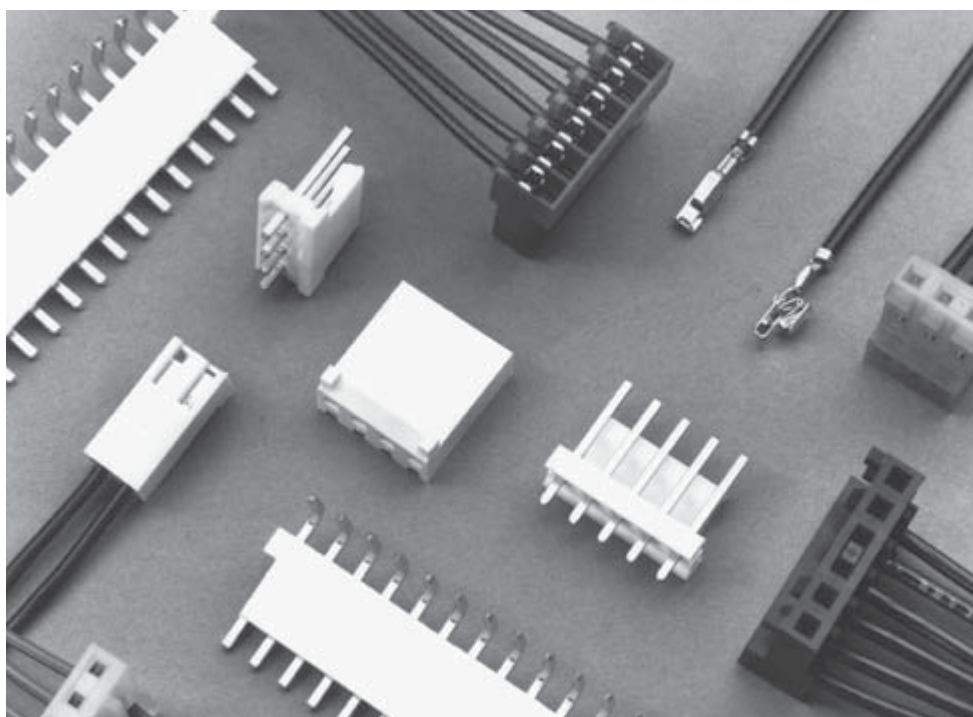


## .156 [3.96] Centerline MTA-156 IDC Connectors and Headers

### Product Facts

- Connectors and headers for 2 through 24 positions; wire sizes of 18, 20, 22, 24 and 26 AWG [0.9–0.12 mm<sup>2</sup>]
- Connectors and headers, except shrouded headers, are end-to-end stackable
- Quad Connectors for higher current rating (page 54)
- Posted connectors for 2, 3, 4, 6, 9, 12, 15 and 24 positions
- Card edge connectors for 3, 6, 9, 12, 15, 18 and 20 through 24 positions
- Connectors preloaded with IDC contacts
- All contacts are slotted for insulation displacement (IDC) termination technique
- Connector styles include both closed end and feed-thru, with and without locking ramps and polarizing tabs
- Molded ribs on housing do not allow reverse mating
- Contacts are lubricated for fretting corrosion protection
- Benefits derived from the MTA-156 system include increases quality and ease of handling such as —
  - One-step assembly
  - No wire stripping
  - No contact damage
  - Reduced wiring errors
  - Simpler tooling
  - Simple maintenance and repair
- Meets the material requirements of Table 23.1 of UL 1410 Standards for Television Receiver and Video Products (wire-to-post connectors only)
- Recognized under the Component Program of Underwriters Laboratories Inc.,  File No. E28476
- Certified by Canadian Standards Association,  File No. LR7189



MTA-156 connectors accept discrete and ribbon cable wire sizes ranging from 18–26 AWG [0.9–0.12 mm<sup>2</sup>] with maximum insulation outside diameter .095 [2.41] for single wire and .070 [1.78] for mass termination of wires. Tin plated solid, fused stranded or stranded (7, 16, and 19 strands) wire with PVC insulation can be used on 18 AWG [0.8–0.9 mm<sup>2</sup>] MTA-156 connectors; 7, 10, and 19 stranded wire on 20 AWG [0.5–0.6 mm<sup>2</sup>] MTA-156 connectors; and 7 and 19 stranded wire on 22–26 AWG [0.4–0.12 mm<sup>2</sup>] MTA-156 connectors.

Only one wire to be terminated into an IDC contact slot.

Mass termination of wire provides the lowest applied cost because it drastically reduces the labor content of virtually any cable or harness assembly required.

The wire-to-post connector housing material is flame retardant thermoplastic, either UL94V-2 or UL94V-0 rated.

A full line of .156 [3.96] centerline headers completes the system. Headers are available with straight or right-angle posts, in flat friction lock and shrouded styles. Headers are available in 2 through 24 positions.

### Performance Data\*

**Voltage Rating** — 600 vac

**Current Rating** —  
7 amp max. for MTA-156 Connector

**Low-Level Resistance** —  
3.0 mΩ max. initial

**Dielectric Withstanding Voltage** —  
2200 vac/1 min.

**Insulation Resistance** —  
5000 MΩ min. initial

**Operating Temperature** —  
–55° C to +105° C

\*Refer to the Product Specification for additional electrical, mechanical and environmental performance tests and requirements.

### Technical Documents

**Product Specification**  
108-1051 MTA-156 Connectors

**Application Specifications**  
114-1020 MTA-156 Connectors, Posted Connectors and Card Edge Connectors

114-1032 MTA-156 Ribbon Cable Assembly

**Note:** Refer to page 70 for approved wire listings.

MTA-156  
.156 [3.96]

## Electronics

## MTA-156 Connector/ Header Mateability Guide

## Matrix for Tin Plated Part Numbers

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 header and connector combination. Where a “Y” is indicated the combination is a valid mating pair. Where an “N” is indicated the combination is not acceptable for mating.

| Connectors | Headers | 640383 | 640384 | 640385 | 640387 | 640388 | 640389 | 640445 | 644611 | 644612 | 644613 | 644614 | 644615 | 644616 | 644617 | 644749 | 644750 | 644751 | 644752 | 644753 | 644754 | 644755 | 647123 | 647124 | 647125 | 647126 | 647127 | 647128 | 647129 | 647130 | 647210 | 647211 | 647212 | 647227 | 647228 | 647229 | 647646 | 647648 | 1744017 |
|------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
|            |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |         |
|            | 640426  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | N      | Y      | Y      |         |
|            | 640427  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | N      | Y      | Y      |         |
|            | 640428  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | N      | Y      | Y      |         |
|            | 640429  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | N      | Y      | Y       |
|            | 640430  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | N      | Y      | Y       |
|            | 640431  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640432  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640433  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640434  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640435  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640472  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      | Y      |         |
|            | 640473  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640474  | Y      | Y      | N      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640475  | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640476  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640477  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640478  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640479  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640480  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640481  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640595  | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640599  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640600  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640601  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640602  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 640604  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640605  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640606  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640607  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 640608  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 641301  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 641302  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 641303  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 641304  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 641305  | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | N      | Y      | Y      |         |
|            | 641306  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |         |
|            | 641307  | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |        |        |        |         |

## MTA-156 Connector/Header Mateability Guide (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 header and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

Matrix for .000030  
[0.00076] Gold Plated  
Part Numbers

| Connectors | Headers |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|            | 641202  | 641203 | 641204 | 641207 | 641208 | 641209 | 641210 | 641217 | 641228 | 641229 | 641230 | 641231 | 641232 | 641233 | 641234 | 641235 |
| 641217     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641218     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641219     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641220     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641221     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641222     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641223     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641224     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641225     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641226     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641227     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641228     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641229     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641230     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641231     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641232     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641233     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641234     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641235     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641236     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 644460     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      |
| 644662     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      |
| 644663     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      |
| 644687     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 644718     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      |
| 644720     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | N      | Y      |

Matrix for .000015  
[0.00038] Gold Plated  
Part Numbers

| Connectors | Headers |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|            | 641113  | 641114 | 641115 | 641118 | 641119 | 641120 | 641121 | 641123 | 641164 | 641165 | 641166 | 641167 | 641168 | 641169 | 641139 | 641140 |
| 641148     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641149     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641150     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641151     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641152     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641153     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641154     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641155     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641156     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641157     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641168     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641169     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641170     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641171     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641172     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 641173     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641174     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641175     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641176     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641177     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 644284     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 647478     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 647479     | Y       | Y      | Y      | N      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | N      | Y      | Y      | Y      | Y      |
| 647496     | Y       | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |

### Material and Finish

**Housing** — UL94V-2 rated, nylon,  
see below for color; or UL94V-0 rated,  
nylon, black

**Contacts** — Phosphor bronze, post tin  
plated, .000030 [0.00076] or .000015  
[.00038] post gold plated over nickel

### Color Coding by Wire Size for UL94V-2 Connectors

**26 AWG** — Blue  
**24 AWG** — White  
**22 AWG** — Red  
**20 AWG** — Yellow  
**18 AWG** — Orange

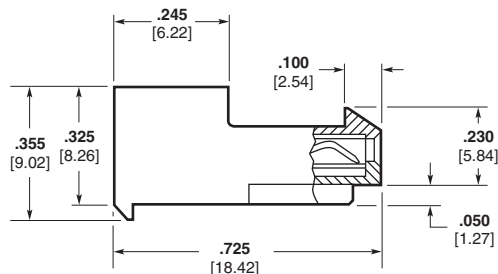
**All Wire Sizes in UL94V-0** —  
Black

### Notes:

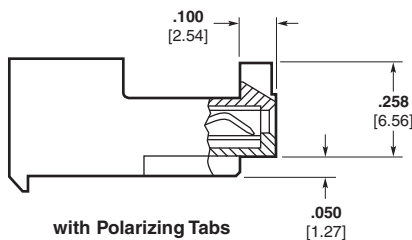
1. Only connectors with locking ramp and without polarizing tabs mate with posted connectors on page 45.
2. Refer to pages 70 thru 74 for approved wire listing.
3. For strain reliefs and dust covers, see pages 40 and 41.
4. For keying plugs and panel mount end caps, see page 42.
5. Other circuit sizes are available upon request. Minimums may apply.
6. Connector circuits can be molded closed for keying purposes. Minimums may apply.
7. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.
8. To determine connector overall length (Dim. A), multiply .156 x the number of circuits. Example: .156 x 10 circuits equals 1.560 inches [39.62 mm].

