39.62]	**1.716** [43.59]	—	3-87025-6
12	11	**1.716** [43.59]	**1.872** [47.55]	1-87025-1	1-87025-2
13	12	**1.872** [47.55]	**2.028** [51.51]	—	3-87025-0
14	13	**2.028** [51.51]	**2.184** [55.47]	—	3-87025-8
15	14	**2.184** [55.47]	**2.340** [59.44]	—	3-87025-2
16	15	**2.340** [59.44]	**2.496** [63.40]	—	2-87025-0
17	16	**2.496** [63.40]	**2.652** [67.36]	—	4-87025-0
18	17	**2.652** [67.36]	**2.808** [71.32]	—	87025-4
19	18	**2.808** [71.32]	**2.964** [75.29]	—	87025-6
20	19	**2.964** [75.29]	**3.120** [79.25]	—	87025-8
25	24	**3.744** [95.10]	**3.900** [99.06]	—	5-87025-0

Notes: [1]Markings on housing.
[2]No markings on housing.

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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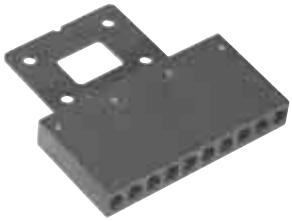
Dimensions are shown for reference purposes only. Specifications subject to change.

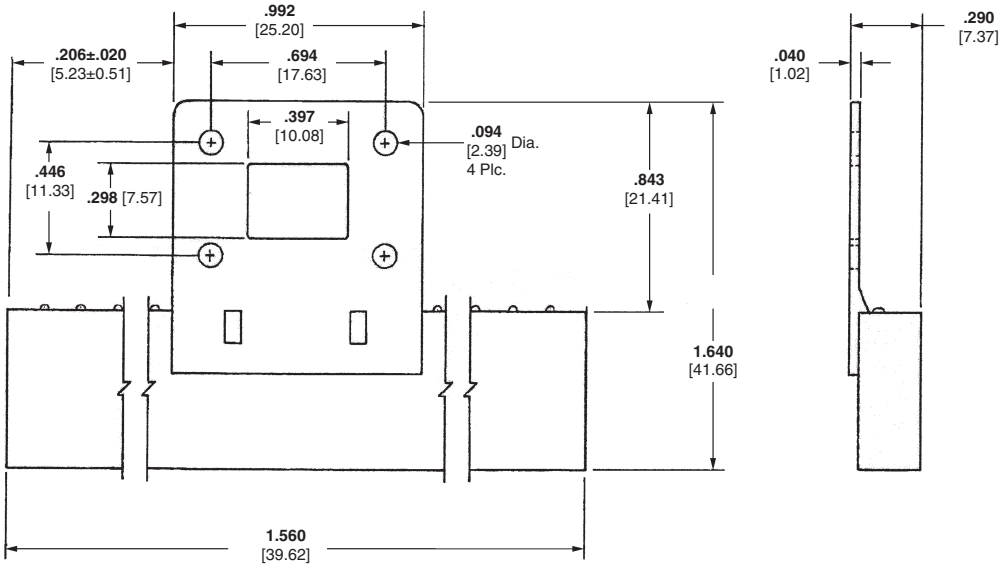
USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-1106-0803

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

Mod I Receptacle Housings, Standard Profile, Unkeyed, .031 x .062 [0.79 x 1.57] Centerline (Continued)

Single Row, .156 [3.96] Centers, With Strain Relief





10 Position Receptacle Housing, Part No. 1-102090-0

Material

Black thermoplastic, flame retardant, 94V-0 rated

Related Product Data

Contacts used with — page 290
Mate with —
Machine Applied Posts — page 294
Headers — pages 295-297
Performance Specifications — page 305

Technical Documents — page 305

Note: All part numbers are RoHS compliant.

Catalog 1307819
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Dimensions are in inches and millimeters unless otherwise specified. Values in brackets are metric equivalents.

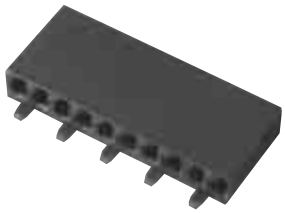
Dimensions are shown for reference purposes only. Specifications subject to change.

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Japan: 81-44-844-8013
UK: 44-8706-080-208a

Mod I Receptacle Housings, Low Profile, Keyed, .031 x .062 [0.79 x 1.57] Centerline

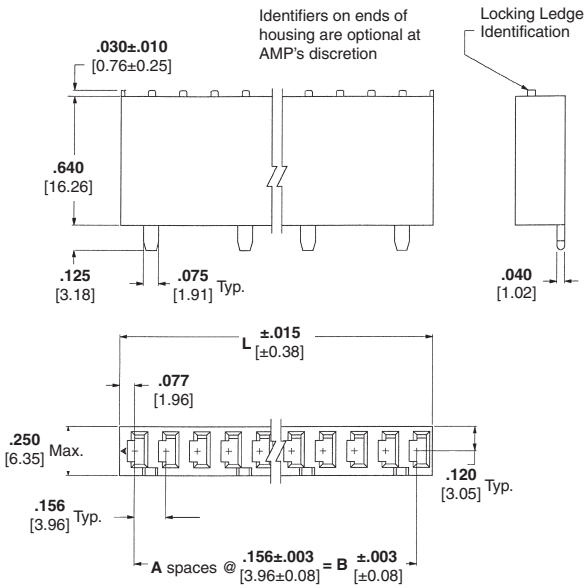
Single Row, .156 [3.96] Centers



Material
Black thermoplastic, flame retardant, 94V-0 rated

Related Product Data
Contacts used with — page 290
Mate with —
Headers — pages 295-297
Performance Specifications — page 305

Technical Documents — page 305

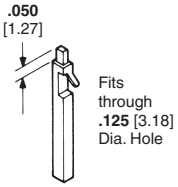


No. of Pos.	Dimensions			No. of Keys	Housing Part Nos. (Unstamped)[1]	Key Locations
	A	B	L			
2	1	**.156** [3.96]	**.312** [7.92]	1	87159-3	A
3	2	**.312** [7.92]	**.468** [11.89]	1	87159-4	A
4	3	**.468** [11.89]	**.624** [15.85]	2	87159-5	A,C
5	4	**.624** [15.85]	**.780** [19.81]	2	87159-1	A,D
6	5	**.780** [19.81]	**.936** [23.77]	3	87159-6	A,C,E
7	6	**.936** [23.77]	**1.092** [27.74]	3	87159-7	A,C,E
8	7	**1.092** [27.74]	**1.248** [31.70]	4	87159-8	A,C,E,G
9	8	**1.248** [31.70]	**1.404** [35.66]	3	87159-9	A,D,G
10	9	**1.404** [35.66]	**1.560** [39.62]	5	1-87159-0	A,C,E,G,J
11	10	**1.560** [39.62]	**1.716** [43.59]	4	1-87159-1	A,D,G,K
12	11	**1.716** [43.59]	**1.872** [47.55]	6	1-87159-2	A,C,E,G,J,L
13	12	**1.872** [47.55]	**2.028** [51.51]	4	87159-2	A,D,J,M
14	13	**2.028** [51.51]	**2.184** [55.47]	7	1-87159-3	A,C,E,G,J,L,N
15	14	**2.184** [55.47]	**2.340** [59.44]	5	1-87159-4	A,D,G,K,N
16	15	**2.340** [59.44]	**2.496** [63.40]	8	1-87159-5	A,C,E,G,J,L,N,Q
17	16	**2.496** [63.40]	**2.652** [67.36]	6	1-87159-6	A,D,G,K,N,R
18	17	**2.652** [67.36]	**2.808** [71.32]	6	1-87159-7	A,D,F,J,P,S
19	18	**2.808** [71.32]	**2.964** [75.29]	8	1-87159-8	B,D,F,J,L,N,Q,S
20	19	**2.964** [75.29]	**3.120** [79.25]	10	1-87159-9	A,C,E,G,J,L,N,Q,S,U
25	24	**3.744** [95.10]	**3.900** [99.06]	11	2-87159-4	A,C,E,H,K,M,Q,S,U,W,Y

[1]No marking on housing.

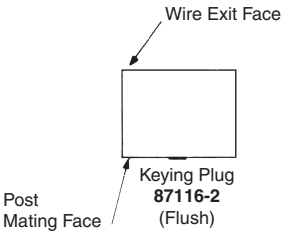
Keying Plug

Material — Natural Color Nylon

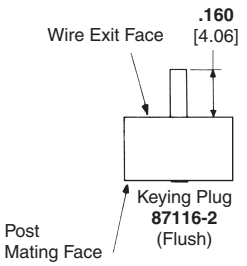


Part No. 87116-2

Keying Plug References



For Standard Housings



For Low Profile Housings

Note: All part numbers are RoHS compliant.

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

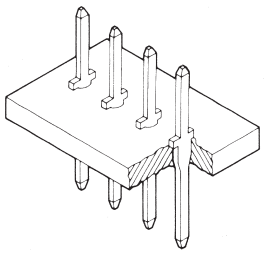
Dimensions are shown for reference purposes only. Specifications subject to change.

