

## Wire-to-Board, .100 [2.54] Centerline Products

### Wire Sizes

| Wire Size |                    | Product Family                                       |
|-----------|--------------------|------------------------------------------------------|
| AWG       | [mm <sup>2</sup> ] |                                                      |
| 20        | 0.5-0.6            | Locking Clip, Mod. IV, IV.v, V, MT, Short Point      |
| 22-30     | 0.3-0.05           | Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point |
| 32        | 0.03               | Mod. IV, IV.v, V, Short Point                        |

### Contact Platings

| Platings                  | Product Family                                       |
|---------------------------|------------------------------------------------------|
| .000015 [0.00038]<br>Gold | Mod. IV, IV.v, V, MTE, MT, Short Point               |
| .000030 [0.00076]<br>Gold | Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point |
| .000050 [0.00127]<br>Gold | Locking Clip, Mod. IV, IV.v, V, MT                   |
| Tin                       | Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point |

### Mating Post Lengths

| Post Lengths          | Product Family                              |
|-----------------------|---------------------------------------------|
| .210-.283 [5.33-7.19] | Mod. IV (.600 [15.24] Profile Height)       |
| .205-.283 [5.21-7.19] | Mod. IV.v (.600 [15.24] Profile Height)     |
| .185-.283 [4.70-7.19] | Mod. V (.600 [15.24] Profile Height)        |
| .256-.323 [6.50-8.20] | Mod. IV (.645 [16.38] Profile Height)       |
| .251-.323 [6.38-8.20] | Mod. IV.v (.645 [16.38] Profile Height)     |
| .231-.323 [5.87-8.20] | Mod. V (.645 [16.38] Profile Height)        |
| .222-.273 [5.64-6.93] | MT Assembly with Standard Pressure Contacts |
| .200-.273 [5.08-6.93] | MT Assembly with High Pressure Contacts     |
| .200-.250 [5.08-6.35] | MTE Assembly                                |
| .169-.259 [4.29-6.58] | Short Point Connector Assembly              |
| .273-.350 [6.93-8.89] | Locking Clip (Connector Assembly)           |
| .200-.277 [5.08-7.04] | Locking Clip (Single Contact)               |

### Application Tooling

| Application Tooling Description                       | Product Family   |    |              |     |             |         |
|-------------------------------------------------------|------------------|----|--------------|-----|-------------|---------|
|                                                       | Mod. IV, IV.v, V | MT | Locking Clip | MTE | Short Point | Level V |
| Manual Hand Tools (Wire Crimp)                        | •                |    | •            | •   | •           |         |
| Manual Hand Tools (IDC)                               |                  | •  |              | •   |             | •       |
| AMP-O-MATIC Stripper/Crimper Machines with Applicator | •                |    | •            |     | •           |         |
| CHAMPOMATOR Model 2.5 Machine                         |                  | •  |              |     |             | •       |
| CHAMPOMATOR Model 3A Machine                          |                  | •  |              |     |             |         |
| AMP-O-ELECTRIC Machines with Applicator               | •                |    | •            |     | •           |         |
| Pneumatic Hand Tools                                  | •                | •  | •            | •   | •           | •       |
| IDC Electric Power Unit                               |                  |    |              | •   |             |         |
| Tube-Fed Ribbon Cable Machine                         |                  |    |              | •   |             |         |
| AMPOMATOR CLS Machines                                | •                |    | •            |     | •           |         |
| Discrete Wire Machine                                 |                  | •  |              |     |             | •       |
| Manual Arbor Tool                                     |                  | •  |              |     |             | •       |
| Pneumatic Arbor Tool                                  |                  | •  |              |     |             | •       |

## Board-to-Board Solutions Guide, .100 [2.54] Centerline Products

| Problem or Concern                                                                                                    | Tyco Electronics' Potential Solution                                                                                                                                         | Single-Row Vertical Headers and Receptacles (Page Ref.) | Single-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.) | Double-Row Vertical Headers and Receptacles (Page Ref.) | Double-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.) |
|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------|--------------------------------------------------------------------|
| Headers Float Off Board Soldering Operation                                                                           | <b>HEADERS</b> Retention Feature: Unshrouded Shrouded                                                                                                                        | 102<br>—                                                | 103<br>—                                                           | 198<br>104, 199                                         | 199<br>105, 200                                                    |
| Header Contacts Damaged During Manufacturing Operation or In-Field Use                                                | Shrouded <b>HEADERS</b> : Standard Profile                                                                                                                                   | 115                                                     | 116                                                                | 117-121                                                 | 122-128                                                            |
| Board/Backplane Requires High Temperature Surface-Mount Compatibility                                                 | Press-Fit ACTION PIN POST <b>HEADERS</b> : Unshrouded Shrouded                                                                                                               | 146<br>—                                                | —<br>—                                                             | 147<br>148, 149, 199                                    | —<br>—                                                             |
|                                                                                                                       | Machine Applied Posts                                                                                                                                                        | 163, 164                                                |                                                                    |                                                         |                                                                    |
|                                                                                                                       | Surface-Mount Compatible Thru-Hole: <b>HEADERS</b> : Unshrouded Shrouded (Low Profile) <b>RECEPTACLES</b>                                                                    | 102*<br>—                                               | 103*<br>—                                                          | 104*<br>130*, 137*<br>196*                              | 105*<br>138*<br>195*                                               |
|                                                                                                                       | Surface-Mount: <b>HEADERS</b> <b>RECEPTACLES</b>                                                                                                                             | 109*<br>187, 188                                        | —<br>172                                                           | 110<br>189-192                                          | —<br>173                                                           |
|                                                                                                                       | Two-Piece Family: w/Guide Posts: <b>HEADERS</b> <b>RECEPTACLES</b>                                                                                                           | —<br>—                                                  | —<br>—                                                             | 198, 199<br>196*                                        | 200<br>195*                                                        |
|                                                                                                                       | Mod IV Low Profile <b>RECEPTACLES</b> : <b>TOP ENTRY</b> : Thru-Hole Surface-Mount <b>BOTTOM ENTRY</b> : Thru-Hole Surface-Mount <b>DUAL ENTRY</b> : Thru-Hole Surface Mount | 178<br>—<br>177<br>—<br>181<br>187, 188                 | —<br>—<br>—<br>—<br>—<br>—                                         | 179, 180*<br>—<br>—<br>—<br>182-184<br>189-192          | —<br>—<br>—<br>—<br>—<br>—                                         |
| Soldering Problems with Thru-Hole Bottom Entry Receptacles (Must Mask Post Holes in Board During Soldering Operation) | <b>RECEPTACLES</b> : Bottom Entry Outrigger (Separate Holes for Receptacle Leads and Mating Leads)                                                                           | 181                                                     | —                                                                  | 182                                                     | —                                                                  |
| Application Requires Connectors to be End-to-End Stackable on .100 [2.54] Grid                                        | End-to-End Stackable: <b>HEADERS</b> (Unshrouded): Thru-Hole Thru-Hole* Surface-Mount <b>RECEPTACLES</b> : Thru-Hole Surface Mount                                           | 93, 102<br>102*<br>109*                                 | 94, 95, 103*<br>103*<br>—                                          | 96, 97, 104*<br>104*<br>110*                            | 98, 99, 105<br>108*<br>—                                           |
|                                                                                                                       |                                                                                                                                                                              | 175, 177, 178, 181                                      | 169*                                                               | 176, 179, 180*, 182*, 183, 184                          | 170                                                                |
|                                                                                                                       |                                                                                                                                                                              | 188                                                     | 172                                                                | 191, 192                                                | 173                                                                |
|                                                                                                                       |                                                                                                                                                                              |                                                         |                                                                    |                                                         |                                                                    |

\*High temperature compatible version, refer to page ref. listed.

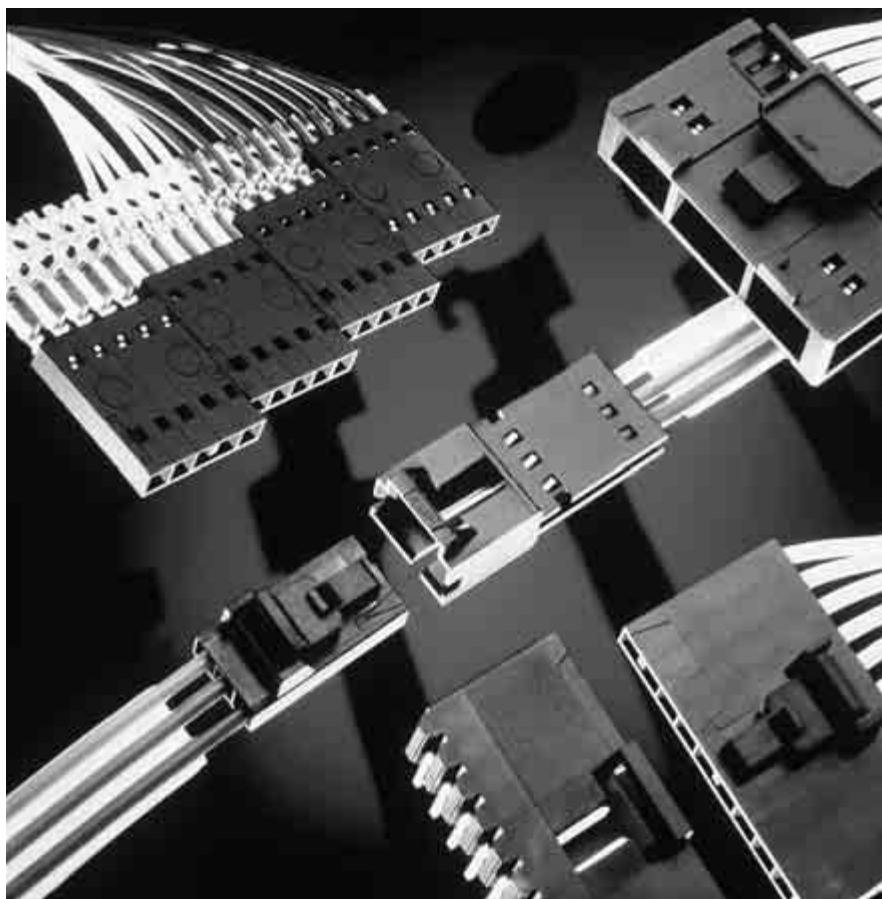
## Wire-to-Board Solutions Guide, .100 [2.54] Centerline Products

| Customer Requirement                                    | Tyco Electronics' Potential Solution              | Catalog Page(s)    |
|---------------------------------------------------------|---------------------------------------------------|--------------------|
| Application Requires Guidance, Polarization             | Mod IV Polarized Housing                          | 220                |
|                                                         | MTE Latched Receptacle and Header                 | 230, 231, 244-250  |
|                                                         | MT with Polarizing Covers                         | 256-258            |
|                                                         | Short Point Polarized Housing                     | 224                |
| Wire-to-Wire Application                                | Mod IV Receptacle Contacts and Pins               | 211-213            |
| Wire-to-Wire Application (Latched)                      | MTE Latched Receptacle and Shrouded Pin Assembly  | 230, 231, 236, 237 |
| Wire-to-Wire Application (Through Panel)                | MTE Panel Mount                                   | 242                |
| High Vibration and Shock Applications                   | Locking Clip Contacts and Housings                | 207-209            |
| Printed Circuit Board Polarization                      | MTE Header with PC Board Orientation Peg          | 248, 249           |
| Board Requires Surface Mount Capability                 | MTE Surface Mount Headers                         | 251, 252           |
|                                                         | MTE High Temperature Compatible Headers           | 249, 250           |
| Need to mate to AMP-LATCH Eject Headers                 | Mod IV Ejection Housing                           | 220                |
| Need to Minimize Strain to Cable                        | MT with Eject Covers                              | 256-259            |
|                                                         | Mod IV Housing with Strain Relief                 | 218, 219           |
| Application Requires Self-Retaining Contacts            | Locking Clip Contacts                             | 207, 298           |
| Header Secured to Board During/Prior to Soldering       | MTE Headers with Post Retention or Holdowns       | 244-250            |
| Mate to Unshrouded Header with Retention Requirements   | Mod IV plain Housing with Mod V Contacts          | 213, 214, 216      |
|                                                         | MTE with High Pressure Contacts                   | 234, 235           |
| Multiple Cables to be Common to One Header              | MTE Coupling Shroud, Double- or Single-Row        | 240, 241           |
| Right-Angle Cable Dress                                 | MT with Hermaphroditic Covers                     | 229, 256, 257, 259 |
| Application Requires Crimp Contacts and MTE Housings    | Short Point Contacts                              | 222                |
| Housings and End-to-End and Side-to-Side Stackable      | Short Point Double-Row Housing, MTE Plain Housing | 223, 228, 229      |
| Connector Must Mate to Post Lengths of .169 [4.29] Min. | Short Point Contacts                              | 222                |

## MTE Interconnection System

### Product Facts

- Receptacle assemblies mate with .025 [0.64] sq. posts; mating post length is .200 [5.08] min., .250 [6.35] max.
- Proven AMPMODU receptacle contact design; dual cantilever beams, built-in anti-overstress, completely enclosed "box" design, standard or high-pressure
- Insulation displacement technology
- Two contact sizes for terminating 30-22 AWG [0.05-0.3 mm<sup>2</sup>] wire range; .054 [1.37] max. insulation diameter with an insulation wall thickness of .015 [0.38] max.
- Choice of gold duplex or tin plated contacts
- Interchangeable crimp snap-in pin and receptacle contacts available
- Housing sizes 2 through 25 positions, single-row .100 [2.54] centers
- Plain housings are end-to-end and/or back-to-back stackable for open pin field applications
- Optional header with "swaged tail" feature helps prevent movement prior to flow soldering
- Integral latch provides positive retention between header and receptacle housing
- Coupling shrouds permit ganging of smaller connectors with guide ribs to form larger single- or double-row latching connectors
- Mass terminating tooling provides lowest applied cost for most production needs
- SMT and SMT compatible, high-temp headers available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189



The AMPMODU MTE Interconnection System offers both wire-to-board and wire-to-wire connectors using .025 [0.64] sq. post technology.

The AMPMODU MTE Interconnection System consists of single-row housings with contacts preloaded on .100 [2.54] centers. Housings are furnished with contacts partially inserted, leaving the termination areas exposed. Final contact insertion can be accomplished automatically with Tyco Electronics application equipment, and manually when terminated with the Tyco Electronics pistol grip hand tool.

The heart of the system is the insulation displacement contact design, featured in both pin and receptacle contacts. The receptacle

contact, available in either standard or high-pressure, features dual cantilever beams in an enclosed "box." The post stop helps prevent a mating post from disturbing the wire termination and also limits the mating depth of a long post to protect a wrap-type termination at the base of the post. The forward contact stop helps prevent contact overinsertion prior to termination. All contacts are furnished on carrier strips which are interlocked for stability and positive location during termination.

Single-row housings are available in sizes 2 through 25 positions. Included are three styles of receptacle housings—plain, polarized/latching and ribbed and two styles of pin housings, shrouded with polarizing/latching feature and ribbed.

### Performance Specifications

#### Electrical Characteristics

**Contact Current Rating** — 3 amperes for single contact in free air (Amperage could vary due to ambient temperature, wire size and duty cycles.)