## MTA-156 IDC Connectors—Closed End

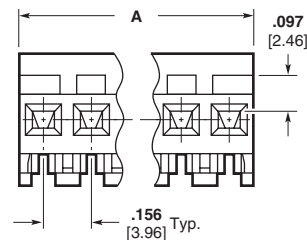
### Closed End with Locking Ramp



without Polarizing Tabs



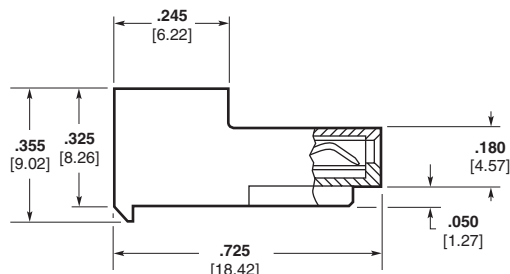
with Polarizing Tabs



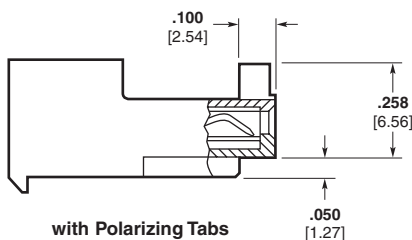
For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Closed End Connectors with Locking Ramp, see pages 45 thru 48, 50, 52, and 53, (49 and 51 Front Bend Headers Only).

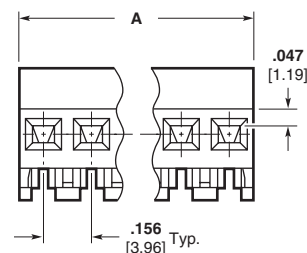
### Closed End without Locking Ramp



without Polarizing Tabs



with Polarizing Tabs



For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Closed End Connectors without Locking Ramp, see pages 46 thru 53.

### Connector Ordering Information

The “Base Part Numbers” Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 10-position closed end connector with locking ramp and without polarizing tabs for 18 AWG wire would be:

Base number **640426** plus prefix-and-suffix

**1- — -0**

The correct ordering number is

**1-640426-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 640426-2               | 3-640426-2                   |
| 3           | 640426-3               | 3-640426-3                   |
| 4           | 640426-4               | 3-640426-4                   |
| 5           | 640426-5               | 3-640426-5                   |
| 6           | 640426-6               | 3-640426-6                   |
| 7           | 640426-7               | 3-640426-7                   |
| 8           | 640426-8               | 3-640426-8                   |
| 9           | 640426-9               | 3-640426-9                   |
| 10          | 1-640426-0             | 4-640426-0                   |
| 11          | 1-640426-1             | 4-640426-1                   |
| 12          | 1-640426-2             | 4-640426-2                   |
| 13          | 1-640426-3             | 4-640426-3                   |
| 14          | 1-640426-4             | 4-640426-4                   |
| 15          | 1-640426-5             | 4-640426-5                   |
| 16          | 1-640426-6             | 4-640426-6                   |
| 17          | 1-640426-7             | 4-640426-7                   |
| 18          | 1-640426-8             | 4-640426-8                   |
| 19          | 1-640426-9             | 4-640426-9                   |
| 20          | 2-640426-0             | 5-640426-0                   |
| 21          | 2-640426-1             | 5-640426-1                   |
| 22          | 2-640426-2             | 5-640426-2                   |
| 23          | 2-640426-3             | 5-640426-3                   |
| 24          | 2-640426-4             | 5-640426-4                   |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

## MTA-156 IDC Connectors—Closed End (Continued)

### Base Part Numbers

| Connector Type & Wire Size                             | Closed End with Locking Ramp |                              |                     |                              | Closed End without Locking Ramp |                              |                     |                              |
|--------------------------------------------------------|------------------------------|------------------------------|---------------------|------------------------------|---------------------------------|------------------------------|---------------------|------------------------------|
|                                                        | Without Tabs                 |                              | With Tabs           |                              | Without Tabs                    |                              | With Tabs           |                              |
|                                                        | Connector Part Nos.          | No. of Circuits/ RoHS Equiv. | Connector Part Nos. | No. of Circuits/ RoHS Equiv. | Connector Part Nos.             | No. of Circuits/ RoHS Equiv. | Connector Part Nos. | No. of Circuits/ RoHS Equiv. |
| <b>Standard UL94V-2, Tin Plated</b>                    |                              |                              |                     |                              |                                 |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>               | 640426                       | 2-24<br><b>32-54</b>         | 643817              | 2-24<br><b>32-54</b>         | 640431                          | 2-24<br><b>32-54</b>         | 644461 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>               | 640427                       | 2-24<br><b>32-54</b>         | 643818              | 2-24<br><b>32-54</b>         | 640432                          | 2-24<br><b>32-54</b>         | 644462 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>               | 640428                       | 2-24<br><b>32-54</b>         | 643819              | 2-24<br><b>32-54</b>         | 640433                          | 2-24<br><b>32-54</b>         | 644463 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                   | 640429                       | 2-24<br><b>32-54</b>         | 643820              | 2-24<br><b>32-54</b>         | 640434                          | 2-24<br><b>32-54</b>         | 644464 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>             | 640430                       | 2-24<br><b>32-54</b>         | 643821              | 2-24<br><b>32-54</b>         | 640435                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>Tape Mounted on Reel UL94V-2, Tin Plated</b>        |                              |                              |                     |                              |                                 |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>               | 640472                       | 2-24<br><b>32-54</b>         | 644878              | 2-24<br><b>32-54</b>         | 640477                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>               | 640473                       | 2-24<br><b>32-54</b>         | —                   | —                            | 640478                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>               | 640474                       | 2-24<br><b>32-54</b>         | 644783              | 2-24<br><b>32-54</b>         | 640479                          | 2-24<br><b>32-54</b>         | 644791 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                   | 640475                       | 2-24<br><b>32-54</b>         | —                   | —                            | 640480                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>             | 640476                       | 2-24<br><b>32-54</b>         | —                   | —                            | 640481                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>Standard UL94V-2, .000030 [0.00076] Gold Plated</b> |                              |                              |                     |                              |                                 |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>               | 641217                       | 2-24<br><b>32-54</b>         | 644460 <sup>1</sup> | 2-12<br><b>32-42</b>         | 641222                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>               | 641218                       | 2-24<br><b>32-54</b>         | 644663 <sup>1</sup> | 2-12<br><b>32-42</b>         | 641223                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>               | 641219                       | 2-24<br><b>32-54</b>         | 644662 <sup>1</sup> | 2-12<br><b>32-42</b>         | 641224                          | 2-24<br><b>32-54</b>         | 644687 <sup>1</sup> | 2-14<br><b>32-44</b>         |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                   | 641220                       | 2-24<br><b>32-54</b>         | —                   | —                            | 641225                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>             | 641221                       | 2-24<br><b>32-54</b>         | —                   | —                            | 641226                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>Standard UL94V-2, .000015 [0.00038] Gold Plated</b> |                              |                              |                     |                              |                                 |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>               | 641148                       | 2-24<br><b>32-54</b>         | 644284 <sup>1</sup> | 2-12<br><b>32-42</b>         | 641153                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>               | 641149                       | 2-24<br><b>32-54</b>         | —                   | —                            | 641154                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>               | 641150                       | 2-24<br><b>32-54</b>         | 647478 <sup>1</sup> | 2-12<br><b>32-42</b>         | 641155                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                   | 641151                       | 2-24<br><b>32-54</b>         | —                   | —                            | 641156                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>             | 641152                       | 2-24<br><b>32-54</b>         | —                   | —                            | 641157                          | 2-24<br><b>32-54</b>         | —                   | —                            |
| <b>Standard UL94V-0, Tin Plated (Black in color)</b>   |                              |                              |                     |                              |                                 |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>               | 644860 <sup>1</sup>          | 2-12<br><b>32-42</b>         | —                   | —                            | 644502 <sup>1</sup>             | 2-12<br><b>32-42</b>         | 644082 <sup>1</sup> | 2-12<br><b>32-42</b>         |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>               | —                            | —                            | —                   | —                            | 644501 <sup>1</sup>             | 2-12<br><b>32-42</b>         | 644566 <sup>1</sup> | 2-12<br><b>32-42</b>         |

<sup>1</sup> Other circuit sizes are available upon request. Minimums may apply.

**Note:** Blocked circuit configurations are available upon request. Contact product engineer or product manager for details. Minimums may apply.

## MTA-156 IDC Connectors—Feed-Thru

### Material and Finish

**Housing** — UL94V-2 rated, nylon,  
see below for color; or UL94V-0 rated,  
nylon, black

**Contacts** — Phosphor bronze; post tin  
plated, .000030 [.00076] or .000015  
[.00038] post gold plated over nickel

### Color Coding by Wire Size for UL94V-2 Connectors

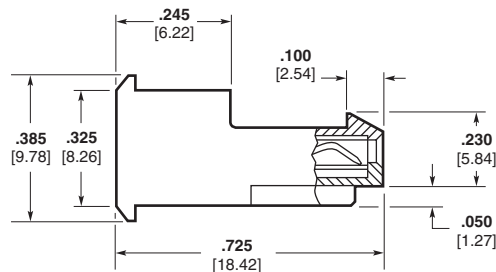
**26 AWG** — Blue  
**24 AWG** — White  
**22 AWG** — Red  
**20 AWG** — Yellow  
**18 AWG** — Orange

**All Wire Sizes in UL94V-0** —  
Black

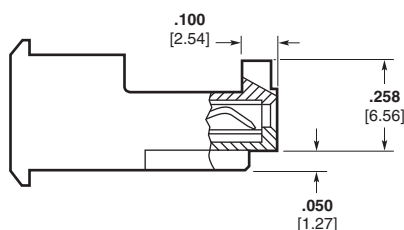
### Notes:

1. Only connectors with locking ramp and without polarizing tabs mate with posted connectors on page 45.
2. Refer to pages 70 thru 74 for approved wire listing.
3. For strain reliefs and dust covers, see pages 40 and 41.
4. For keying plugs and panel mount end caps, see page 42.
5. Other circuit sizes are available upon request. Minimums may apply.
6. Connector circuits can be molded closed for keying purposes. Minimums may apply.
7. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.
8. To determine connector overall length (Dim. A), multiply .156 x the number of circuits. Example: .156 x 10 circuits equals 1.560 inches [39.62 mm].

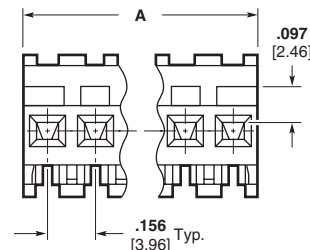
### Feed-Thru with Locking Ramp



without Polarizing Tabs



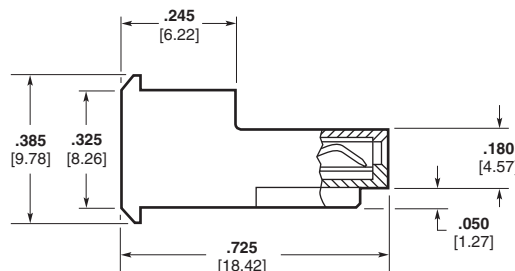
with Polarizing Tabs



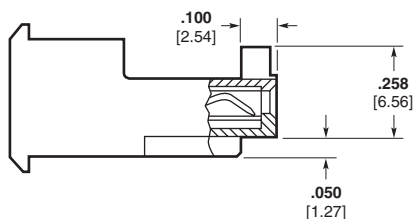
For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Feed-Thru Connectors with Locking Ramp, see pages 45 thru 48, 50, 52, and 53, (49 and 51 Front Bend Headers Only).