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

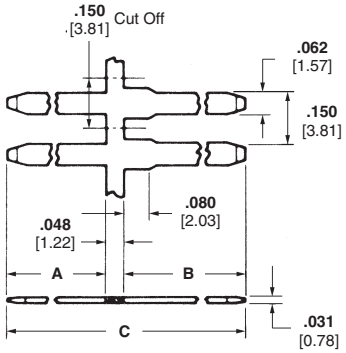
South America: 55-11-2103-6000
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-8706-080-208a

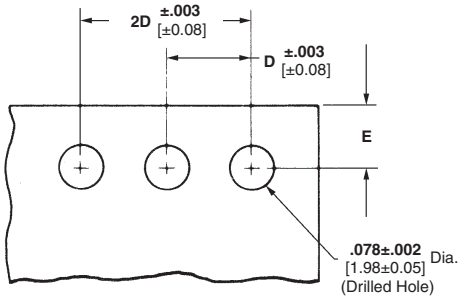
Mod I Posts, Machine Applied, .031 x .062 [0.79 x 1.57] Centerline

Straight Posts



Typical Assembly





Recommended Mounting Holes

Material and Finish

Brass, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

Related Product Data

Mate with —

Board Mount Receptacles — pages 285, 286

Board Mount Receptacle Assemblies — pages 287-289

Crimp Snap-In Receptacles and Housings — pages 290-292

Locking Clip Contacts & Housings — pages 298, 299 (see page 298 for recommended post length).

Application Tooling — pages 300-304

Performance Specifications — page 305

Technical Documents — page 305

D—Post centers may vary depending on requirements. Minimum nominal centerline spacing between adjacent contacts is .125 [3.18]; .003 [0.08] tolerances not to accumulate over length of board.

E—Post center location from edge of board may vary to satisfy application.

Dimensions			Finish	Part Nos.	
A	B	C		Strip Form[1]	Loose Piece[2]
.360 [9.14]	**.187** [4.75]	**.595** [15.11]	Plating A	86147-7	86182-7
			Plating B	5086147-2	5086182-2
.380 [9.65]	**.320** [8.13]	**.748** [19.00]	Plating A	1-86147-5	1-86182-5
			Plating B	5086147-9	5086182-9
.400 [10.16]	**.125** [3.18]	**.573** [14.55]	Plating A	4-86147-2	2-86182-9
			Plating B	3-5086147-7	2-5086182-5
.480 [12.19]	**.187** [4.75]	**.715** [18.16]	Plating A	1-86147-8	1-86182-8
			Plating B	2-5086147-2	2-5086182-2
.565 [14.35]	**.187** [4.75]	**.800** [20.32]	Plating A	86147-8	86182-8
			Plating B	5086147-1	5086182-1
.800 [20.32]	**.150** [3.81]	**.998** [25.35]	Plating A	1-86147-2	1-86182-2
			Plating B	1-5086147-0	1-5086182-0

[1] Packaging quantity of 20,000 per reel.
[2] Packaging quantity of 1,000 per bag.
Note: Strip form posts applied with Insertion Machine No. **3-457382-1**, includes power unit and applicator.

Note: All part numbers are RoHS compliant.

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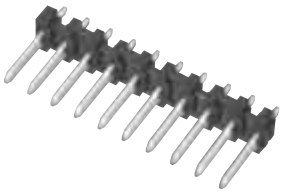
Dimensions are shown for reference purposes only. Specifications subject to change.

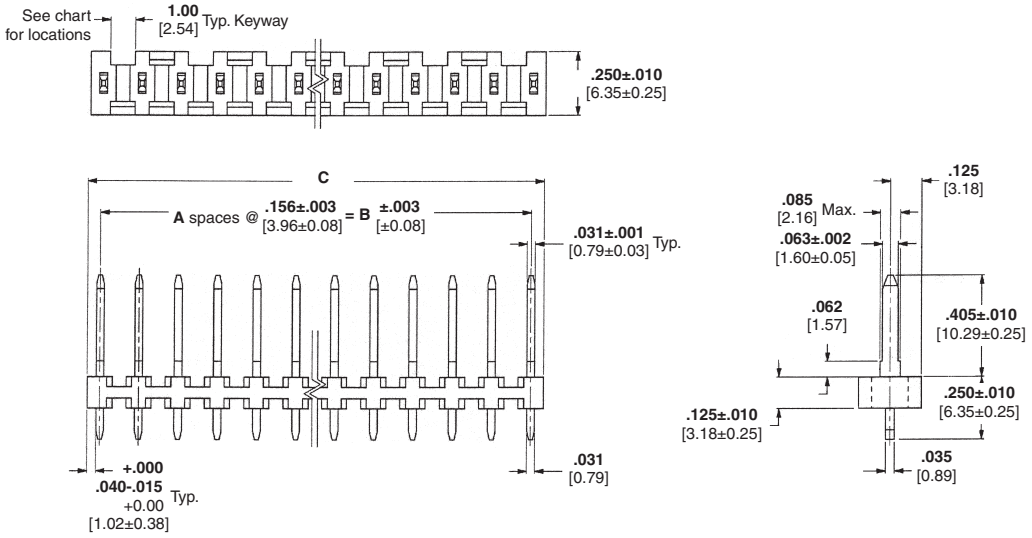
USA: 1-800-522-6752
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Mexico: 01-800-733-8926
C. America: 52-55-1106-0803

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

Mod I Headers, Straight Post, Keyed, .031 x .062 [0.79 x 1.57] Centerline

Single Row, .156 [3.96] Centers





Material and Finish

Housing — Black thermoplastic, 94V-0 rated

Posts — Brass, plated as follows:

Plating A — Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] min. nickel on entire post

Plating B — .000100-.000200 [0.00254-0.00508] tin over .000030 [0.00762] nickel on entire post

Related Product Data

Mate with —

Board Mount Receptacles — pages 285, 286

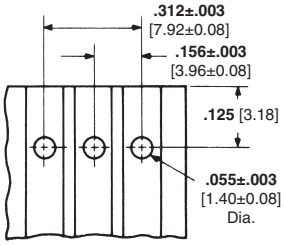
Board Mount Receptacle Assemblies — pages 287-289

Crimp Snap-In Receptacles and Housings — pages 290-292

Locking Clip Contacts & Housings — pages 298 & 299 (see page 298 for recommended post length).

Performance Specifications — page 305

Technical Documents — page 305



Recommended Board Layout



Keyway Locations (Ref only)

No. of Pos.	Dimensions A	B	C	No. of Keying Slots	Post Height D=.405 [10.29] Plating A	Plating B	Post Height D=.587 [14.91] Plating A	Plating B	Keyway Locations
2	1	**.156** [3.96]	**.267** [6.78]	1	85829-2	5-87160-4	87247-2	5-87262-2	A
3	2	**.312** [7.92]	**.423** [10.74]	1	85829-3	5-87160-5	87247-3	5-87262-3	A
4	3	**.468** [11.89]	**.579** [14.71]	2	85829-4	5-87160-6	87247-4	5-87262-4	A,C
5	4	**.624** [15.85]	**.735** [18.67]	2	85829-5	5-87160-1	87247-5	5-87262-5	A,D
6	5	**.780** [19.81]	**.891** [22.63]	3	85829-6	5-87160-7	87247-6	5-87262-6	A,C,E
7	6	**.936** [23.77]	**1.047** [26.59]	3	85829-7	5-87160-8	87247-7	5-87262-7	A,C,E,
8	7	**1.092** [27.74]	**1.203** [30.56]	4	85829-8	5-87160-9	87247-8	5-87262-8	A,C,E,G
9	8	**1.248** [31.70]	**1.359** [34.52]	3	85829-9	6-87160-0	87247-9	5-87262-9	A,D,G
10	9	**1.404** [35.66]	**1.515** [38.48]	5	1-85829-0	6-87160-1	1-87247-0	6-87262-0	A,C,E,G,J
11	10	**1.560** [39.62]	**1.671** [42.44]	4	1-85829-1	6-87160-2	1-87247-1	6-87262-1	A,D,G,K
12	11	**1.716** [43.59]	**1.827** [46.41]	6	1-85829-2	6-87160-3	1-87247-2	6-87262-2	A,C,E,G,J,L
13	12	**1.872** [47.55]	**1.983** [50.37]	4	1-85829-3	5-87160-2	1-87247-3	6-87262-3	A,D,J,M
14	13	**2.028** [51.51]	**2.139** [54.33]	7	1-85829-4	6-87160-4	1-87247-4	6-87262-4	A,C,E,G,J,L,N
15	14	**2.184** [55.47]	**2.295** [58.29]	5	1-85829-5	6-87160-5	1-87247-5	6-87262-5	A,D,G,K,N
16	15	**2.340** [59.44]	**2.451** [62.26]	8	1-85829-6	6-87160-6	1-87247-6	6-87262-6	A,C,E,G,J,L,N,Q
17	16	**2.496** [63.40]	**2.607** [66.22]	6	1-85829-7	6-87160-7	1-87247-7	6-87262-7	A,D,G,K,N,R
18	17	**2.652** [67.36]	**2.763** [70.18]	7	1-85829-8	6-87160-8	1-87247-8	6-87262-8	A,D,F,J,M,P,S
19	18	**2.808** [71.32]	**2.919** [74.14]	8	1-85829-9	6-87160-9	1-87247-9	6-87262-9	B,D,F,J,L,N,Q,S
20	19	**2.964** [75.29]	**3.075** [78.11]	10	2-85829-0	7-87160-0	2-87247-0	7-87262-0	A,C,E,G,J,L,N,Q,S,U
21	20	**3.120** [79.25]	**3.231** [82.07]	7	2-85829-1	7-87160-1	2-87247-1	7-87262-1	A,D,G,K,N,R,U
22	21	**3.276** [83.21]	**3.387** [86.03]	11	2-85829-2	7-87160-2	2-87247-2	7-87262-2	A,C,E,G,J,L,N,Q,S,U,W
23	22	**3.432** [87.17]	**3.543** [89.99]	8	2-85829-3	7-87160-3	2-87247-3	7-87262-3	A,D,G,K,N,R,U,X
24	23	**3.588** [91.14]	**3.699** [93.95]	12	2-85829-4	7-87160-4	2-87247-4	7-87262-4	A,C,E,G,J,L,N,Q,S,U,W,Y
25	24	**3.744** [95.10]	**3.855** [97.92]	11	2-85829-5	7-87160-5	2-87247-5	7-87262-5	A,C,E,H,K,M,Q,S,U,W,Y

Note: All part numbers are RoHS compliant.

