



**.100 [2.54] Centerline MTA-100 IDC Connectors and Headers**

MTA-100  
.100 [2.54]

**Product Facts**

- Connectors and headers for 2 through 28 positions; wire sizes of 22, 24, 26 and 28 AWG [0.4-0.08 mm<sup>2</sup>]
- Wire-to-Post Connectors preloaded with dual beam contacts
- Connectors and headers, except shrouded headers, are end-to-end stackable
- Connector styles include both closed end and feed-thru connectors with locking ramps, with and without polarizing tabs
- Molded ribs on housing do not allow reverse mating
- Posted connectors for 2 through 19 positions
- Connectors preloaded with IDC contacts
- All contacts are slotted for insulation displacement (IDC) terminal technique
- Contacts are lubricated for fretting corrosion protection
- Benefits derived from the MTA-100 system include increased 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 UL1410 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 

**Technical Documents**

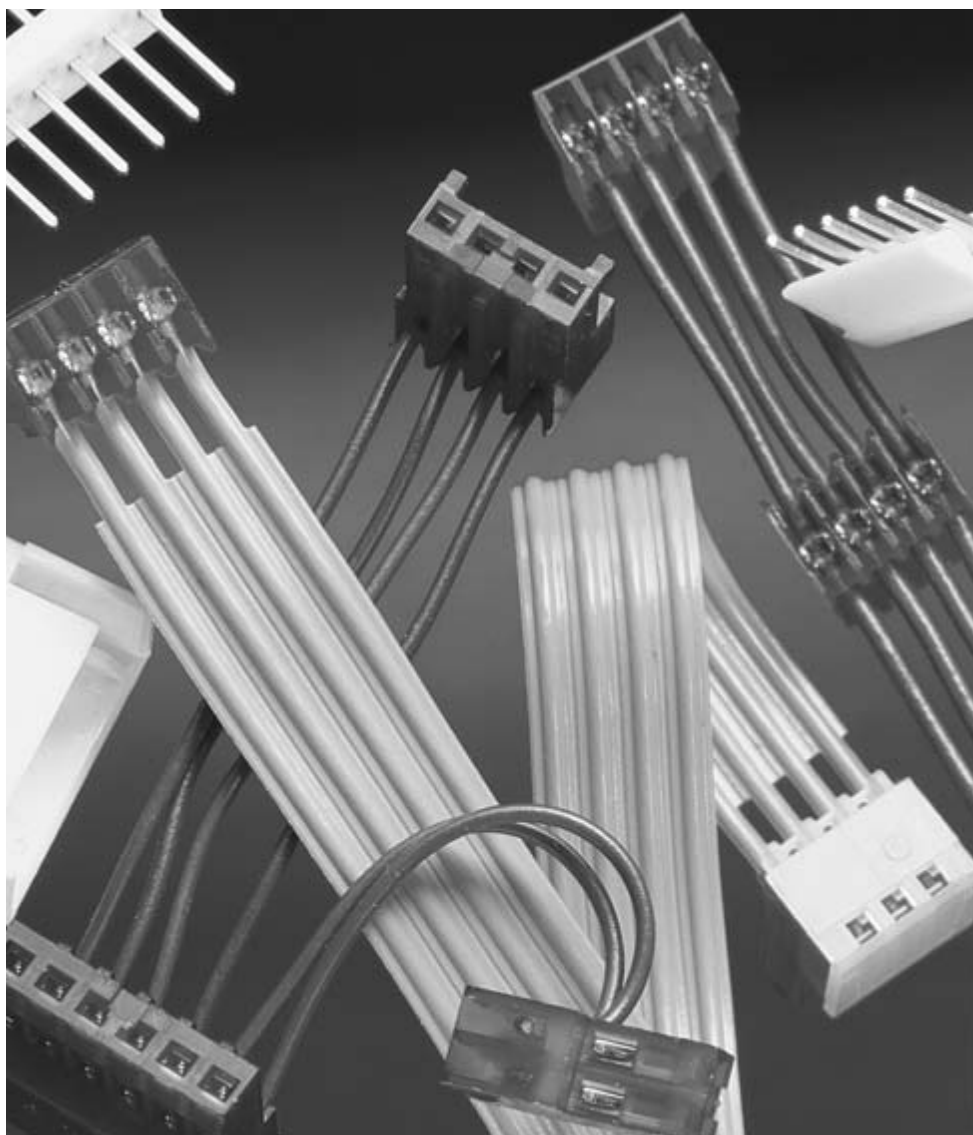
**Product Specification**

108-1050 MTA-100 Connectors

**Application Specifications**

114-1019 MTA-100 Connectors

114-1031 MTA-100 Ribbon Cable Assembly



MTA-100 connectors accept discrete and ribbon cable wire sizes ranging from 22–28 AWG [0.4–0.08 mm<sup>2</sup>] with maximum insulation outside diameter of .060 [1.52] for terminating single wire and .050 [1.27] for mass termination of wires. Tin plated solid, fused stranded, or stranded (7 strands) wire with PVC insulation can be used on 22–28 AWG [0.4–0.9 mm<sup>2</sup>] MTA-100 connectors and 19 stranded wire on 22–24 AWG [0.4–0.2 mm<sup>2</sup>] MTA-100 connectors. Only

one wire to be terminated into an IDC contact slot.

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

A full line of .100 [2.54] centerline headers completes the system. Headers are available with straight or right-angle posts, in flat, polarized or friction lock styles. Headers are available in 2 through 28 positions. Shrouded headers are available in 2 through 14 positions.

**Performance Data\***

**Voltage Rating** — 250 vac

**Current Rating** — 5 amp max.

**Low-Level Resistance** — 6 mΩ max. initial

**Dielectric Withstanding Voltage** — 750 vac/1 min.

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

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

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

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

**MTA-100 Connector/Header Mateability Guide**

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 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 Tin Plated  
Part Numbers**

**Headers**

	640452	640453	640454	640455	640456	640457	644456	644457	644486	644488	644694	644695	644803	644861	644874	644875	644876	644877	644892	644893	644894	647047	647048	647050	647051	647106	647166	647609	647623	647532	1744075
640440	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640441	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640442	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640443	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640468	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640469	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640470	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640471	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640620	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640621	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640622	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
640623	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641311	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641312	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641313	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641314	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641534	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641535	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641536	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641537	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641653	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641654	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641655	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641656	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643498	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643813	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643814	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643815	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643816	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
643828	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644083	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644312	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644313	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644497	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644511	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644512	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644513	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644514	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644540	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644563	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644564	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644565	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644574	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644575	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644576	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644577	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644578	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644579	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644795	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	
*1375820	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

**Connectors**

\*Select contact plating to match header plating.

**MTA-100  
.100 [2.54]**

**MTA-100 Connector/Header Mateability Guide** (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 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																								
	641211	641212	641213	641214	641215	641216	644487	644489	644884	644885	644886	644887	644896	644897	644898	647108	647109	647114	647116	647117	647168	647626	647624	647534	1744047
641237	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641238	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641239	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641240	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641241	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641242	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641243	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641244	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644042	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644043	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644044	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644702	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644726	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
*1375820	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Matrix for .000015  
[0.00038] Gold Plated  
Part Numbers

Connectors	Headers																								
	641122	641123	641124	641125	641126	641127	644888	644889	644890	644891	647075	647076	647078	647079	647107	647167	647625	647627	647533	1744074					
641190	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641191	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641192	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641193	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641198	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641199	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641200	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641201	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644038	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644040	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
647477	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
647480	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
*1375820	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
1744020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

\*Select contact plating to match header plating.

MTA-100  
.100 [2.54]

**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 [0.00038] post gold-plated over nickel

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

- 28 AWG — Green
- 26 AWG — Blue
- 24 AWG — White
- 22 AWG — Red

All wire sizes in UL94V-0 — Black

For mateability options, see matrix on pages 12 and 13.

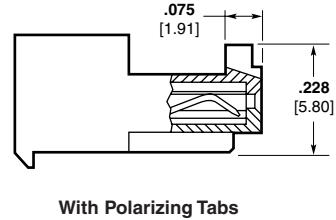
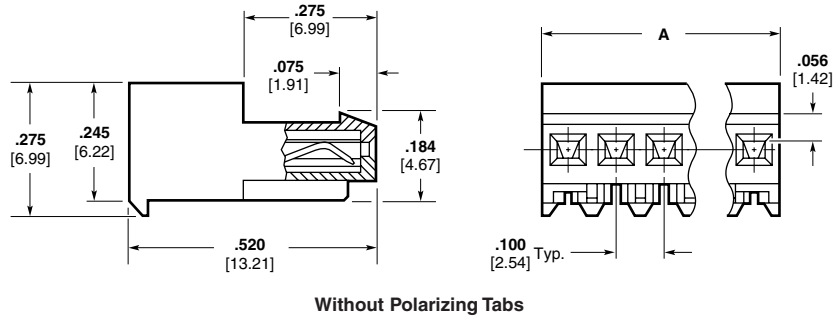
For mating half visuals, see pages 20 thru 30.