**Contact Termination Resistance** — 15 milliohms (max.)

**Dielectric Withstanding Voltage** — At Sea Level—600 VAC, rms  
At 70,000 Ft. [21 336 m]—225 VAC, rms

**Insulation Resistance** — 5,000 megohms (min.)

#### Environmental Characteristics

**Operating Temperature** — -65°C to +105°C

**Vibration** — 15 G's (gold), 10 G's (tin)

**Physical Shock** — 50 G's

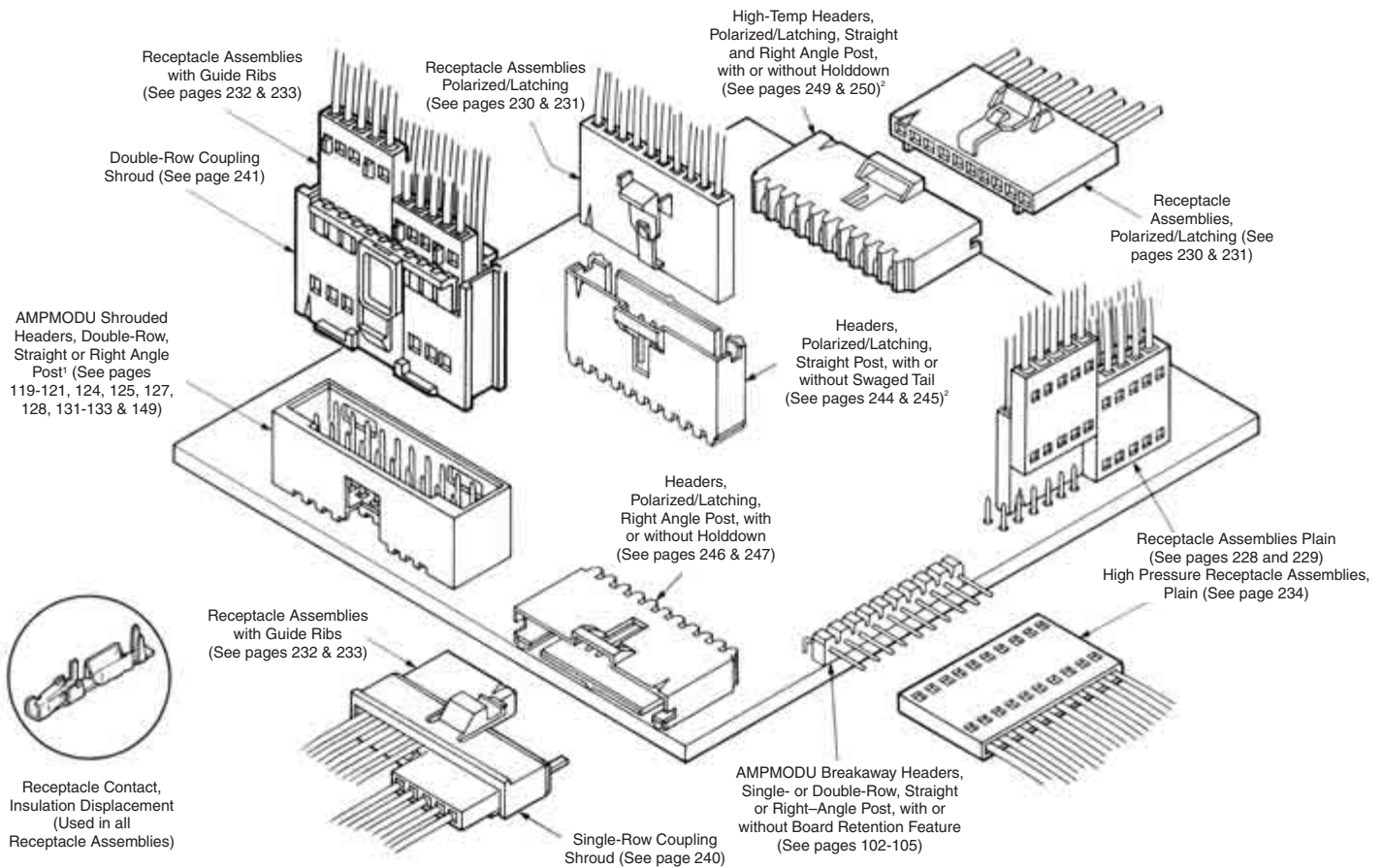
**Industrial Mixed Flow Gasing** — Class 1 (20 days) (gold)

**Product Specification** 108-25034

**Application Specification** 114-25026

## MTE Interconnection System (Continued)

### Wire-to-Board

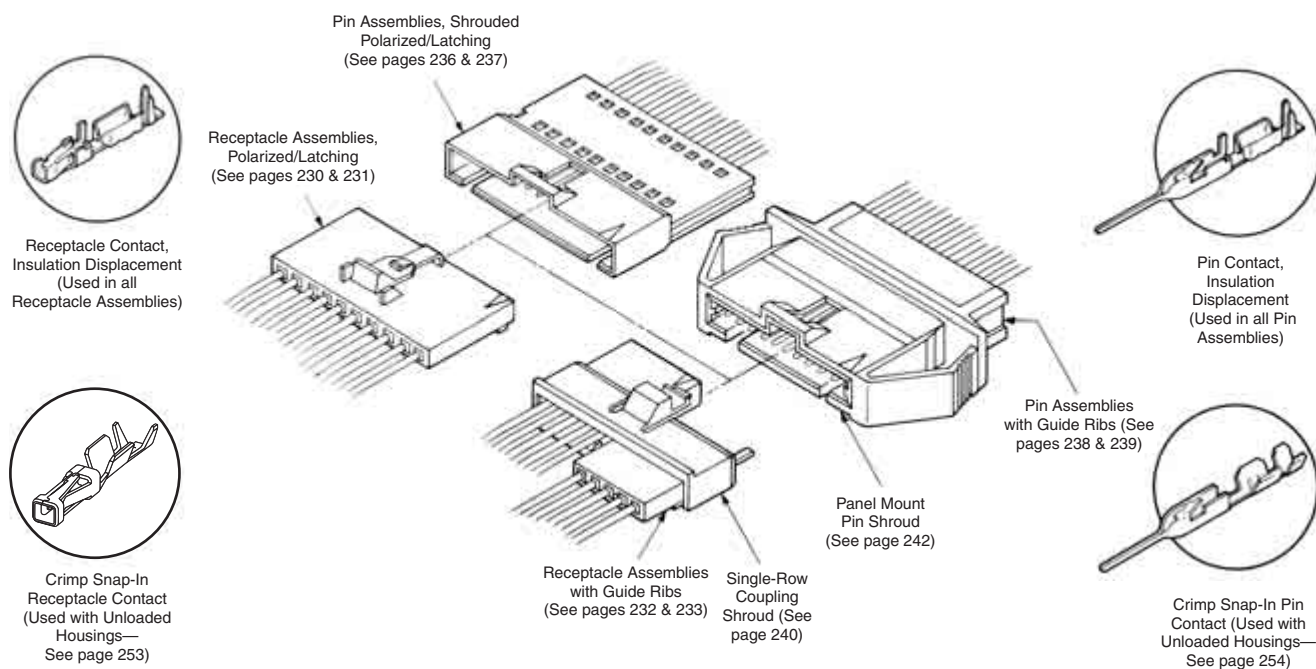


¹Mating AMPMODU Double-Row Shrouded Header Assemblies must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

²Surface Mount Right-Angle and Vertical Headers are also available (see pages 251 and 252)

## MTE Interconnection System (Continued)

### Wire-to-Wire



**Note:** For wire-to-wire applications shown above, all pin and receptacle assembly combinations are intermateable.



## MTE Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Contacts** — Phosphor Bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

### Related Product Data

**Mateable AMPMODU Products Breakaway Headers** — pages 102-110 (with .230 mating length)

**Reeled Breakaway Headers** — pages 106, 107 (with .230 mating length)

**Machine Applied Bandolier Posts** — page 163

**Single-Row Shrouded Headers with .066 [1.68] End Dimension** — pages 115, 116

**Interchangeable Crimp Contacts (Short Point)** — page 253

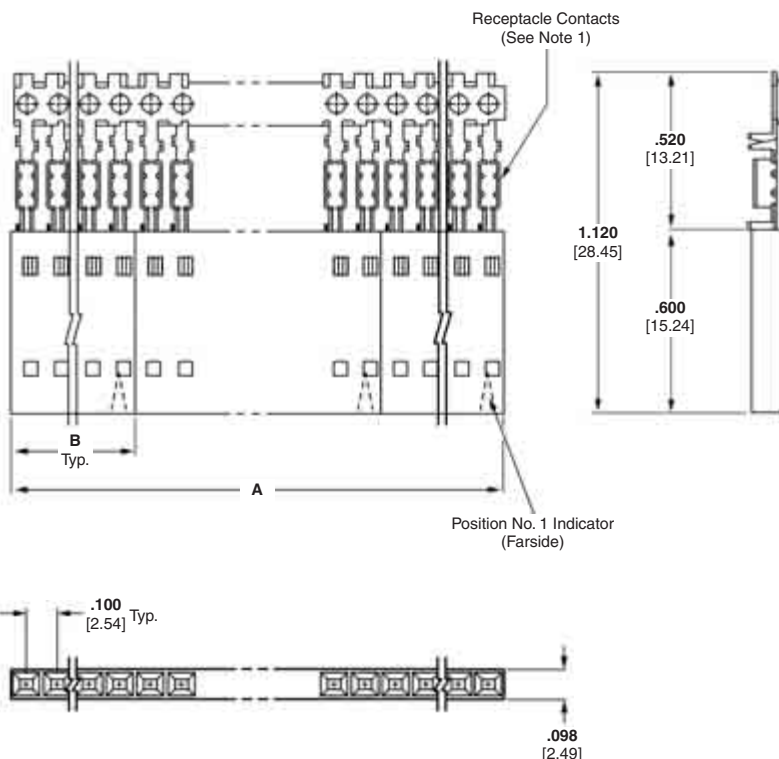
**Application Tooling** — page 273

**Performance Specifications** — page 225

**Technical Documents** — pages 277, 278

**Product Specification** 108-25034

**Application Specification** 114-25026



These receptacle assemblies with plain housings can be stacked end-to-end and/or side-to-side for single or double-row connections to an open pin field with a .100 [2.54] centerline grid.

## MTE Receptacle Assemblies—Strip Form Plain, Single-Row, .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A                                                                 | Plating B  | Plating C  | Plating A                                                                | Plating B  | Plating C  |                   |
| 2           | 2.000 [50.80] | .198 [5.03]   | 10                                   | 5-103979-1                                                                | 5-103978-1 | 5-103977-1 | 5-103976-1                                                               | 5-103975-1 | 5-103974-1 | 103688-1          |
| 3           | 2.400 [60.96] | .298 [7.57]   | 8                                    | 5-103979-2                                                                | 5-103978-2 | 5-103977-2 | 5-103976-2                                                               | 5-103975-2 | 5-103974-2 | 103688-2          |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                    | 5-103979-3                                                                | 5-103978-3 | 5-103977-3 | 5-103976-3                                                               | 5-103975-3 | 5-103974-3 | 103688-3          |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                    | 5-103979-4                                                                | 5-103978-4 | 5-103977-4 | 5-103976-4                                                               | 5-103975-4 | 5-103974-4 | 103688-4          |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                    | 5-103979-5                                                                | 5-103978-5 | 5-103977-5 | 5-103976-5                                                               | 5-103975-5 | 5-103974-5 | 103688-5          |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                    | 5-103979-6                                                                | 5-103978-6 | 5-103977-6 | 5-103976-6                                                               | 5-103975-6 | 5-103974-6 | 103688-6          |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                    | 5-103979-7                                                                | 5-103978-7 | 5-103977-7 | 5-103976-7                                                               | 5-103975-7 | 5-103974-7 | 103688-7          |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                    | 5-103979-8                                                                | 5-103978-8 | 5-103977-8 | 5-103976-8                                                               | 5-103975-8 | 5-103974-8 | 103688-8          |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                    | 5-103979-9                                                                | 5-103978-9 | 5-103977-9 | 5-103976-9                                                               | 5-103975-9 | 5-103974-9 | 103688-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 6-103979-0                                                                | 6-103978-0 | 6-103977-0 | 6-103976-0                                                               | 6-103975-0 | 6-103974-0 | 1-103688-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 6-103979-1                                                                | 6-103978-1 | 6-103977-1 | 6-103976-1                                                               | 6-103975-1 | 6-103974-1 | 1-103688-1        |

## MTE Receptacle Assemblies—Individual Form Plain, Single-Row, .100 [2.54] Centerline

| No. of Pos. | Dimensions B  | Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|------------|------------|-------------------|
|             |               | Plating A                                                                 | Plating B  | Plating C  | Plating A                                                                | Plating B  | Plating C  |                   |
| 13          | 1.298 [32.96] | 6-103903-2                                                                | 6-103684-2 | 6-103685-2 | 6-103902-2                                                               | 6-103686-2 | 6-103687-2 | 1-103688-2        |
| 14          | 1.398 [35.51] | 6-103903-3                                                                | 6-103684-3 | 6-103685-3 | 6-103902-3                                                               | 6-103686-3 | 6-103687-3 | 1-103688-3        |
| 15          | 1.498 [38.05] | 6-103903-4                                                                | 6-103684-4 | 6-103685-4 | 6-103902-4                                                               | 6-103686-4 | 6-103687-4 | 1-103688-4        |
| 16          | 1.598 [40.59] | 6-103903-5                                                                | 6-103684-5 | 6-103685-5 | 6-103902-5                                                               | 6-103686-5 | 6-103687-5 | 1-103688-5        |
| 17          | 1.698 [43.13] | 6-103903-6                                                                | 6-103684-6 | 6-103685-6 | 6-103902-6                                                               | 6-103686-6 | 6-103687-6 | 1-103688-6        |
| 18          | 1.798 [45.67] | 6-103903-7                                                                | 6-103684-7 | 6-103685-7 | 6-103902-7                                                               | 6-103686-7 | 6-103687-7 | 1-103688-7        |
| 19          | 1.898 [48.20] | 6-103903-8                                                                | 6-103684-8 | 6-103685-8 | 6-103902-8                                                               | 6-103686-8 | 6-103687-8 | 1-103688-8        |
| 20          | 1.998 [50.75] | 6-103903-9                                                                | 6-103684-9 | 6-103685-9 | 6-103902-9                                                               | 6-103686-9 | 6-103687-9 | 1-103688-9        |
| 21          | 2.098 [53.29] | 7-103903-0                                                                | 7-103684-0 | 7-103685-0 | 7-103902-0                                                               | 7-103686-0 | 7-103687-0 | 2-103688-0        |
| 22          | 2.198 [55.83] | 7-103903-1                                                                | 7-103684-1 | 7-103685-1 | 7-103902-1                                                               | 7-103686-1 | 7-103687-1 | 2-103688-1        |
| 23          | 2.298 [58.37] | 7-103903-2                                                                | 7-103684-2 | 7-103685-2 | 7-103902-2                                                               | 7-103686-2 | 7-103687-2 | 2-103688-2        |
| 24          | 2.398 [60.91] | 7-103903-3                                                                | 7-103684-3 | 7-103685-3 | 7-103902-3                                                               | 7-103686-3 | 7-103687-3 | 2-103688-3        |
| 25          | 2.498 [63.45] | 7-103903-4                                                                | 7-103684-4 | 7-103685-4 | 7-103902-4                                                               | 7-103686-4 | 7-103687-4 | 2-103688-4        |

- Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
3. Keying plugs are available, see page 253.

**Note:** All part numbers are RoHS compliant.

## MTE Receptacle Assemblies—Polarized/Latching, Single-Row, .100 [2.54] Centerline



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

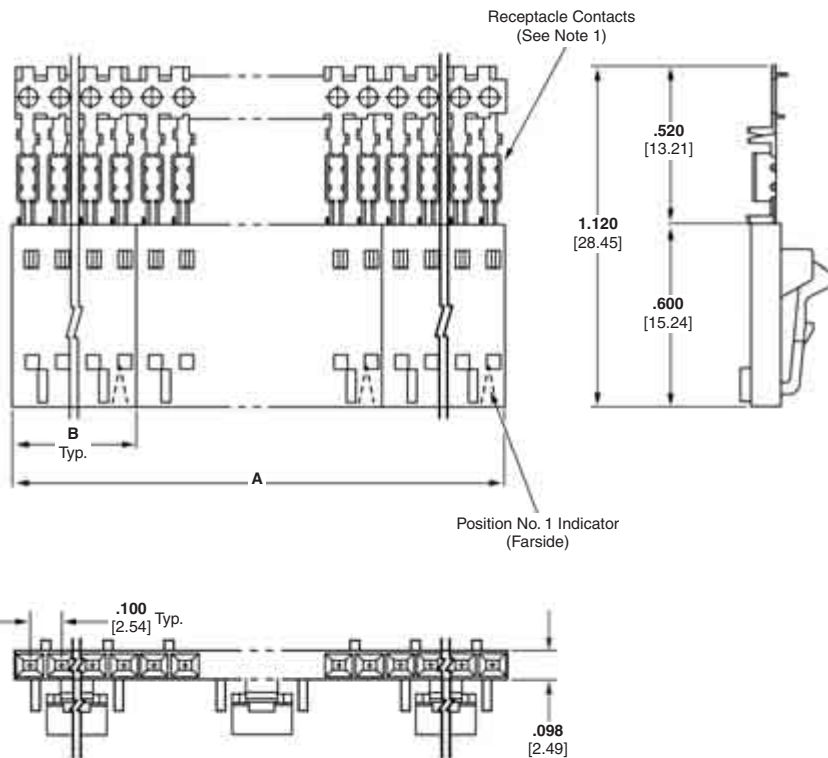
**Contacts** — Phosphor Bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.