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

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UK: 44-8706-080-208a

Mod I Headers, Straight Post, Keyed, .031 x .062 [0.79 x 1.57] Centerline (Continued)

No. of Pos.	Dimensions			No. of Keying Slots	Post Height D=.750 [19.05]		Post Height D=1.187 [30.15]		Post Height D=1.310 [33.27]		Keyway Locations
	A	B	C		Plating A	Plating B	Plating A	Plating B	Plating A	Plating B	
2	1	**.156** [3.96]	**.267** [6.78]	1	85923-2	5-85875-7	87283-2	—	85839-2	5-85840-2	A
3	2	**.312** [7.92]	**.423** [10.74]	1	85923-3	5-85875-8	87283-3	5-86207-2	85839-3	5-85840-3	A
4	3	**.468** [11.89]	**.579** [14.71]	2	85923-4	5-85875-1	87283-4	5-86207-9	85839-4	5-85840-4	A,C
5	4	**.624** [15.85]	**.735** [18.67]	2	85923-5	5-85875-2	87283-5	5-86207-3	85839-5	5-85840-5	A,D
6	5	**.780** [19.81]	**.891** [22.63]	3	85923-6	5-85875-9	87283-6	—	85839-6	5-85840-6	A,C,E
7	6	**.936** [23.77]	**1.047** [26.59]	3	85923-7	6-85875-0	87283-7	—	85839-7	5-85840-7	A,C,E,
8	7	**1.092** [27.74]	**1.203** [30.56]	4	85923-8	6-85875-1	87283-8	—	85839-8	5-85840-8	A,C,E,G
9	8	**1.248** [31.70]	**1.359** [34.52]	3	85923-9	5-85875-3	87283-9	—	85839-9	5-85840-9	A,D,G
10	9	**1.404** [35.66]	**1.515** [38.48]	5	1-85923-0	6-85875-2	1-87283-0	—	1-85839-0	6-85840-0	A,C,E,G,J
11	10	**1.560** [39.62]	**1.671** [42.44]	4	1-85923-1	6-85875-3	1-87283-1	—	1-85839-1	6-85840-1	A,D,G,K
12	11	**1.716** [43.59]	**1.827** [46.41]	6	1-85923-2	5-85875-4	1-87283-2	—	1-85839-2	6-85840-2	A,C,E,G,J,L
13	12	**1.872** [47.55]	**1.983** [50.37]	4	1-85923-3	6-85875-4	1-87283-3	—	1-85839-3	6-85840-3	A,D,J,M
14	13	**2.028** [51.51]	**2.139** [54.33]	7	1-85923-4	6-85875-5	1-87283-4	—	1-85839-4	6-85840-4	A,C,E,G,J,L,N
15	14	**2.184** [55.47]	**2.295** [58.29]	5	1-85923-5	6-85875-6	1-87283-5	—	1-85839-5	6-85840-5	A,D,G,K,N
16	15	**2.340** [59.44]	**2.451** [62.26]	8	1-85923-6	6-85875-7	1-87283-6	—	1-85839-6	6-85840-6	A,C,E,G,J,L,N,Q
17	16	**2.496** [63.40]	**2.607** [66.22]	6	1-85923-7	6-85875-8	1-87283-7	—	1-85839-7	6-85840-7	A,D,G,K,N,R
18	17	**2.652** [67.36]	**2.763** [70.18]	7	1-85923-8	6-85875-9	1-87283-8	—	1-85839-8	6-85840-8	A,D,F,J,M,P,S
19	18	**2.808** [71.32]	**2.919** [74.14]	8	1-85923-9	7-85875-0	1-87283-9	—	1-85839-9	6-85840-9	B,D,F,J,L,N,Q,S
20	19	**2.964** [75.29]	**3.075** [78.11]	10	2-85923-0	7-85875-1	2-87283-0	—	2-85839-0	7-85840-0	A,C,E,G,J,L,N,Q,S,U
21	20	**3.120** [79.25]	**3.231** [82.07]	7	2-85923-1	7-85875-2	2-87283-1	—	2-85839-1	7-85840-1	A,D,G,K,N,R,U
22	21	**3.276** [83.21]	**3.387** [86.03]	11	2-85923-2	7-85875-3	2-87283-2	—	2-85839-2	7-85840-2	A,C,E,G,J,L,N,Q,S,U,W
23	22	**3.432** [87.17]	**3.543** [89.99]	8	2-85923-3	5-85875-5	2-87283-3	—	2-85839-3	7-85840-3	A,D,G,K,N,R,U,X
24	23	**3.588** [91.14]	**3.699** [93.95]	12	2-85923-4	7-85875-4	2-87283-4	—	2-85839-4	7-85840-4	A,C,E,G,J,L,N,Q,S,U,W,Y
25	24	**3.744** [95.10]	**3.855** [97.92]	11	2-85923-5	7-85875-5	2-87283-5	—	2-85839-5	7-85840-5	A,C,E,H,K,M,Q,S,U,W,Y

Note: All part numbers are RoHS compliant.

Catalog 1307819
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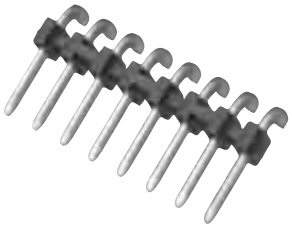
Dimensions are shown for reference purposes only. Specifications subject to change.

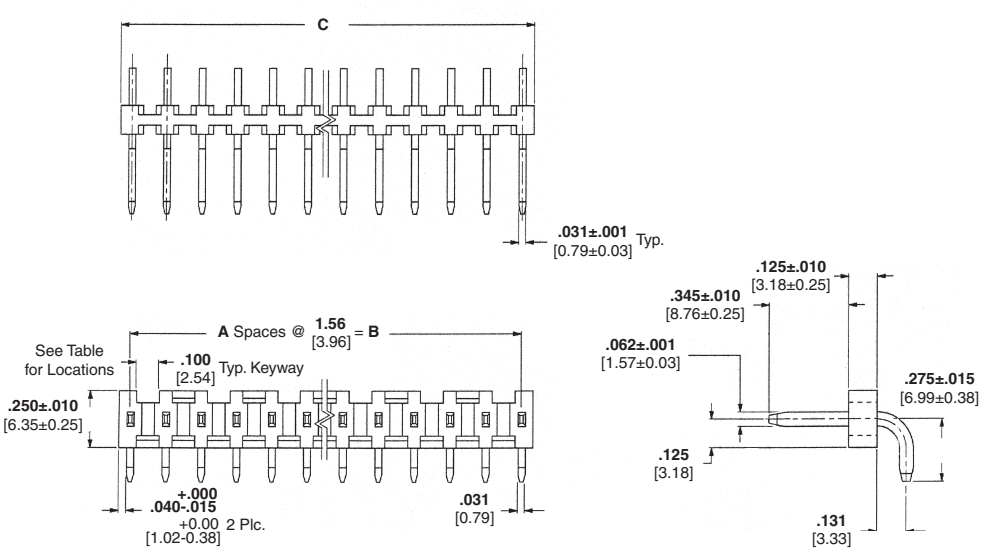
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UK: 44-8706-080-208a

Mod I Headers, Right-Angle Post, Keyed, .031 x .062 [0.79 x 1.57] Centerline

Single Row, .156 [3.96] Centers







Keyway Locations (Ref Only)

Material and Finish

Housing — Black thermoplastic, 94V-0 rated

Posts — Brass, plated as follows:

Plating A — Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B — .000015 [0.00038] gold over .000050 [0.00127] nickel on entire post

Plating C — .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

Related Product Data

Mate with —
Board Mount Receptacles — pages 285, 286

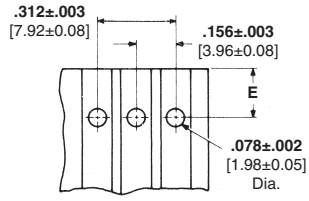
Board Mount Receptacle Assemblies — pages 287-289

Crimp Snap-In Receptacles and Housings — pages 290-292

Locking Clip Contacts and Housings — pages 298 & 299 (see page 298 for recommended post length).

Performance Specifications — page 305

Technical Documents — page 305



Recommended Board Layout

E Dimension

.345 [8.76] Post Height — .250 [6.35] for mounting header flush with board edge; .595 [15.11] for supporting mating connector on board.