**Notes:**

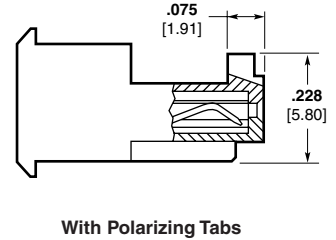
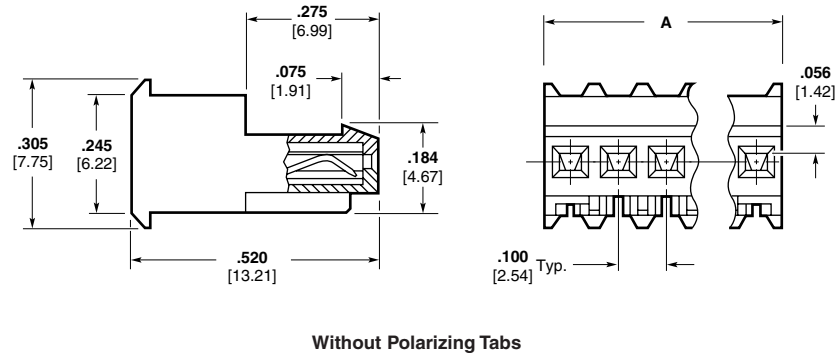
1. Refer to pages 70-74 for approved wire listing.
2. For strain reliefs and dust covers, see page 16.
3. For keying plugs, see page 17.
4. Other circuit sizes are available upon request. Minimums may apply.
5. Connector circuits can be molded closed for keying purposes. Minimums may apply.
6. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.
7. To determine connector overall length (dim. A), multiply .100 x the number of circuits. Example: .100 x 10 circuits equals 1.000 inch [25.4 mm].

**MTA-100 IDC Connectors—Closed End and Feed-Thru**

**Closed End Connectors**



**Feed-Thru Connectors**



**Connector Ordering Information**

The "Base Part Numbers" Chart at right shows the base part number, number of circuits and their RoHS (Restrictions on Certain Hazardous Substances) Compliant (lead free) equivalent 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 without polarizing tabs for 22 AWG wire would be:

Base number **640440** plus prefix-and-suffix  
**1- -0**

The correct ordering number is **1-640440-0**

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	640440-2	3-640440-2
3	640440-3	3-640440-3
4	640440-4	3-640440-4
5	640440-5	3-640440-5
6	640440-6	3-640440-6
7	640440-7	3-640440-7
8	640440-8	3-640440-8
9	640440-9	3-640440-9
10	1-640440-0	4-640440-0
11	1-640440-1	4-640440-1
12	1-640440-2	4-640440-2
13	1-640440-3	4-640440-3
14	1-640440-4	4-640440-4
15	1-640440-5	4-640440-5
16	1-640440-6	4-640440-6
17	1-640440-7	4-640440-7
18	1-640440-8	4-640440-8
19	1-640440-9	4-640440-9
20	2-640440-0	5-640440-0
21	2-640440-1	5-640440-1
22	2-640440-2	5-640440-2
23	2-640440-3	5-640440-3
24	2-640440-4	5-640440-4
25	2-640440-5	5-640440-5
26	2-640440-6	5-640440-6
27	2-640440-7	5-640440-7
28	2-640440-8	5-640440-8

**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-100 IDC Connectors—Closed End and Feed-Thru (Continued)**

**Base Part Numbers**

Connector Type & Wire Size	Closed End				Feed-Thru			
	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>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	640440	2–28 <b>32–58</b>	643813	2–28 <b>32–58</b>	640620	2–28 <b>32–58</b>	644540 <sup>1</sup>	2–15 <b>32–45</b>
<b>24 AWG</b> 0.2 mm <sup>2</sup>	640441	2–28 <b>32–58</b>	643814	2–28 <b>32–58</b>	640621	2–28 <b>32–58</b>	644563 <sup>1</sup>	2–24 <b>32–54</b>
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	640442	2–28 <b>32–58</b>	643815	2–28 <b>32–58</b>	640622	2–28 <b>32–58</b>	644564 <sup>1</sup>	2–15 <b>32–45</b>
<b>28 AWG</b> 0.08–0.09 mm <sup>2</sup>	640443	2–28 <b>32–58</b>	643816	2–28 <b>32–58</b>	640623	2–28 <b>32–58</b>	644565 <sup>1</sup>	2–15 <b>32–45</b>
<b>Tape Mounted on Reel UL94V-2, Tin Plated</b>								
<b>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	640468	2–28 <b>32–58</b>	644511	2–28 <b>42–68</b>	641311	2–28 <b>32–58</b>	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	640469	2–28 <b>32–58</b>	644512	2–28 <b>32–58</b>	641312	2–28 <b>32–58</b>	—	—
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	640470	2–28 <b>32–58</b>	644513	2–28 <b>32–58</b>	641313	2–28 <b>32–58</b>	—	—
<b>28 AWG</b> 0.08–0.09 mm <sup>2</sup>	640471	2–28 <b>32–58</b>	644514	2–28 <b>32–58</b>	641314	2–28 <b>32–58</b>	—	—
<b>Standard UL94V-2, .000030 [0.00076] Gold Plated</b>								
<b>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	641237	2–28 <b>32–58</b>	644042	2–28 <b>32–58</b>	641241	2–28 <b>32–58</b>	644702 <sup>1</sup>	2–15 <b>32–45</b>
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641238	2–28 <b>32–58</b>	644020	2–28 <b>32–58</b>	641242	2–28 <b>32–58</b>	—	—
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	641239	2–28 <b>32–58</b>	644043 <sup>1</sup>	2–14 <b>32–44</b>	641243	2–28 <b>32–58</b>	644726 <sup>1</sup>	2–15 <b>32–45</b>
<b>28 AWG</b> 0.8–0.9 mm <sup>2</sup>	641240	2–28 <b>32–58</b>	644044 <sup>1</sup>	2–14 <b>32–44</b>	641244	2–28 <b>32–58</b>	—	—
<b>Standard UL94V-2, .000015 [0.00038] Gold Plated</b>								
<b>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	641190	2–28 <b>32–58</b>	644038 <sup>1</sup>	2–14 <b>32–44</b>	641198	2–28 <b>32–58</b>	647477	2–16 <b>32–46</b>
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641191	2–28 <b>32–58</b>	1744020 <sup>1</sup>	2–14 <b>32–44</b>	641199	2–28 <b>32–58</b>	—	—
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	641192	2–28 <b>32–58</b>	644040 <sup>1</sup>	2–14 <b>32–44</b>	641200	2–28 <b>32–58</b>	647480	2–13 <b>32–43</b>
<b>28 AWG</b> 0.08–0.09 mm <sup>2</sup>	641193	2–28 <b>32–58</b>	—	—	641201	2–28 <b>32–58</b>	—	—
<b>LED*, UL94V-2, Tin Plated (See Note 1)</b>								
<b>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	641534	2–3 <b>32–33</b>	—	—	641653	2–3 <b>32–33</b>	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641535	2–3 <b>32–33</b>	644795	2–3 <b>32–33</b>	641654	2–3 <b>32–33</b>	—	—
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	641536	2–3 <b>32–33</b>	—	—	641655	2–3 <b>32–33</b>	—	—
<b>28 AWG</b> 0.08–0.09 mm <sup>2</sup>	641537	2–3 <b>32–33</b>	—	—	641656	2–3 <b>32–33</b>	—	—
<b>Standard UL94V-0, Tin Plated (Gold is available, minimums may apply.) (Black in color)</b>								
<b>22 AWG</b> 0.3–0.4 mm <sup>2</sup>	643498 <sup>1</sup>	2–15 <b>32–45</b>	644083 <sup>1</sup>	2–15 <b>32–45</b>	644575 <sup>1</sup>	2–15 <b>32–45</b>	644578 <sup>1</sup>	2–15 <b>32–45</b>
<b>24 AWG</b> 0.2 mm <sup>2</sup>	644574 <sup>1</sup>	2–15 <b>32–45</b>	644312 <sup>1</sup>	2–15 <b>32–45</b>	644576 <sup>1</sup>	2–15 <b>32–45</b>	644579 <sup>1</sup>	2–15 <b>32–45</b>
<b>26 AWG</b> 0.12–0.15 mm <sup>2</sup>	643828 <sup>1</sup>	2–15 <b>32–45</b>	644313 <sup>1</sup>	2–15 <b>32–45</b>	644577 <sup>1</sup>	2–15 <b>32–45</b>	644497 <sup>1</sup>	2–15 <b>32–45</b>

\*LED connectors are designed to mate with .014–.020 [0.36–0.51] diameter posts or square leads.

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

<sup>2</sup> Tape mounted.

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

**MTA-100 IDC Connector Accessories**

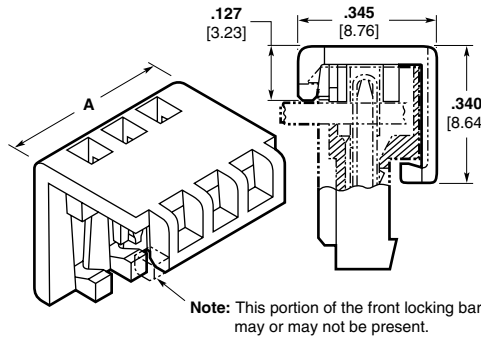
**Covers**

**Material (RoHS Compliant)**

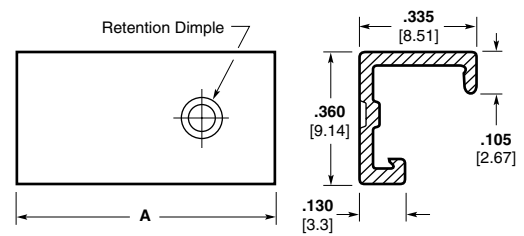
**Strain Relief Cover** — UL94V-2 rated, nylon, white