### Related Product Data

#### Mateable AMPMODU Products

**Pin Assemblies (Polarized/Latching)** — pages 236, 237

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)** — pages 238, 239, 242

**Headers (Polarized/Latching)** — pages 244-252

**Interchangeable Crimp Contacts (Short Point)** — page 253

**Application Tooling** — page 273

**Performance Specifications** — page 225

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



## MTE Receptacle Assemblies—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centerline (Continued)

| No. of<br>Pos. | Dimensions    |               | Housing<br>Quantities<br>Per Strip<br>Segment | Strip Form Receptacle Assembly<br>30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly<br>26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded<br>Housings |
|----------------|---------------|---------------|-----------------------------------------------|------------------------------------------------------------------------------|------------|------------|-----------------------------------------------------------------------------|------------|------------|----------------------|
|                | A             | B             |                                               | Plating A                                                                    | Plating B  | Plating C  | Plating A                                                                   | Plating B  | Plating C  |                      |
| 2              | 2.000 [50.80] | .198 [5.03]   | 10                                            | 5-103961-1                                                                   | 5-103960-1 | 5-103959-1 | 5-103958-1                                                                  | 5-103957-1 | 5-103956-1 | 104257-1             |
| 3              | 2.400 [60.96] | .298 [7.57]   | 8                                             | 5-103961-2                                                                   | 5-103960-2 | 5-103959-2 | 5-103958-2                                                                  | 5-103957-2 | 5-103956-2 | 104257-2             |
| 4              | 1.990 [50.55] | .398 [10.11]  | 5                                             | 5-103961-3                                                                   | 5-103960-3 | 5-103959-3 | 5-103958-3                                                                  | 5-103957-3 | 5-103956-3 | 104257-3             |
| 5              | 1.990 [50.55] | .498 [12.65]  | 4                                             | 5-103961-4                                                                   | 5-103960-4 | 5-103959-4 | 5-103958-4                                                                  | 5-103957-4 | 5-103956-4 | 104257-4             |
| 6              | 2.390 [60.71] | .598 [15.19]  | 4                                             | 5-103961-5                                                                   | 5-103960-5 | 5-103959-5 | 5-103958-5                                                                  | 5-103957-5 | 5-103956-5 | 104257-5             |
| 7              | 1.400 [35.56] | .698 [17.73]  | 2                                             | 5-103961-6                                                                   | 5-103960-6 | 5-103959-6 | 5-103958-6                                                                  | 5-103957-6 | 5-103956-6 | 104257-6             |
| 8              | 1.600 [40.64] | .798 [20.27]  | 2                                             | 5-103961-7                                                                   | 5-103960-7 | 5-103959-7 | 5-103958-7                                                                  | 5-103957-7 | 5-103956-7 | 104257-7             |
| 9              | 1.800 [45.72] | .898 [22.81]  | 2                                             | 5-103961-8                                                                   | 5-103960-8 | 5-103959-8 | 5-103958-8                                                                  | 5-103957-8 | 5-103956-8 | 104257-8             |
| 10             | 2.000 [50.80] | .998 [23.35]  | 2                                             | 5-103961-9                                                                   | 5-103960-9 | 5-103959-9 | 5-103958-9                                                                  | 5-103957-9 | 5-103956-9 | 104257-9             |
| 11             | 2.200 [55.88] | 1.098 [27.89] | 2                                             | 6-103961-0                                                                   | 6-103960-0 | 6-103959-0 | 6-103958-0                                                                  | 6-103957-0 | 6-103956-0 | 1-104257-0           |
| 12             | 2.400 [60.96] | 1.198 [30.43] | 2                                             | 6-103961-1                                                                   | 6-103960-1 | 6-103959-1 | 6-103958-1                                                                  | 6-103957-1 | 6-103956-1 | 1-104257-1           |

## MTE Receptacle Assemblies—Individual Form Polarized/Latching, Single-Row, .100 [2.54] Centerline

| No. of<br>Pos. | Dimensions<br>B | Individual Receptacle Assembly<br>30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly<br>26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded<br>Housings |
|----------------|-----------------|------------------------------------------------------------------------------|------------|------------|-----------------------------------------------------------------------------|------------|------------|----------------------|
|                |                 | Plating A                                                                    | Plating B  | Plating C  | Plating A                                                                   | Plating B  | Plating C  |                      |
| 13             | 1.298 [32.96]   | 6-103897-2                                                                   | 6-103640-2 | 6-103641-2 | 6-103734-2                                                                  | 6-103644-2 | 6-103645-2 | 1-104257-2           |
| 14             | 1.398 [35.51]   | 6-103897-3                                                                   | 6-103640-3 | 6-103641-3 | 6-103734-3                                                                  | 6-103644-3 | 6-103645-3 | 1-104257-3           |
| 15             | 1.498 [38.05]   | 6-103897-4                                                                   | 6-103640-4 | 6-103641-4 | 6-103734-4                                                                  | 6-103644-4 | 6-103645-4 | 1-104257-4           |
| 16             | 1.598 [40.59]   | 6-103897-5                                                                   | 6-103640-5 | 6-103641-5 | 6-103734-5                                                                  | 6-103644-5 | 6-103645-5 | 1-104257-5           |
| 17             | 1.698 [43.13]   | 6-103897-6                                                                   | 6-103640-6 | 6-103641-6 | 6-103734-6                                                                  | 6-103644-6 | 6-103645-6 | 1-104257-6           |
| 18             | 1.798 [45.67]   | 6-103897-7                                                                   | 6-103640-7 | 6-103641-7 | 6-103734-7                                                                  | 6-103644-7 | 6-103645-7 | 1-104257-7           |
| 19             | 1.898 [48.20]   | 6-103897-8                                                                   | 6-103640-8 | 6-103641-8 | 6-103734-8                                                                  | 6-103644-8 | 6-103645-8 | 1-104257-8           |
| 20             | 1.998 [50.75]   | 6-103897-9                                                                   | 6-103640-9 | 6-103641-9 | 6-103734-9                                                                  | 6-103644-9 | 6-103645-9 | 1-104257-9           |
| 21             | 2.098 [53.29]   | 7-103897-0                                                                   | 7-103640-0 | 7-103641-0 | 7-103734-0                                                                  | 7-103644-0 | 7-103645-0 | 2-104257-0           |
| 22             | 2.198 [55.83]   | 7-103897-1                                                                   | 7-103640-1 | 7-103641-1 | 7-103734-1                                                                  | 7-103644-1 | 7-103645-1 | 2-104257-1           |
| 23             | 2.298 [58.37]   | 7-103897-2                                                                   | 7-103640-2 | 7-103641-2 | 7-103734-2                                                                  | 7-103644-2 | 7-103645-2 | 2-104257-2           |
| 24             | 2.398 [60.91]   | 7-103897-3                                                                   | 7-103640-3 | 7-103641-3 | 7-103734-3                                                                  | 7-103644-3 | 7-103645-3 | 2-104257-3           |
| 25             | 2.498 [63.45]   | 7-103897-4                                                                   | 7-103640-4 | 7-103641-4 | 7-103734-4                                                                  | 7-103644-4 | 7-103645-4 | 2-104257-4           |

**Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
3. Keying plugs are available, see page 253.

**Note:** All part numbers are RoHS compliant.

## MTE Receptacle Assemblies—Guide Ribs, Single-Row, .100 [2.54] Centerline



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Contacts** — Phosphor Bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.

### Related Product Data

**Coupling Shrouds used with —**

**Single-Row** — page 240

**Double-Row** — page 241

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds) —**

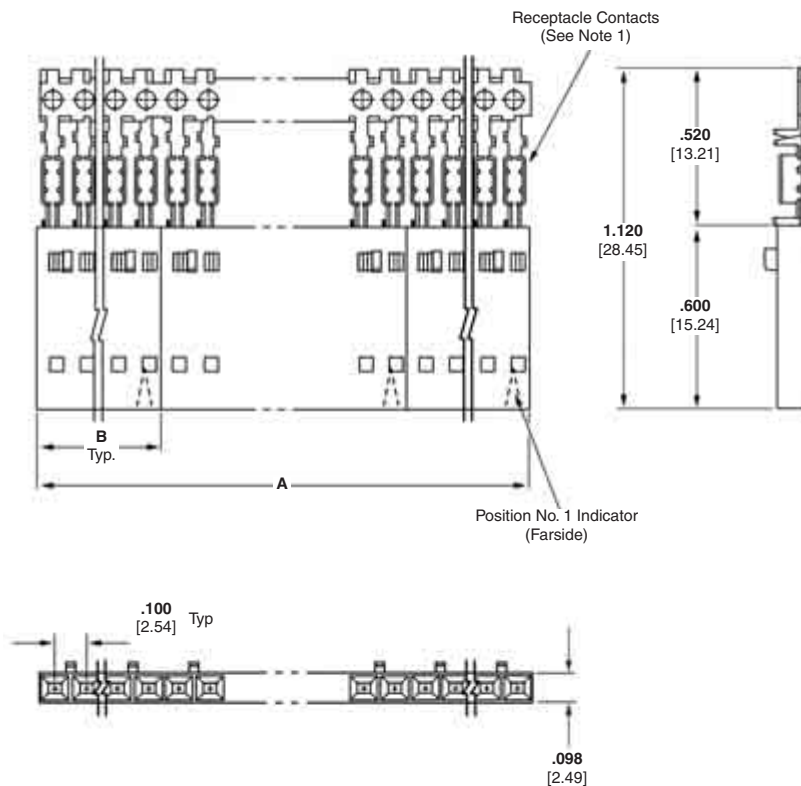
**Pin Assemblies (Polarized/Latching)** — pages 236, 237

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)** — pages 238, 239, 242

**Headers (Polarized/Latching)** — pages 244-252

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds) —**

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension)** — pages 119-121, 124, 125, 128, 129, 131-133



**Interchangeable Crimp Contacts—**  
(Short Point) — page 253

**Application Tooling** — page 273

**Performance Specifications** —  
page 225

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

## MTE Receptacle Assemblies—Strip Form with Guide Ribs, Single-Row, .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|---------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A                                                                 | Plating B  | Plating C  | Plating A                                                                | Plating B  | Plating C  |                   |
| 2           | 2.000 [50.80] | .198 [5.03]   | 10                                   | 5-103973-1                                                                | 5-103972-1 | 5-103971-1 | 5-103970-1                                                               | 5-103969-1 | 5-103968-1 | 103648-1          |
| 3           | 2.400 [60.96] | .298 [7.57]   | 8                                    | 5-103973-2                                                                | 5-103972-2 | 5-103971-2 | 5-103970-2                                                               | 5-103969-2 | 5-103968-2 | 103648-2          |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                    | 5-103973-3                                                                | 5-103972-3 | 5-103971-3 | 5-103970-3                                                               | 5-103969-3 | 5-103968-3 | 103648-3          |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                    | 5-103973-4                                                                | 5-103972-4 | 5-103971-4 | 5-103970-4                                                               | 5-103969-4 | 5-103968-4 | 103648-4          |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                    | 5-103973-5                                                                | 5-103972-5 | 5-103971-5 | 5-103970-5                                                               | 5-103969-5 | 5-103968-5 | 103648-5          |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                    | 5-103973-6                                                                | 5-103972-6 | 5-103971-6 | 5-103970-6                                                               | 5-103969-6 | 5-103968-6 | 103648-6          |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                    | 5-103973-7                                                                | 5-103972-7 | 5-103971-7 | 5-103970-7                                                               | 5-103969-7 | 5-103968-7 | 103648-7          |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                    | 5-103973-8                                                                | 5-103972-8 | 5-103971-8 | 5-103970-8                                                               | 5-103969-8 | 5-103968-8 | 103648-8          |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                    | 5-103973-9                                                                | 5-103972-9 | 5-103971-9 | 5-103970-9                                                               | 5-103969-9 | 5-103968-9 | 103648-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 6-103973-0                                                                | 6-103972-0 | 6-103971-0 | 6-103970-0                                                               | 6-103969-0 | 6-103968-0 | 1-103648-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 6-103973-1                                                                | 6-103972-1 | 6-103971-1 | 6-103970-1                                                               | 6-103969-1 | 6-103968-1 | 1-103648-1        |

## MTE Receptacle Assemblies—Individual Form with Guide Ribs, Single-Row, .100 [2.54] Centerline

| No. of Pos. | Dimensions B  | Individual Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------------------------------------------------------------------|------------|------------|--------------------------------------------------------------------------|------------|------------|-------------------|
|             |               | Plating A                                                                 | Plating B  | Plating C  | Plating A                                                                | Plating B  | Plating C  |                   |
| 13          | 1.298 [32.96] | 6-103901-2                                                                | 6-103649-2 | 6-103650-2 | 6-103900-2                                                               | 6-103651-2 | 6-103652-2 | 1-103648-2        |
| 14          | 1.398 [35.51] | 6-103901-3                                                                | 6-103649-3 | 6-103650-3 | 6-103900-3                                                               | 6-103651-3 | 6-103652-3 | 1-103648-3        |
| 15          | 1.498 [38.05] | 6-103901-4                                                                | 6-103649-4 | 6-103650-4 | 6-103900-4                                                               | 6-103651-4 | 6-103652-4 | 1-103648-4        |
| 16          | 1.598 [40.59] | 6-103901-5                                                                | 6-103649-5 | 6-103650-5 | 6-103900-5                                                               | 6-103651-5 | 6-103652-5 | 1-103648-5        |
| 17          | 1.698 [43.13] | 6-103901-6                                                                | 6-103649-6 | 6-103650-6 | 6-103900-6                                                               | 6-103651-6 | 6-103652-6 | 1-103648-6        |
| 18          | 1.798 [45.67] | 6-103901-7                                                                | 6-103649-7 | 6-103650-7 | 6-103900-7                                                               | 6-103651-7 | 6-103652-7 | 1-103648-7        |
| 19          | 1.898 [48.20] | 6-103901-8                                                                | 6-103649-8 | 6-103650-8 | 6-103900-8                                                               | 6-103651-8 | 6-103652-8 | 1-103648-8        |
| 20          | 1.998 [50.75] | 6-103901-9                                                                | 6-103649-9 | 6-103650-9 | 6-103900-9                                                               | 6-103651-9 | 6-103652-9 | 1-103648-9        |
| 21          | 2.098 [53.29] | 7-103901-0                                                                | 7-103649-0 | 7-103650-0 | 7-103900-0                                                               | 7-103651-0 | 7-103652-0 | 2-103648-0        |
| 22          | 2.198 [55.83] | 7-103901-1                                                                | 7-103649-1 | 7-103650-1 | 7-103900-1                                                               | 7-103651-1 | 7-103652-1 | 2-103648-1        |
| 23          | 2.298 [58.37] | 7-103901-2                                                                | 7-103649-2 | 7-103650-2 | 7-103900-2                                                               | 7-103651-2 | 7-103652-2 | 2-103648-2        |
| 24          | 2.398 [60.91] | 7-103901-3                                                                | 7-103649-3 | 7-103650-3 | 7-103900-3                                                               | 7-103651-3 | 7-103652-3 | 2-103648-3        |
| 25          | 2.498 [63.45] | 7-103901-4                                                                | 7-103649-4 | 7-103650-4 | 7-103900-4                                                               | 7-103651-4 | 7-103652-4 | 2-103648-4        |

- Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into "preload" windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove receptacle contacts.  
3. Keying plugs are available, see page 253.

**Note:** All part numbers are RoHS compliant.

## MTE High Pressure Receptacle Assemblies—Plain, Single-Row, .100 [2.54] Centerline



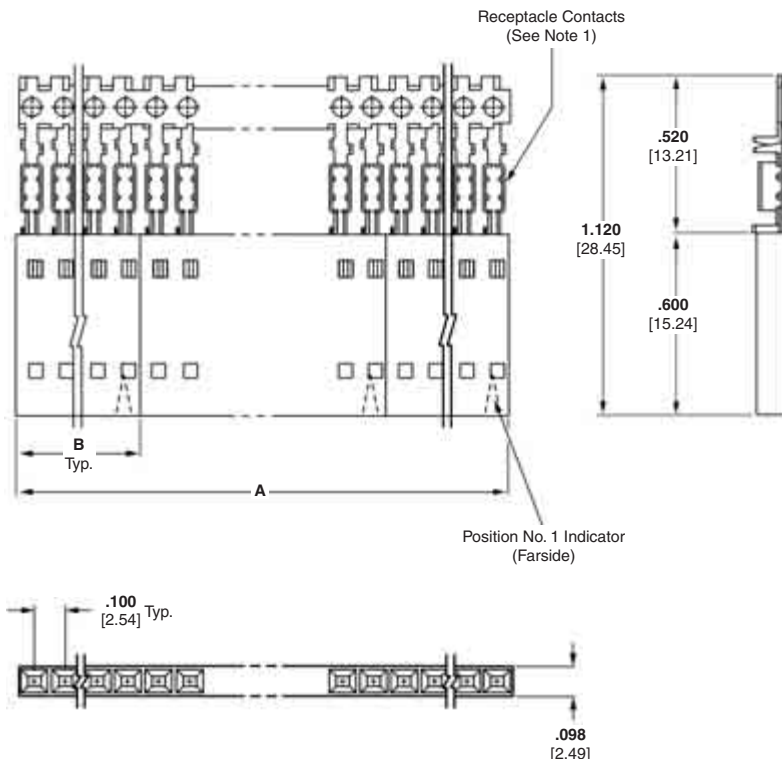
Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Contacts** — Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded housings is .200 [5.08] min., .250 [6.35] max.



### Related Product Data

#### Mateable AMPMODU Products

**Breakaway Headers** — pages 102-110, (with .230 mating length)

**Reeled Breakaway Headers** — pages 106, 107 (with .230 mating length)

**Machine Applied Bandolier Posts** — page 163

**Application Tooling** — page 273

**Performance Specifications** — page 225

**Technical Documents** — pages 277, 278)

**Product Specification**  
108-25034

**Application Specification**  
114-25026

| No. of Pos. | Dimensions    |               | Housings Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [.05-.15mm <sup>2</sup> ] Wire | Strip Form Receptacle Assembly 26-22 AWG [.12-.30mm <sup>2</sup> ] Wire |
|-------------|---------------|---------------|---------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
|             | A             | B             |                                       |                                                                         |                                                                         |
| 2           | 1.980 [50.29] | .198 [5.03]   | 10                                    | 5-104438-1                                                              | 5-104439-1                                                              |
| 3           | 1.490 [37.85] | .298 [7.57]   | 5                                     | 5-104438-2                                                              | 5-104439-2                                                              |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                     | 5-104438-3                                                              | 5-104439-3                                                              |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                     | 5-104438-4                                                              | 5-104439-4                                                              |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                     | 5-104438-5                                                              | 5-104439-5                                                              |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                     | 5-104438-6                                                              | 5-104439-6                                                              |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                     | 5-104438-7                                                              | 5-104439-7                                                              |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                     | 5-104438-8                                                              | 5-104439-8                                                              |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                     | 5-104438-9                                                              | 5-104439-9                                                              |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                     | 6-104438-0                                                              | 6-104439-0                                                              |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                     | 6-104438-1                                                              | 6-104439-1                                                              |

- Notes:** 1. Receptacle assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. High pressure receptacle contacts can be made available in other housing styles and position sizes. Contact your Tyco Electronics sales representative.