.500 [12.70] Post Height — .250 [6.35] for mounting header flush with board edge; .750 [19.05] for supporting mating connector on board.

No. of Pos.	Dimensions			No. of Keying Slots	Post Height D=.345 [8.76]		Post Height D=.500 [12.70]		Keyway Locations
	A	B	C		Plating A	Plating C	Plating B	Plating C	
2	1	**.156** [3.96]	**.267** [6.78]	1	87654-2	5-87655-2	87258-2	5-87194-1	A
3	2	**.312** [7.92]	**.423** [10.74]	1	87654-3	5-87655-3	87258-3	5-87194-2	A
4	3	**.468** [11.89]	**.579** [14.71]	2	87654-4	5-87655-4	87258-4	5-87194-3	A,C
5	4	**.624** [15.85]	**.735** [18.67]	2	87654-5	5-87655-5	87258-5	5-87194-4	A,D
6	5	**.780** [19.81]	**.891** [22.63]	3	87654-6	5-87655-6	87258-6	5-87194-5	A,C,E
7	6	**.936** [23.77]	**1.047** [26.59]	3	87654-7	5-87655-7	87258-7	5-87194-6	A,C,E
8	7	**1.092** [27.74]	**1.203** [30.56]	4	87654-8	5-87655-8	87258-8	5-87194-7	A,C,E,G
9	8	**1.248** [31.70]	**1.359** [34.52]	3	87654-9	5-87655-9	87258-9	5-87194-8	A,D,G
10	9	**1.404** [35.66]	**1.515** [38.48]	5	1-87654-0	6-87655-0	1-87258-0	5-87194-9	A,C,E,G,J
11	10	**1.560** [39.62]	**1.671** [42.44]	4	1-87654-1	6-87655-1	1-87258-1	6-87194-0	A,D,G,K
12	11	**1.716** [43.59]	**1.827** [46.41]	6	1-87654-2	6-87655-2	1-87258-2	6-87194-1	A,C,E,G,J,L
13	12	**1.872** [47.55]	**1.983** [50.37]	4	1-87654-3	6-87655-3	1-87258-3	6-87194-2	A,D,J,M
14	13	**2.028** [51.51]	**2.139** [54.33]	7	1-87654-4	6-87655-4	1-87258-4	6-87194-3	A,C,E,G,J,L,N,
15	14	**2.184** [55.47]	**2.295** [58.29]	5	1-87654-5	6-87655-5	1-87258-5	6-87194-4	A,D,G,K,N
16	15	**2.340** [59.44]	**2.451** [62.26]	8	1-87654-6	6-87655-6	1-87258-6	6-87194-5	A,C,E,G,J,L,N,Q
17	16	**2.496** [63.40]	**2.607** [66.22]	6	1-87654-7	6-87655-7	1-87258-7	6-87194-6	A,D,G,K,N,R
18	17	**2.652** [67.36]	**2.763** [70.18]	7	1-87654-8	6-87655-8	1-87258-8	6-87194-7	A,D,F,J,M,P,S
19	18	**2.808** [71.32]	**2.919** [74.14]	8	1-87654-9	6-87655-9	1-87258-9	6-87194-8	B,D,F,J,L,N,Q,S
20	19	**2.964** [75.29]	**3.075** [78.11]	10	2-87654-0	7-87655-0	2-87258-0	6-87194-9	A,C,E,G,J,L,N,Q,S,U
21	20	**3.120** [79.25]	**3.231** [82.07]	7	2-87654-1	7-87655-1	2-87258-1	7-87194-0	A,D,G,K,N,R,U
22	21	**3.276** [83.21]	**3.387** [86.03]	11	2-87654-2	7-87655-2	2-87258-2	7-87194-1	A,C,E,G,J,L,N,Q,S,U,W
23	22	**3.432** [87.17]	**3.543** [89.99]	8	2-87654-3	7-87655-3	2-87258-3	7-87194-2	A,D,G,K,N,R,U,X
24	23	**3.588** [91.14]	**3.699** [93.95]	12	2-87654-4	7-87655-4	2-87258-4	7-87194-3	A,C,E,G,J,L,N,Q,S,U,W,Y
25	24	**3.744** [95.10]	**3.855** [97.92]	11	2-87654-5	7-87655-5	2-87258-5	7-87194-4	A,C,E,H,K,M,Q,S,U,W,Y

Note: All part numbers are RoHS compliant.

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UK: 44-8706-080-208a

Locking Clip Contacts for .031 x .062 [0.79 x 1.57] Posts, .031 x .062 [0.79 x 1.57] Centerline

Wire Crimp Contacts with Insulation Support

Material and Finish

Contact Body — Phosphor bronze, plated as follows:

Plating A — Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

Plating B — .000100 [0.00254] min. tin over .000050 [0.00127] nickel on entire contact

Contact Spring — Stainless steel

Related Product Data

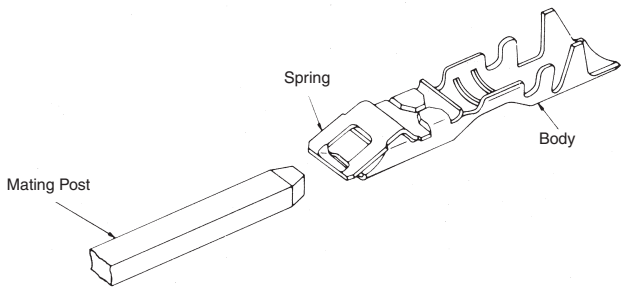
Mate with —
Machine Applied Posts — page 294
Headers (.500 Post Height Only) — pages 295-297 (see recommended post length below)*
Housings used in — page 299
Application Tooling — pages 300-304
Performance Specification — page 305

Technical Documents — page 305



Extraction Tool Part No. 91104-1

Instruction Sheet
408-7678



Wire Size Range AWG [mm²]	Ins. Dia. Range	Finish	Contact Part Nos. Strip Form	Contact Part Nos. Loose Piece
22-18 [0.3-0.9]	**.050-.0100** [1.27–2.54]	Plating A	87269-2	87278-2
		Plating B	5-87269-1	5-87278-1

Wire Size Range AWG [mm²]	Applicator Part Number	Applicator Type	Applicator Used With Machine	Premium CERTI-CRIMP Hand Tool Part Number
22-18 [0.3-0.9]	466007-2	HDM	Model "K" (AMP-O-LECTRIC)[1]	90308-1
	466950-2	SCA	Stripper/Crimper (AMP-O-MATIC)	

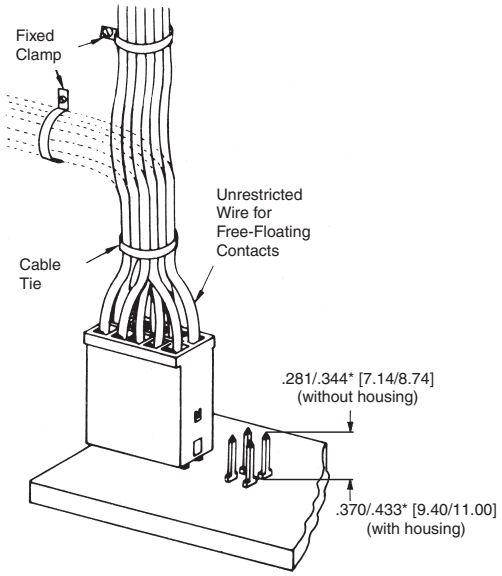
[1]AMP-O-LECTRIC KII Machine. Applicators also available for AMPOMATOR Lead Making Machines. Consult Tyco Electronics.

Note: These contacts must be crimped in accordance with Tyco Electronics Specification No. 114-25008 in order to function properly in a connector housing.

Extraction Tool **Part No. 91104-1** is used for removing individual contacts from connector housings and for detaching contacts from mating posts.

Wire Harnessing

If necessary, wires can be grouped with cable ties and secured to a panel with fixed clamps. However, locking clip contacts must be free to float within the connector housings to allow proper extraction. Therefore, harnessing hardware or the use of multiple terminations per contact must not restrict the free-floating action of contacts in the housing. For more information, request Insulating and Bundling Products Catalog 124132.



*Dimension defines .031 x .062 [0.79 x 1.57] portion of post.
If post is longer than maximum specified, post tip may butt against wire ends.

Note: All part numbers are RoHS compliant.