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

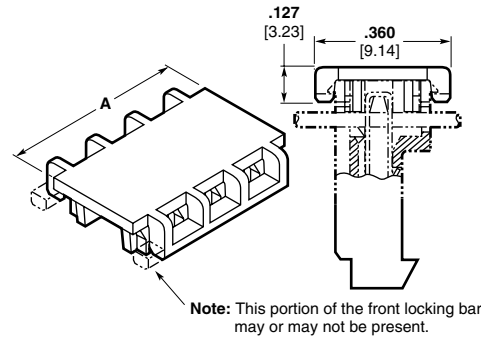
**Closed End Strain Relief Covers**



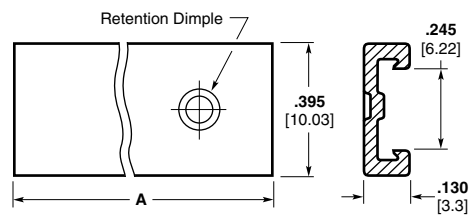
**Closed End Dust Covers**



**Feed-Thru Strain Relief Covers**



**Feed-Thru Dust Covers**



**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 **643075** plus prefix-and-suffix

**1- -0**

The correct ordering number is

**1-643075-0**

**Base Part Numbers**

Closed End				Feed-Thru			
Strain Relief Covers		Dust Covers		Strain Relief Covers		Dust Covers	
Cover Part Nos.	No. of Circuits	Cover Part Nos.	No. of Circuits	Cover Part Nos.	No. of Circuits	Cover Part Nos.	No. of Circuits
643075	2-28	640550	2-28	643077	2-28	640642	3-28

**Cover Length**

No. of Circuits	Dim. A	Prefix/Suffix
2	.200 5.08	-2
3	.300 7.62	-3
4	.400 10.16	-4
5	.500 12.7	-5
6	.600 15.24	-6
7	.700 17.78	-7
8	.800 20.32	-8

No. of Circuits	Dim. A	Prefix/Suffix
9	.900 22.86	-9
10	1.00 25.4	1- 0
11	1.100 27.94	1- 1
12	1.200 30.48	1- 2
13	1.300 33.02	1- 3
14	1.400 35.56	1- 4
15	1.500 38.1	1- 5

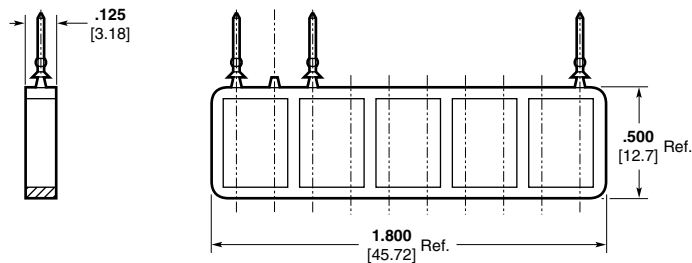
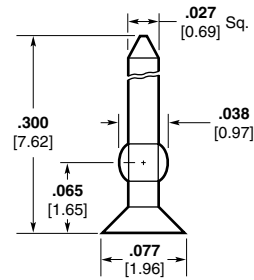
No. of Circuits	Dim. A	Prefix/Suffix
16	1.600 40.64	1- 6
17	1.700 43.18	1- 7
18	1.800 45.72	1- 8
19	1.900 48.26	1- 9
20	2.000 50.8	2- 0
21	2.100 53.34	2- 1
22	2.200 55.88	2- 2

No. of Circuits	Dim. A	Prefix/Suffix
23	2.300 58.42	2- 3
24	2.400 60.96	2- 4
25	2.500 63.5	2- 5
26	2.600 66.04	2- 6
27	2.700 68.58	2- 7
28	2.800 71.12	2- 8

**Keying Plug with Carrier Strip (10 plugs per strip)**  
**Part No. 641994-1**

**Material (RoHS Compliant)**  
UL94V-2 rated, nylon, natural color

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



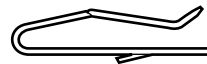
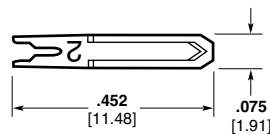
**Replacement IDC Contacts**

**Material and Finish**

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.

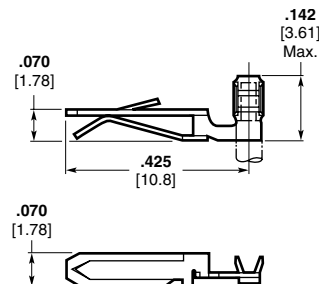
Wire Size		Part Numbers			
AWG	mm <sup>2</sup>	Standard Tin Plated	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated	LED Tin Plated
22	0.3–0.4	640636-3	641186-4	641186-3	641643-2
24	0.2	640637-3	641187-4	641187-3	641644-2
26	0.12–0.15	640638-3	641188-4	641188-3	641645-2
28	0.08–0.09	640639-2	641189-4	641189-3	641646-2



**Crimp Snap-In Contacts**

**Material and Finish**

Phosphor bronze, tin plated



Wire Size		Part Nos.	
AWG	mm <sup>2</sup>	Loose Piece*	Strip**
26-22	0.12–0.4	640709-2	640708-2

\*\*Hand Tool No. 59836-1 (IS 408-6527)  
\*\*Applicator No. 466747-1 (IS 408-8040)

- 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-100 Posted Connector/Connector Mateability Guide**

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 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 Tin Plated  
Part Numbers**

**Posted Connectors**

	647000	647001	647002	647003	647004	647005	647006	647007
640440	Y	Y	Y	Y	Y	Y	Y	Y
640441	Y	Y	Y	Y	Y	Y	Y	Y
640442	Y	Y	Y	Y	Y	Y	Y	Y
640443	Y	Y	Y	Y	Y	Y	Y	Y
640468	Y	Y	Y	Y	Y	Y	Y	Y
640469	Y	Y	Y	Y	Y	Y	Y	Y
640470	Y	Y	Y	Y	Y	Y	Y	Y
640471	Y	Y	Y	Y	Y	Y	Y	Y
640620	Y	Y	Y	Y	Y	Y	Y	Y
640621	Y	Y	Y	Y	Y	Y	Y	Y
640622	Y	Y	Y	Y	Y	Y	Y	Y
640623	Y	Y	Y	Y	Y	Y	Y	Y
641311	Y	Y	Y	Y	Y	Y	Y	Y
641312	Y	Y	Y	Y	Y	Y	Y	Y
641313	Y	Y	Y	Y	Y	Y	Y	Y
641314	Y	Y	Y	Y	Y	Y	Y	Y
641534	Y	Y	Y	Y	Y	Y	Y	Y
641535	Y	Y	Y	Y	Y	Y	Y	Y
641536	Y	Y	Y	Y	Y	Y	Y	Y
641537	Y	Y	Y	Y	Y	Y	Y	Y
641653	Y	Y	Y	Y	Y	Y	Y	Y
641654	Y	Y	Y	Y	Y	Y	Y	Y
641655	Y	Y	Y	Y	Y	Y	Y	Y
641656	Y	Y	Y	Y	Y	Y	Y	Y
643498	Y	Y	Y	Y	Y	Y	Y	Y
643813	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
643814	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
643815	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
643816	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
643828	Y	Y	Y	Y	Y	Y	Y	Y
644083	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644312	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644313	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644497	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644511	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644512	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644513	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644514	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644540	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644563	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644564	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644565	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644574	Y	Y	Y	Y	Y	Y	Y	Y
644575	Y	Y	Y	Y	Y	Y	Y	Y
644576	Y	Y	Y	Y	Y	Y	Y	Y
644577	Y	Y	Y	Y	Y	Y	Y	Y
644578	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644579	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
644795	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
1375820	N	N	N	N	N	N	N	N

Connectors

\*2 & 3 position MTA-100 Posted Connectors can not mate with MTA-100 connectors with polarizing tabs.

MTA-100  
.100 [2.54]



**MTA-100 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-100 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							
		647008	647009	647010	647011	647012	647013	647014	647015
Connectors	641237	Y	Y	Y	Y	Y	Y	Y	Y
	641238	Y	Y	Y	Y	Y	Y	Y	Y
	641239	Y	Y	Y	Y	Y	Y	Y	Y
	641240	Y	Y	Y	Y	Y	Y	Y	Y
	641241	Y	Y	Y	Y	Y	Y	Y	Y
	641242	Y	Y	Y	Y	Y	Y	Y	Y
	641243	Y	Y	Y	Y	Y	Y	Y	Y
	641244	Y	Y	Y	Y	Y	Y	Y	Y
	644020	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644042	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644043	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644044	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644702	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644726	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	1375820	N	N	N	N	N	N	N	N

\*2 & 3 position MTA-100 Posted Connectors can not mate with MTA-100 connectors with polarizing tabs.

Matrix for .000015  
[0.00038] Gold Plated  
Part Numbers

		Posted Connectors							
		647008	647009	647010	647011	647012	647013	647014	647015
Connectors	641190	Y	Y	Y	Y	Y	Y	Y	Y
	641191	Y	Y	Y	Y	Y	Y	Y	Y
	641192	Y	Y	Y	Y	Y	Y	Y	Y
	641193	Y	Y	Y	Y	Y	Y	Y	Y
	641198	Y	Y	Y	Y	Y	Y	Y	Y
	641199	Y	Y	Y	Y	Y	Y	Y	Y
	641200	Y	Y	Y	Y	Y	Y	Y	Y
	641201	Y	Y	Y	Y	Y	Y	Y	Y
	644038	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	644040	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	647477	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	647480	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*
	1375820	N	N	N	N	N	N	N	N
	1744020	Y*	Y*	Y*	Y*	Y*	Y*	Y*	Y*

\*2 & 3 position MTA-100 Posted Connectors can not mate with MTA-100 connectors with polarizing tabs.