**Note:** All part numbers are RoHS compliant.

## MTE High Pressure Receptacle Assemblies – Guide Ribs



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Thermoplastic, black, 94V-0 rated

**Contacts** — Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin on crimp area, with entire contact underplated .000050 [0.00127] nickel.

### Related Product Data

**Coupling Shrouds used with —**  
**Single-Row** — page 240  
**Double-Row** — page 241

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds)** —

**Pin Assemblies (Polarized/Latching)** — pages 236, 237

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)** — pages 238, 239, 242

**Headers (Polarized/Latching)** — pages 244-252

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds)** —

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension)** — pages 119-121, 124, 125, 128, 129, 131-133

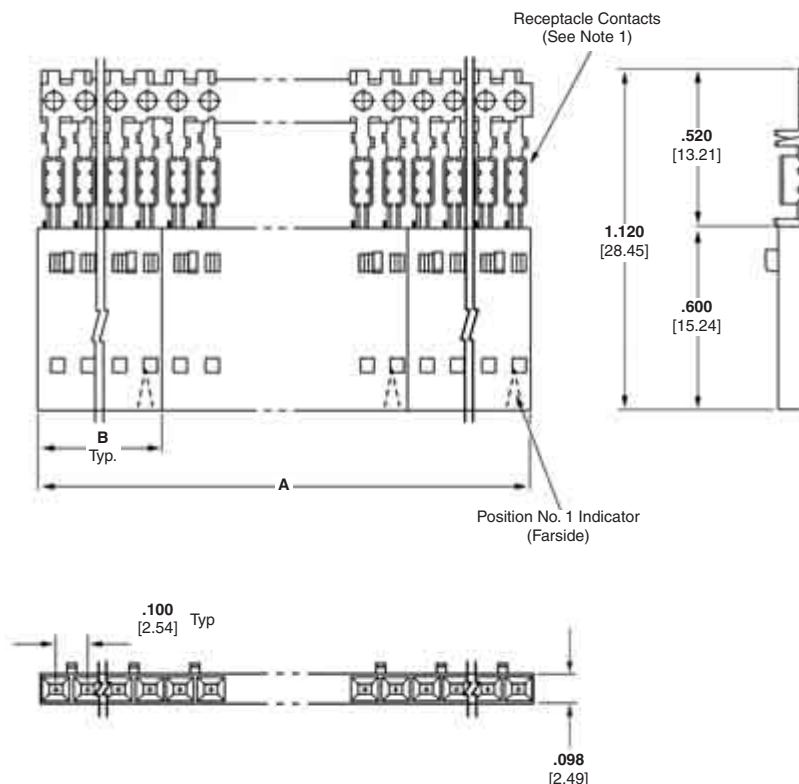
**Application Tooling** — page 273

**Performance Specifications** — page 225

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

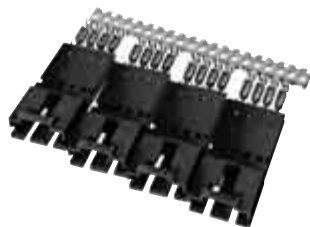


| No. of Pos. | Dimensions    |               | Housings Quantities Per Strip Segment | Strip Form Receptacle Assembly 30-26 AWG [.05-.15mm <sup>2</sup> ] Wire | Strip Form Receptacle Assembly 26-22 AWG [.12-.30mm <sup>2</sup> ] Wire |
|-------------|---------------|---------------|---------------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------|
|             | A             | B             |                                       |                                                                         |                                                                         |
| 2           | 1.980 [50.29] | .198 [5.03]   | 10                                    | 5-147396-1                                                              | 5-147030-3                                                              |
| 3           | 1.490 [37.85] | .298 [7.57]   | 5                                     | 5-147396-2                                                              | 5-147030-4                                                              |
| 4           | 1.990 [50.55] | .398 [10.11]  | 5                                     | 5-147396-3                                                              | 5-147030-1                                                              |
| 5           | 1.990 [50.55] | .498 [12.65]  | 4                                     | 5-147396-4                                                              | 5-147030-2                                                              |
| 6           | 2.390 [60.71] | .598 [15.19]  | 4                                     | 5-147396-5                                                              | 5-147030-5                                                              |
| 7           | 1.400 [35.56] | .698 [17.73]  | 2                                     | 5-147396-6                                                              | 5-147030-6                                                              |
| 8           | 1.600 [40.64] | .798 [20.27]  | 2                                     | 5-147396-7                                                              | 5-147030-7                                                              |
| 9           | 1.800 [45.72] | .898 [22.81]  | 2                                     | 5-147396-8                                                              | 5-147030-8                                                              |
| 10          | 2.000 [50.80] | .998 [23.35]  | 2                                     | 5-147396-9                                                              | 5-147030-9                                                              |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                     | 6-147396-0                                                              | 6-147030-0                                                              |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                     | 6-147396-1                                                              | 6-147030-1                                                              |

**Note:** All part numbers are RoHS compliant.



## MTE Pin Assemblies, Shrouded—Polarized/Latching, Single-Row, .100 [2.54] Centerline



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Contacts** — Phosphor Bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

### Related Product Data

**Mateable AMPMODU Products —**

**Receptacle Assemblies (Polarized/Latching) —**  
pages 230, 231

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) —** pages 232, 233, 235, 240

**Interchangeable Crimp Contacts —**  
page 254

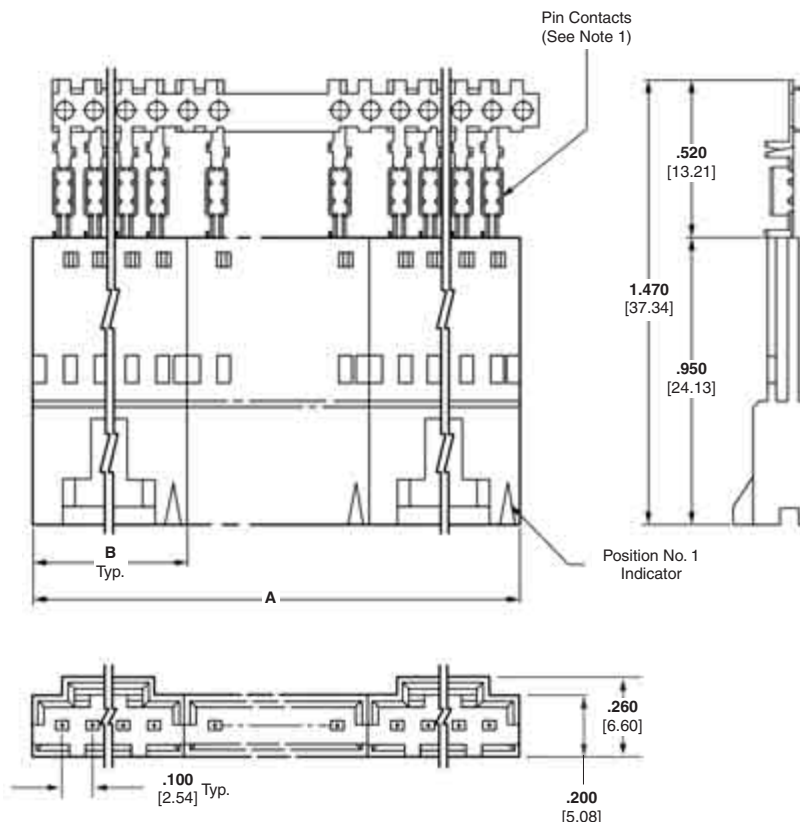
**Application Tooling —** page 273

**Performance Specifications —**  
page 225

**Technical Documents —**  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



## MTE Pin Assemblies, Shrouded—Strip Form Polarized/Latching, Single-Row, .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|--------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A                                                          | Plating B  | Plating C  | Plating A                                                         | Plating B  | Plating C  |                   |
| 2           | 2.360 [59.94] | .295 [7.49]   | 8                                    | 5-103949-1                                                         | 5-103948-1 | 5-103947-1 | 5-103946-1                                                        | 5-103945-1 | 5-103944-1 | 103653-1          |
| 3           | 1.980 [50.29] | .395 [10.03]  | 5                                    | 5-103949-2                                                         | 5-103948-2 | 5-103947-2 | 5-103946-2                                                        | 5-103945-2 | 5-103944-2 | 103653-2          |
| 4           | 1.980 [50.29] | .495 [12.57]  | 4                                    | 5-103949-3                                                         | 5-103948-3 | 5-103947-3 | 5-103946-3                                                        | 5-103945-3 | 5-103944-3 | 103653-3          |
| 5           | 2.380 [60.45] | .595 [15.11]  | 4                                    | 5-103949-4                                                         | 5-103948-4 | 5-103947-4 | 5-103946-4                                                        | 5-103945-4 | 5-103944-4 | 103653-4          |
| 6           | 1.390 [35.31] | .695 [17.65]  | 2                                    | 5-103949-5                                                         | 5-103948-5 | 5-103947-5 | 5-103946-5                                                        | 5-103945-5 | 5-103944-5 | 103653-5          |
| 7           | 2.390 [60.71] | .795 [20.19]  | 3                                    | 5-103949-6                                                         | 5-103948-6 | 5-103947-6 | 5-103946-6                                                        | 5-103945-6 | 5-103944-6 | 103653-6          |
| 8           | 1.790 [45.47] | .895 [22.73]  | 2                                    | 5-103949-7                                                         | 5-103948-7 | 5-103947-7 | 5-103946-7                                                        | 5-103945-7 | 5-103944-7 | 103653-7          |
| 9           | 1.990 [50.57] | .995 [25.27]  | 2                                    | 5-103949-8                                                         | 5-103948-8 | 5-103947-8 | 5-103946-8                                                        | 5-103945-8 | 5-103944-8 | 103653-8          |
| 10          | 2.190 [55.63] | 1.095 [27.81] | 2                                    | 5-103949-9                                                         | 5-103948-9 | 5-103947-9 | 5-103946-9                                                        | 5-103945-9 | 5-103944-9 | 103653-9          |
| 11          | 2.390 [60.71] | 1.195 [30.35] | 2                                    | 6-103949-0                                                         | 6-103948-0 | 6-103947-0 | 6-103946-0                                                        | 6-103945-0 | 6-103944-0 | 1-103653-0        |
| 12          | 2.590 [65.79] | 1.295 [32.89] | 2                                    | 6-103949-1                                                         | 6-103948-1 | 6-103947-1 | 6-103946-1                                                        | 6-103945-1 | 6-103944-1 | 1-103653-1        |

## MTE Pin Assemblies, Shrouded—Individual Form Polarized/Latching, Single-Row, .100 [2.54] Centerline

| No. of Pos. | Dimensions B  | Individual Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|--------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------|------------|------------|-------------------|
|             |               | Plating A                                                          | Plating B  | Plating C  | Plating A                                                         | Plating B  | Plating C  |                   |
| 13          | 1.395 [35.43] | 6-103894-2                                                         | 6-103658-2 | 6-103659-2 | 6-103893-2                                                        | 6-103660-2 | 6-103661-2 | 1-103653-2        |
| 14          | 1.495 [37.97] | 6-103894-3                                                         | 6-103658-3 | 6-103659-3 | 6-103893-3                                                        | 6-103660-3 | 6-103661-3 | 1-103653-3        |
| 15          | 1.595 [40.51] | 6-103894-4                                                         | 6-103658-4 | 6-103659-4 | 6-103893-4                                                        | 6-103660-4 | 6-103661-4 | 1-103653-4        |
| 16          | 1.695 [43.05] | 6-103894-5                                                         | 6-103658-5 | 6-103659-5 | 6-103893-5                                                        | 6-103660-5 | 6-103661-5 | 1-103653-5        |
| 17          | 1.795 [45.59] | 6-103894-6                                                         | 6-103658-6 | 6-103659-6 | 6-103893-6                                                        | 6-103660-6 | 6-103661-6 | 1-103653-6        |
| 18          | 1.895 [48.13] | 6-103894-7                                                         | 6-103658-7 | 6-103659-7 | 6-103893-7                                                        | 6-103660-7 | 6-103661-7 | 1-103653-7        |
| 19          | 1.995 [50.67] | 6-103894-8                                                         | 6-103658-8 | 6-103659-8 | 6-103893-8                                                        | 6-103660-8 | 6-103661-8 | 1-103653-8        |
| 20          | 2.095 [53.21] | 6-103894-9                                                         | 6-103658-9 | 6-103659-9 | 6-103893-9                                                        | 6-103660-9 | 6-103661-9 | 1-103653-9        |
| 21          | 2.195 [55.75] | 7-103894-0                                                         | 7-103658-0 | 7-103659-0 | 7-103893-0                                                        | 7-103660-0 | 7-103661-0 | 2-103653-0        |
| 22          | 2.295 [58.29] | 7-103894-1                                                         | 7-103658-1 | 7-103659-1 | 7-103893-1                                                        | 7-103660-1 | 7-103661-1 | 2-103653-1        |
| 23          | 2.395 [60.83] | 7-103894-2                                                         | 7-103658-2 | 7-103659-2 | 7-103893-2                                                        | 7-103660-2 | 7-103661-2 | 2-103653-2        |
| 24          | 2.495 [63.37] | 7-103894-3                                                         | 7-103658-3 | 7-103659-3 | 7-103893-3                                                        | 7-103660-3 | 7-103661-3 | 2-103653-3        |
| 25          | 2.595 [65.91] | 7-103894-4                                                         | 7-103658-4 | 7-103659-4 | 7-103893-4                                                        | 7-103660-4 | 7-103661-4 | 2-103653-4        |

- Notes:** 1. Pin assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove pin contacts.

**Note:** All part numbers are RoHS compliant.

## MTE Pin Assemblies—Guide Ribs, Single-Row, .100 [2.54] Centerline



Preassembled housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

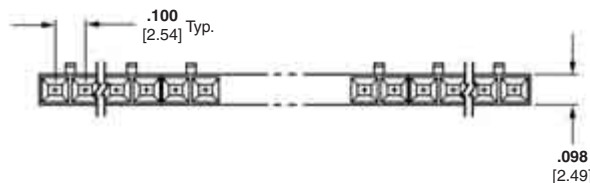
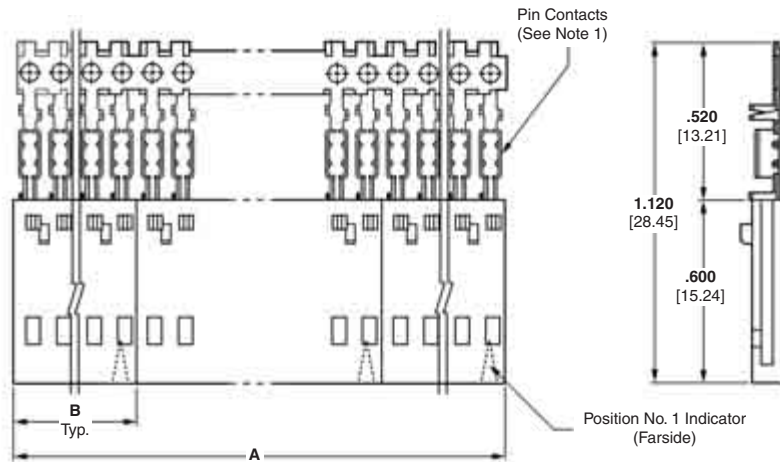
**Contacts** — Phosphor Bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.