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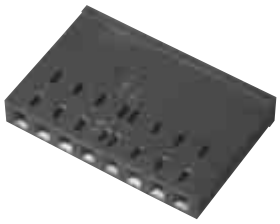
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Locking Clip Connector Housings, .031 x .062 [0.79 x 1.57] Centerline

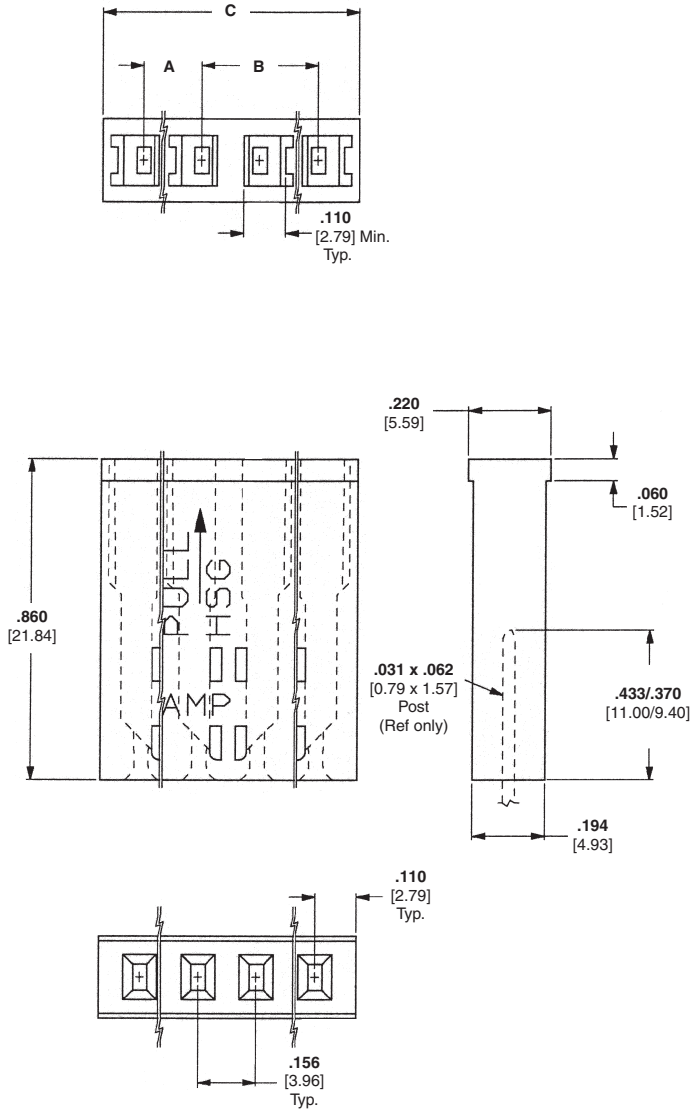
Single Row, .156 [3.96] Centers



Material and Finish
Black thermoplastic, 94V-0 rated

Related Product Data
Contacts used with — page 298
Mate with —
Machine Applied Posts — page 294
Headers — pages 295-297 (see page 298 for recommended post length)
Performance Specifications — page 305

Technical Documents —
page 305



No. of Pos.	Dimensions A	B	C	Housing Part Nos. UnKeyed	Keyed	Keyed Positions on Mating Face
1	—	—	**.200** [5.08]	87270-1	—	—
2	—	—	**.376** [9.55]	87270-2	—	—
3	**.156** [3.96]	**.156** [3.96]	**.532** [13.51]	1-87270-3	—	—
3 of 4	**.156** [3.96]	**.312** [7.92]	**.688** [17.48]	—	87270-3	□□■□
4				87270-4	—	—
4 of 5	**.312** [7.92]	**.312** [7.92]	**.844** [21.44]	—	1-87270-0	□□□■□
5				1-87270-4	—	—
5 of 6	**.312** [7.92]	**.468** [11.89]	**1.000** [25.40]	—	1-87270-2	□□□□■□
6				87270-5	—	—
6 of 7	**.468** [11.89]	**.468** [11.89]	**1.156** [29.36]	—	1-87270-1	□□□□■□□
7				1-87270-5	—	—
8	**.468** [11.89]	**.624** [15.85]	**1.312** [33.32]	87270-6	—	—
9	**.624** [15.85]	**.624** [15.85]	**1.468** [37.29]	1-87270-6	—	—
10	**.624** [15.85]	**.780** [19.81]	**1.624** [41.25]	87270-7	—	—
11	**.780** [19.81]	**.780** [19.81]	**1.780** [45.21]	1-87270-7	—	—
12	**.780** [19.81]	**.936** [23.77]	**1.936** [49.17]	87270-8	—	—

■Indicates "closed cavity". No post entry hole in this position.
Notes: 1. All housings listed above will accept Locking Clip Contacts No. 87269 and 87278, refer to page 298
2. Refer to Tyco Electronics Instruction Sheet 408-7676 for proper contact orientation within the housings.

Note: All part numbers are RoHS compliant.

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Application Tooling

For Crimp Snap-In Receptacles and Locking Clip Contacts

Side-Feed Heavy-Duty Miniature Applicators (Coded HDM)



Interchangeable applicators for crimping products reeled side-by-side on single or dual carrier strips (primarily closed-barrel terminals and open-barrel contacts). Similar design as the end-feed version. All side-feed applicators include a wire stop to help correctly position the wire end in the crimping target area.

For more information, request Instruction Sheet **408-8040**.

AMP-O-LECTRIC Model "G" Terminating Machines, 354500-1, -9, -11



Semiautomatic bench machines for crimping reeled terminals and contacts, featuring a quiet and reliable direct motor drive, microprocessor controls for ease of setup and operation, and guarding and lighting designed for operator convenience and safety. All models are equipped with either manual or automatic precision adjustment of crimp height. Machine-mounted sensors are available for crimp quality monitoring using conventional miniature-style applicators.

Specifications

Width — 18.7-25.3 [475-643] depending on applicator type

Depth — 21.5-28.1 [546-713] depending on applicator type

Height — 20 [508]

Weight — 240 lb [110 kg]

Electrical — 120 or 220 VAC, 50 or 60 Hz; 310 VA

Air — 90-110 psi [6.21-7.59 bar], 6 scfm [0.00282 m^3/s] when required with air-feed applicators

Wire Range — 26-10 AWG [0.12-6 mm^2] solid or stranded, depending on product applied

For more information, request Catalog **65828**, Video **198116**, Catalog **82275 [Crimp Quality Monitor (CQM)],** Video **198094.**

AMPOMATOR CLS IV+ Lead-Making Machines, 356500-1, -2, 1213400-1, -2



Fully-automatic machines that measure, cut, strip and terminate single leads. Microprocessor-controlled, and programmed and operated using an easy-to-follow, menu-driven touchscreen. Features include direct-drive terminating units with precision crimp height adjustment, fully programmable setups, wire runout and splice detection, and motorized pre-feed with wire straightener. Crimp quality monitoring is also available.

Specifications

Width — 159 [4 040]

Depth — 68 [1 730]

Height — 86 [2 185] with 24 [610] dia. reel

Weight — 2 000 lb [907 kg]

Electrical — 220 VAC, 50 or 60 Hz, single phase, 25 A, with neutral and ground

Air — 90 psi [6.21 bar], 15 scfm [0.0071 m^3/s] sustained

Wire Range — 26-10 AWG [0.12-6 mm^2] stranded, 26-16 AWG [0.12-1.4 mm^2] solid

Lead Lengths — 3-90 [76.2-2 285], 90-1 000 [2 285-25 400] with long lead conveyors

For more information, request Catalog **124324**, Video **198142** (NTSC)**, 199609** (PAL).

Note: All part numbers are RoHS compliant.

Note: For additional tooling options, contact Tyco Electronics or reference the Tyco Electronics web site.

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UK: 44-8706-080-208a

Application Tooling (Continued)

For Crimp Snap-In Receptacles and Locking Clip Contacts (Continued)

AMP-O-MATIC Stripper-Crimper Machines, 854040-3, -4



Semiautomatic bench crimping machines that also strip the wire, and are therefore used for terminating jacketed cable. Feature manual precision adjustment of crimp height, keyed strip blades for faster, more accurate setups, and an efficient scrap removal system. All adjustments can be made from the front of the machines without special tools. Available with crimp quality monitoring.

Specifications

Width—14 [355]

Depth—18 [457]

Height—33 [838] without reel

Weight—150 lb [68 kg]

Electrical—120 VAC, 50 or 60 Hz, .5 A

Air—80-100 psi [5.52-6.90 bar], 3.5 scfm [0.00165 m^3/s]

Wire Range—32-14 AWG [0.03-2 mm^2]

For more information, request Catalog **65004**, Video **198075,** Catalog **82275 [Crimp Quality Monitor (CQM)],** Video **198094.**

Stripper-Crimper Applicators (coded SCA)



Interchangeable applicators for crimping products in AMP-O-MATIC Stripper-Crimper Machines. Consist of separate ram and lower tooling assemblies. Similar dial-in settings for different wire sizes and insulation diameters as HDM applicators. Available with sensors for use with the Crimp Quality Monitor.

For more information, request Catalog **65004 (AMP-O-MATIC Stripper-Crimper Machines)**, Catalog **82275 [Crimp Quality Monitor (CQM)]**.

Kappa 235, Automatic Cut and Strip, 3-547178-1



The Kappa 235 has the capability of processing wires with a cross section of up to 4 AWG and an outside diameter of 0.59 inch. Options include an inner conductor processing kit for multiconductor cables and a flat ribbon cable kit.

Specifications

Width—25 [630]

Depth—16 [490]

Height—13.4 [370]

Weight—95 lb [44 kg]

Wire Cross-Sections—24-4 AWG [0.22-25 mm^2]

Flat Ribbon Cables—width up to 40mm

Length Range—0.04”-328ft [1mm - 99.99m] (+/- 0.2%)

Electrical—110/230 V - 50/60Hz, switches automatically

Cosmic 927R Micro-Cable Stripper



The Cosmic 927R Micro-Cable Stripper was developed to reliably strip various insulation materials and micro-cable. From conductor diameter 36 AWG to 10 AWG, the stripping diameter display can be set to within 0.1mm increments.

Thus optimal stripping quality is guaranteed and damage to the conductor is eliminated.

Note: All part numbers are RoHS compliant.