### MTA-100 IDC Posted Connectors (Wire-to-Wire)—Closed End, Feed-Thru

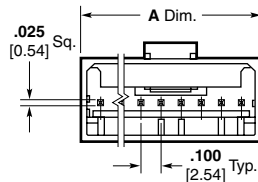
#### Material and Finish

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

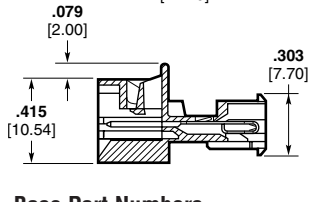
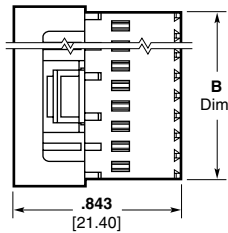
**Contacts** — Copper alloy, post tin or gold plated over nickel (see chart)

#### Notes:

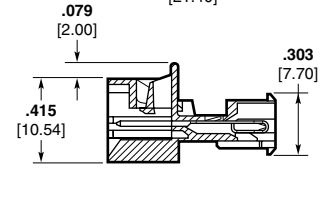
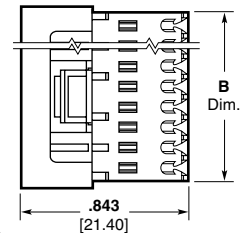
1. Mating half visuals - pages 14 & 15.
2. Use feed thru strain relief covers & feed thru dust covers (if needed) - page 16.
3. Approved wire listing - pages 70 thru 74.



#### Closed End



#### Feed-Thru



#### 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 22 AWG wire would be:

Base number **647000** plus prefix-and-suffix  
**1- -2**

The correct ordering number is **1-647000-2**

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	647000-2	3-647000-2
thru		
19	1-647000-9	4-647000-9

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

- 22 AWG — Red
- 24 AWG — White
- 26 AWG — Blue
- 28 AWG — Green

#### Performance Data

**Voltage Rating** — 250 VAC

**Current Rating** — 4 amp max.

**Low-Level Resistance** — 16 mΩ max. initial

**Dielectric Withstanding Voltage** — 750 VAC/1 min.

#### Base Part Numbers

Connector Type & Wire Size	Closed End Connector		Feed-Thru Connector	
	Part Nos.	No. of Circuits/RoHS Equiv.	Part Nos.	No. of Circuits
<b>Standard UL 94V-2, Tin Plated</b>				
22 AWG 0.3–0.4 mm <sup>2</sup>	647000	2–19 <sup>1</sup> 32–49	647004	— <sup>2</sup>
24 AWG 0.2 mm <sup>2</sup>	647001	2–19 <sup>1</sup> 32–49	647005	— <sup>2</sup>
26 AWG 0.12–0.15 mm <sup>2</sup>	647002	2–19 <sup>1</sup> 32–49	647006	— <sup>2</sup>
28 AWG 0.08–0.09 mm <sup>2</sup>	647003	2–19 <sup>1</sup> 32–49	647007	— <sup>2</sup>
<b>Standard UL 94V-2, .000030 [0.00076] Gold Plated</b>				
22 AWG 0.3–0.4 mm <sup>2</sup>	647008	2–19 <sup>1</sup> 32–49	647012	— <sup>2</sup>
24 AWG 0.2 mm <sup>2</sup>	647009	2–19 <sup>1</sup> 32–49	647013	— <sup>2</sup>
26 AWG 0.12–0.15 mm <sup>2</sup>	647010	2–19 <sup>1</sup> 32–49	647014	— <sup>2</sup>
28 AWG 0.08–0.09 mm <sup>2</sup>	647011	2–19 <sup>1</sup> 32–49	647015	— <sup>2</sup>
<b>Standard UL 94V-2, .000015 [0.00038] Gold Plated</b>				
22 AWG 0.3–0.4 mm <sup>2</sup>	647016	2–19 <sup>1</sup> 32–49	647020	— <sup>2</sup>
24 AWG 0.2 mm <sup>2</sup>	647017	2–19 <sup>1</sup> 32–49	647021	— <sup>2</sup>
26 AWG 0.12–0.15 mm <sup>2</sup>	647018	2–19 <sup>1</sup> 32–49	647022	— <sup>2</sup>
28 AWG 0.08–0.09 mm <sup>2</sup>	647019	2–19 <sup>1</sup> 32–49	647023	— <sup>2</sup>

<sup>1</sup> 2 and 3 position MTA-100 Posted Connectors (Closed End) **can not mate** with MTA-100 connectors with polarizing tabs.  
<sup>2</sup> Parts may be manufactured upon request. Minimums may apply. Contact product engineer or product manager for details.

No. of Circuits	Dim.		No. of Circuits	Dim.		No. of Circuits	Dim.		No. of Circuits	Dim.	
	A	B		A	B		A	B		A	B
2	.300 [7.62]	.227 [5.77]	6	.700 [17.78]	.627 [15.93]	10	1.100 [27.94]	1.027 [26.09]	14	1.500 [38.10]	1.427 [36.25]
3	.400 [10.16]	.327 [8.31]	7	.800 [20.32]	.727 [18.47]	11	1.200 [30.48]	1.127 [28.63]	15	1.600 [40.64]	1.527 [38.79]
4	.500 [12.70]	.427 [10.85]	8	.900 [22.86]	.827 [21.01]	12	1.300 [33.02]	1.227 [31.17]	16	1.700 [43.18]	1.627 [41.33]
5	.600 [15.24]	.527 [13.39]	9	1.000 [25.40]	.927 [23.55]	13	1.400 [35.56]	1.327 [33.71]	17	1.800 [45.72]	1.727 [43.87]
									18	1.900 [48.26]	1.827 [46.41]
									19	2.000 [50.80]	1.927 [48.95]

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

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

#### Technical Documents

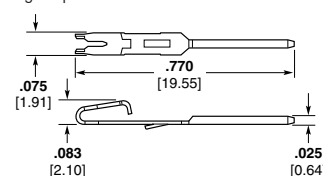
**Product Specification**  
108-1050-1 MTA-100 Posted Connector

**Application Specification**  
114-1019 MTA-100 Connectors

#### Replacement IDC Contacts

#### Material and Finish

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



Wire Size AWG mm <sup>2</sup>	Part Numbers	
	Tin Plated	.000030 [0.00076] Gold Plated
22 0.3–0.4	3-647030-1	3-647030-2
24 0.2	3-647031-1	3-647031-2
26 0.12–0.15	3-647032-1	3-647032-2
28 0.8–0.9	3-647033-1	3-647033-2

*Electronics*

**MTA-100 Flat Headers—Straight and Right-Angle**

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **641211** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-641211-0**

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	641211-2	3-641211-2
thru		
28	2-641211-8	5-641211-8

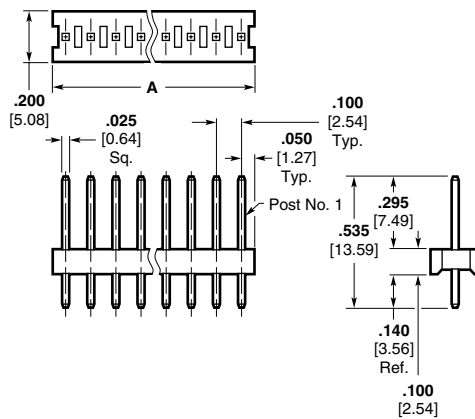
See page 15 for an explanation of RoHS lead free equivalents.

**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.

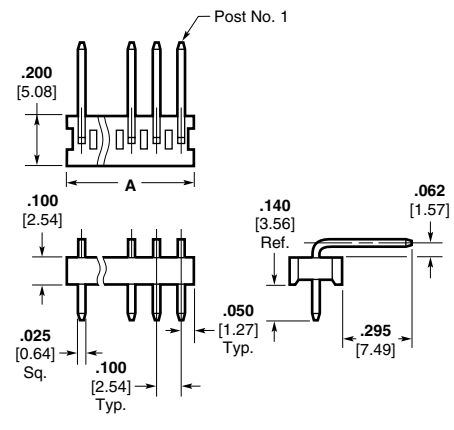
**Note:**

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

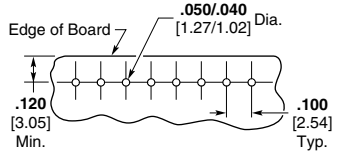
**Straight Post (.025 [0.64] Square)**



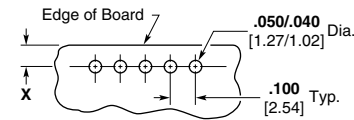
**Right-Angle Post (.025 [0.64] Square)**



X = .120 [3.05] min., .240 [6.1] max. when mated with MTA-100 Connector.  
X = .120 [3.05] min., when mated with CST-100 II Connector.



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



**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**

Straight Posts		Right-Angle Posts	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>			
640452	<b>2-28</b>	640453	<b>2-28</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>			
641211	<b>2-28</b> <b>32-58</b>	641212	<b>2-28</b> <b>32-58</b>
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>			
641122	<b>2-28</b> <b>32-58</b>	641123	<b>2-28</b> <b>32-58</b>

MTA-100  
.100 [2.54]

**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. Headers without retentive legs are suitable for breakaway application.
3. 2 or 3 retentive leg(s) per header, depending upon number of positions.
4. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
5. To determine header overall length (dim. A) multiply .100 x the number of posts minus (-) .012. Example: .100 x 10 posts - .012 = .988 inches [25.1 mm].

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 14, 15 and 31.