### Related Product Data

**Mateable AMPMODU MTE Products (with Pin Assembly Installed in Panel Mount Pin Shroud)** — pages 242, 243

**Receptacle Assemblies (Polarized/Latching)** — pages 230, 231

**Receptacle Assemblies with Guide Ribs (installed in Single Row Coupling Shroud)** — pages 232, 233, 235, 240

**Interchangeable Crimp Contacts** — page 254

**Application Tooling** — page 273

**Performance Specifications** — page 225

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

## MTE Pin Assemblies—Strip Form with Guide Ribs, Single-Row, .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               | Housing Quantities Per Strip Segment | Strip Form Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Strip Form Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|---------------|--------------------------------------|--------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------|------------|------------|-------------------|
|             | A             | B             |                                      | Plating A                                                          | Plating B  | Plating C  | Plating A                                                         | Plating B  | Plating C  |                   |
| 2           | 1.980 [50.29] | 0.198 [5.03]  | 10                                   | 5-103955-1                                                         | 5-103954-1 | 5-103953-1 | 5-103952-1                                                        | 5-103951-1 | 5-103950-1 | 104503-1          |
| 3           | 1.490 [37.85] | 0.298 [7.57]  | 5                                    | 5-103955-2                                                         | 5-103954-2 | 5-103953-2 | 5-103952-2                                                        | 5-103951-2 | 5-103950-2 | 104503-2          |
| 4           | 1.990 [50.55] | 0.398 [10.11] | 5                                    | 5-103955-3                                                         | 5-103954-3 | 5-103953-3 | 5-103952-3                                                        | 5-103951-3 | 5-103950-3 | 104503-3          |
| 5           | 1.990 [50.55] | 0.498 [12.65] | 4                                    | 5-103955-4                                                         | 5-103954-4 | 5-103953-4 | 5-103952-4                                                        | 5-103951-4 | 5-103950-4 | 104503-4          |
| 6           | 2.390 [60.71] | 0.598 [15.19] | 4                                    | 5-103955-5                                                         | 5-103954-5 | 5-103953-5 | 5-103952-5                                                        | 5-103951-5 | 5-103950-5 | 104503-5          |
| 7           | 1.400 [35.56] | 0.698 [17.73] | 2                                    | 5-103955-6                                                         | 5-103954-6 | 5-103953-6 | 5-103952-6                                                        | 5-103951-6 | 5-103950-6 | 104503-6          |
| 8           | 1.600 [40.64] | 0.798 [20.27] | 2                                    | 5-103955-7                                                         | 5-103954-7 | 5-103953-7 | 5-103952-7                                                        | 5-103951-7 | 5-103950-7 | 104503-7          |
| 9           | 1.800 [45.72] | 0.898 [22.81] | 2                                    | 5-103955-8                                                         | 5-103954-8 | 5-103953-8 | 5-103952-8                                                        | 5-103951-8 | 5-103950-8 | 104503-8          |
| 10          | 2.000 [50.80] | 0.998 [25.35] | 2                                    | 5-103955-9                                                         | 5-103954-9 | 5-103953-9 | 5-103952-9                                                        | 5-103951-9 | 5-103950-9 | 104503-9          |
| 11          | 2.200 [55.88] | 1.098 [27.89] | 2                                    | 6-103955-0                                                         | 6-103954-0 | 6-103953-0 | 6-103952-0                                                        | 6-103951-0 | 6-103950-0 | 1-104503-0        |
| 12          | 2.400 [60.96] | 1.198 [30.43] | 2                                    | 6-103955-1                                                         | 6-103954-1 | 6-103953-1 | 6-103952-1                                                        | 6-103951-1 | 6-103950-1 | 1-104503-1        |

## MTE Pin Assemblies—Individual Form with Guide Ribs, Single-Row, .100 [2.54] Centerline

| No. of Pos. | Dimensions B  | Individual Pin Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire |            |            | Individual Pin Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire |            |            | Unloaded Housings |
|-------------|---------------|--------------------------------------------------------------------|------------|------------|-------------------------------------------------------------------|------------|------------|-------------------|
|             |               | Plating A                                                          | Plating B  | Plating C  | Plating A                                                         | Plating B  | Plating C  |                   |
| 13          | 1.398 [35.51] | 6-103896-2                                                         | 6-103657-2 | 6-103656-2 | 6-103895-2                                                        | 6-103655-2 | 6-103654-2 | 1-104503-2        |
| 14          | 1.498 [38.05] | 6-103896-3                                                         | 6-103657-3 | 6-103656-3 | 6-103895-3                                                        | 6-103655-3 | 6-103654-3 | 1-104503-3        |
| 15          | 1.598 [40.59] | 6-103896-4                                                         | 6-103657-4 | 6-103656-4 | 6-103895-4                                                        | 6-103655-4 | 6-103654-4 | 1-104503-4        |
| 16          | 1.698 [43.13] | 6-103896-5                                                         | 6-103657-5 | 6-103656-5 | 6-103895-5                                                        | 6-103655-5 | 6-103654-5 | 1-104503-5        |
| 17          | 1.798 [45.67] | 6-103896-6                                                         | 6-103657-6 | 6-103656-6 | 6-103895-6                                                        | 6-103655-6 | 6-103654-6 | 1-104503-6        |
| 18          | 1.898 [48.20] | 6-103896-7                                                         | 6-103657-7 | 6-103656-7 | 6-103895-7                                                        | 6-103655-7 | 6-103654-7 | 1-104503-7        |
| 19          | 1.998 [50.75] | 6-103896-8                                                         | 6-103657-8 | 6-103656-8 | 6-103895-8                                                        | 6-103655-8 | 6-103654-8 | 1-104503-8        |
| 20          | 2.098 [53.29] | 6-103896-9                                                         | 6-103657-9 | 6-103656-9 | 6-103895-9                                                        | 6-103655-9 | 6-103654-9 | 1-104503-9        |
| 21          | 2.198 [55.83] | 7-103896-0                                                         | 7-103657-0 | 7-103656-0 | 7-103895-0                                                        | 7-103655-0 | 7-103654-0 | 2-104503-0        |
| 22          | 2.298 [58.37] | 7-103896-1                                                         | 7-103657-1 | 7-103656-1 | 7-103895-1                                                        | 7-103655-1 | 7-103654-1 | 2-104503-1        |
| 23          | 2.398 [60.91] | 7-103896-2                                                         | 7-103657-2 | 7-103656-2 | 7-103895-2                                                        | 7-103655-2 | 7-103654-2 | 2-104503-2        |
| 24          | 2.498 [63.45] | 7-103896-3                                                         | 7-103657-3 | 7-103656-3 | 7-103895-3                                                        | 7-103655-3 | 7-103654-3 | 2-104503-3        |
| 25          | 2.598 [65.99] | 7-103896-4                                                         | 7-103657-4 | 7-103656-4 | 7-103895-4                                                        | 7-103655-4 | 7-103654-4 | 2-104503-4        |

**Notes:** 1. Pin assemblies are furnished with strip contacts partially inserted into housing—contacts latched into “preload” windows. Contacts are fully inserted into housings automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.  
2. Use **Extraction/Lance Reset Tool No. 843477-1** to remove pin contacts.

**Note:** All part numbers are RoHS compliant.

## Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs

### Single-Row

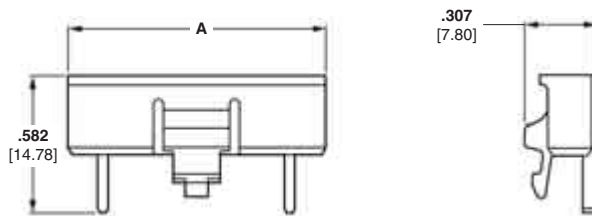
#### Material

Black thermoplastic, 94V-0 rated

**Technical Documents** —  
pages 277, 278

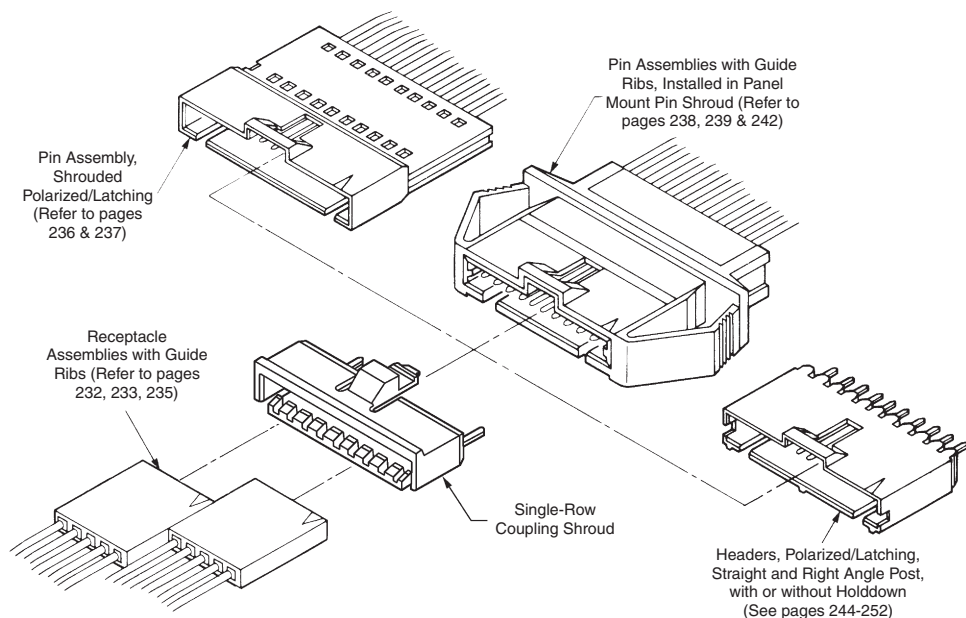
**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimension A   | Single-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 4           | .485 [12.32]  | 103680-1                   |
| 5           | .585 [14.86]  | 103680-2                   |
| 6           | .685 [17.40]  | 103680-3                   |
| 7           | .785 [19.94]  | 103680-4                   |
| 8           | .885 [22.48]  | 103680-5                   |
| 9           | .985 [25.02]  | 103680-6                   |
| 10          | 1.085 [27.56] | 103680-7                   |
| 11          | 1.185 [30.10] | 103680-8                   |
| 12          | 1.285 [32.64] | 103680-9                   |
| 13          | 1.385 [35.18] | 1-103680-0                 |
| 14          | 1.485 [37.72] | 1-103680-1                 |

| No. of Pos. | Dimension A   | Single-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 15          | 1.585 [40.26] | 1-103680-2                 |
| 16          | 1.685 [42.80] | 1-103680-3                 |
| 17          | 1.785 [45.34] | 1-103680-4                 |
| 18          | 1.885 [47.88] | 1-103680-5                 |
| 19          | 1.985 [50.42] | 1-103680-6                 |
| 20          | 2.085 [52.96] | 1-103680-7                 |
| 21          | 2.185 [55.50] | 1-103680-8                 |
| 22          | 2.285 [58.04] | 1-103680-9                 |
| 23          | 2.385 [60.58] | 2-103680-0                 |
| 24          | 2.485 [63.12] | 2-103680-1                 |
| 25          | 2.585 [65.66] | 2-103680-2                 |



**Typical Application of Single-Row Coupling Shroud and Mating AMPMODU MTE Products**

**Note:** All part numbers are RoHS compliant.



## Coupling Shrouds for MTE Receptacle Assemblies with Guide Ribs (Continued)

### Double-Row

#### Material

Black thermoplastic, 94V-0 rated

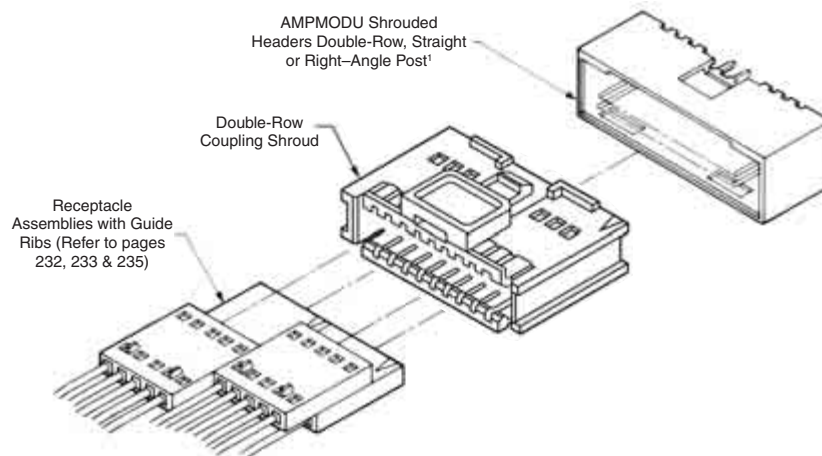
**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimension A   | Double-Row Coupling Shroud |
|-------------|---------------|----------------------------|
| 8           | .585 [14.86]  | 103681-1                   |
| 10          | .685 [17.40]  | 103681-2                   |
| 12          | .785 [19.94]  | 103681-3                   |
| 14          | .885 [22.48]  | 103681-4                   |
| 16          | .985 [25.02]  | 103681-5                   |
| 18          | 1.085 [27.56] | 104500-1                   |
| 20          | 1.185 [30.10] | 104500-2                   |
| 22          | 1.285 [32.64] | 104500-3                   |
| 24          | 1.385 [35.18] | 104500-4                   |
| 26          | 1.485 [37.72] | 104500-5                   |
| 28          | 1.585 [40.26] | 104500-6                   |
| 30          | 1.685 [42.80] | 104500-7                   |
| 32          | 1.785 [45.34] | 104500-8                   |
| 34          | 1.885 [47.88] | 104500-9                   |
| 40          | 2.185 [55.50] | 1-104500-0                 |
| 50          | 2.685 [68.20] | 1-104500-1                 |



¹Mating AMPMODU Double-Row Shrouded Headers must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

### Typical Application of Double-Row Coupling Shroud and Mating AMPMODU Products

**Note:** All part numbers are RoHS compliant.

## Panel Mount Pin Shrouds for MTE Pin Assemblies with Guide Ribs, Single-Row

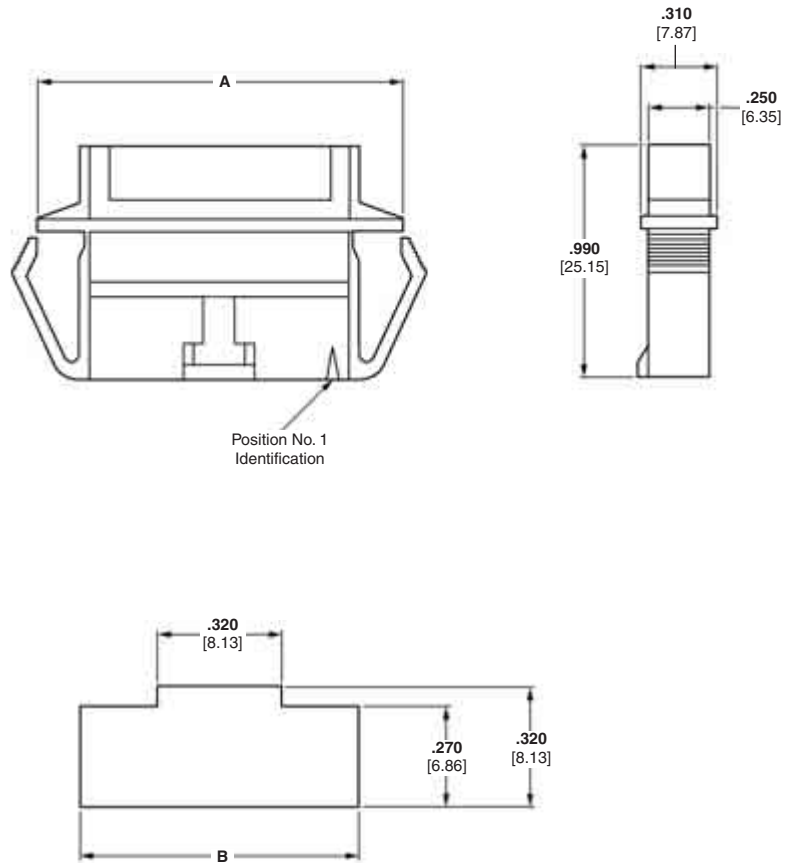
### Material

Black thermoplastic, 94V-0 rated

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



| No. of Pos. | Dimensions    |               | Panel Mount Pin Shroud |
|-------------|---------------|---------------|------------------------|
|             | A             | B             |                        |
| 2           | .735 [18.67]  | .625 [15.88]  | 103682-1               |
| 3           | .835 [21.21]  | .725 [18.42]  | 103682-2               |
| 4           | .935 [23.75]  | .825 [20.96]  | 103682-3               |
| 5           | 1.035 [26.29] | .925 [23.50]  | 103682-4               |
| 6           | 1.135 [28.83] | 1.025 [26.04] | 103682-5               |
| 7           | 1.235 [31.37] | 1.125 [28.58] | 103682-6               |
| 8           | 1.335 [33.91] | 1.225 [31.12] | 103682-7               |
| 9           | 1.435 [36.45] | 1.325 [33.66] | 103682-8               |
| 10          | 1.535 [38.99] | 1.425 [36.20] | 103682-9               |
| 11          | 1.635 [41.53] | 1.525 [38.74] | 1-103682-0             |
| 12          | 1.735 [44.07] | 1.625 [41.28] | 1-103682-1             |
| 13          | 1.835 [46.61] | 1.725 [43.82] | 1-103682-2             |

| No. of Pos. | Dimensions    |               | Panel Mount Pin Shroud |
|-------------|---------------|---------------|------------------------|
|             | A             | B             |                        |
| 14          | 1.935 [49.15] | 1.825 [46.36] | 1-103682-3             |
| 15          | 2.035 [51.69] | 1.925 [48.90] | 1-103682-4             |
| 16          | 2.135 [54.23] | 2.025 [51.44] | 1-103682-5             |
| 17          | 2.235 [56.77] | 2.125 [53.98] | 1-103682-6             |
| 18          | 2.335 [59.31] | 2.225 [56.52] | 1-103682-7             |
| 19          | 2.435 [61.85] | 2.325 [59.06] | 1-103682-8             |
| 20          | 2.535 [64.39] | 2.425 [61.60] | 1-103682-9             |
| 21          | 2.635 [66.93] | 2.525 [64.14] | 2-103682-0             |
| 22          | 2.735 [69.47] | 2.625 [66.68] | 2-103682-1             |
| 23          | 2.835 [72.01] | 2.725 [69.22] | 2-103682-2             |
| 24          | 2.935 [74.55] | 2.825 [71.76] | 2-103682-3             |
| 25          | 3.035 [77.09] | 2.925 [74.30] | 2-103682-4             |