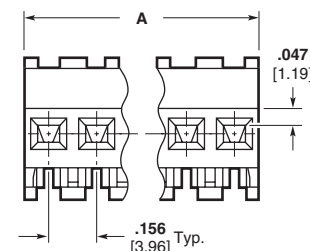
### Feed-Thru without Locking Ramp



without Polarizing Tabs



with Polarizing Tabs



For mateability options, see matrix on pages 34 and 35.

Mating half visuals for Feed-Thru Connectors without Locking Ramp, see pages 46 thru 53.

### Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 10-position feed-thru connector with locking ramp and without polarizing tabs for 18 AWG wire would be:

Base number **640599** plus prefix-and-suffix

**1- — -0**

The correct ordering number is

**1-640599-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 640599-2               | 3-640599-2                   |
| 3           | 640599-3               | 3-640599-3                   |
| 4           | 640599-4               | 3-640599-4                   |
| 5           | 640599-5               | 3-640599-5                   |
| 6           | 640599-6               | 3-640599-6                   |
| 7           | 640599-7               | 3-640599-7                   |
| 8           | 640599-8               | 3-640599-8                   |
| 9           | 640599-9               | 3-640599-9                   |
| 10          | 1-640599-0             | 4-640599-0                   |
| 11          | 1-640599-1             | 4-640599-1                   |
| 12          | 1-640599-2             | 4-640599-2                   |
| 13          | 1-640599-3             | 4-640599-3                   |
| 14          | 1-640599-4             | 4-640599-4                   |
| 15          | 1-640599-5             | 4-640599-5                   |
| 16          | 1-640599-6             | 4-640599-6                   |
| 17          | 1-640599-7             | 4-640599-7                   |
| 18          | 1-640599-8             | 4-640599-8                   |
| 19          | 1-640599-9             | 4-640599-9                   |
| 20          | 2-640599-0             | 5-640599-0                   |
| 21          | 2-640599-1             | 5-640599-1                   |
| 22          | 2-640599-2             | 5-640599-2                   |
| 23          | 2-640599-3             | 5-640599-3                   |
| 24          | 2-640599-4             | 5-640599-4                   |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

## MTA-156 IDC Connectors—Feed-Thru (Continued)

### Base Part Numbers

| Connector Type & Wire Size                            | Feed-Thru with Locking Ramp |                              |                     |                              | Feed-Thru without Locking Ramp |                              |                     |                              |
|-------------------------------------------------------|-----------------------------|------------------------------|---------------------|------------------------------|--------------------------------|------------------------------|---------------------|------------------------------|
|                                                       | Without Tabs                |                              | With Tabs           |                              | Without Tabs                   |                              | With Tabs           |                              |
|                                                       | Connector Part Nos.         | No. of Circuits/ RoHS Equiv. | Connector Part Nos. | No. of Circuits/ RoHS Equiv. | Connector Part Nos.            | No. of Circuits/ RoHS Equiv. | Connector Part Nos. | No. of Circuits/ RoHS Equiv. |
| <b>Standard UL94V-2, Tin Plated</b>                   |                             |                              |                     |                              |                                |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>              | 640599                      | 2–24<br><b>32–54</b>         | 644465 <sup>1</sup> | 2–14<br><b>32–44</b>         | 640604                         | 2–24<br><b>32–54</b>         | 644469 <sup>1</sup> | 2–14<br><b>32–44</b>         |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>              | 640600                      | 2–24<br><b>32–54</b>         | 644466 <sup>1</sup> | 2–14<br><b>32–44</b>         | 640605                         | 2–24<br><b>32–54</b>         | 644470 <sup>1</sup> | 2–14<br><b>32–44</b>         |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>              | 640601                      | 2–24<br><b>32–54</b>         | 644467 <sup>1</sup> | 2–14<br><b>32–44</b>         | 640606                         | 2–24<br><b>32–54</b>         | 644471 <sup>1</sup> | 2–14<br><b>32–44</b>         |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                  | 640602                      | 2–24<br><b>32–54</b>         | 644468 <sup>1</sup> | 2–14<br><b>32–44</b>         | 640607                         | 2–24<br><b>32–54</b>         | 644472 <sup>1</sup> | 2–14<br><b>32–44</b>         |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>            | 640595                      | 2–24<br><b>32–54</b>         | —                   | —                            | 640608                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>Tape Mounted on Reel UL94V-2, Tin Plated</b>       |                             |                              |                     |                              |                                |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>              | 641302                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641306                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>              | 641303                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641307                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>              | 641304                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641308                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                  | 641305                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641309                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>            | 641301                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641310                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>Standard UL94V-2, .00003 [.00076] Gold Plated</b>  |                             |                              |                     |                              |                                |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>              | 641227                      | 2–24<br><b>32–54</b>         | 644718 <sup>1</sup> | 2–14<br><b>32–44</b>         | 641232                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>              | 641228                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641233                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>              | 641229                      | 2–24<br><b>32–54</b>         | 644720 <sup>1</sup> | 2–14<br><b>32–44</b>         | 641234                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                  | 641230                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641235                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>            | 641231                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641236                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>Standard UL94V-2, .000015 [.00038] Gold Plated</b> |                             |                              |                     |                              |                                |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>              | 641168                      | 2–24<br><b>32–54</b>         | 647479 <sup>1</sup> | 2–12<br><b>32–42</b>         | 641173                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>20 AWG</b><br>0.5–0.6 mm <sup>2</sup>              | 641169                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641174                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>              | 641170                      | 2–24<br><b>32–54</b>         | 647496 <sup>1</sup> | 2–12<br><b>32–42</b>         | 641175                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                  | 641171                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641176                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>26 AWG</b><br>0.12–0.15 mm <sup>2</sup>            | 641172                      | 2–24<br><b>32–54</b>         | —                   | —                            | 641177                         | 2–24<br><b>32–54</b>         | —                   | —                            |
| <b>Standard UL94V-0, Tin Plated</b>                   |                             |                              |                     |                              |                                |                              |                     |                              |
| <b>18 AWG</b><br>0.8–0.9 mm <sup>2</sup>              | —                           | —                            | —                   | —                            | 644567 <sup>1</sup>            | 2–12<br><b>32–42</b>         | 644570 <sup>1</sup> | 2–12<br><b>32–42</b>         |
| <b>22 AWG</b><br>0.3–0.4 mm <sup>2</sup>              | —                           | —                            | —                   | —                            | 644569 <sup>1</sup>            | 2–12<br><b>32–42</b>         | 644572 <sup>1</sup> | 2–12<br><b>32–42</b>         |

<sup>1</sup> Other circuit sizes are available upon request. Minimums may apply.

**Note:** Blocked circuit configurations are available upon request. Contact product engineer or product manager for details. Minimums may apply.

MTA-156  
.156 [3.96]

## MTA-156 Connector Accessories

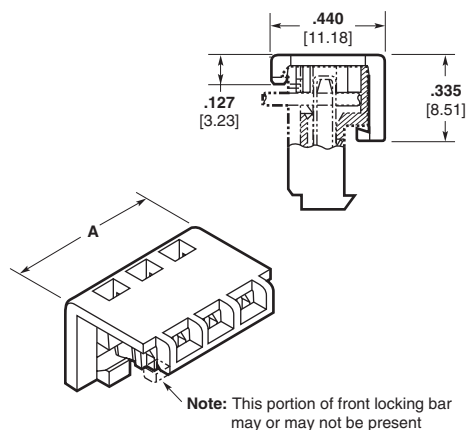
### Closed End Covers

#### Material (RoHS Compliant)

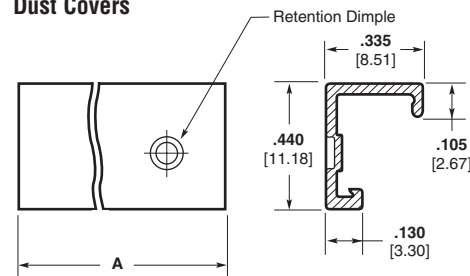
**Strain Relief Covers**—UL94V-2 rated, nylon, white

**Dust Covers**—UL94V-0 rated, polyester, white

### Strain Relief Covers



### Dust Covers



### Base Part Numbers

| Closed End           |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| Strain Relief Covers |                 | Dust Covers     |                 |
| Cover Part Nos.      | No. of Circuits | Cover Part Nos. | No. of Circuits |
| 643067               | 2-24            | 640551          | 2-24            |

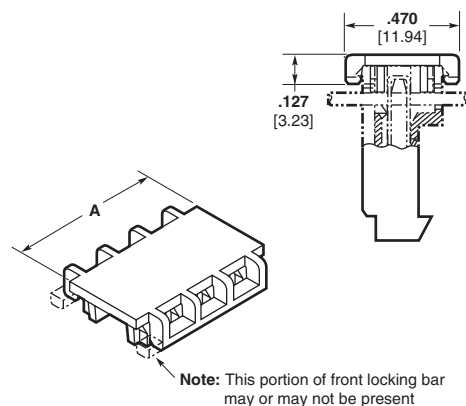
### Feed-Thru Covers

#### Material (RoHS Compliant)

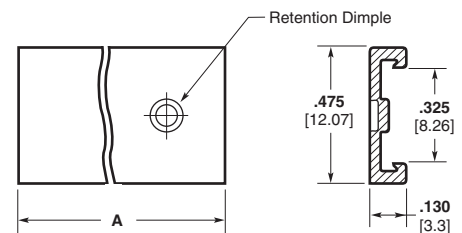
**Strain Relief Covers**—UL94V-2 rated, nylon, white

**Dust Covers**—UL94V-0 rated, polyester, white

### Strain Relief Covers



### Dust Covers



### Base Part Numbers

| Feed-Thru            |                 |                 |                 |
|----------------------|-----------------|-----------------|-----------------|
| Strain Relief Covers |                 | Dust Covers     |                 |
| Cover Part Nos.      | No. of Circuits | Cover Part Nos. | No. of Circuits |
| 643071               | 2-24            | 640643          | 2-24            |

### Cover Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described cover.

Prefixes and suffixes are determined by the number of circuit positions in the cover. For example, the complete part number for a 10-position closed-end strain relief cover would be:

Base number **643067** plus prefix-and-suffix

**1- -0**

The correct ordering number is

**1-643067-0**

### Cover Length

| No. of Circuits | Dim. A         | Prefix/Suffix |
|-----------------|----------------|---------------|
| 2               | .312<br>7.92   | -2            |
| 3               | .468<br>11.89  | -3            |
| 4               | .624<br>15.85  | -4            |
| 5               | .780<br>19.81  | -5            |
| 6               | .936<br>23.77  | -6            |
| 7               | 1.092<br>27.74 | -7            |
| 8               | 1.248<br>31.7  | -8            |
| 9               | 1.404<br>35.66 | -9            |

| No. of Circuits | Dim. A         | Prefix/Suffix |
|-----------------|----------------|---------------|
| 10              | 1.560<br>39.62 | 1- -0         |
| 11              | 1.716<br>43.59 | 1- -1         |
| 12              | 1.872<br>47.55 | 1- -2         |
| 13              | 2.028<br>51.51 | 1- -3         |
| 14              | 2.184<br>55.47 | 1- -4         |
| 15              | 2.340<br>59.44 | 1- -5         |
| 16              | 2.496<br>63.4  | 1- -6         |
| 17              | 2.652<br>67.36 | 1- -7         |

| No. of Circuits | Dim. A         | Prefix/Suffix |
|-----------------|----------------|---------------|
| 18              | 2.808<br>71.32 | 1- -8         |
| 19              | 2.964<br>75.29 | 1- -9         |
| 20              | 3.120<br>79.25 | 2- -0         |
| 21              | 3.276<br>83.21 | 2- -1         |
| 22              | 3.432<br>87.17 | 2- -2         |
| 23              | 3.588<br>91.14 | 2- -3         |
| 24              | 3.744<br>95.1  | 2- -4         |

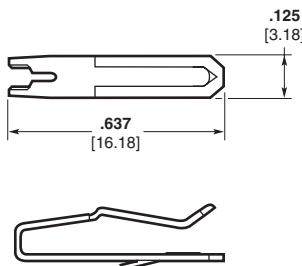
## MTA-156 Connector Accessories (Continued)

### Replacement IDC Contacts

#### Material and Finish

**Contacts** — Phosphor bronze, post tin plated; .000030 [0.00076] or .000015 [0.00038] post gold plated over nickel

**Note:** Tyco Electronics does not recommend terminating an MTA contact more than one time. Use replacement contacts when required for field repairs or wire changes.