**Connector 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 posts and without retentive legs would be:

Base number **644456** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-644456-0**

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	644456-2	3-644456-2
	thru	
28	2-644456-8	5-644456-8

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

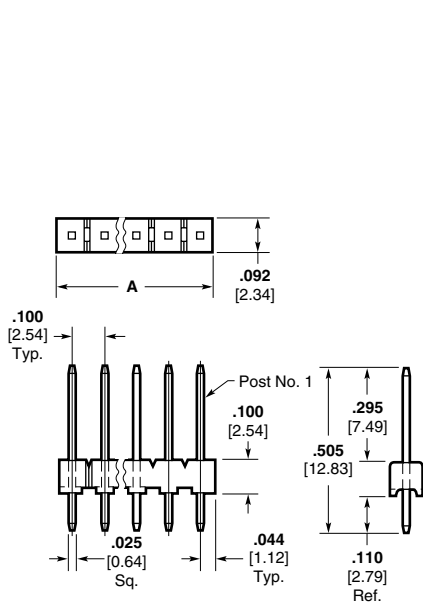
**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:**

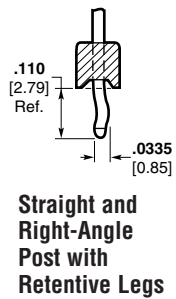
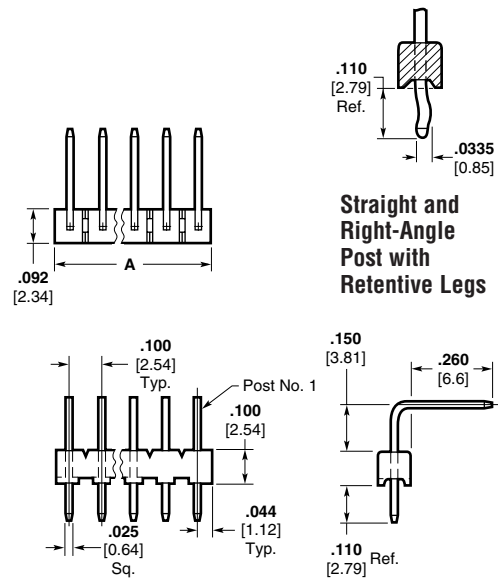
Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

**MTA-100 Narrow Flat Headers—Straight and Right-Angle**

**Straight Post (.025 [0.64] Square)**

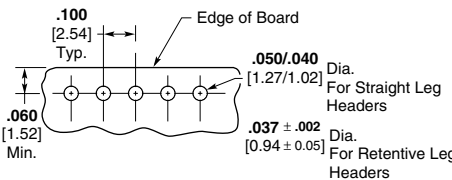


**Right-Angle Post (.025 [0.64] Square)**

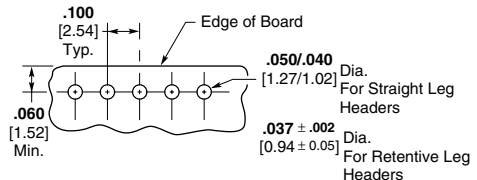


**Straight and Right-Angle Post with Retentive Legs**

**Connector Ordering Information**



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



**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**

Straight Posts				Right-Angle Posts			
Without Retentive Legs		With Retentive Legs		Without Retentive Legs		With Retentive Legs	
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>							
644456	2-28 32-58	644695	2-28 32-58	644457	2-28 32-58	644694	2-28 32-58
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>							
644884	2-28	644886	2-28	644885	2-28	644887	2-28
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>							
644888	2-28	644890	2-28	644889	2-28	644891	2-28

**MTA-100 Polarized Headers—Straight and Right-Angle**

**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. All posts on retentive leg headers are bent.
4. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.  
For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **641213** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-641213-0**

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

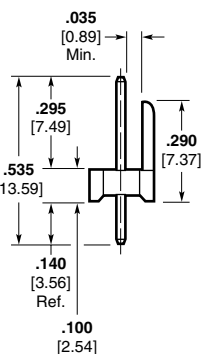
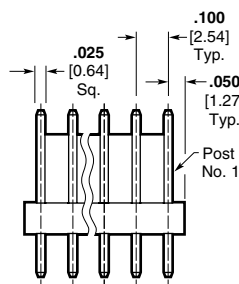
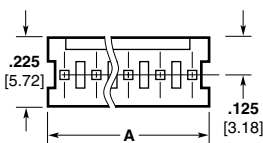
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641213-2	3-641213-2
thru		
28	2-641213-8	5-641213-8

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

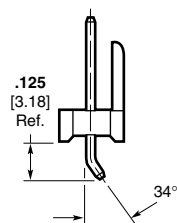
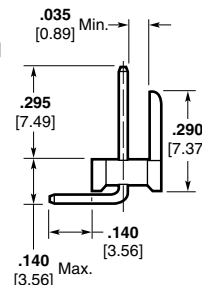
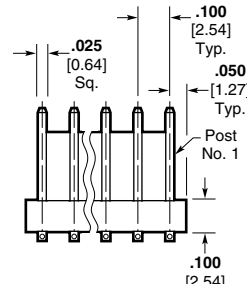
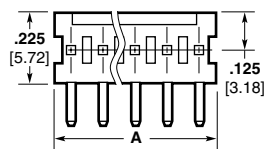
**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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

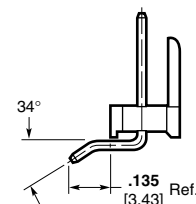
**Straight Post (.025 [0.64] Square)**



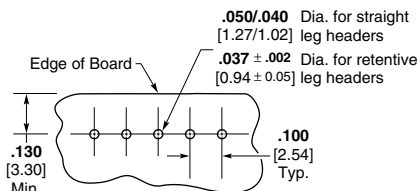
**Right-Angle Post (.025 [0.64] Square)**



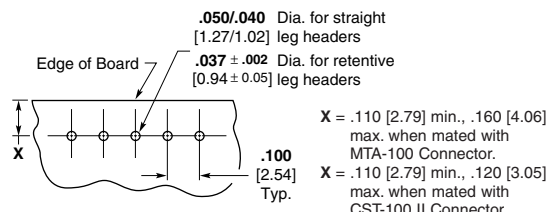
**Retentive Leg**



**Retentive Leg**



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



**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**

Straight Posts				Right-Angle Posts			
Without Retentive Legs		With Retentive Legs		Without Retentive Legs		With Retentive Legs	
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>							
640454	2-28	644876	2-28	640455	2-28	644877	2-28
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>							
641213	2-28 32-58	—	—	641214	2-28 32-58	—	—
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>							
641124	2-28 32-58	—	—	641125	2-28 32-58	—	—

*Electronics*

**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. All posts on retentive leg headers are bent.
4. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **641215** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-641215-0**

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	641215-2	3-641215-2
thru		
28	2-641215-8	5-641215-8

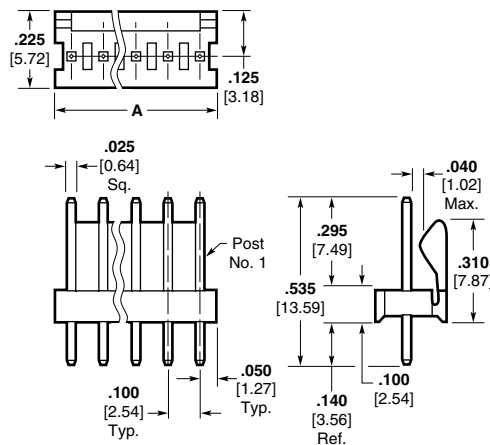
See page 15 for an explanation of RoHS lead free equivalents.

**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.

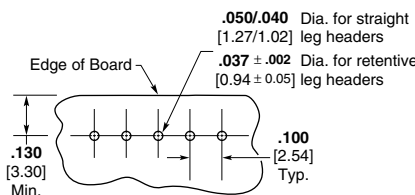
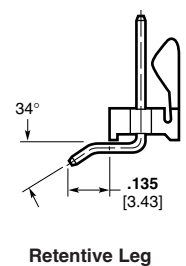
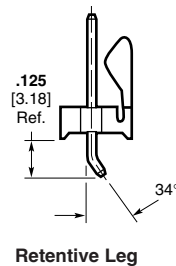
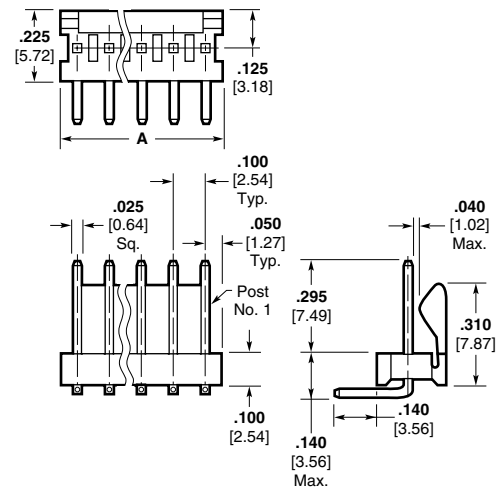
**Note:**

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

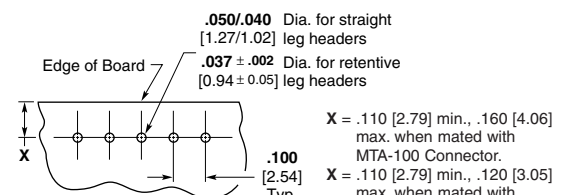
**Straight Post (.025 [0.64] Square)**



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



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



**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**

Straight Posts				Right-Angle Posts			
Without Retentive Legs		With Retentive Legs		Without Retentive Legs		With Retentive Legs	
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>							
640456	2-28	644874	2-28	640457	2-28	644875	2-28
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>							
641215	2-28 32-58	—	—	641216	2-28 32-58	—	—
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>							
641126	2-28 32-58	—	—	641127	2-28 32-58	—	—

**MTA-100 Headers with Retention Peg—Straight**

**Material and Finish**

**Housing**—UL94V-0 rated, thermo-plastic, black

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.  
For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **647609** plus prefix-and-suffix **1- -0**