**Note:** All part numbers are RoHS compliant.

## Panel Mount Pin Shrouds for MTE Pin Assemblies with Guide Ribs, Single-Row (Continued)

### Material

Black thermoplastic, 94V-0 rated

### Technical Documents —

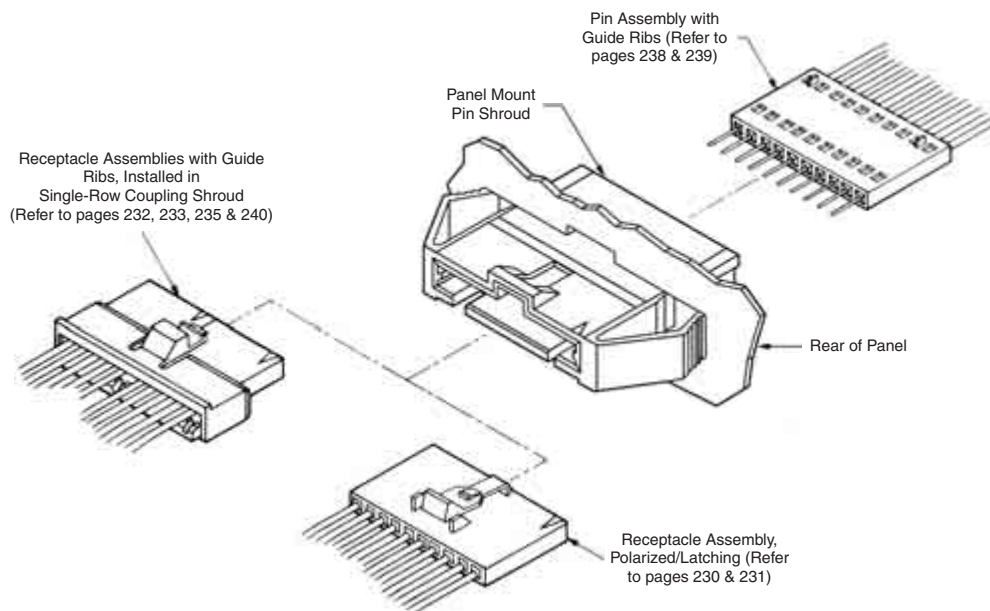
pages 277, 278

### Product Specification

108-25034

### Application Specification

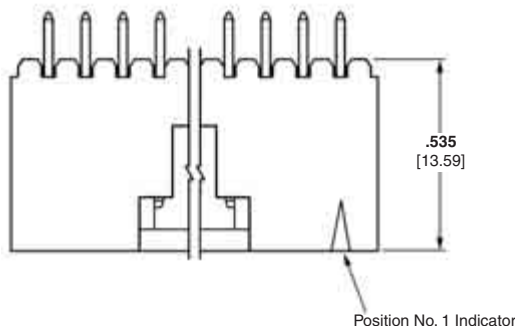
114-25026



Typical Application of Panel Mount Pin Shroud and Mating AMPMODU Products

## MTE Headers, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centerline

**.025 [0.64] Square  
Straight Post (With or  
Without Swaged Tail)**



Swaged Retention Tail  
(See Note)

### Material and Finish

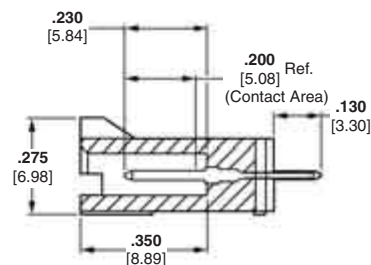
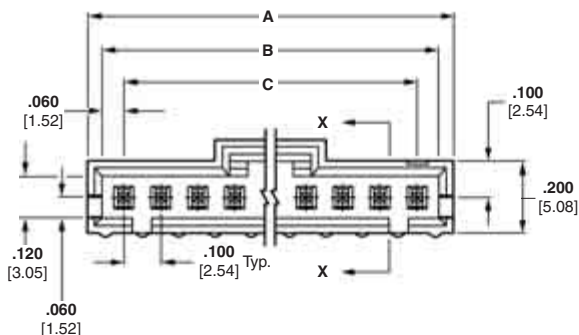
**Housing** — Black thermoplastic,  
94V-0 rated

**Posts** — Brass, plated as follows:

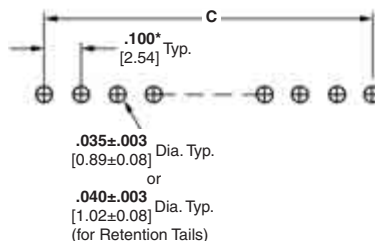
**Plating A** — Duplex plated .000030  
[0.00076] gold on contact area, .000100  
[0.00254] min. tin on solder area, with  
entire post underplated .000050  
[0.00127] nickel

**Plating B** — Duplex plated .000015  
[0.00038] gold on contact area, .000100  
[0.00254] min. tin on solder area, with  
entire post underplated .000050  
[0.00127] nickel

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



Section X-X



Recommended PC Board Hole Layout

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

### Related Product Data

**Mateable AMPMODU MTE  
Products** —

**Receptacle Assemblies  
(Polarized/Latching)** —  
pages 230, 231

**Receptacle Assemblies with Guide  
Ribs (installed in Single-Row  
Coupling Shroud)** —  
pages 232, 233, 235, 240

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

## MTE Headers, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               |               | Polarized/Latching Header With Swage |            |            | Polarized/Latching Header Without Swage |            |            |
|-------------|---------------|---------------|---------------|--------------------------------------|------------|------------|-----------------------------------------|------------|------------|
|             | A             | B             | C             | Plating A                            | Plating B  | Plating C  | Plating A                               | Plating B  | Plating C  |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 5-103908-1                           | 5-104362-1 | 5-103669-1 | 5-103735-1                              | 5-104363-1 | 5-103639-1 |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 5-103908-2                           | 5-104362-2 | 5-103669-2 | 5-103735-2                              | 5-104363-2 | 5-103639-2 |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 5-103908-3                           | 5-104362-3 | 5-103669-3 | 5-103735-3                              | 5-104363-3 | 5-103639-3 |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 5-103908-4                           | 5-104362-4 | 5-103669-4 | 5-103735-4                              | 5-104363-4 | 5-103639-4 |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 5-103908-5                           | 5-104362-5 | 5-103669-5 | 5-103735-5                              | 5-104363-5 | 5-103639-5 |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 5-103908-6                           | 5-104362-6 | 5-103669-6 | 5-103735-6                              | 5-104363-6 | 5-103639-6 |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 5-103908-7                           | 5-104362-7 | 5-103669-7 | 5-103735-7                              | 5-104363-7 | 5-103639-7 |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 5-103908-8                           | 5-104362-8 | 5-103669-8 | 5-103735-8                              | 5-104363-8 | 5-103639-8 |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 5-103908-9                           | 5-104362-9 | 5-103669-9 | 5-103735-9                              | 5-104363-9 | 5-103639-9 |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 6-103908-0                           | 6-104362-0 | 6-103669-0 | 6-103735-0                              | 6-104363-0 | 6-103639-0 |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 6-103908-1                           | 6-104362-1 | 6-103669-1 | 6-103735-1                              | 6-104363-1 | 6-103639-1 |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 6-103908-2                           | 6-104909-2 | 6-103669-2 | 6-103735-2                              | 6-104910-2 | 6-103639-2 |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 6-103908-3                           | 6-104909-3 | 6-103669-3 | 6-103735-3                              | 6-104910-3 | 6-103639-3 |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 6-103908-4                           | 6-104909-4 | 6-103669-4 | 6-103735-4                              | 6-104910-4 | 6-103639-4 |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 6-103908-5                           | 6-104909-5 | 6-103669-5 | 6-103735-5                              | 6-104910-5 | 6-103639-5 |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 6-103908-6                           | 6-104909-6 | 6-103669-6 | 6-103735-6                              | 6-104910-6 | 6-103639-6 |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 6-103908-7                           | 6-104909-7 | 6-103669-7 | 6-103735-7                              | 6-104910-7 | 6-103639-7 |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 6-103908-8                           | 6-104909-8 | 6-103669-8 | 6-103735-8                              | 6-104910-8 | 6-103639-8 |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 6-103908-9                           | 6-104909-9 | 6-103669-9 | 6-103735-9                              | 6-104910-9 | 6-103639-9 |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 7-103908-0                           | 7-104909-0 | 7-103669-0 | 7-103735-0                              | 7-104910-0 | 7-103639-0 |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 7-103908-1                           | 7-104909-1 | 7-103669-1 | 7-103735-1                              | 7-104910-1 | 7-103639-1 |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 7-103908-2                           | 7-104909-2 | 7-103669-2 | 7-103735-2                              | 7-104910-2 | 7-103639-2 |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 7-103908-3                           | 7-104909-3 | 7-103669-3 | 7-103735-3                              | 7-104910-3 | 7-103639-3 |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 7-103908-4                           | 7-104909-4 | 7-103669-4 | 7-103735-4                              | 7-104910-4 | 7-103639-4 |

Notes: 1. Selectively loaded headers are available, consult Tyco Electronics.  
2. Use Keying Tool No. 91417-1 to remove post for keying.

Note: All part numbers are RoHS compliant.

**.025 [0.64] Square  
Right-Angle Post**



**Housing** — Black thermoplastic, 94V-0 rated

**Plating A** — Duplex plated .000030  
[0.00076] gold on contact area, .000100  
[0.00254] min. tin on solder area, with  
entire post underplated .000050  
[0.00127] nickel

**Plating B** — Duplex plated .000015  
[0.00038] gold on contact area, .000100  
[0.00254] min. tin on solder area, with  
entire post underplated .000050  
[0.00127] nickel

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



**Receptacle Assemblies (Latching)** — pages 230, 231

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)** — pages 232, 233, 235, 240

**Technical Documents** —  
pages 277, 278

## Product Specification

### 108-25034

**Application Specification**  
114-25026

Technical drawing of a 16-pin connector showing top, side, and cross-section views with dimensions in inches and millimeters.

**Top View Dimensions:**

- Overall width:  $.535$  [13.59]
- Position No. 1 Indicator

**Side View Dimensions:**

- Overall height:  $.365$  [9.27]
- Pin pitch:  $.100$  [2.54] Typ.
- Pin diameter:  $.035 \pm .003$  [0.89  $\pm$  0.08] Dia. Typ.
- Pin length:  $.120$  [3.05]
- Pin thickness:  $.060$  [1.52]
- Pin spacing:  $.100$  [2.54]
- Pin diameter:  $.060$  [1.52]
- Pin diameter:  $.134 \pm .003$  [3.40  $\pm$  0.08] (2 Plc.)
- Pin diameter:  $.055 \pm .003$  [1.40  $\pm$  0.08] Typ.

**Section X-X Dimensions:**

- Overall width:  $.230$  [5.84]
- Pin diameter:  $.200$  [5.08] Ref. (Contact Area)
- Pin length:  $.275$  [6.99]
- Pin diameter:  $.350$  [8.89]
- Pin diameter:  $.145$  [3.68]

**Recommended PC Board Hole Layout**  
**(PC board thickness (for Holddown Feature) is .062±.008 [1.57±.20])**  
<sup>\*</sup>±.003 [±0.08]; tolerance not to accumulate within one connector pattern.

[illegible]

**Recommended PC Board Hole Layout**  
 $\pm 0.003$  [ $\pm 0.08$ ]: tolerance not to accumulate within one connector pattern.



## MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline (Continued)

| No. of Pos. | Dimensions    |               |               | Latching Header With Hold Down |            |            | Latching Header Without Hold Down |            |            |
|-------------|---------------|---------------|---------------|--------------------------------|------------|------------|-----------------------------------|------------|------------|
|             | A             | B             | C             | Plating A                      | Plating B  | Plating C  | Plating A                         | Plating B  | Plating C  |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 5-103904-1                     | 5-103673-1 | 5-103672-1 | 5-104935-5                        | 5-103635-1 | 5-103634-1 |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 5-103904-2                     | 5-103673-2 | 5-103672-2 | 5-104935-3                        | 5-103635-2 | 5-103634-2 |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 5-103904-3                     | 5-103673-3 | 5-103672-3 | 5-104935-1                        | 5-103635-3 | 5-103634-3 |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 5-103904-4                     | 5-103673-4 | 5-103672-4 | 5-104935-6                        | 5-103635-4 | 5-103634-4 |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 5-103904-5                     | 5-103673-5 | 5-103672-5 | 5-104935-7                        | 5-103635-5 | 5-103634-5 |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 5-103904-6                     | 5-103673-6 | 5-103672-6 | 5-104935-8                        | 5-103635-6 | 5-103634-6 |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 5-103904-7                     | 5-103673-7 | 5-103672-7 | 5-104935-2                        | 5-103635-7 | 5-103634-7 |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 5-103904-8                     | 5-103673-8 | 5-103672-8 | 5-104935-9                        | 5-103635-8 | 5-103634-8 |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 5-103904-9                     | 5-103673-9 | 5-103672-9 | 6-104935-0                        | 5-103635-9 | 5-103634-9 |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 6-103904-0                     | 6-103673-0 | 6-103672-0 | 6-104935-1                        | 6-103635-0 | 6-103634-0 |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 6-103904-1                     | 6-103673-1 | 6-103672-1 | 5-104935-4                        | 6-103635-1 | 6-103634-1 |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 6-103904-2                     | 6-103673-2 | 6-103672-2 | 6-104935-2                        | 6-103635-2 | 6-103634-2 |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 6-103904-3                     | 6-103673-3 | 6-103672-3 | 6-104935-3                        | 6-103635-3 | 6-103634-3 |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 6-103904-4                     | 6-103673-4 | 6-103672-4 | 6-104935-4                        | 6-103635-4 | 6-103634-4 |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 6-103904-5                     | 6-103673-5 | 6-103672-5 | 6-104935-5                        | 6-103635-5 | 6-103634-5 |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 6-103904-6                     | 6-103673-6 | 6-103672-6 | 6-104935-6                        | 6-103635-6 | 6-103634-6 |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 6-103904-7                     | 6-103673-7 | 6-103672-7 | 6-104935-7                        | 6-103635-7 | 6-103634-7 |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 6-103904-8                     | 6-103673-8 | 6-103672-8 | 6-104935-8                        | 6-103635-8 | 6-103634-8 |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 6-103904-9                     | 6-103673-9 | 6-103672-9 | 6-104935-9                        | 6-103635-9 | 6-103634-9 |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 7-103904-0                     | 7-103673-0 | 7-103672-0 | 7-104935-0                        | 7-103635-0 | 7-103634-0 |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 7-103904-1                     | 7-103673-1 | 7-103672-1 | 7-104935-1                        | 7-103635-1 | 7-103634-1 |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 7-103904-2                     | 7-103673-2 | 7-103672-2 | 7-104935-2                        | 7-103635-2 | 7-103634-2 |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 7-103904-3                     | 7-103673-3 | 7-103672-3 | 7-104935-3                        | 7-103635-3 | 7-103634-3 |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 7-103904-4                     | 7-103673-4 | 7-103672-4 | 7-104935-4                        | 7-103635-4 | 7-103634-4 |

Notes: 1. Selectively loaded headers are available, consult Tyco Electronics.  
2. Use Keying Tool No. 91417-1 to remove post for keying.

Note: All part numbers are RoHS compliant.