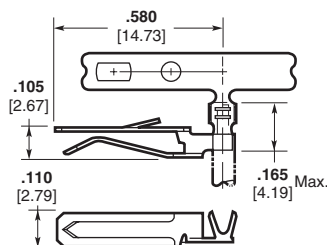


| Wire Size |                 | Part Numbers |                                  |                                  |
|-----------|-----------------|--------------|----------------------------------|----------------------------------|
| AWG       | mm <sup>2</sup> | Tin Plated   | .000030 [0.00076]<br>Gold Plated | .000015 [0.00038]<br>Gold Plated |
| 18        | 0.8–0.9         | 640631-3     | 641143-4                         | 641143-3                         |
| 20        | 0.5–0.6         | 640632-3     | 641144-4                         | 641144-3                         |
| 22        | 0.3–0.4         | 640633-3     | 641145-4                         | 641145-3                         |
| 24        | 0.2             | 640634-3     | 641146-4                         | 641146-3                         |
| 26        | 0.12–0.15       | 640635-3     | 641147-4                         | 641147-3                         |

### Crimp Snap-in Contacts

#### Material and Finish

**Contacts** — Phosphor bronze, tin plated



| Wire Size |                 | Part Nos.    |          |
|-----------|-----------------|--------------|----------|
| AWG       | mm <sup>2</sup> | Loose Piece* | Strip**  |
| 26–22     | .12–0.3         | 640557-3     | 640556-3 |
| 22–18     | 0.3–0.9         | 640559-3     | 640558-3 |

\*Hand Tool No. 59837-1 (408-6528)

\*\*AMP-O-ELECTRIC Model "G" Termination Machine (Request Catalog 65828)

**Note:** Requires applicator. For part number, call Technical Support.

Special applications for crimp snap-in contacts are:

1. Double wire per contact
2. Coax or shielded wire
3. Mixed wire size in same connector

**Note:** Only one crimp snap-in contact per connector.

**MTA-156 Connector Accessories (Continued)**

**Keying Plugs**

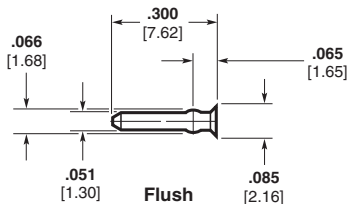
**Material (RoHS Compliant)**

UL94V-2 rated, nylon, natural color

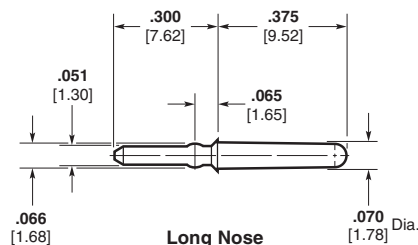
**Note:** Removal of contact is not necessary when using keying plug.

**Loose Piece**

**Part No. 640629-1 (Flush)**  
Used with keyed headers

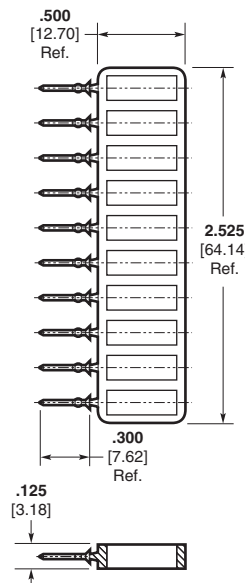


**Part No. 640630-1 (Long Nose)**  
Used with staked post



**On Carrier Strip**

**Part No. 641623-1 (Flush)**  
(10 per strip)



**Panel Mount End Caps**

**Part No. 641440-1**

**Part No. 641533-1**

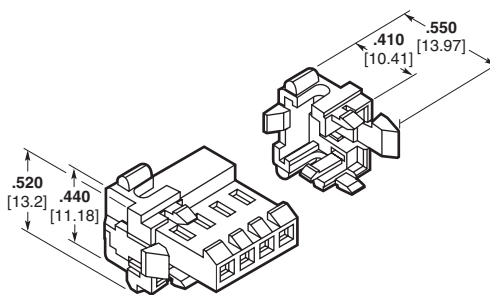
(2-position only)

**Material (RoHS Compliant)**

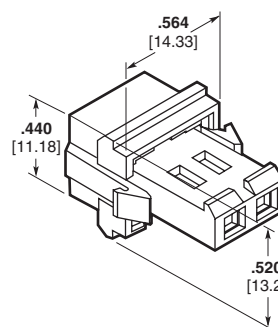
UL94V-2 rated, nylon, black

**Notes:**

- Both left-hand and right-hand end caps are attached by a connecting tab. This tab must be broken off prior to installing on connector.
- For best results attach panel mount end caps to the MTA-156 (IDC) connectors shown on pages 36 thru 39. While not preferred, panel mount end caps can be attached to MTA-156 (IDC) posted connector on page 45.

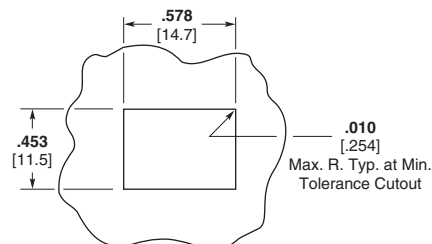
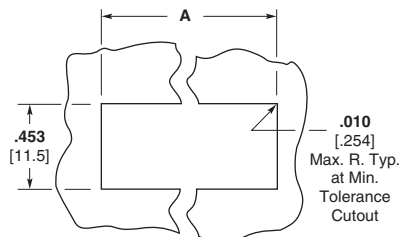


**3- thru 24-Position**  
**641440-1**  
See Note 1



**Two-Position Only**  
**641533-1**

| No. of Pos. | Dim. A         |
|-------------|----------------|
| 3           | .736<br>18.69  |
| 4           | .892<br>22.66  |
| 6           | 1.204<br>30.58 |
| 9           | 1.672<br>42.47 |
| 12          | 2.140<br>54.36 |
| 15          | 2.608<br>66.24 |
| 24          | 4.012<br>101.9 |



**Recommended Panel Cutout**  
(Recommended Panel Thickness .062 [1.57] to .067 [1.70] max.)

# MTA-156 Posted Connector/Connector Mateability Guide

## Matrix for Tin Plated Part Numbers

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 posted connector and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

Connectors

MTA, CST-100 II, SL-156 and AMP Economy Power (EP) Connectors

Posted Connectors

|        | 641435 | 641436 | 641437 | 641438 | 641439 | 641522 | 641523 | 641524 | 641525 | 641526 |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 640426 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640427 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640428 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640429 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640430 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640431 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640432 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640433 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640434 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640435 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640472 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640473 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640474 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640475 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640476 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640477 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640478 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640479 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640480 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640481 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640595 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640599 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640600 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640601 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640602 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 640604 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640605 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640606 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640607 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 640608 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 641301 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641302 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641303 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641304 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641305 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 641306 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 641307 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 641308 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 641309 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 641310 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 643817 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 643818 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 643819 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 643820 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 643821 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644082 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644461 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644462 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644463 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644464 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644465 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644466 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644467 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644468 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644469 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644470 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644471 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644472 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644501 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644502 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644566 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644567 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644569 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644570 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644572 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644783 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644791 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |
| 644860 | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      | Y      |
| 644878 | N      | N      | N      | N      | N      | N      | N      | N      | N      | N      |

MTA-156  
.156 [3.96]

**MTA-156 Posted Connector/Connector Mateability Guide** (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-156 posted connector and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

Matrix for .000030  
[0.00076] Gold Plated  
Part Numbers

**Posted Connectors**

|        | 644807 | 644809 | 644812 | 644814 |
|--------|--------|--------|--------|--------|
| 641217 | Y      | Y      | Y      | Y      |
| 641218 | Y      | Y      | Y      | Y      |
| 641219 | Y      | Y      | Y      | Y      |
| 641220 | Y      | Y      | Y      | Y      |
| 641221 | Y      | Y      | Y      | Y      |
| 641222 | N      | N      | N      | N      |
| 641223 | N      | N      | N      | N      |
| 641224 | N      | N      | N      | N      |
| 641225 | N      | N      | N      | N      |
| 641226 | N      | N      | N      | N      |
| 641227 | Y      | Y      | Y      | Y      |
| 641228 | Y      | Y      | Y      | Y      |
| 641229 | Y      | Y      | Y      | Y      |
| 641230 | Y      | Y      | Y      | Y      |
| 641231 | Y      | Y      | Y      | Y      |
| 641232 | N      | N      | N      | N      |
| 641233 | N      | N      | N      | N      |
| 641234 | N      | N      | N      | N      |
| 641235 | N      | N      | N      | N      |
| 641236 | N      | N      | N      | N      |
| 644460 | N      | N      | N      | N      |
| 644662 | N      | N      | N      | N      |
| 644663 | N      | N      | N      | N      |
| 644687 | N      | N      | N      | N      |
| 644718 | N      | N      | N      | N      |
| 644720 | N      | N      | N      | N      |

Connectors

Matrix for .000015  
[0.00038] Gold Plated  
Part Numbers

**Posted Connectors**

|        | 643995 | 647476 | 647481 | 647497 |
|--------|--------|--------|--------|--------|
| 641148 | Y      | Y      | Y      | Y      |
| 641149 | Y      | Y      | Y      | Y      |
| 641150 | Y      | Y      | Y      | Y      |
| 641151 | Y      | Y      | Y      | Y      |
| 641152 | Y      | Y      | Y      | Y      |
| 641153 | N      | N      | N      | N      |
| 641154 | N      | N      | N      | N      |
| 641155 | N      | N      | N      | N      |
| 641156 | N      | N      | N      | N      |
| 641157 | N      | N      | N      | N      |
| 641168 | Y      | Y      | Y      | Y      |
| 641169 | Y      | Y      | Y      | Y      |
| 641170 | Y      | Y      | Y      | Y      |
| 641171 | Y      | Y      | Y      | Y      |
| 641172 | Y      | Y      | Y      | Y      |
| 641173 | N      | N      | N      | N      |
| 641174 | N      | N      | N      | N      |
| 641175 | N      | N      | N      | N      |
| 641176 | N      | N      | N      | N      |
| 641177 | N      | N      | N      | N      |
| 644284 | N      | N      | N      | N      |
| 647478 | N      | N      | N      | N      |
| 647479 | N      | N      | N      | N      |
| 647496 | N      | N      | N      | N      |