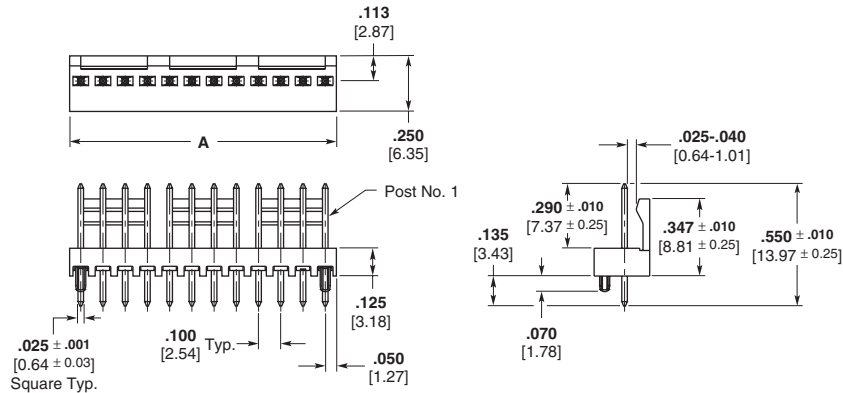
The correct ordering number is **1-647609-0**

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

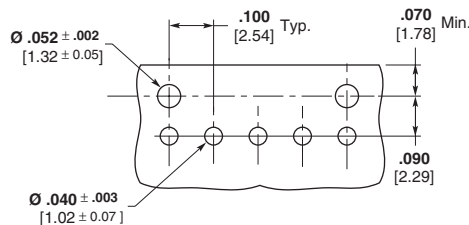
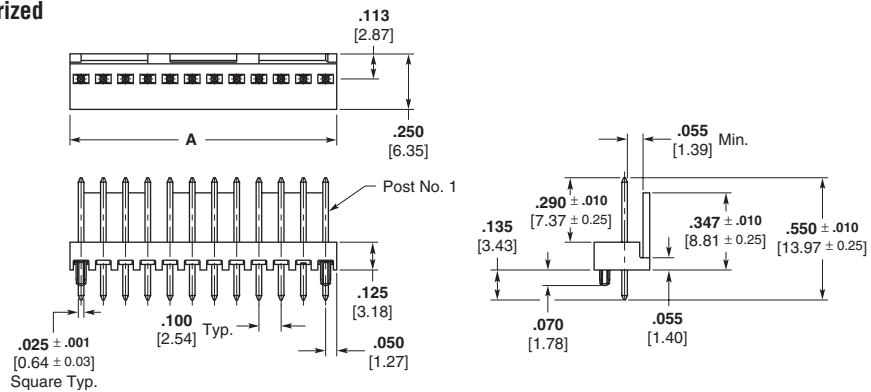
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	647609-2	3-647609-2
3	647609-3	3-647609-3
4	647609-4	3-647609-4
5	647609-5	3-647609-5
6	647609-6	3-647609-6
7	647609-7	3-647609-7
8	647609-8	3-647609-8
9	647609-9	3-647609-9
10	1-647609-0	4-647609-0
11	1-647609-1	4-647609-1
12	1-647609-2	4-647609-2

**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.

**Friction Lock**



**Polarized**



**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**

Friction Lock		Polarized	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>			
647609	2-12 <b>32-42</b>	647623	2-12 <b>32-42</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>			
647626	2-12 <b>32-42</b>	647624	2-12 <b>32-42</b>
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>			
647627	2-12 <b>32-42</b>	647625	2-12 <b>32-42</b>

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

MTA-100  
.100 [2.54]

**Material and Finish**

**Housing**—UL94V-0 rated, thermo-plastic, black

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].
4. This product can be mounted in the middle of the PC Board as shown in the PCB layout.

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 14, 15 and 31.

**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 right-angle posts would be:

Base number **647630** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-647630-0**

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

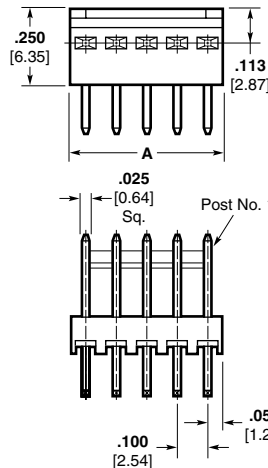
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	647630-2	3-647630-2
3	647630-3	3-647630-3
4	647630-4	3-647630-4
5	647630-5	3-647630-5
6	647630-6	3-647630-6
7	647630-7	3-647630-7
8	647630-8	3-647630-8
9	647630-9	3-647630-9
10	1-647630-0	4-647630-0
11	1-647630-1	4-647630-1
12	1-647630-2	4-647630-2

**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-100 High Profile Headers—Right-Angle**

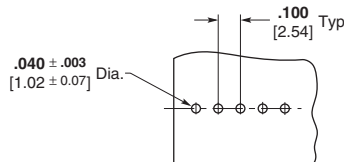
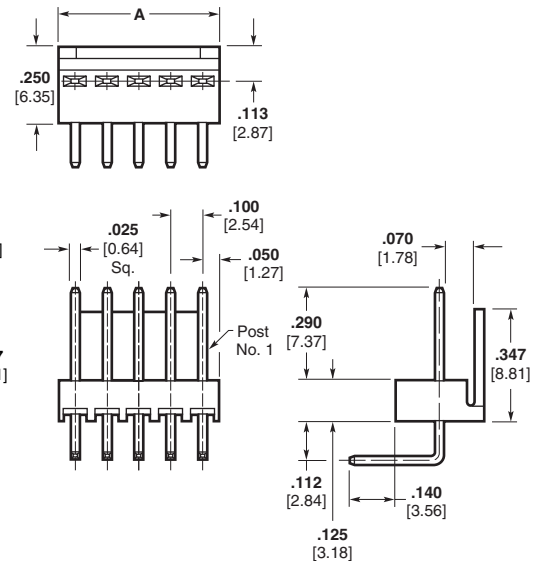
**Friction Lock**

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



**Polarized**

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



**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**

Friction Lock		Polarized	
Right-Angle Posts		Right-Angle Posts	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>			
647630	2-12 <b>32-42</b>	647651	2-12 <b>32-42</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>			
647629	2-12 <b>32-42</b>	647653	2-12 <b>32-42</b>
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>			
647628	2-12 <b>32-42</b>	647652	2-12 <b>32-42</b>

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



**MTA-100 Polarized High Temperature Headers—Straight and Right-Angle**

**Material and Finish**

**Housing** —  
2–12 Position — UL94V-0 rated,  
nylon, black  
13–18 Position — UL94V-0 rated,  
LCP, black

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **647047** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-647047-0**

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	647047-2	3-647047-2
	thru	
12	1-647047-2	4-647047-2
13	1-647047-3	NA
	thru	
18	1-647047-8	NA

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

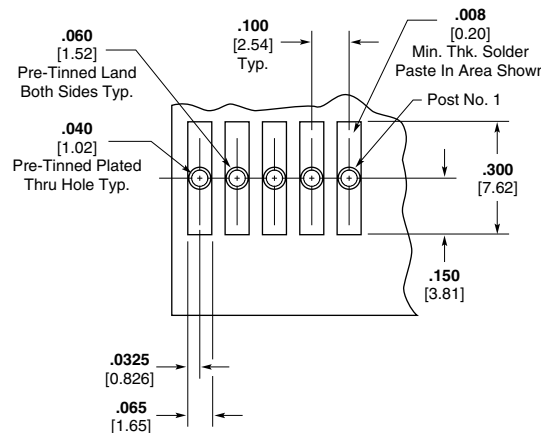
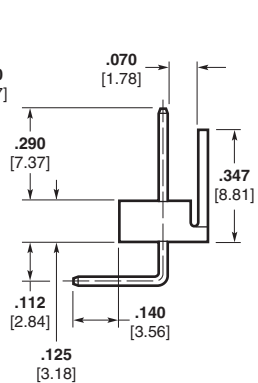
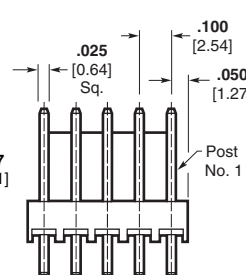
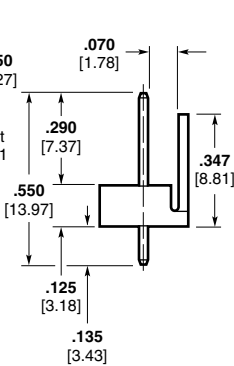
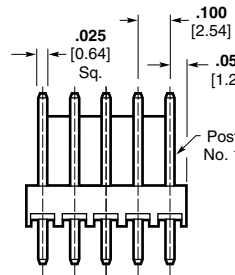
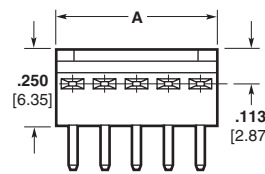
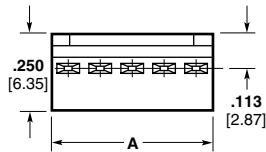
**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**For use with Infrared Reflow Process**

Maximum Temperature Rating: 2–12 Position: 280°C  
13–18 Position: 235°C

**Straight Post (.025 [0.64] Square)**

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



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

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

**Base Part Numbers**

Straight Posts		Straight Posts (Tube Loaded)		Right-Angle Posts	
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>					
647047	2–18 <b>32–42</b>	647298	2–18 <b>32–42</b>	647048	2–18 <b>32–42</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>					
647109	2–18 <b>32–42</b>	647300	2–18 <b>32–42</b>	647114	2–18 <b>32–42</b>
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>					
647075	2–18 <b>32–42</b>	647299	2–18 <b>32–42</b>	647076	2–18 <b>32–42</b>

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

MTA-100  
.100 [2.54]

MTA-100  
.100 [2.54]

**Material and Finish**

**Housing** —  
2–12 Position — UL94V-0 rated,  
nylon, black  
13–18 Position — UL94V-0 rated,  
LCP, black

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.  
For mating half visuals, see pages 14, 15 and 31.