## MTE Headers, Shrouded Latching, Single-Row .100 [2.54] Centerline

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**



### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Posts** — Brass, plated .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

### Related Product Data

**Mateable AMPMODU MTE Products** —

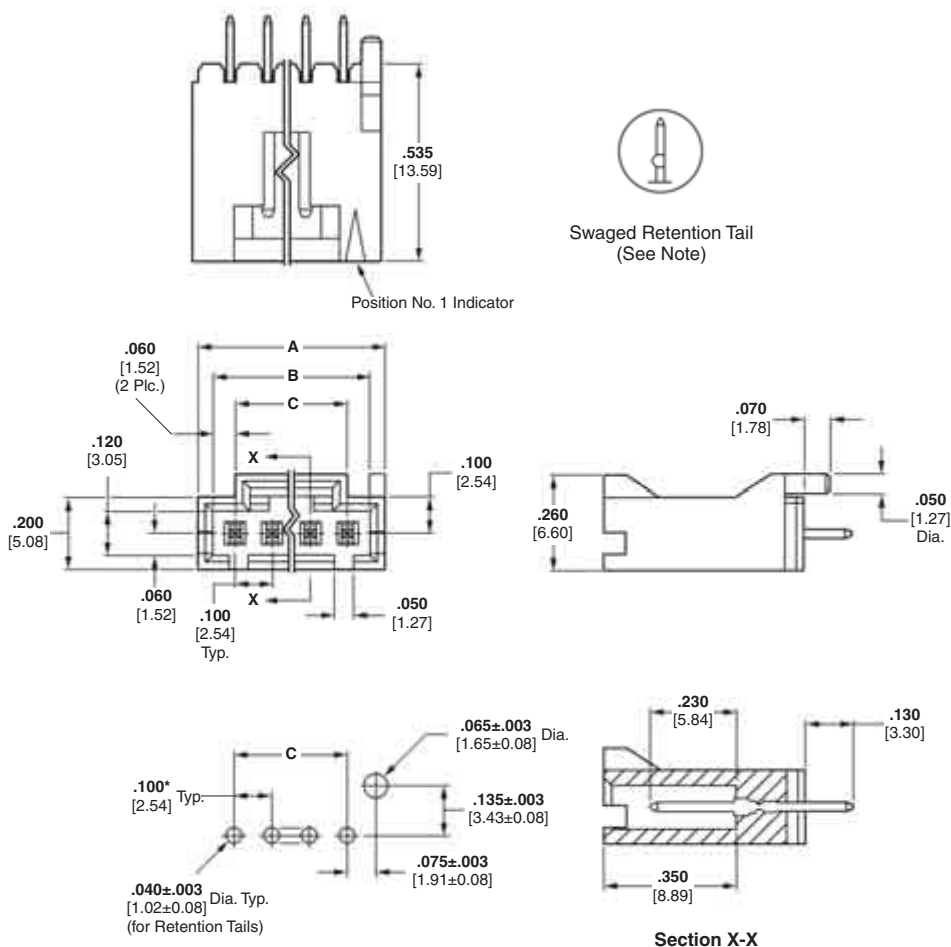
**Receptacle Assemblies (Polarized/Latching)** —  
pages 230, 231

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)** —  
pages 232, 233, 235, 240

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board Hole Layout**

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

| No. of Pos. | Dimensions    |               |              | Latching Header |
|-------------|---------------|---------------|--------------|-----------------|
|             | A             | B             | C            |                 |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]  | 5-104450-1      |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]  | 5-104450-2      |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]  | 5-104450-3      |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16] | 5-104450-4      |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70] | 5-104450-5      |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24] | 5-104450-6      |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78] | 5-104450-7      |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32] | 5-104450-8      |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86] | 5-104450-9      |

**Note:** All part numbers are RoHS compliant.

## MTE Headers, Through-hole, Surface Mount Compatible, Shrouded Polarized/Latching, Single-Row .100 [2.54] Centerline

**.025 [0.64] Square Straight Post (With Swaged Tails and PC Board Orientation)**



### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Posts** — Brass, duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min tin on solder tail, with entire post underplated .000050 [0.00127] nickel

### Related Product Data

**Mateable AMPMODU MTE Products** —

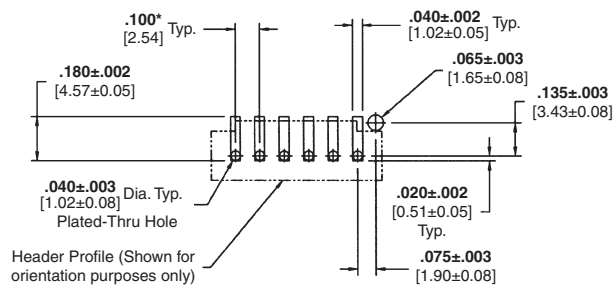
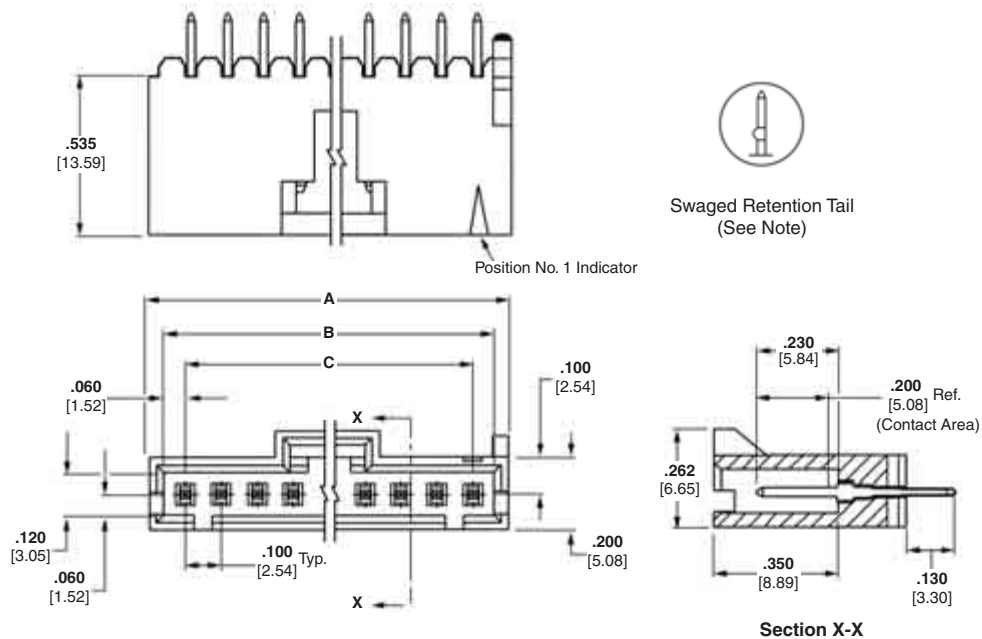
**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)** — pages 232, 233, 235, 240

**Receptacle Assemblies (Polarized Latching)** — pages 230, 231

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



### Recommended PC Board Hole Layout (Stencil Thickness = .010 [0.25])

\*±.003 [±0.08] tolerance not to accumulate within one connector pattern

| No. of Pos. | Dimensions    |               |               | Polarized/Latching Header, High-Temp |
|-------------|---------------|---------------|---------------|--------------------------------------|
|             | A             | B             | C             |                                      |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 5-104809-1                           |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 5-104809-2                           |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 5-104809-3                           |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 5-104809-4                           |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 5-104809-5                           |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 5-104809-6                           |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 5-104809-7                           |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 5-104809-8                           |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 5-104809-9                           |
| 11          | 1.200 [30.48] | 1.120 [28.45] | 1.000 [25.40] | 6-104809-0                           |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 6-104809-1                           |

**Note:** All part numbers are RoHS compliant.

## MTE Headers, Polarized/Latching, Through-Hole, Surface Mount Compatible, Single-Row, .100 [2.54] Centerline

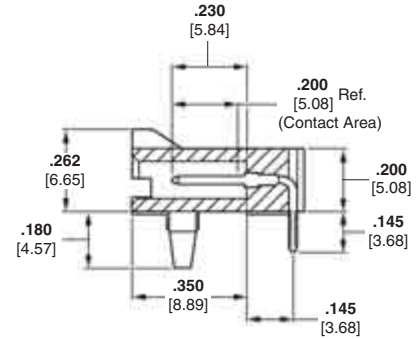
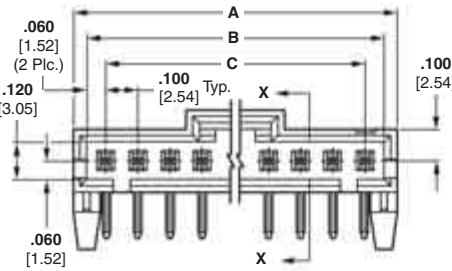
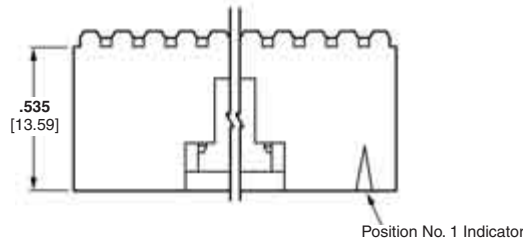
### .025 [0.64] Square Right-Angle Post (With Holddown)



#### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Posts** — Brass, duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder tail, with entire post underplated .000050 [0.00127] nickel



#### Related Product Data

**Mateable AMPMODU MTE**

**Products** —

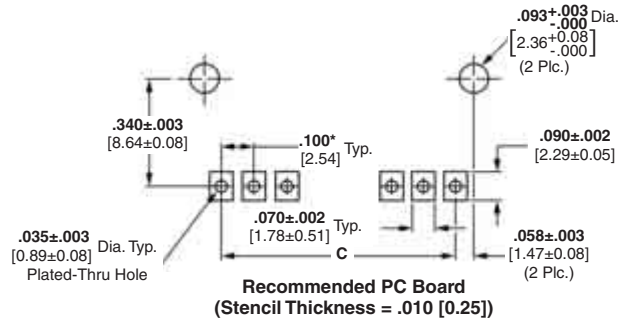
**Receptacle Assemblies (Polarized/Latching)** — pages 230, 231

**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)** — pages 232, 233, 235, 240

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026



**Recommended PC Board**  
(Stencil Thickness = .010 [0.25])

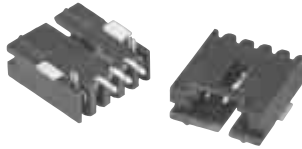
\*±.003 [±0.08]; tolerance is not to accumulate within one connector pattern.

| No. of Pos. | Dimensions    |               |               | Right-Angle Header with Hold Down |
|-------------|---------------|---------------|---------------|-----------------------------------|
|             | A             | B             | C             |                                   |
| 2           | .300 [7.62]   | .220 [5.59]   | .100 [2.54]   | 5-104361-1                        |
| 3           | .400 [10.16]  | .320 [8.13]   | .200 [5.08]   | 5-104361-2                        |
| 4           | .500 [12.70]  | .420 [10.67]  | .300 [7.62]   | 5-104361-3                        |
| 5           | .600 [15.24]  | .520 [13.21]  | .400 [10.16]  | 5-104361-4                        |
| 6           | .700 [17.78]  | .620 [15.75]  | .500 [12.70]  | 5-104361-5                        |
| 7           | .800 [20.32]  | .720 [18.29]  | .600 [15.24]  | 5-104361-6                        |
| 8           | .900 [22.86]  | .820 [20.83]  | .700 [17.78]  | 5-104361-7                        |
| 9           | 1.000 [25.40] | .920 [23.37]  | .800 [20.32]  | 5-104361-8                        |
| 10          | 1.100 [27.94] | 1.020 [25.91] | .900 [22.86]  | 5-104361-9                        |
| 11          | 1.200 [30.48] | 1.120 [28.44] | 1.000 [25.40] | 6-104361-0                        |
| 12          | 1.300 [33.02] | 1.220 [30.99] | 1.100 [27.94] | 6-104361-1                        |
| 13          | 1.400 [35.56] | 1.320 [33.53] | 1.200 [30.48] | 6-104361-2                        |

| No. of Pos. | Dimensions    |               |               | Right-Angle Header with Hold Down |
|-------------|---------------|---------------|---------------|-----------------------------------|
|             | A             | B             | C             |                                   |
| 14          | 1.500 [38.10] | 1.420 [36.07] | 1.300 [33.02] | 6-104361-3                        |
| 15          | 1.600 [40.64] | 1.520 [38.61] | 1.400 [35.56] | 6-104361-4                        |
| 16          | 1.700 [43.18] | 1.620 [41.15] | 1.500 [38.10] | 6-104361-5                        |
| 17          | 1.800 [45.72] | 1.720 [43.69] | 1.600 [40.64] | 6-104361-6                        |
| 18          | 1.900 [48.26] | 1.820 [46.23] | 1.700 [43.18] | 6-104361-7                        |
| 19          | 2.000 [50.80] | 1.920 [48.77] | 1.800 [45.72] | 6-104361-8                        |
| 20          | 2.100 [53.34] | 2.020 [51.31] | 1.900 [48.26] | 6-104361-9                        |
| 21          | 2.200 [55.88] | 2.120 [53.85] | 2.000 [50.80] | 7-104361-0                        |
| 22          | 2.300 [58.42] | 2.220 [56.39] | 2.100 [53.34] | 7-104361-1                        |
| 23          | 2.400 [60.96] | 2.320 [58.93] | 2.200 [55.88] | 7-104361-2                        |
| 24          | 2.500 [63.50] | 2.420 [61.47] | 2.300 [58.42] | 7-104361-3                        |
| 25          | 2.600 [66.04] | 2.520 [64.01] | 2.400 [60.96] | 7-104361-4                        |

**Note:** All part numbers are RoHS compliant.

## MTE Headers, Right-Angle, Polarized/Latching, Surface Mount



### Material and Finish

**Housing** — Black thermoplastic, 94V-0 rated

**Posts** — Brass, plated as follows:

**Plating A** — Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating B** — Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel.

**Plating C** — .000100 [.00254] tin over .000050 [.00127] nickel on entire post

### Recommended PC Board Layout

(Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

### Related Product Data

**Mateable AMPMODU MTE Products** —

**Receptacle Assemblies (Polarized/Latching)** — pages 230, 231

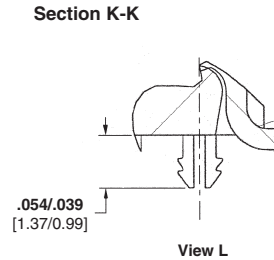
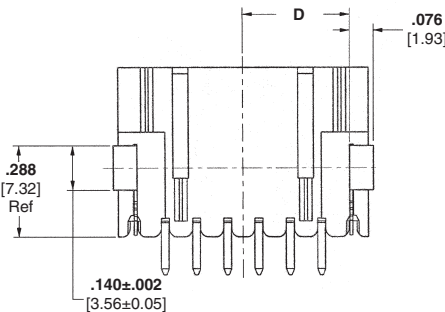
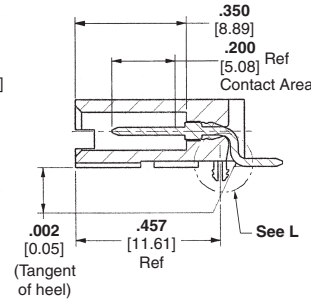
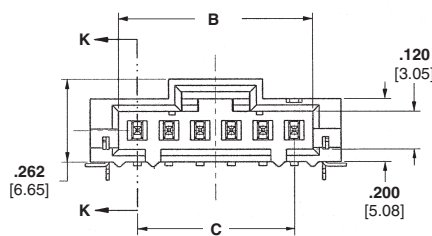
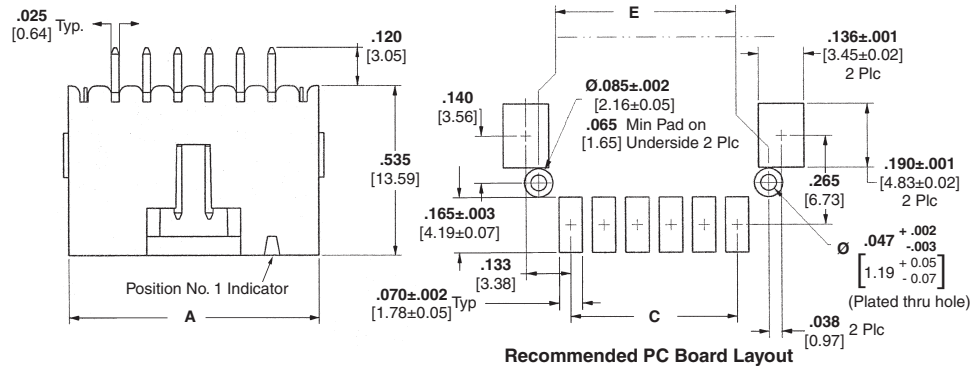
**Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud)** — pages 232, 233, 235, 240

**Technical Documents** — pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

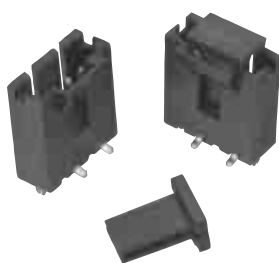
**Note:** All part numbers are RoHS compliant.