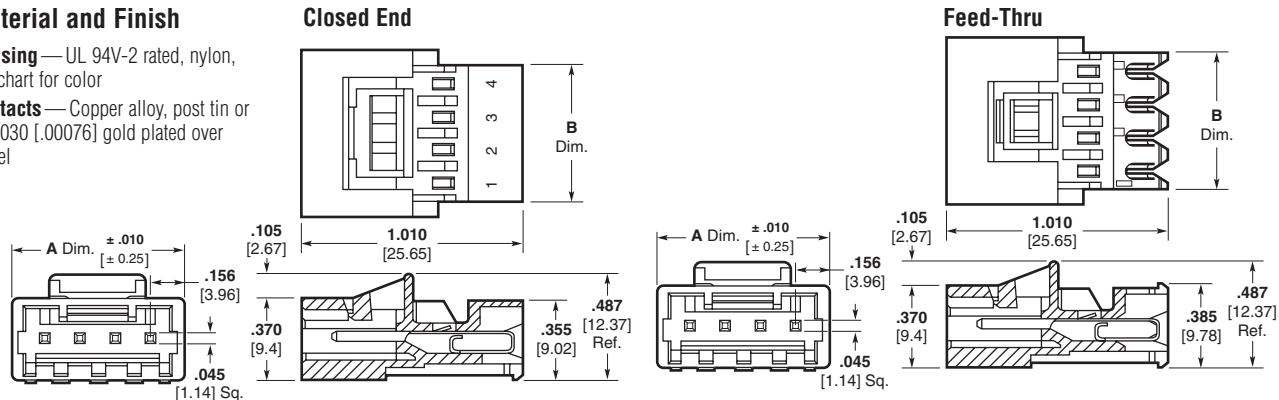
Connectors

## MTA-156 IDC Posted Connectors (Wire-to-Wire)—Closed End, Feed-Thru

### Material and Finish

**Housing**—UL 94V-2 rated, nylon,  
see chart for color

**Contacts**—Copper alloy, post tin or  
.000030 [0.00076] gold plated over  
nickel



#### Notes:

1. Mating half visuals - pages 36 thru 39.
2. Strain relief & dust covers - pages 40 & 41.
3. Approved wire listing - page 70.

### Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of circuits available for the described connectors.

Prefixes and suffixes are determined by the number of circuit positions in the connector. For example, the complete part number for a 12-position closed end connector for 18 AWG wire would be:

Base number **641435** plus  
prefix-and-suffix  
**1- -2**

The correct ordering number is  
**1-641435-2**

See page 15 for an explanation of  
RoHS lead free equivalents.

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

### Color Coding by Wire Size for UL 94V-2 Connectors

**18 AWG** —Orange  
**20 AWG** —Yellow  
**22 AWG** —Red  
**24 AWG** —White  
**26 AWG** —Blue

### Performance Data

**Voltage Rating**—600 VAC

**Current Rating**—7 amp max.

**Low-Level Resistance**—  
7 mΩ max. initial

**Dielectric Withstanding Voltage**—  
1500 VAC/1 min.

**Insulation Resistance**—  
5000 MΩ min. initial

**Operating Temperature**—  
-55° C to +105° C

### Base Part Numbers

| Connector Type<br>& Wire Size                           | Closed End Connector <sup>1</sup> |                                                                    | Feed-Thru Connector <sup>1</sup> |                                                                    |
|---------------------------------------------------------|-----------------------------------|--------------------------------------------------------------------|----------------------------------|--------------------------------------------------------------------|
|                                                         | Part Nos.                         | No. of Circuits/<br>RoHS Equiv.                                    | Part Nos.                        | No. of Circuits/<br>RoHS Equiv.                                    |
| <b>Standard UL 94V-2, Tin Plated</b>                    |                                   |                                                                    |                                  |                                                                    |
| <b>18 AWG</b><br>0.8-0.9 mm <sup>2</sup>                | 641435                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 641522                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>20 AWG</b><br>0.5-0.6 mm <sup>2</sup>                | 641436                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 641523                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>22 AWG</b><br>0.3-0.4 mm <sup>2</sup>                | 641437                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 641524                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                    | 641438                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 641525                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>26 AWG</b><br>0.12-0.15 mm <sup>2</sup>              | 641439                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 641526                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>Standard UL 94V-2, .000030 [0.00076] Gold Plated</b> |                                   |                                                                    |                                  |                                                                    |
| <b>18 AWG</b><br>0.8-0.9 mm <sup>2</sup>                | 644807                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 644812                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>20 AWG</b><br>0.5-0.6 mm <sup>2</sup>                | — <sup>2</sup>                    | —                                                                  | — <sup>2</sup>                   | —                                                                  |
| <b>22 AWG</b><br>0.3-0.4 mm <sup>2</sup>                | 644809                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 644814                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>24 AWG</b><br>0.2 mm <sup>2</sup>                    | — <sup>2</sup>                    | —                                                                  | — <sup>2</sup>                   | —                                                                  |
| <b>26 AWG</b><br>0.12-0.15 mm <sup>2</sup>              | — <sup>2</sup>                    | —                                                                  | — <sup>2</sup>                   | —                                                                  |
| <b>Standard UL 94V-2, .000015 [0.00038] Gold Plated</b> |                                   |                                                                    |                                  |                                                                    |
| <b>18 AWG</b><br>0.8-0.9 mm <sup>2</sup>                | 647476                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 647481                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |
| <b>22 AWG</b><br>0.3-0.4 mm <sup>2</sup>                | 643995                            | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> | 647497                           | 2, 3, 4, 6, 9, 12, 15, 24<br><b>32, 33, 34, 36, 39, 42, 45, 54</b> |

<sup>1</sup> MTA-156 Posted Connectors (Closed End and Feed-Thru) **will Only mate** with MTA-156 connectors with locking ramp and without polarizing tabs. They **will NOT mate** with MTA-156 Quad Connectors.

<sup>2</sup> Parts can be made available upon request. Minimums may apply.

| No. of<br>Circuits | Dim.           |               | Suffix | No. of<br>Circuits | Dim.           |                | Prefix/<br>Suffix |
|--------------------|----------------|---------------|--------|--------------------|----------------|----------------|-------------------|
|                    | A              | B             |        |                    | A              | B              |                   |
| 2                  | .468<br>11.89  | .316<br>8.03  | -2     | 9                  | 1.560<br>39.62 | 1.408<br>35.76 | -9                |
| 3                  | .624<br>15.85  | .472<br>11.99 | -3     | 12                 | 2.028<br>51.51 | 1.876<br>47.65 | 1- -2             |
| 4                  | .780<br>19.81  | .628<br>15.95 | -4     | 15                 | 2.496<br>63.40 | 2.344<br>59.54 | 1- -5             |
| 6                  | 1.092<br>27.74 | .940<br>23.88 | -6     | 24                 | 3.900<br>99.06 | 3.748<br>95.20 | 2- -4             |

### Technical Documents

#### Product Specification

108-1065 MTA-156 Posted  
Connector

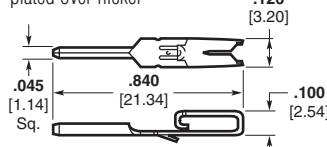
#### Application Specification

114-1020 MTA-156 Connectors,  
Posted Connectors and  
Card Edge Connectors

### Replacement IDC Contacts

#### Material and Finish

**Contacts**—Copper alloy, post tin  
plated over nickel



| Wire Size<br>AWG | mm <sup>2</sup> | Part<br>Numbers |
|------------------|-----------------|-----------------|
|                  |                 |                 |
| 18               | 0.8-0.9         | 3-641425-1      |
| 20               | 0.5-0.6         | 3-641426-1      |
| 22               | 0.3-0.4         | 3-641427-1      |
| 24               | 0.2             | 3-641428-1      |
| 26               | 0.12-0.15       | 3-641429-1      |

## MTA-156 Flat Headers—Straight

### Material and Finish

**Housing**—UL94V-0 rated, polyester, white

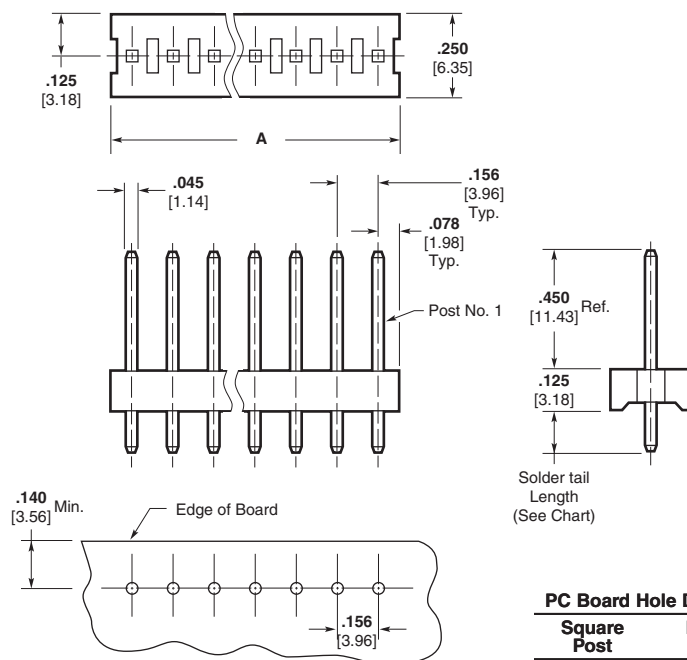
**Posts**—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

#### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39, 55, 60 and 62.



Recommended Mounting Hole Pattern  
for .062 [1.57] Thk. PC Board

#### PC Board Hole Diameters

| Square Post              | Round Post               |
|--------------------------|--------------------------|
| .080/.070<br>[2.03/1.78] | .070/.060<br>[1.78/1.52] |

### Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be:

Base number **640383** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-640383-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 640383-2               | 3-640383-2                   |
|             | thru                   |                              |
| 24          | 2-640383-4             | 5-640383-4                   |

See page 15 for an explanation of RoHS lead free equivalents.

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** Consult Product Drawing for details on placing headers onto PC boards.