Note: For additional tooling options, contact Tyco Electronics or reference the Tyco Electronics web site.

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Application Tooling (Continued)

For Crimp Snap-In Receptacles and Locking Clip Contacts (Continued)

CERTI-CRIMP Straight Action Hand Tools (SAHT)



Premium grade hand tools. Feature ratchet control to provide complete crimp cycle. Die sets close in a straight line. Include a contact locator and wire stop, plus an insulation crimp adjustment lever, when applicable. Approximate weight 1.3 lb [0.59 kg]

All CERTI-CRIMP head assemblies / dies, have multiple power options available. The accompanying diagram outlines those power options. See catalogs 1654714 (SDE Electric Terminator), 124208 (626 Pneumatic Tool System) and 1773381(Battery-Powered Crimp Tool Kits) for more information.

For more information, request Catalog **65780**.



PRO-CRIMPER III Hand Tool



Commercial grade hand tool for crimping various products. Features ratchet control to provide complete crimp cycle. Accepts both pinned- and shouldered-style die sets. Locators are provided with pinned-style die sets for proper contact and wire positioning, and to help minimize contact rotation and bending during crimping. Approximate weight 1.3 lb [0.60 kg].

All PRO-CRIMPER head assemblies / dies, have multiple power options available. The accompanying diagram outlines those power options. See catalogs 1654714 (SDE Electric Terminator), 124208 (626 Pneumatic Tool System) and 1773381(Battery-Powered Crimp Tool Kits) for more information.

Instruction Sheet
408-9930



Note: For additional tooling options, contact Tyco Electronics or reference the Tyco Electronics web site.

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Application Tooling (Continued)

For Board Mount Receptacles and Machine Applied Posts

Modular Insertion System (MIS) Bench Machines, 217600 Series, 662820 Series (shown)



For Board Mount Receptacles

Bench machines for inserting a variety of products into pc boards. Uses the same interchangeable insertion heads as the Comp-U-Sertor II Machines. Series 217600 machines feature a manually-operated X-Y positioning fixture, plus a locator spotlight. The machine cycles when the board hole is placed on the anvil and both triggers on the dual handles attached to the X-Y fixture are depressed. Series 662820 machines, without board fixturing, cycle automatically when the hole is properly located. A stabilizing disk over the anvil helps keep the board level.

This benchtop insertion machine installs contacts into PC boards at rates to 2000 per hour. A spotlight highlights the insertion area, and lower tooling assures precise board location. The machine is activated by a foot pedal.

Specifications

Width — 18 [457]
Depth — 24 [610]
Height — 18 [457]
Weight — 250 lb [113 kg]
Electrical — 120 to 220 VAC, 50 or 60 Hz (217600); 120 or 240 VAC, 60 Hz, single phase, 120 VA (662820)
Air — 80 psi [5.52 bar] min., 15 scfm [0.00708 m^3/s] min.
Insertable Area — 18 x 22 [457 x 559] max.
For more information, request Catalog **296059**.

P300 Automatic Insertion Machine



Automatic machine for inserting a variety of contacts into pc boards (PCBs). Equipped with an insertion tool (comprised of a product-specific insertion head, an anvil, and a product feed mechanism). Stepper-motor driven X-Y table positions PCBs under insertion head. Surface Mount Equipment Manufacturers Association (SMEMA) compatible inline PCB Insertion Station for posts, tabs, receptacles or sockets. Stand-alone unit is field upgradeable to Pass Through. Mounts up to four Tyco Electronics pneumatic insertion heads. Modem diagnostics standard, vision system optional. Control panel used to program and monitor entire insertion process.

Specifications

Width — 57.5 [1 460]
Depth — 64.5 [1 640]
Height — 60 [1 520]
Weight — Depending on configuration
Electrical — 110 V, 60 Hz
Air — 87 psi [6 bar]
Insertable Area — 24 x 16 [600 x 400]
For more information, contact Tyco Electronics.

Note: All part numbers are RoHS compliant.

Note: For additional tooling options, contact Tyco Electronics or reference the Tyco Electronics web site.

Catalog 1307819
Revised 8-08

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: 44-8706-080-208a

Application Tooling (Continued)

For Board Mount Receptacles and Machine Applied Posts (Continued)

P350 Pin Insertion Machine



The P350 is a fully automatic inline pin insertion machine capable of applying reeled pins, tabs, receptacles and similar products into PCBs. With inline operation, an automatic tool changer and insertion rates up to 5 per second, it is focused at fully automatic high speed operation to maximize throughput while minimizing costly scrap.

A servo powered XY table positions the PCB under a central drive station at high speed. The tool changer can hold up to 3 insertion heads each capable of applying a different product. A unique rotary insertion finger allows the application of products at up to 7 different angles without rotating the PCB. This allows the P350 to apply product at different angles without a reduction in insertion rate or the potential positioning error associated with PCB rotation. Icon driven software with touch screen provides a simple to use, intuitive operator interface.

The P350 provides a wide range of solutions for pin insertion applications. Quick change tooling packs, and a wide range of options make it a flexible high speed platform.

Specifications

Width — 102 [2600]
Depth — 118 [3000]
Height — 87 [2200]
Weight — approx 3500 lb [1600 kg]
Electrical — 230 V, 50-60 Hz, 10 A
Air — 600 kPa dried air
Max. Board Size — 17.5 x 17.5 [450 x 450]

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Revised 8-08

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UK: 44-8706-080-208a

Performance Specifications

The electrical, mechanical and environmental characteristics of the AMPMODU .031 x .062 [0.79 x 1.57] Interconnection System are listed below:

Mechanical Characteristics

Contact Durability

Plating	Receptacles		Locking Clip Contacts
	Standard Pressure	High Pressure	
.000016 [0.00041] Min. Tin	75 Cycles	25 Cycles	N/A
.000079 [0.00201] Min. Tin	75 Cycles	25 Cycles	N/A
.000100 [0.00254] Min. Tin	N/A	N/A	25 Cycles
.000015 [0.00038] Gold	75 Cycles	50 Cycles	25 Cycles
.000030 [0.00076] Gold	200 Cycles	100 Cycles	N/A

Electrical Characteristics

Contact Current Rating —
5 amperes max. for single contact in free air, could vary due to ambient temperature, wire size and duty cycles.

Contact Resistance —
12 milliohms at 100 ma and 50 mv open circuit.

Dielectric Rating —
At Sea Level – 1200 VAC between contacts on .156 [3.96] centers for 1 minute.

Insulation Resistance — 5 x 10^3 megohms (initial)

Connector Durability

Receptacles	
Mating	– 16 oz. [4.45N] max. per contact after 3 mating cycles (standard pressure)
	–30 oz. [8.34N] max. per contact after 3 mating cycles (high pressure, gold)
	–60 oz. [16.68N] max. per contact after 3 mating cycles (high pressure, tin)
Unmating	– 1 oz. [0.28N] min. per contact after 3 mating cycles (standard pressure)
	3 oz. [0.83N] min. per contact after 3 mating cycles (high pressure)
Locking Clip Contacts	
Mating	– 4 lb. [17.79N] max. per contact after 3 mating cycles
Unmating	– 2 lb. [8.90N] min. per contact after 3 mating cycles

Environmental Characteristics

Operating Temperature — -65°C to 105°C [-85°F to 221°F] (Gold Plated)
-65°C to 60°C [-85°F to 140°F] (Tin Plated)

Technical Documents

Various technical documents are available for your use:

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineer.

108-25016 Interconnection System, Standard Pressure
108-25025 Interconnection System, High Pressure, Gold
108-25025-1 Interconnection System, High Pressure, Tin
108-36029 Locking Clip Connectors

Application Specifications describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-25000 Crimp Snap-In Receptacle Contacts
114-25004 Board Mount Receptacle Contacts
114-25008 Locking Clip Contacts
114-25011 Machine Applied Straight Posts

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

408-7308 Clinching Procedures for Header Assemblies
408-7411 Suggestions for Wave Soldering AMPMODU Receptacles
408-7594 Tyco Electronics Hand Tool 90274-2 for Crimping Crimp Snap-In 18-22 AWG Contacts
408-7750 Tyco Electronics Hand Tool 90328-1 for Crimping Crimp Snap-In Contacts (22-26 AWG)
408-7676 AMPMODU Locking Clip Connectors and Contacts
408-7671 Tyco Electronics Hand Tool 90308-1 for Crimping Locking Clip Contacts
408-7678 Tyco Electronics Extraction Tool 91104-1 for Locking Clip Contacts
408-7981 Clinching Procedures for Receptacle Assemblies
408-9451 Tyco Electronics Extraction Tool 843473-1 for Crimp Snap-In Receptacles

Note: All part numbers are RoHS compliant.