| No. of Pos. | Dimensions    |               |               |               |               | Right-Angle Latching SMT Headers |            |            |
|-------------|---------------|---------------|---------------|---------------|---------------|----------------------------------|------------|------------|
|             | A             | B             | C             | D             | E             | Plating A                        | Plating B  | Plating C  |
| 2           | .400 [10.16]  | .220 [5.59]   | .100 [2.54]   | .140 [3.56]   | .290 [7.37]   | 5-147323-1                       | 5-147278-1 | 5-147324-1 |
| 3           | .500 [12.70]  | .320 [8.13]   | .200 [5.08]   | .190 [4.83]   | .390 [9.91]   | 5-147323-2                       | 5-147278-2 | 5-147324-2 |
| 4           | .600 [15.24]  | .420 [10.67]  | .300 [7.62]   | .240 [6.10]   | .490 [12.45]  | 5-147323-3                       | 5-147278-3 | 5-147324-3 |
| 5           | .700 [17.78]  | .520 [13.21]  | .400 [10.16]  | .290 [7.37]   | .590 [14.99]  | 5-147323-4                       | 5-147278-4 | 5-147324-4 |
| 6           | .800 [20.32]  | .620 [15.75]  | .500 [12.70]  | .340 [8.64]   | .690 [17.53]  | 5-147323-5                       | 5-147278-5 | 5-147324-5 |
| 7           | .900 [22.86]  | .720 [18.29]  | .600 [15.24]  | .390 [9.91]   | .790 [20.07]  | 5-147323-6                       | 5-147278-6 | 5-147324-6 |
| 8           | 1.000 [25.40] | .820 [20.83]  | .700 [17.78]  | .440 [11.18]  | .890 [22.61]  | 5-147323-7                       | 5-147278-7 | 5-147324-7 |
| 9           | 1.100 [27.94] | .920 [23.37]  | .800 [20.32]  | .490 [12.45]  | .990 [25.15]  | 5-147323-8                       | 5-147278-8 | 5-147324-8 |
| 10          | 1.200 [30.48] | 1.020 [25.91] | .900 [22.86]  | .540 [13.72]  | 1.090 [27.69] | 5-147323-9                       | 5-147278-9 | 5-147324-9 |
| 11          | 1.300 [33.02] | 1.120 [28.45] | 1.000 [25.40] | .590 [14.99]  | 1.190 [30.23] | 6-147323-0                       | 6-147278-0 | 6-147324-0 |
| 12          | 1.400 [35.56] | 1.220 [30.99] | 1.100 [27.94] | .640 [16.26]  | 1.290 [32.77] | 6-147323-1                       | 6-147278-1 | 6-147324-1 |
| 13          | 1.500 [38.10] | 1.320 [33.53] | 1.200 [30.48] | .690 [17.53]  | 1.390 [35.31] | 6-147323-2                       | 6-147278-2 | 6-147324-2 |
| 14          | 1.600 [40.64] | 1.420 [36.07] | 1.300 [33.02] | .740 [18.80]  | 1.490 [37.85] | 6-147323-3                       | 6-147278-3 | 6-147324-3 |
| 15          | 1.700 [43.18] | 1.520 [38.61] | 1.400 [35.56] | .790 [20.07]  | 1.590 [40.39] | 6-147323-4                       | 6-147278-4 | 6-147324-4 |
| 16          | 1.800 [45.72] | 1.620 [41.15] | 1.500 [38.10] | .840 [21.34]  | 1.690 [42.93] | 6-147323-5                       | 6-147278-5 | 6-147324-5 |
| 17          | 1.900 [48.26] | 1.720 [43.69] | 1.600 [40.64] | .890 [22.61]  | 1.790 [45.47] | 6-147323-6                       | 6-147278-6 | 6-147324-6 |
| 18          | 2.000 [50.80] | 1.820 [46.23] | 1.700 [43.18] | .940 [23.88]  | 1.890 [48.01] | 6-147323-7                       | 6-147278-7 | 6-147324-7 |
| 19          | 2.100 [53.34] | 1.920 [48.77] | 1.800 [45.72] | .990 [25.15]  | 1.990 [50.55] | 6-147323-8                       | 6-147278-8 | 6-147324-8 |
| 20          | 2.200 [55.88] | 2.020 [51.31] | 1.900 [48.26] | 1.040 [26.42] | 2.090 [53.09] | 6-147323-9                       | 6-147278-9 | 6-147324-9 |
| 21          | 2.300 [58.42] | 2.120 [53.85] | 2.000 [50.80] | 1.090 [27.69] | 2.190 [55.63] | 7-147323-0                       | 7-147278-0 | 7-147324-0 |
| 22          | 2.400 [60.96] | 2.220 [56.39] | 2.100 [53.34] | 1.140 [28.96] | 2.290 [58.17] | 7-147323-1                       | 7-147278-1 | 7-147324-1 |
| 23          | 2.500 [63.50] | 2.320 [58.93] | 2.200 [55.88] | 1.190 [30.23] | 2.390 [60.71] | 7-147323-2                       | 7-147278-2 | 7-147324-2 |
| 24          | 2.600 [66.04] | 2.420 [61.47] | 2.300 [58.42] | 1.240 [31.50] | 2.490 [63.25] | 7-147323-3                       | 7-147278-3 | 7-147324-3 |
| 25          | 2.700 [68.58] | 2.520 [64.01] | 2.400 [60.96] | 1.290 [32.77] | 2.590 [65.79] | 7-147323-4                       | 7-147278-4 | 7-147324-4 |



## MTE Headers, Vertical, Polarized/Latching, Surface Mount



## Material and Finish

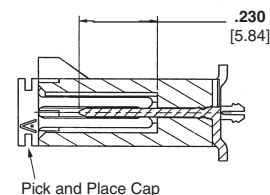
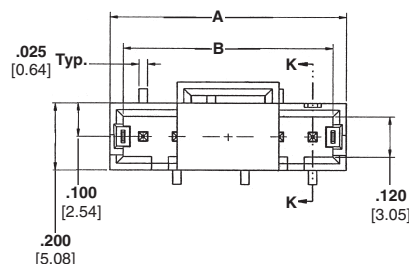
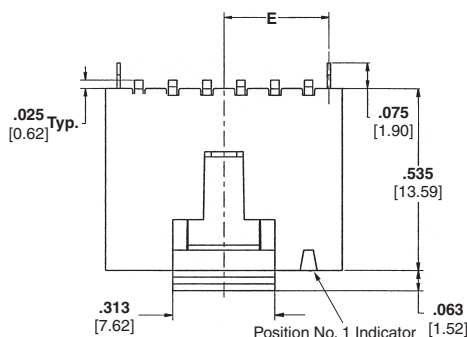
**Housing** — Black thermoplastic, 94V-0 rated

**Posts** — Brass, plated as follows:

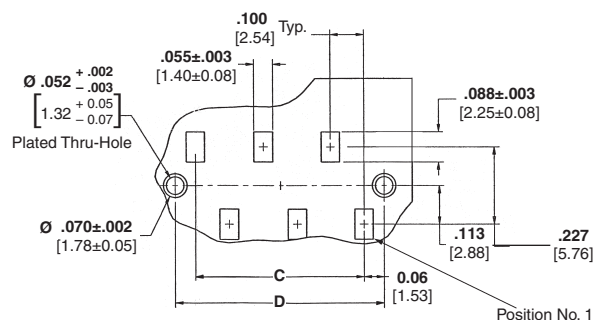
**Plating A** — Duplex plated .000030  
[.00076] gold on contact area, .000100  
[.00254] min. tin on solder area, with  
entire post underplated .000050  
[.00127] nickel.

**Plating B** — Duplex plated .000015  
[.00038] gold on contact area, .000100  
[.00254] min. tin on solder area, with  
entire post underplated .000050  
[.00127] nickel.

**Plating C** — .000100 [.00254] tin  
over .000050 [.00127] nickel on entire  
post



Section K-K



## Recommended PC Board Layout

(Refer to MTE Application Spec.  
114-25026 for Stencil Aperture Layout  
using .006 [0.152] or .008 [0.203]  
stencil thickness

### Related Product Data

## Mateable AMPMODU MTE Products —

**Receptacle Assemblies (Polarized/  
Latching)** — pages 230, 231

**Receptacle Assemblies with Guide  
Ribs (installed in Single-Row  
Coupling Shroud)** — pages 232, 233,  
235, 240

**Technical Documents** —  
pages 277, 278

## Product Specification

**Application Specification**  
114-25026

**Note:** All part numbers are RoHS compliant.

### Recommended PC Board Layout

| No. of Pos. | Dimensions   |              |              |              |              | Vertical SMT Headers |             |             |
|-------------|--------------|--------------|--------------|--------------|--------------|----------------------|-------------|-------------|
|             | A            | B            | C            | D            | E            | Plating A            | Plating B   | Plating C   |
| 2           | .300[7.62]   | .220[5.59]   | .100[2.54]   | .220[5.60]   | .110[2.80]   | 5-1375583-1          | 5-1375582-1 | 5-1375549-1 |
| 3           | .400[10.16]  | .320[8.13]   | .200[5.08]   | .320[8.14]   | .160[4.07]   | 5-1375583-2          | 5-1375582-2 | 5-1375549-  |
| 4           | .500[12.70]  | .420[10.67]  | .300[7.62]   | .420[10.68]  | .210[5.34]   | 5-1375583-3          | 5-1375582-3 | 5-1375549-3 |
| 5           | .600[15.24]  | .520[13.21]  | .400[10.16]  | .520[13.22]  | .260[6.61]   | 5-1375583-4          | 5-1375582-4 | 5-1375549-4 |
| 6           | .700[17.78]  | .620[15.75]  | .500[12.70]  | .620[15.76]  | .310[7.88]   | 5-1375583-5          | 5-1375582-5 | 5-1375549-5 |
| 7           | .800[20.32]  | .720[18.29]  | .600[15.24]  | .720[18.30]  | .360[9.15]   | 5-1375583-6          | 5-1375582-6 | 5-1375549-6 |
| 8           | .900[22.86]  | .820[20.83]  | .700[17.78]  | .820[20.84]  | .410[10.42]  | 5-1375583-7          | 5-1375582-7 | 5-1375549-7 |
| 9           | 1.000[25.40] | .920[23.37]  | .800[20.32]  | .920[23.38]  | .460[11.69]  | 5-1375583-8          | 5-1375582-8 | 5-1375549-8 |
| 10          | 1.100[27.94] | 1.020[25.91] | .900[22.86]  | 1.020[25.92] | .510[12.96]  | 5-1375583-9          | 5-1375582-9 | 5-1375549-9 |
| 11          | 1.200[30.48] | 1.120[28.45] | 1.000[25.40] | 1.120[28.46] | .560[14.23]  | 6-1375583-0          | 6-1375582-0 | 6-1375549-0 |
| 12          | 1.300[33.02] | 1.220[30.99] | 1.100[27.94] | 1.220[31.00] | .610[15.50]  | 6-1375583-1          | 6-1375582-1 | 6-1375549-1 |
| 13          | 1.400[35.56] | 1.320[33.53] | 1.200[30.48] | 1.320[33.54] | .660[16.77]  | 6-1375583-2          | 6-1375582-2 | 6-1375549-2 |
| 14          | 1.500[38.10] | 1.420[36.07] | 1.300[33.02] | 1.420[36.08] | .710[18.04]  | 6-1375583-3          | 6-1375582-3 | 6-1375549-3 |
| 15          | 1.600[40.64] | 1.520[38.61] | 1.400[35.56] | 1.520[38.62] | .760[19.31]  | 6-1375583-4          | 6-1375582-4 | 6-1375549-4 |
| 16          | 1.700[43.18] | 1.620[41.15] | 1.500[38.10] | 1.620[41.16] | .810[20.58]  | 6-1375583-5          | 6-1375582-5 | 6-1375549-5 |
| 17          | 1.800[45.72] | 1.720[43.69] | 1.600[40.64] | 1.720[43.70] | .860[21.85]  | 6-1375583-6          | 6-1375582-6 | 6-1375549-6 |
| 18          | 1.900[48.26] | 1.820[46.23] | 1.700[43.18] | 1.820[46.24] | .910[23.12]  | 6-1375583-7          | 6-1375582-7 | 6-1375549-7 |
| 19          | 2.000[50.80] | 1.920[48.77] | 1.800[45.72] | 1.920[48.78] | .960[24.39]  | 6-1375583-8          | 6-1375582-8 | 6-1375549-8 |
| 20          | 2.100[53.34] | 2.020[51.31] | 1.900[48.26] | 2.020[51.32] | 1.010[25.66] | 6-1375583-9          | 6-1375582-9 | 6-1375549-9 |
| 21          | 2.200[55.88] | 2.120[53.85] | 2.000[50.80] | 2.120[53.86] | 1.060[26.93] | 7-1375583-0          | 7-1375582-0 | 7-1375549-0 |
| 22          | 2.300[58.42] | 2.220[56.39] | 2.100[53.34] | 2.220[56.40] | 1.110[28.20] | 7-1375583-1          | 7-1375582-1 | 7-1375549-1 |
| 23          | 2.400[60.96] | 2.320[58.93] | 2.200[55.88] | 2.320[58.94] | 1.160[29.47] | 7-1375583-2          | 7-1375582-2 | 7-1375549-2 |
| 24          | 2.500[63.50] | 2.420[61.47] | 2.300[58.42] | 2.420[61.48] | 1.210[30.74] | 7-1375583-3          | 7-1375582-3 | 7-1375549-3 |
| 25          | 2.600[66.04] | 2.520[64.01] | 2.400[60.96] | 2.520[64.02] | 1.260[32.01] | 7-1375583-4          | 7-1375582-4 | 7-1375549-4 |



## Interchangeable Contacts, Wire Crimp (Snap-In)

### Material and Finish

Copper alloy C7025, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating B** — Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

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



**Keying Plug**

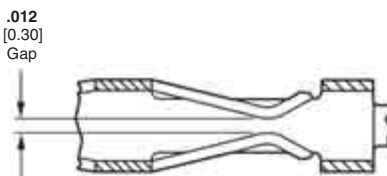
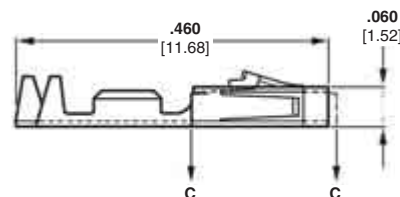
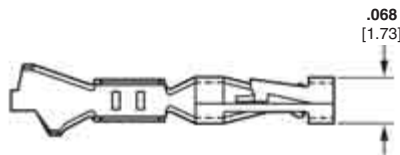
**Part No. 104072-1**

Ten plugs are supplied per strip.  
Order quantity reflects the number of strips required.



**Extraction/Lance Reset**  
**Tool No. 843477-1**

### Short Point Receptacles



**Section C - C**

### Related Product Data

**Performance Characteristics** —  
page 221

**Housings used in** —  
Short Point—pages 223, 224

**AMPMODU MTE Unloaded Housings** — pages 228-233

**Application Tooling**—  
pages 270-272

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-1472, 108-1472-1

**Application Specification**  
114-25038

| Wire Size Range | Ins. Dia. Range        | Finish    | Contact Part No. (Standard Pressure) |             | Heavy Duty Miniature Applicator for AMP-O-ELECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Nos. |
|-----------------|------------------------|-----------|--------------------------------------|-------------|-------------------------------------------------------------|-----------------------------------------------------|----------------|
|                 |                        |           | Strip Form                           | Loose Piece |                                                             |                                                     |                |
| 32-28 0.03-0.08 | .025-.060<br>0.64-1.52 | Plating A | 1-104481-1                           | 1-104481-3  | 567296-2                                                    | 466980-1                                            | 91518-1        |
|                 |                        | Plating B | 1-104481-0                           | 1-104481-2  |                                                             |                                                     |                |
|                 |                        | Plating C | 5-104481-2                           | 5-104481-6  |                                                             |                                                     |                |
| 26-22 0.13-0.3  | .025-.060<br>0.64-1.52 | Plating A | 1-104480-3                           | 1-104480-6  | 567297-2                                                    | 466981-1                                            | 91518-1        |
|                 |                        | Plating B | 1-104480-2                           | 1-104480-5  |                                                             |                                                     |                |
|                 |                        | Plating C | 1-104480-7                           | 1-104480-4  |                                                             |                                                     |                |
| 24-20 0.2-0.5   | .025-.060<br>0.64-1.52 | Plating A | 1-104479-0                           | 1-104479-3  | 567298-2                                                    | 466982-1                                            | 91551-1        |
|                 |                        | Plating B | 104479-9                             | 1-104479-2  |                                                             |                                                     |                |
|                 |                        | Plating C | 104479-8                             | 1-104479-1  |                                                             |                                                     |                |

\*For use with Model "K" machines. Call the Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the Model "G" machines (shown on page 270), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

**Note:** All part numbers are RoHS compliant.

## Interchangeable Contacts, Wire Crimp (Snap-In) (Continued)

### Material and Finish

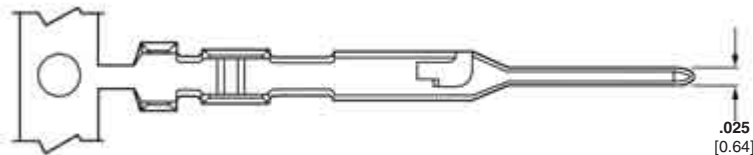
Phosphor bronze, plated as follows:

**Plating A** — Duplex plated .000030 [0.00076] gold on contact area, .000030 [0.00076] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

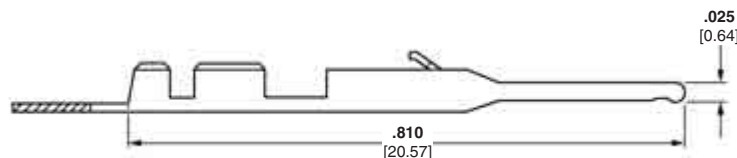
**Plating B** — Duplex plated .000015 [0.00038] gold on contact area, .000030 [0.00076] min. tin on solder area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** — .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

### Pins



Extraction/Lance Reset  
Tool No. 843477-1



### Related Product Data

**Performance Characteristics** —  
page 221

**AMPMODU MTE Unloaded Housings** — pages 228-233

**Application Tooling** —  
pages 270-272

**Technical Documents** —  
pages 277, 278

**Product Specification**  
108-25034

**Application Specification**  
114-25026

| Wire Size Range | Ins. Dia. Range        | Finish    | Contact Part No. (Standard Pressure) |             | Heavy Duty Miniature Applicator for AMP-O-ELECTRIC Machine* | Applicator for AMP-O-MATIC Stripper/Crimper Machine | Hand Tool Nos. |
|-----------------|------------------------|-----------|--------------------------------------|-------------|-------------------------------------------------------------|-----------------------------------------------------|----------------|
|                 |                        |           | Strip Form                           | Loose Piece |                                                             |                                                     |                |
| 32-28 0.03-0.08 | .025-.054<br>0.64-1.37 | Plating A | 5-104506-6                           | 5-104506-7  | —                                                           | —                                                   | 58342-2        |
|                 |                        | Plating B | 5-104506-4                           | 5-104506-5  |                                                             |                                                     |                |
|                 |                        | Plating C | 5-104506-2                           | 5-104506-3  |                                                             |                                                     |                |
| 26-22 0.14-0.32 | .036-.054<br>0.91-1.37 | Plating A | 5-104505-6                           | 5-104505-7  | 567239-2                                                    | 466983-1                                            | 91531-1        |
|                 |                        | Plating B | 5-104505-4                           | 5-104505-5  |                                                             |                                                     |                |
|                 |                        | Plating C | 5-104505-2                           | 5-104505-3  |                                                             |                                                     |                |

\*For use with AMP-O-ELECTRIC Model "K" machines. Call Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-ELECTRIC Model "G" machines (shown on page 270), as well as other bench machines and fully automatic AMPOMATOR lead making machines.  
**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

**Note:** All part numbers are RoHS compliant.

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