### Base Part Numbers

| Square Posts                                           |                              |                            |                              | Round Posts                |                              |                            |                              |
|--------------------------------------------------------|------------------------------|----------------------------|------------------------------|----------------------------|------------------------------|----------------------------|------------------------------|
| .125 [3.18]<br>Solder tail                             |                              | .175 [4.45]<br>Solder tail |                              | .125 [3.18]<br>Solder tail |                              | .175 [4.45]<br>Solder tail |                              |
| Header Part Nos.                                       | No. of Posts/<br>RoHS Equiv. | Header Part Nos.           | No. of Posts/<br>RoHS Equiv. | Header Part Nos.           | No. of Posts/<br>RoHS Equiv. | Header Part Nos.           | No. of Posts/<br>RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                              |                            |                              |                            |                              |                            |                              |
| 640383                                                 | 2-24                         | 644749                     | 2-24                         | 640384                     | 2-24                         | 644750                     | 2-24                         |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                              |                            |                              |                            |                              |                            |                              |
| 641202                                                 | 2-24<br>32-54                | 644756                     | 2-24<br>32-54                | 641203                     | 2-24<br>32-54                | 644757                     | 2-24<br>32-54                |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                              |                            |                              |                            |                              |                            |                              |
| 641113                                                 | 2-24<br>32-54                | 644763                     | 2-24<br>32-54                | 641114                     | 2-24<br>32-54                | 644764                     | 2-24<br>32-54                |

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## Material and Finish

**Housing**—UL94V-0 rated, polyester, white

**Posts**—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39, 55, 60 and 62.

## Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be:

Base number **641204** plus  
prefix-and-suffix  
**1- -0**

The correct ordering number is  
**1-641204-0**

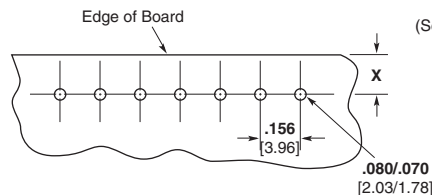
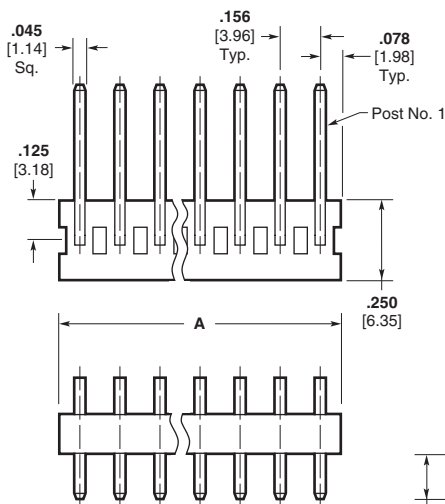
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 641204-2               | 3-641204-2                   |
| thru        |                        |                              |
| 24          | 2-641204-4             | 5-641204-4                   |

See page 15 for an explanation of RoHS lead free equivalents.

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

## MTA-156 Flat Headers—Right-Angle

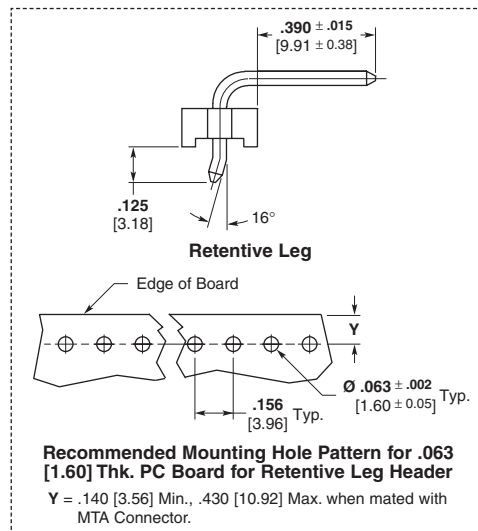
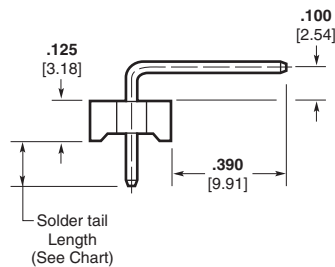


**Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board**

X = .140 [3.56] Min., .430 [10.92] Max. when mated with MTA Connector.

X = .140 [3.56] Min. when mated with SL-156 Wire-to-Board Connector.

**Note:** Consult Product Drawing for details on placing headers onto PC boards.



## Base Part Numbers

| Retentive Leg                                          |                           | Square Posts     |                             | .175 [4.45] Solder tail |                             |
|--------------------------------------------------------|---------------------------|------------------|-----------------------------|-------------------------|-----------------------------|
| Header Part Nos.                                       | No. of Posts/ RoHS Equiv. | Header Part Nos. | No. of Posts/ RoHS Equiv.   | Header Part Nos.        | No. of Posts/ RoHS Equiv.   |
| <b>Standard UL94V-0, Tin Plated</b>                    |                           |                  |                             |                         |                             |
| 647646                                                 | <b>2-12</b>               | 640385           | <b>2-24</b>                 | 644751                  | <b>2-24</b>                 |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                           |                  |                             |                         |                             |
| —                                                      | —                         | 641204           | <b>2-24</b><br><b>32-54</b> | 644758                  | <b>2-24</b><br><b>32-54</b> |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                           |                  |                             |                         |                             |
| —                                                      | —                         | 641115           | <b>2-24</b><br><b>32-54</b> | 644765                  | <b>2-24</b><br><b>32-54</b> |

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## MTA-156 Friction Lock Headers—Straight

### Material and Finish

**Housing**—UL94V-0 rated, polyester, white

**Posts**—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

#### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 55, 60 and 62.

### Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

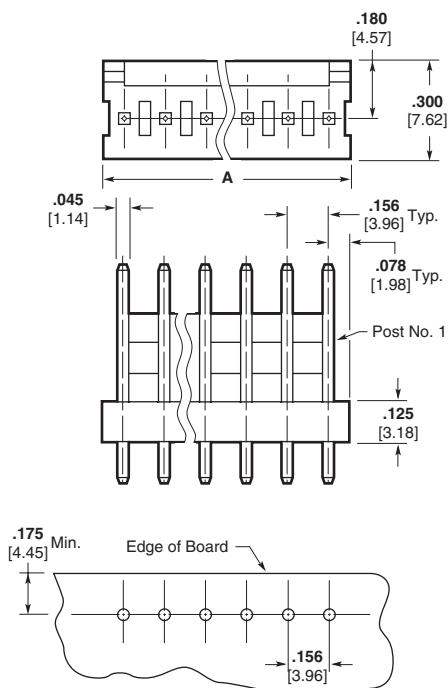
Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts and a .125 [3.18] solder tail length would be: Base number **641208** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-641208-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

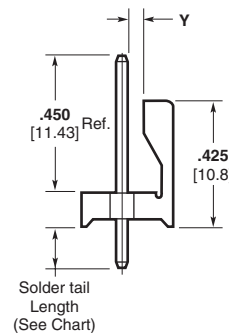
| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 641208-2               | 3-641208-2                   |
|             | thru                   |                              |
| 24          | 2-641208-4             | 5-641208-4                   |

See page 15 for an explanation of RoHS lead free equivalents.



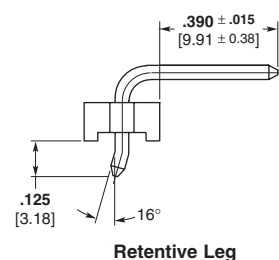
Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

| PC Board Hole Diameters |                       |
|-------------------------|-----------------------|
| Square Post             | Round Post            |
| .080/.070 [2.03/1.78]   | .070/.060 [1.78/1.52] |



Y = .068 [1.73] Max. 2-8 position tin plated and 2-24 position gold plated headers.

Y = .073 [1.85] 9-24 position tin plated headers.



**Note:** Consult Product Drawing for details on placing headers onto PC boards.

### Base Part Numbers

| Square Posts                                           |                           |                         |                           |                         |                           | Round Posts             |                           |                         |                           |
|--------------------------------------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Retentive Leg                                          |                           | .125 [3.18] Solder tail |                           | .175 [4.45] Solder tail |                           | .125 [3.18] Solder tail |                           | .175 [4.45] Solder tail |                           |
| Header Part Nos.                                       | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                           |                         |                           |                         |                           |                         |                           |                         |                           |
| 1744017                                                | 2-12                      | 640445                  | 2-24                      | 644752                  | 2-24                      | 640388                  | 2-24                      | 644753                  | 2-24                      |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                           |                         |                           |                         |                           |                         |                           |                         |                           |
| —                                                      | —                         | 641208                  | 2-24<br>32-54             | 644759                  | 2-24<br>32-54             | 641209                  | 2-24<br>32-54             | 644760                  | 2-24<br>32-54             |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                           |                         |                           |                         |                           |                         |                           |                         |                           |
| —                                                      | —                         | 641119                  | 2-24<br>32-54             | 644766                  | 2-24<br>32-54             | 641120                  | 2-24<br>32-54             | 644767                  | 2-24<br>32-54             |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** Select lead headers (omitted pin headers) and tube loaded product are available upon request. Please contact product engineer or product manager for details.

### Material and Finish

**Housing**—UL94V-0 rated, polyester, white

**Posts**—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

#### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

When using Front Bend Headers—for mating half visuals use connectors with a locking ramp for polarization/retention purposes. When using Rear Bend Headers—for mating half visuals use connectors without a locking ramp. For polarization purposes only see pages 36 thru 39, 55, 60 and 62.

### Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts, front bend, and a .125 [3.18] solder tail length would be:

Base number **641210** plus prefix-and-suffix  
**1- -0**

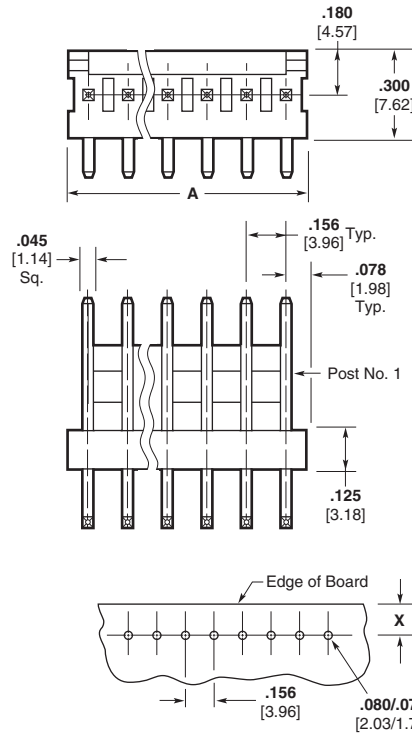
The correct ordering number is **1-641210-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 641210-2               | 3-641210-2                   |
| thru        |                        |                              |
| 24          | 2-641210-4             | 5-641210-4                   |

See page 15 for an explanation of RoHS lead free equivalents.

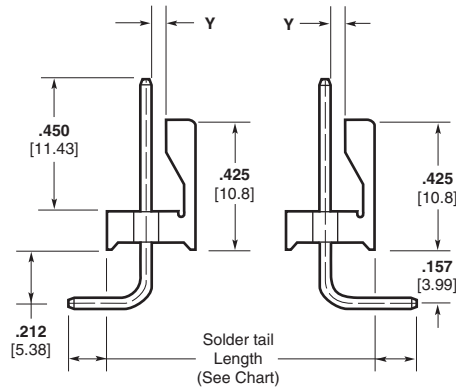
## MTA-156 Friction Lock Headers—Right-Angle



Recommended Mounting Hole Pattern  
for .062 [1.57] Thk. PC Board

Y = .068 [1.73] Max. 2-8 position tin plated and 2-24 position gold plated headers.