**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 posts would be:

Base number **647050** plus  
prefix-and-suffix  
**1- -0**

The correct ordering number is  
**1-647050-0**

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	647050-2	3-647050-2
	thru	
12	1-647050-2	4-647050-2
13	1-647050-3	NA
	thru	
18	1-647050-8	NA

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.

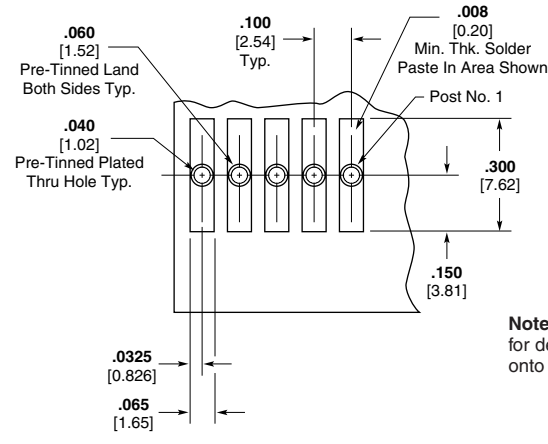
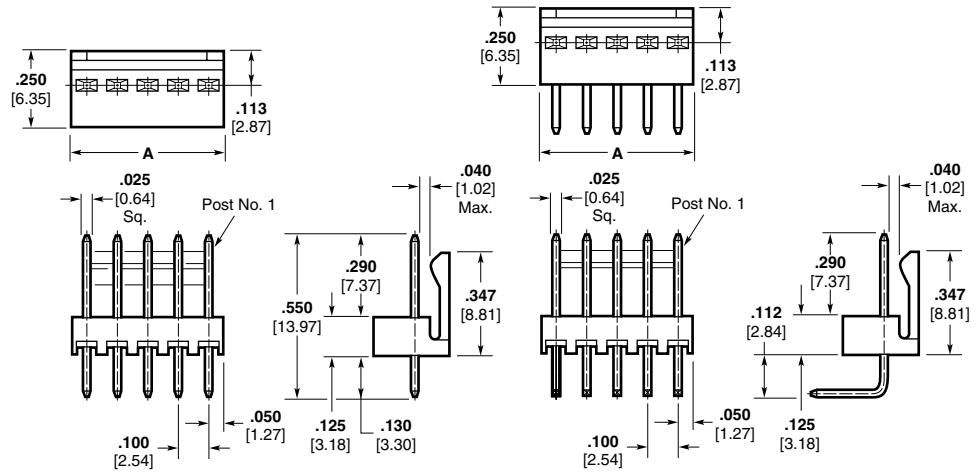
**MTA-100 Friction Lock High Temperature Headers—Straight and Right-Angle**

**For use with Infrared Reflow Process**

**Maximum Temperature Rating:** 2–12 Position: 280°C  
13–18 Position: 235°C

**Straight Post (.025 [0.64] Square)**

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



**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**

Straight Posts		Straight Posts (Tube Loaded)		Right-Angle Posts	
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>					
647050	2-18 32-42	647295	2-18 32-42	647051	2-18 32-42
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>					
647116	2-18 32-42	647297	2-18 32-42	647117	2-18 32-42
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>					
647078	2-18 32-42	647296	2-18 32-42	647079	2-18 32-42

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

**MTA-100 Polarized and Friction Lock Surface Mount Headers—Straight**

**Material and Finish**

**Housing** —  
2–12 Position — UL94V-0 rated,  
nylon, black  
13–18 Position — UL94V-0 rated,  
LCP, black

**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. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

For mateability options, see matrix on pages 12 and 13.  
For mating half visuals, see pages 14, 15 and 31.

**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 surface mount polarized header would be:

Base number **647106** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-647106-0**

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	647106-2	3-647106-2
thru		
12	1-647106-2	4-647106-2
13	1-647106-3	NA
thru		
18	1-647106-8	NA

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

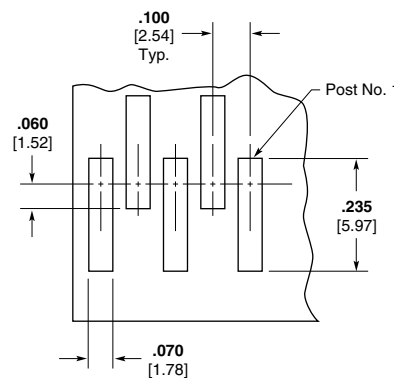
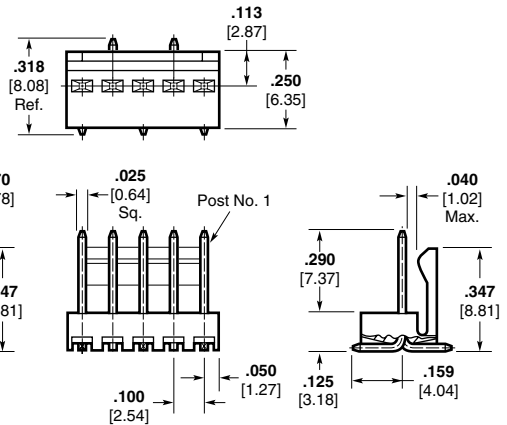
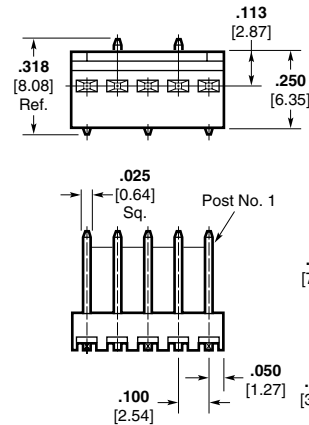
**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**For use with Infrared Reflow Process**

**Maximum Temperature Rating:** 2–12 Position: 280°C  
13–18 Position: 235°C

**Polarized Header**

**Friction Lock Header**



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

**Recommended PC Board Layout for use with .010 [0.25] Thick Stencil**

**Base Part Numbers**

Polarized Headers		Friction Lock Headers	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>			
647106	2–18 <sup>1</sup> <b>32-42</b>	647166	2–18 <sup>1</sup> <b>32-42</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>			
647108	2–18 <sup>1</sup> <b>32-42</b>	647168	2–18 <sup>1</sup> <b>32-42</b>
<b>Standard UL94V-0, .000015 [0.00038] Gold Plated</b>			
647107	2–18 <sup>1</sup> <b>32-42</b>	647167	2–18 <sup>1</sup> <b>32-42</b>

<sup>1</sup> Availability may vary depending on number of posts. Alternate packaging may be available upon request. Minimums may apply. Contact product engineer or product manager for details.

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

MTA-100  
.100 [2.54]

*Electronics*

**Material and Finish**

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

**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. Headers with .000015 [0.00038] gold plated post are available upon request. Minimums may apply.
3. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.

For mateability options, see matrix on pages 12 and 13.  
For mating half visuals, see pages 14 and 15.

**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 posts and with pegs would be:

Base number **644486** plus prefix-and-suffix  
**1- -0**

The correct ordering number is **1-644486-0**

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.

**Notes:**

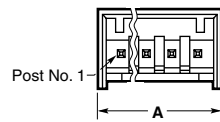
1. Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.
2. MTA-100 shrouded headers do not mate with CST-100 II housings.

**Header Length**

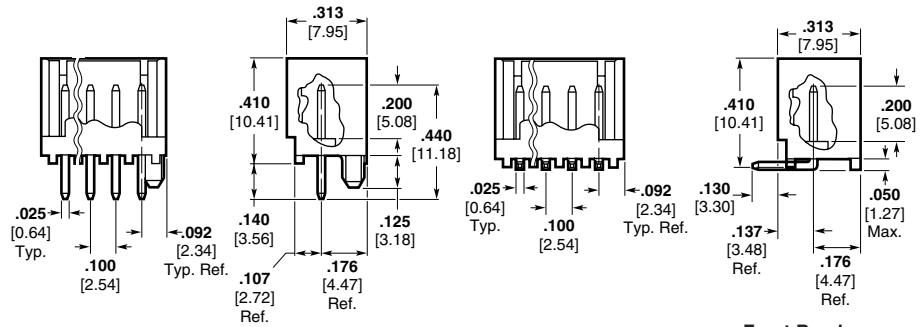
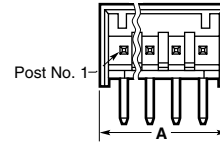
No. of Circuits	Dim. A	Prefix/Suffix
2	.284 7.21	-2
3	.384 9.75	-3
4	.484 12.29	-4
5	.584 14.83	-5

**MTA-100 Shrouded Headers—Straight and Right-Angle**

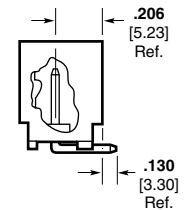
**Straight Post (.025 [0.64] Square)**



**Right-Angle (.025 [0.64] Square)**



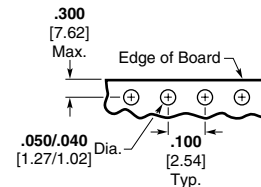
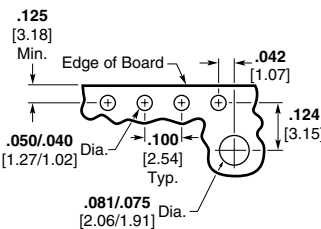
Front Bend



Rear Bend



Polarized Retention Peg



Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board (Solder Side of Board Shown)

Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board (Solder Side of Board Shown)