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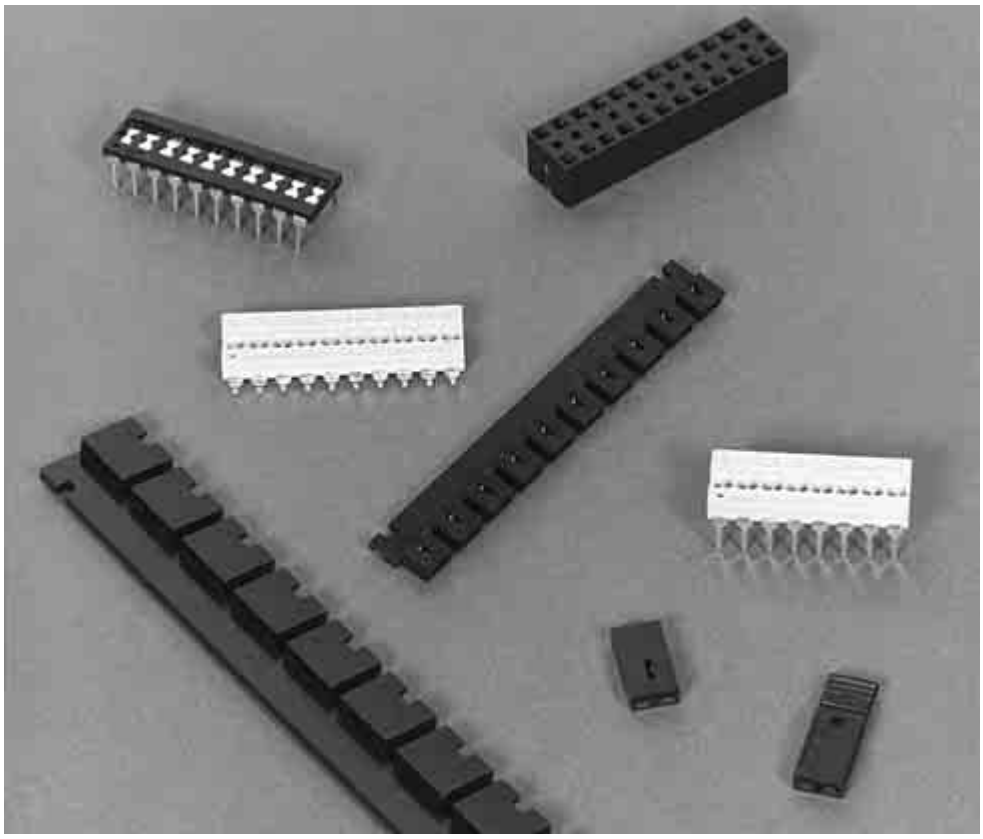
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Shunts

Product Facts

- **7600 Series Programmable Shunts use conventional .100 x .300 [2.54x7.62] DIP leg spacing**
- **Post Shunts are used to common pairs of .025 [0.64] square posts, .025 [0.64] diameter round posts and .022 x .026 [0.56 x 0.66] formed posts**



Tyco Electronics offers a variety of high quality shunts for low cost manual programming. Tyco Electronics 7600 Series Programmable Shunts are designed on the standard .100 x .300 [2.54 x 7.62] DIP spacing.

Tyco Electronics DIP Shunts are a highly reliable, low cost means of manually programming various types of electrical/electronic equipment. The shunt consists of a series of conductive straps packaged in a DIP configuration. The straps can be retained intact for a closed circuit or broken with a hand tool to produce an open circuit.

Tyco Electronics Post Shunts mate with any common pairs of square, rectangular and round posts. Post shunts come in two-position low profile, 2 mm miniature, tandem spring, dual beam, and multiposition versions.

Among the options available are choices of gold or tin plating, beryllium copper or phosphor bronze contact material and shunts with 94V-0 rated housing spaces on .079 [2.00], .100 [2.54] and .200 [5.08] centers with the low profile series requiring only .250 [6.35] clearance from the pc board.

All Tyco Electronics shunts feature one-piece construction for high reliability. All have high normal forces for excellent electrical continuity. For added reliability, Tandem Spring and Dual Beam Shunts have two points of contact in each receptacle.

Catalog 1307819
Revised 8-08

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Dual In-Line Package (DIP) Shunts — 7600 Series

Standard Shunt
Standard Pressure

Material and Finish

Housing — Glass-filled polyester, UL 94V-0 rated

Contacts — Brass

Finish — Selectively plated .000100 min. tin on solder area over .000050 min. nickel on entire contact

Contact Lead Spacing — .100 x .300 [2.54x7.62]

Lead Length — .140 [3.56] below mounting surface

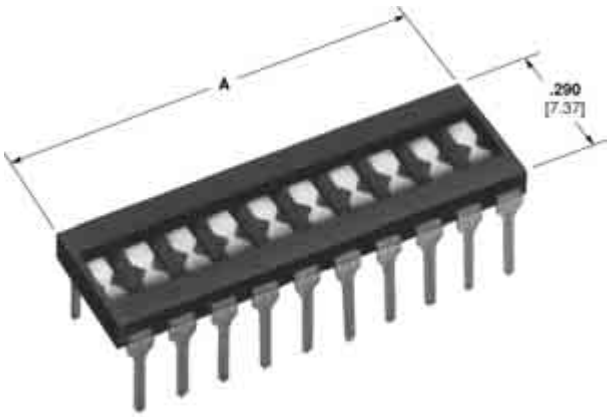
Housing Color — Black

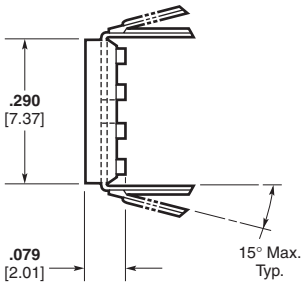
Programming Tool — See below

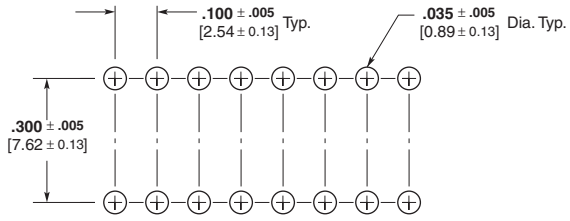
Programming Hand Tool
Part No. 435862-1



This tool provides a reliable means of programming DIP shunts. It is rugged, light-weight and dependable. No special skills are required to use this tool.







No. of Pos.	Dimension A		Standard Shunt Standard Pressure
	inch	mm	
4	.400	10.16	1825190-4
6	.600	15.24	1825190-6
7	.700	17.78	1825190-7
8	.800	20.32	1825190-8
9	.900	22.86	1825190-9
10	1.000	25.40	1-1825190-0
12	1.200	30.48	1-1825190-2

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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UK: 44-8706-080-208a

Post Shunts

Product Facts

- One-piece contact construction
- High normal forces
- 94V-0 rated housings
- Gold inlay, gold plate or tin plate over nickel
- Stackable
- Those post shunts indicated are recognized under the component program of Underwriters Laboratories Inc., File No. E28476 and certified by the Canadian Standards Association File No. LR 7189

Tandem Spring Shunts

- Two points of contact provide extra reliability
- Shunts accept posts as short as .175 [4.45]; posts bottom at .330 [8.38]

2mm Mini Shunts

- Stackable on 2mm contact centerline
- Low profile
- Available in strips of 10

Material and Finish — Low Profile and 2mm Shunts

Housing — Glass-filled thermoplastic, black, UL 94V-0 rated

Contacts — Beryllium copper or phosphor bronze, plated .000050 [0.00127] nickel underplate with gold plate in contact area or tin overall

Material and Finish — Tandem Spring Shunts

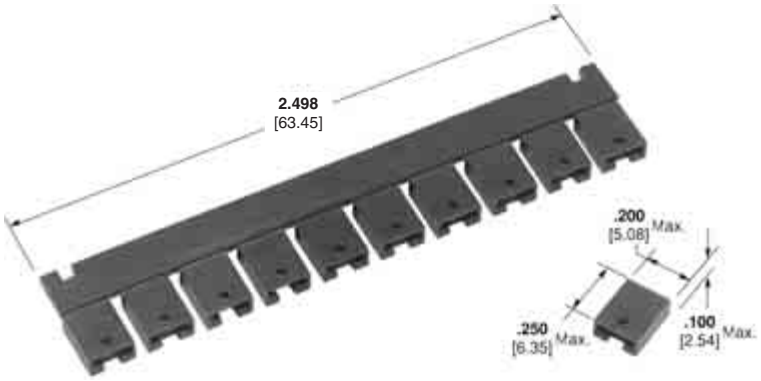
Housing — Nylon, UL 94V-0 rated

Contacts — Phosphor Bronze

Finish — .000030 [0.00076] nickel underplate with gold inlay in the contact area or tin overall

2-Position, Low Profile Shunts

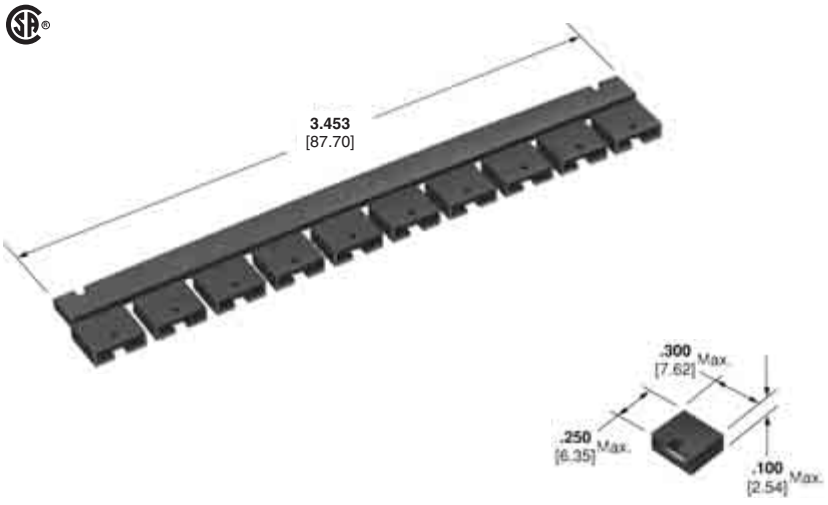
Economy Shunt
.100 [2.54] Centerline



Configuration	Housing Color	Part Numbers			
		Gold Plate[1] .000015 [0.00038]	Gold Flash[1] .000005 [0.00013]	Tin Plate .000100 [0.00254]	Gold Plate .000030 [0.00076]
Strip of 10	Blue	382811-2	—	—	—
Strip of 10	Black	382811-6	382811-8	382811-5	2-382811-0
Strip of 10	Red	382811-9	—	—	—
Loose Piece	Black	1-382811-6	1-382811-8	—	—