Y = .073 [1.85] 9-24 position tin plated headers.



#### Front Bend

X = .325 [8.26] Min., .400 [10.16] Max., when mated with MTA Connector.  
X = .325 [8.26] Min., .345 [8.76] Max., when mated with SL-156 Connector.

#### Rear Bend

X = .500 [12.7] Min., .650 [16.51] Max., when mated with MTA Connector.  
X = .500 [12.7] Min., when mated with SL-156 Connector.

**Note:** Consult Product Drawing for details on placing headers onto PC boards.

### Base Part Numbers

| Square Posts                                           |                           |                         |                           |                         |                           |                         |                           |
|--------------------------------------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|-------------------------|---------------------------|
| Front Bend                                             |                           |                         |                           | Rear Bend               |                           |                         |                           |
| .125 [3.18] Solder tail                                |                           | .175 [4.45] Solder tail |                           | .125 [3.18] Solder tail |                           | .175 [4.45] Solder tail |                           |
| Header Part Nos.                                       | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. | Header Part Nos.        | No. of Posts/ RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                           |                         |                           |                         |                           |                         |                           |
| 640389                                                 | 2-24                      | 644754                  | 2-24                      | 640387                  | 2-24                      | 644755                  | 2-24                      |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                           |                         |                           |                         |                           |                         |                           |
| 641210                                                 | 2-24<br>32-54             | 644761                  | 2-24<br>32-54             | 641207                  | 2-24<br>32-54             | 644762                  | 2-24<br>32-54             |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                           |                         |                           |                         |                           |                         |                           |
| 641121                                                 | 2-24<br>32-54             | 644768                  | 2-24<br>32-54             | 641118                  | 2-24<br>32-54             | 644769                  | 2-24<br>32-54             |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## MTA-156 Polarized Lock Headers—Straight

### Material and Finish

**Housing**—UL94V-0 rated, polyester, white

**Posts**—Copper alloy, tin plated or .000030 [0.00076] gold over nickel

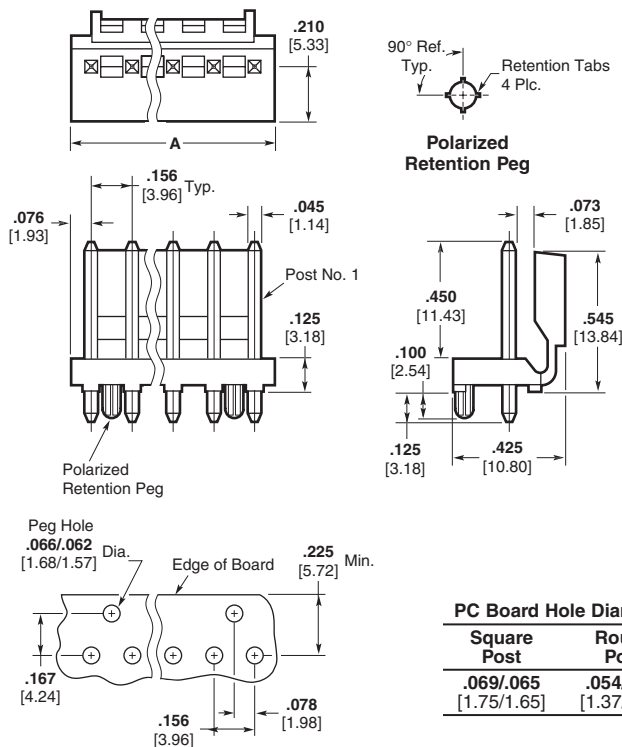
#### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Peg holes are not required in PC Boards when headers without pegs are used.
3. One peg only on a 2 position header, other position sizes have two pegs.
4. Headers with .00015 [0.00038] gold plated post are available upon request. Minimums may apply.
5. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.



PC Board Hole Diameters

| Square Post              | Round Post               |
|--------------------------|--------------------------|
| .069/.065<br>[1.75/1.65] | .054/.050<br>[1.37/1.27] |

### Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with square posts with pegs would be:

Base number **644615** plus  
prefix-and-suffix  
**1- -0**

The correct ordering number is  
**1-644615-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 644615-2               | 3-644615-2                   |
|             | thru                   |                              |
| 18          | 1-644615-8             | 4-644615-8                   |

See page 15 for an explanation of RoHS lead free equivalents.

### Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

**Note:** Consult Product Drawing for details on placing headers onto PC boards.

### Base Part Numbers

| Square Posts                                           |                           |                  |                           | Round Posts      |                           |                  |                           |
|--------------------------------------------------------|---------------------------|------------------|---------------------------|------------------|---------------------------|------------------|---------------------------|
| Without Pegs                                           |                           | With Pegs        |                           | Without Pegs     |                           | With Pegs        |                           |
| Header Part Nos.                                       | No. of Posts/ RoHS Equiv. | Header Part Nos. | No. of Posts/ RoHS Equiv. | Header Part Nos. | No. of Posts/ RoHS Equiv. | Header Part Nos. | No. of Posts/ RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                           |                  |                           |                  |                           |                  |                           |
| 644611                                                 | 2-18<br><b>32-48</b>      | 644615           | 2-18<br><b>32-48</b>      | 644612           | 2-18<br><b>32-48</b>      | 644616           | 2-18<br><b>32-48</b>      |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                           |                  |                           |                  |                           |                  |                           |
| 644627                                                 | 2-18<br><b>32-48</b>      | 644631           | 2-18<br><b>32-48</b>      | 644628           | 2-18<br><b>32-48</b>      | 644632           | 2-18<br><b>32-48</b>      |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## MTA-156 Polarized Lock Headers—Right-Angle

### Material and Finish

**Housing**—UL94V-0 rated, polyester, white

**Posts**—Copper alloy, tin plated or .000030 [0.00076] gold over nickel

#### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Peg holes are not required in PC Boards when headers without pegs are used.
3. One peg only on a 2 position header, other position sizes have two pegs.
4. Headers with .00015 [0.00038] gold plated post are available upon request. Minimums may apply.
5. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use only connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.

### Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with front bend and with pegs would be:

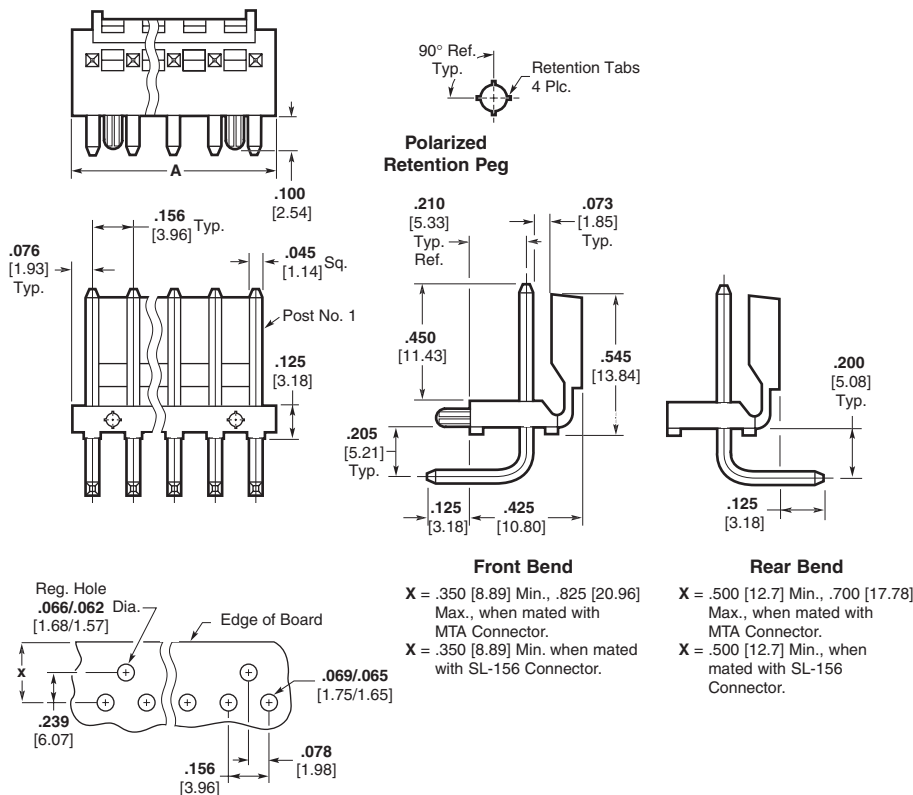
Base number **644617** plus prefix-and-suffix  
**1- -0**

The correct ordering number is  
**1-644617-0**

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 644617-2               | 3-644617-2                   |
| thru        |                        |                              |
| 18          | 1-644617-8             | 4-644617-8                   |

See page 15 for an explanation of RoHS lead free equivalents.



Recommended Mounting Hole Pattern  
for .062 [1.57] Thk. PC Board

**Note:** Consult Product Drawing for details on placing headers onto PC boards.

### Base Part Numbers

| Square Posts                                           |                          |                  |                          |                  |                          |
|--------------------------------------------------------|--------------------------|------------------|--------------------------|------------------|--------------------------|
| Front Bend                                             |                          |                  |                          | Rear Bend        |                          |
| Without Pegs                                           |                          | With Pegs        |                          | Without Pegs     |                          |
| Header Part Nos.                                       | No. of Posts/RoHS Equiv. | Header Part Nos. | No. of Posts/RoHS Equiv. | Header Part Nos. | No. of Posts/RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                          |                  |                          |                  |                          |
| 644613                                                 | 2-18<br><b>32-48</b>     | 644617           | 2-18<br><b>32-48</b>     | 644614           | 2-18<br><b>32-48</b>     |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                          |                  |                          |                  |                          |
| 644629                                                 | 2-18<br><b>32-48</b>     | 644633           | 2-18<br><b>32-48</b>     | 644630           | 2-18<br><b>32-48</b>     |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## MTA-156 Friction Lock High Temperature Headers—Straight

## Material and Finish

**Housing**—UL94V-0 rated, nylon, black

**Posts**—Copper alloy, tin plated, .000015 [0.00038] gold over nickel

**Notes:**

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin-lead on the solder tail.
3. Headers with straight and right-angle square posts are available upon request. Minimums may apply.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, use connectors with a locking ramp for polarization/retention purposes, see pages 36 thru 39, 55, 60 and 62.

For polarizing purposes only use connectors without a locking ramp. See pages 36 thru 39, 60 and 62.

## Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with round tin plated posts:

Base number **647648** plus  
prefix-and-suffix  
**1- — -0**

The correct ordering number is

1-647648-0

The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

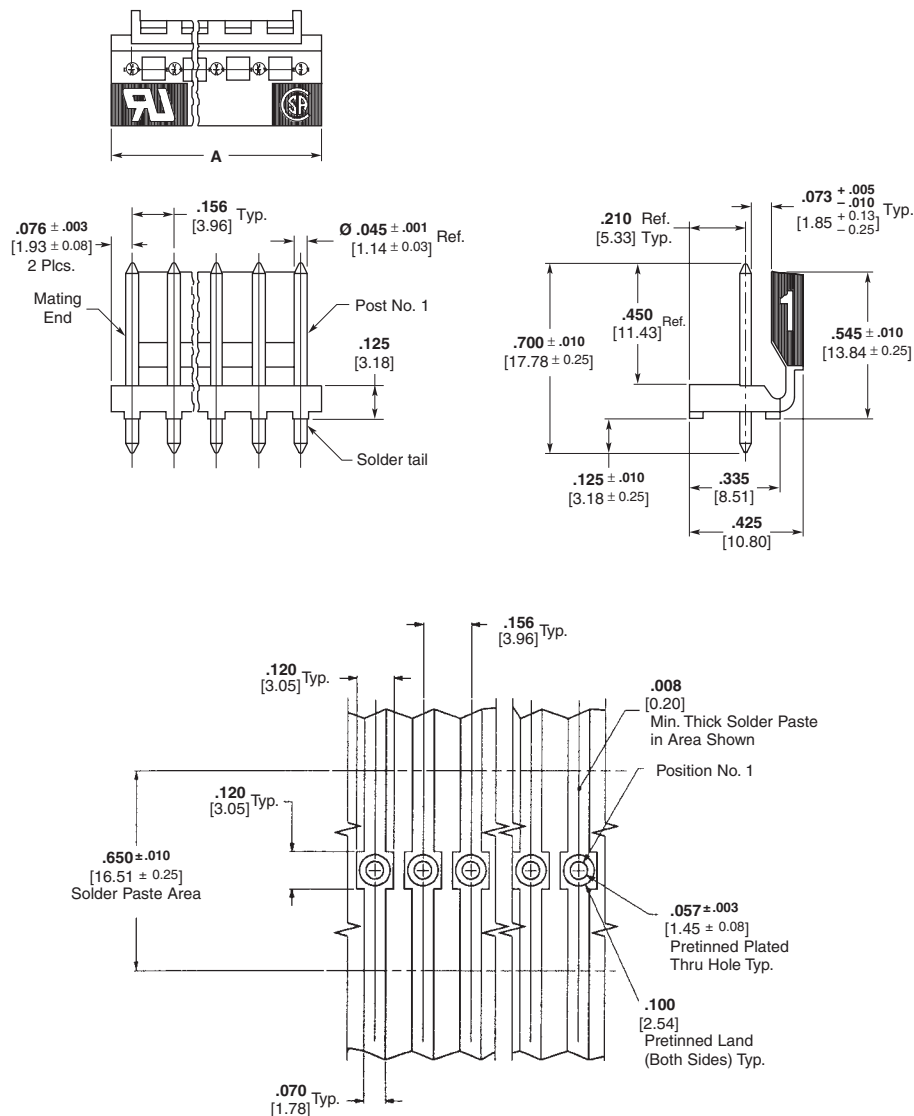
| No. of Pos. | Standard Prefix/Suffix | Lead Free RoHS Prefix/Suffix |
|-------------|------------------------|------------------------------|
| 2           | 647648-2               | 3-647648-2                   |
|             | thru                   |                              |
| 12          | 1-647648-2             | 4-647648-2                   |

See page 15 for an explanation of RoHS lead free equivalents.

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

### For use with Infrared Reflow Process

Maximum Temperature Rating: 280°C



### Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board

**Note:** Consult Product Drawing for details on placing headers onto PC boards.

## Base Part Numbers

| Round Post                                             |                              |
|--------------------------------------------------------|------------------------------|
| Header Part Nos.                                       | No. of Posts/<br>RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                              |
| 647648                                                 | 2-12<br>32-42                |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                              |
| 647649                                                 | 2-12<br>32-42                |

**Note:**

Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

## Material and Finish

**Housing**—UL94V-0 rated, polyester, black

**Posts**—Copper alloy, tin plated; or .000030 [0.00076] or .000015 [0.00038] gold over nickel

### Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. Peg holes are not required in PC boards when headers without pegs are used.
4. One peg only on a 2 position header, other position sizes have two pegs.
5. Right-angle front and rear bend headers with retention pegs can be made available upon request. Minimums may apply.

For mateability options, see matrix on pages 34, 35, 54 and 58.

For mating half visuals, see pages 36 thru 39 and 55.

## Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and number of posts available for the described headers.

Prefixes and suffixes are determined by the number of post positions in the header. For example, the complete part number for a 10-position header with straight, square posts and with pegs would be: Base number **647127** plus prefix-and-suffix

**1- -0**

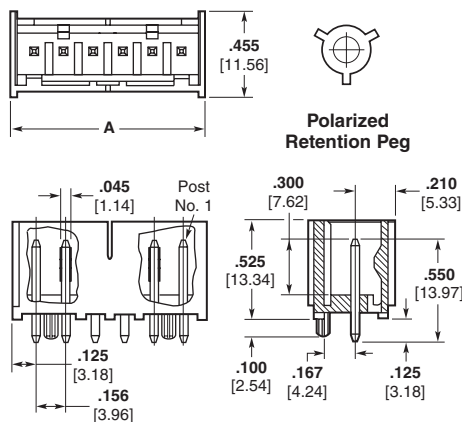
The correct ordering number is **1-647127-0**

| No. of Pos. | Dim. A         | Standard Prefix/Suffix | RoHS Prefix/Suffix |
|-------------|----------------|------------------------|--------------------|
| 2           | .406<br>10.31  | -2                     | 2--2               |
| 3           | .562<br>14.27  | -3                     | 2--3               |
| 4           | .718<br>18.24  | -4                     | 2--4               |
| 5           | .874<br>22.20  | -5                     | 2--5               |
| 6           | 1.030<br>26.16 | -6                     | 2--6               |
| 7           | 1.186<br>30.12 | -7                     | 2--7               |
| 8           | 1.342<br>34.09 | -8                     | 2--8               |
| 9           | 1.498<br>38.05 | -9                     | 2--9               |
| 10          | 1.654<br>42.01 | 1--0                   | 3--0               |
| 11          | 1.810<br>45.97 | 1--1                   | 3--1               |
| 12          | 1.966<br>49.94 | 1--2                   | 3--2               |

**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

## MTA-156 Shrouded Headers—Straight and Right-Angle

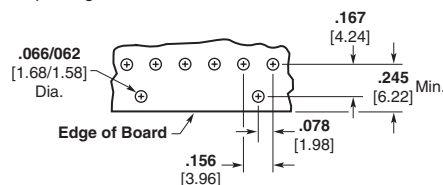
### Straight Post (.045 [1.14] Square or Round)



### PC Board Hole Diameters

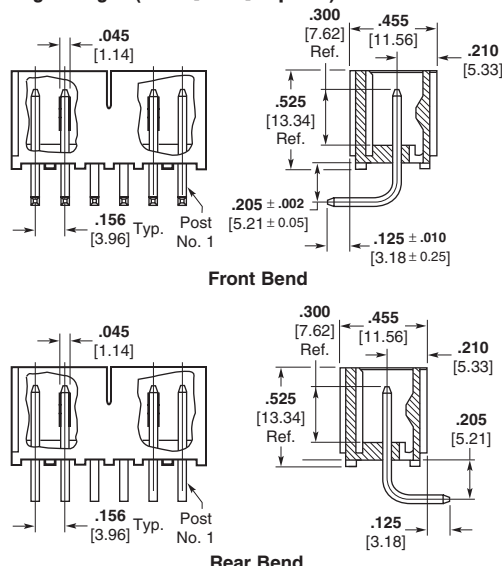
| Square Post              | Round Post               |
|--------------------------|--------------------------|
| .069/.065<br>[1.75/1.65] | .054/.050<br>[1.37/1.27] |

**Note:** Consult Product Drawing for details on placing headers onto PC boards.



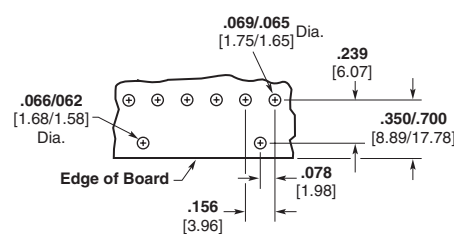
**Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board Using a Straight Post Header**

### Right-Angle (.045 [1.14] Square)



**Front Bend**

**Rear Bend**



**Recommended Mounting Hole Pattern for .062 [1.57] Thick PC Board Using a Right-Angle Header**

### Base Part Numbers

| Straight Square Posts                                  |                              |                  |                              | Straight Round Posts         |                              |                  |                              |
|--------------------------------------------------------|------------------------------|------------------|------------------------------|------------------------------|------------------------------|------------------|------------------------------|
| Without Pegs                                           |                              | With Pegs        |                              | Without Pegs                 |                              | With Pegs        |                              |
| Header Part Nos.                                       | No. of Posts/<br>RoHS Equiv. | Header Part Nos. | No. of Posts/<br>RoHS Equiv. | Header Part Nos.             | No. of Posts/<br>RoHS Equiv. | Header Part Nos. | No. of Posts/<br>RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                              |                  |                              |                              |                              |                  |                              |
| 647123                                                 | 2-12<br>22-32                | 647127           | 2-12<br>22-32                | 647124                       | 2-12<br>22-32                | 647128           | 2-12<br>22-32                |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                              |                  |                              |                              |                              |                  |                              |
| 647131                                                 | 2-12<br>22-32                | 647135           | 2-12<br>22-32                | 647132                       | 2-12<br>22-32                | 647136           | 2-12<br>22-32                |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                              |                  |                              |                              |                              |                  |                              |
| 647139                                                 | 2-12<br>22-32                | 647143           | 2-12<br>22-32                | 647140                       | 2-12<br>22-32                | 647144           | 2-12<br>22-32                |
| Right-Angle Posts, Front Bend                          |                              |                  |                              | Right-Angle Posts, Rear Bend |                              |                  |                              |
| Without Pegs                                           |                              | With Pegs        |                              | Without Pegs                 |                              | With Pegs        |                              |
| Header Part Nos.                                       | No. of Posts/<br>RoHS Equiv. | Header Part Nos. | No. of Posts/<br>RoHS Equiv. | Header Part Nos.             | No. of Posts/<br>RoHS Equiv. | Header Part Nos. | No. of Posts/<br>RoHS Equiv. |
| <b>Standard UL94V-0, Tin Plated</b>                    |                              |                  |                              |                              |                              |                  |                              |
| 647125                                                 | 2-12<br>22-32                |                  |                              | 647126                       | 2-12<br>22-32                |                  |                              |
| <b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b> |                              |                  |                              |                              |                              |                  |                              |
| 647133                                                 | 2-12<br>22-32                |                  |                              | 647134                       | 2-12<br>22-32                |                  |                              |
| <b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b> |                              |                  |                              |                              |                              |                  |                              |
| 647141                                                 | 2-12<br>22-32                |                  |                              | 647142                       | 2-12<br>22-32                |                  |                              |

**Note:** Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.