**Base Part Numbers**

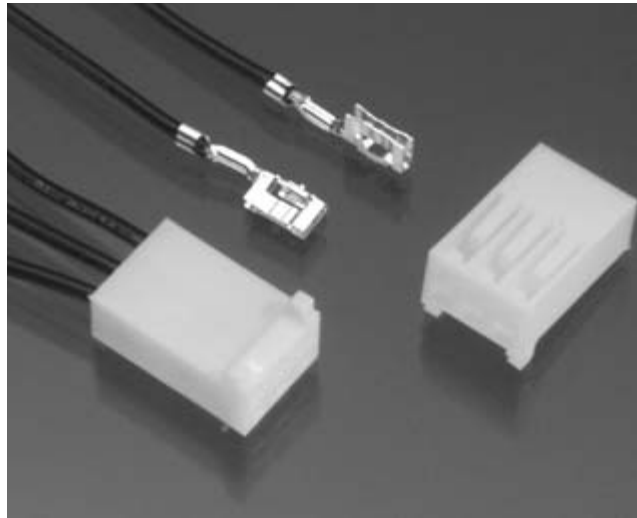
Straight Posts				Right-Angle Posts Without Pegs Only			
With Pegs		Without Pegs		Front Bend		Rear Bend	
Header Part Nos.	No. of Posts/RoHS Equiv.	Header Part Nos.	No. of Posts/RoHS Equiv.	Header Part Nos.	No. of Posts/RoHS Equiv.	Header Part Nos.	No. of Posts/RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>							
644486	2-14 22-34	644861	2-14 22-34	644488	2-14 22-34	644803	2-14 22-34
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>							
644487	2-14 22-34	—	—	644489	2-14 22-34	—	—

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

**.100 [2.54] Centerline CST-100 II Crimp Contacts and Housings**

**Product Facts**

- Low cost wire-to-board interconnections
- Wide wire range for single contact
- Tin and gold plated contacts
- Mates with specified MTA and similar competitive notched headers
- Plastic latching feature in housing helps prevent contact backout
- Locking ramps and polarizing tabs are standard
- For keying purposes use keying plug 641994-1 (page 17)
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476 
- Certified by Canadian Standards Association, File No. LR7189 



**Application Tooling**

**Loose Piece Contacts** — Hand Tool No. 58517-3 (408-4064)

**Strip Contacts** — AMP-O-LECTRIC Model "G" Termination Machine\* Applicator No. 567373-3 (Request Catalog 65828)

AMP-O-MATIC Stripper-Crimper Machine\* Applicator No. 567910-1 or 567827-1 (with QQM) (Request Catalog 65004)

AMPOMATOR CLS IIIG Lead Making Machine\* (Request Catalog 82659)

\*Requires applicators. For part numbers, call Technical Support.

**Contacts**

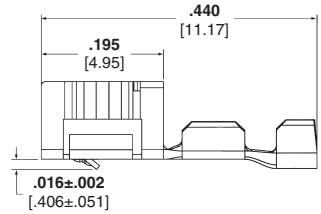
Part Numbers		
Tin Plated	15 Au Gold Plated	30 Au Gold Plated
1375819-1 (Strip)	1375819-2 (Strip)	1375819-3 (Strip)
1445336-1 (Loose Piece)	1445336-2 (Loose Piece)	1445336-3 (Loose Piece)

**Material and Finish (RoHS Compliant)**

Phosphor bronze, pretinned or .000015 [.00038] gold, over nickel  
 .000030 [0.00076] gold over nickel

**Wire Range** — 22–26 AWG [0.35–0.13 mm<sup>2</sup>]

**Max. Ins. Dia.** — .065 [1.65]



**Housing\***

**Material (RoHS Compliant)**

UL94V-0 rated, nylon, white

No. of Pos.	Dim. A	Part Numbers	No. of Pos.	Dim. A	Part Numbers
2	.220 [5.59]	1375820-2	16	1.620 [41.15]	1-1375820-6
3	.320 [8.13]	1375820-3	17	1.720 [43.69]	1-1375820-7
4	.420 [10.67]	1375820-4	18	1.820 [46.23]	1-1375820-8
5	.520 [13.21]	1375820-5	19	1.920 [48.77]	1-1375820-9
6	.620 [15.75]	1375820-6	20	2.020 [51.31]	2-1375820-0
7	.720 [18.29]	1375820-7	21	2.120 [53.85]	2-1375820-1
8	.820 [20.83]	1375820-8	22	2.220 [56.39]	2-1375820-2
9	.920 [23.37]	1375820-9	23	2.320 [58.93]	2-1375820-3
10	1.020 [25.91]	1-1375820-0	24	2.420 [61.47]	2-1375820-4
11	1.120 [28.45]	1-1375820-1	25	2.520 [64.01]	2-1375820-5
12	1.220 [30.99]	1-1375820-2	26	2.620 [66.55]	2-1375820-6
13	1.320 [33.53]	1-1375820-3	27	2.720 [69.09]	2-1375820-7
14	1.420 [36.07]	1-1375820-4	28	2.820 [71.63]	2-1375820-8
15	1.520 [38.61]	1-1375820-5			

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 21 thru 29 and 32.

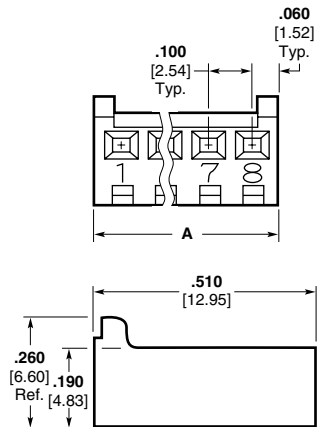
See page 15 for an explanation of RoHS lead free equivalents.

**Performance Data**

- Voltage Rating** — 250 vac
- Current Rating** — 4 amp max.
- Low-Level Resistance** — 6 mΩ max. initial; 10 mΩ max. final
- Insulation Resistance** — 1000 MΩ min. initial; 100 MΩ min. final
- Operating Temperature** — -55° C to +105° C

**Technical Documents**

- Product Specification**  
108-1948
- Application Specification**  
114-13036
- Instruction Sheet**  
408-8493



\*Housings without polarizing tabs may be manufactured upon request. Minimums may apply. Contact product engineering or product manager for details.

*Electronics*

**CST-100 II Shrouded Headers—Straight and Right-Angle**

**Material and Finish**

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

**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. Headers with .000015 [0.00038] gold plated posts are available upon request. Minimums may apply.
3. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.

For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see page 31.

**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 posts and with pegs would be:

Base number **644893** plus prefix-and-suffix **1- -0**

The correct ordering number is **1-644893-0**

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

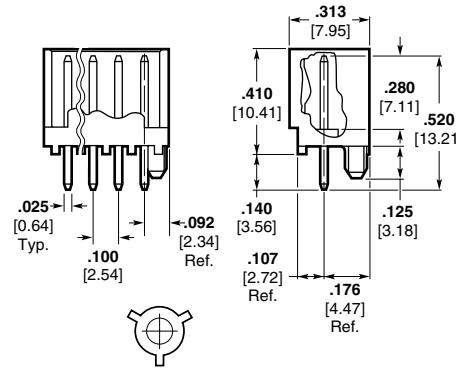
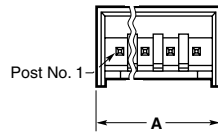
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644893-2	3-644893-2
thru		
14	1-644893-4	4-644893-4

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

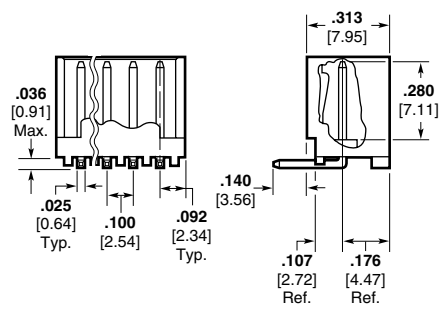
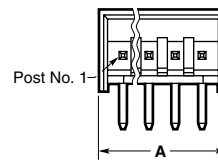
**Note:** All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

**Note:** CST-100 II shrouded headers **only mate** with CST-100 II housings. All the MTA-100 headers except the MTA-100 shrouded headers mate with CST-100 II housings.

**Straight Post (.025 [0.64] Square)**

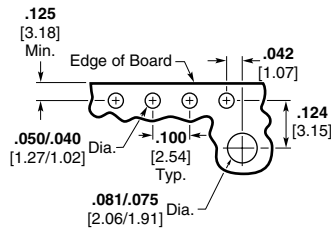


**Right-Angle (.025 [0.64] Square)**

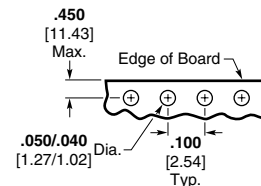


**Polarized Retention Peg**

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



**Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board (Solder Side of Board Shown)**



**Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board (Solder Side of Board Shown)**

**Base Part Numbers**

Straight Posts				Right-Angle Posts Without Pegs Only	
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.	Header Part Nos.	No. of Posts/ RoHS Equiv.
<b>Standard UL94V-0, Tin Plated</b>					
644893	2-14 <b>32-44</b>	644892	2-14 <b>32-44</b>	644894	2-14 <b>32-44</b>
<b>Standard UL94V-0, .000030 [0.00076] Gold Plated</b>					
644897	2-14 <b>32-44</b>	644896	2-14 <b>32-44</b>	644898	2-14 <b>32-44</b>

**Header Length**

No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix
2	.284 7.21	-2	5	.584 14.83	-5	8	.884 22.45	-8
3	.384 9.75	-3	6	.684 17.37	-6	9	.984 24.99	-9
4	.484 12.29	-4	7	.784 19.91	-7	10	1.084 27.53	1- -0

CST-100 II  
.100 [2.54]