[1]In contact area

Standard Housing Shunt
.200 [5.08] Centerline



Configuration	Housing Color	Part Numbers		
		Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	Tin Plate .000100 [0.00254]
Strip of 10	Black	531230-2	531230-3	531230-1

[1]In contact area

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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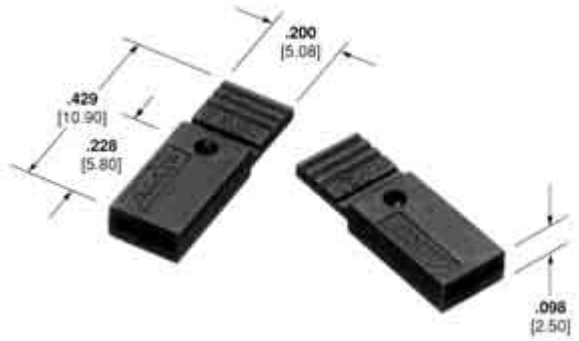
USA: 1-800-522-6752
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Post Shunts (Continued)

2-Position, Low Profile Shunts (Novo) (Continued)

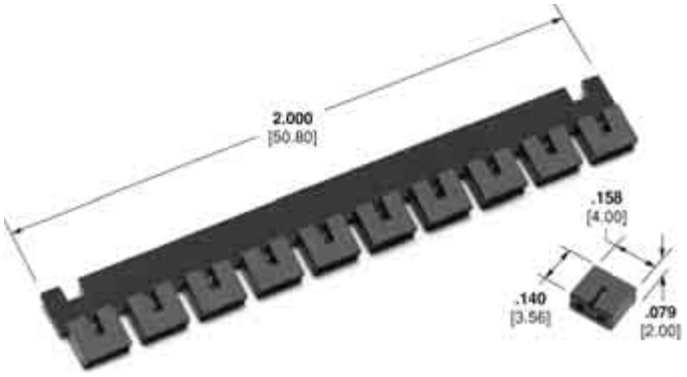
Handle Shunt
.100 [2.54] Centerline



Housing Color	Loose Piece Part Numbers				Type
	Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	Gold Plate[1] .000050 [0.00127]	Tin Plate .000100 [0.00254]	
Black	881545-1	881545-2	881545-3	4-881545-2	Open Top
Black	880584-1	880584-2	880584-3	880584-4	Closed Top

[1]In contact area

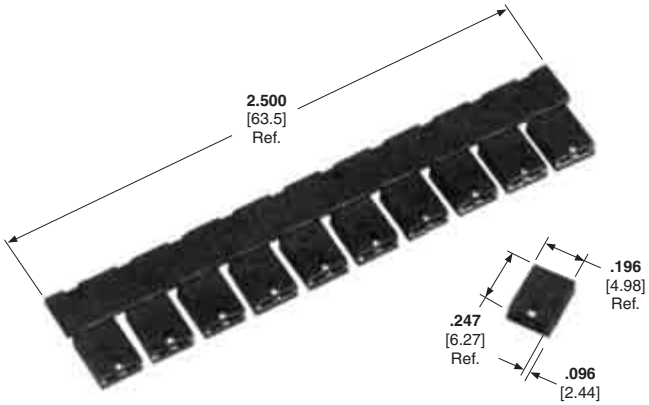
2 mm Mini-Shunt
.079 [2.00] Centerline



Configuration	Housing Color	Part Numbers	
		Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]
Strip of 10	Black	382575-2	382575-3

[1]In contact area

Dual Beam Shunt



Configuration	Housing Color	Part Numbers		Type
		Gold Plate[1] .000015 [0.00038]	Gold Plate[1] .000030 [0.00076]	
Strip of 10	Black	390088-2	390088-1	Open Top
Strip of 10	Blue	390088-4	390088-3	Open Top
Strip of 10	Yellow	—	390088-5	Open Top

[1]In contact area

Note: All part numbers are RoHS compliant.

Catalog 1307819
Revised 8-08

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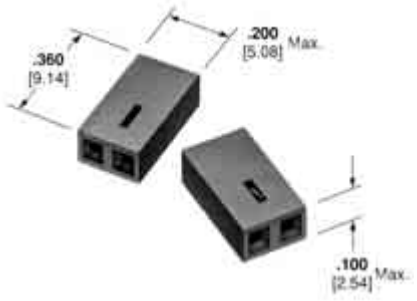
USA: 1-800-522-6752
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Post Shunts (Continued)

Tandem Spring Shunt

.100 [2.54] Centerline



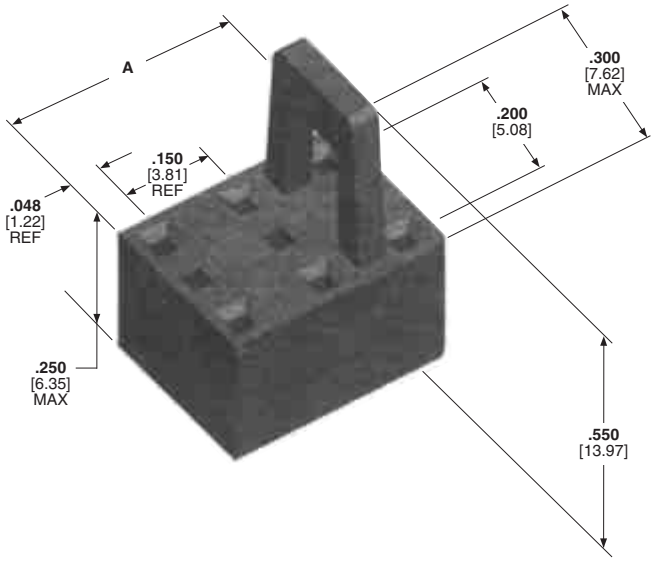
Housing Color	Part Numbers	
	Gold Inlay[1] .000030 [0.00076]	TinPlate .000100 [0.00254]
Black	530153-2	4-530153-1

[1]In contact area

Multiposition Shunts for.025 [0.64] Square Posts

.200 [5.08] Centerline

Housing — Glass-filled polyester
Contacts — Beryllium Copper
Finish — .000030 [.00076] gold in contact area over .000050 [.00127] nickel on entire contact
Current Rating — 2.5 amps



Size	Dimension A		Housing Color	Part Number
	inch	mm		
2x2	.246	6.25	Black	390102-1
2x2	.246	6.25	Red	390102-3
2x3	.396	10.01	Black	390102-2

Note: All part numbers are RoHS compliant.

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Performance Specifications

Dual In-Line Package (DIP) Shunts — 7600 Series

Current Rating —
Standard pressure — 2 amperes for +20˚C rise above ambient (one conductor per shunt
Machine insertable — 1 ampere for +20˚C rise above ambient (one conductor per shunt)

Insulation Resistance — 1x 10^{10} ohms min. at 100 VDC

Dielectric Withstanding Voltage — 500 VDC min.

Capacitance — 2 picofarads max. between adjacent straps

Temperature Rating — -55˚C to +105˚C

Terminal Strength (Bend Test) — Two 45˚ bend cycles per MIL-STD-202, Method 211, Condition B

Solder Bridging —
Cut straps can be reconnected by solder bridging. Solder bridging recommendations are:

- Use low temperature solder (60/40 tin/lead)
- Use solder tip approximately 1/32 [0.79] in diameter
- Do not let solder tip come in contact with plastic material

Post Shunts

Current Rating —
3 amperes max. unless otherwise noted

Temperature Rating — -65˚C to +105˚C (gold) -40˚C to +85˚C (tin)

Technical Documents

Various technical documents are available for your use:

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineer.

108-7533	Dual In-Line Package (DIP) Shunts
108-1445	2mm Mini Shunt
108-1476	Economy Shunt, Multiposition Shunt
108-1674	Dual Beam Shunt
108-9057	Low Profile Shunt
108-9062	Tandem Spring Shunt
108-37006	Novo Shunt with Handle

Application Specifications describe requirements for using the product in its intended application and/or crimping information. They are intended for the Packaging and Design Engineer and the Machine Setup Person.

114-1045	Tandem Spring Shunt
114-1054	Dual In-Line Package (DIP) Shunts
114-1059	Economy Shunt, Dual Beam Shunt, Low Profile Shunt, Multiposition Shunt
114-1074	2mm Mini Shunt

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

408-7768	Dual In-Line Package (DIP) Shunts
408-3208	Tandem Spring Shunt
408-3230	Economy Shunt, Dual Beam Shunt, Low Profile Shunt
408-3251	Multiposition Shunt
408-3276	2mm Mini Shunt

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Engineering Notes

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