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

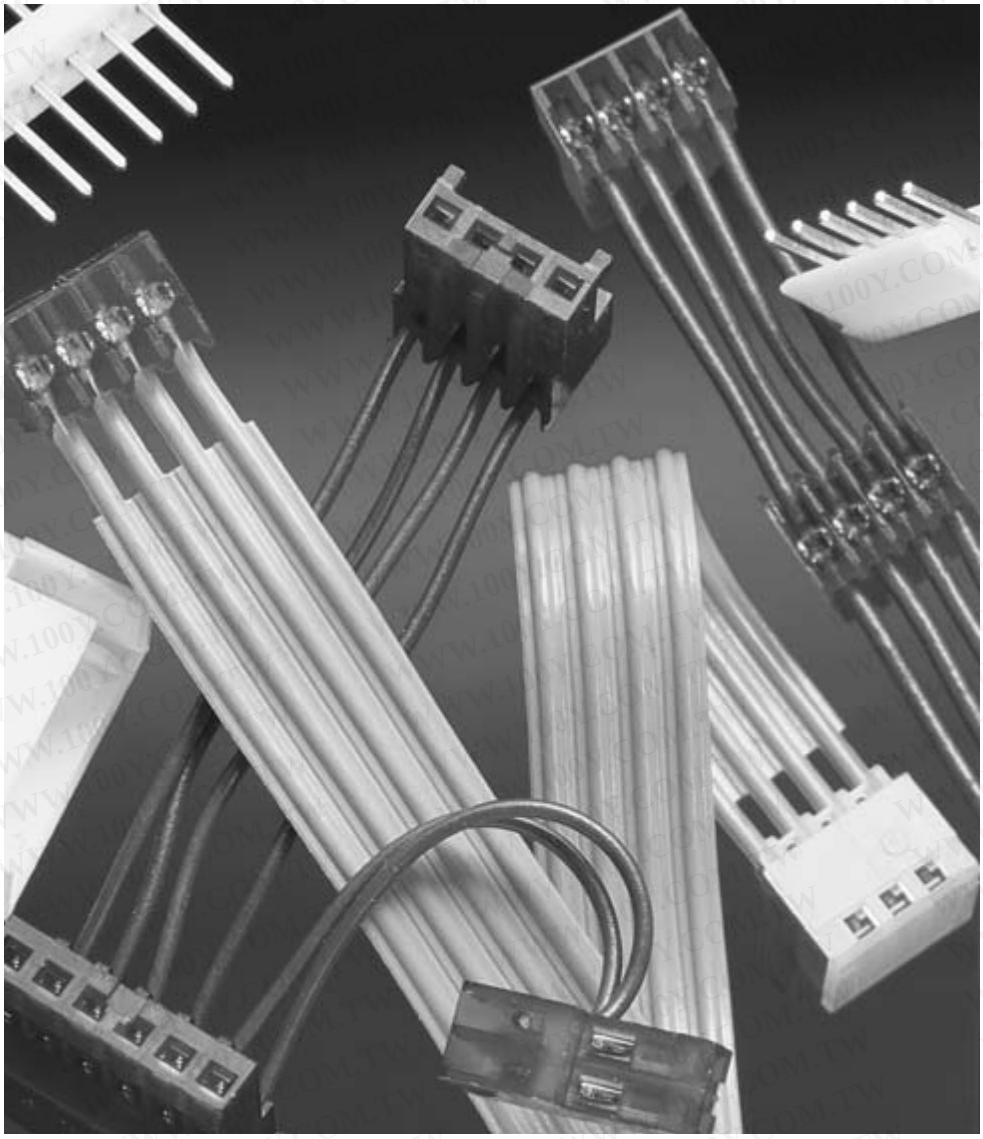
Product Facts

- Connectors and headers for 2 through 28 positions; wire sizes of 22, 24, 26 and 28 AWG [0.4-0.08 mm²]
- 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 mm²] 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 mm²] MTA-100 connectors and 19 stranded wire on 22–24 AWG [0.4–0.2 mm²] 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.

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UK: 44-141-810-8967

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

Connectors

	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	Y
*1375820	Y	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

*Select contact plating to match header plating.

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MTA-100 Connector/Header Mateability Guide (Continued)

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Matrix for .000030 [0.00076] Gold Plated Part Numbers

Headers

Connectors	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	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641238	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641239	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641240	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641241	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641242	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641243	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641244	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644042	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644043	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644044	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644702	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644726	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	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

Headers

Connectors	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
641191	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
641193	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
641199	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
641201	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
644040	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
647480	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	Y	Y
1744020	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.

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MTA-100 IDC Connectors—Closed End and 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 [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

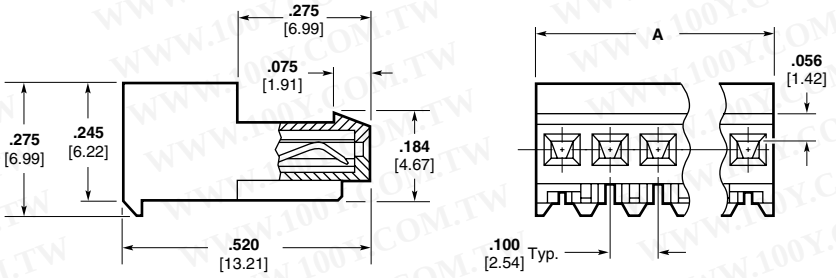
For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 20 thru 30.

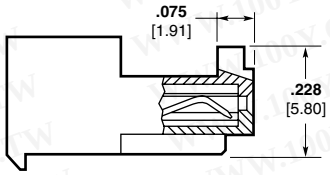
Notes:

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].

Closed End Connectors

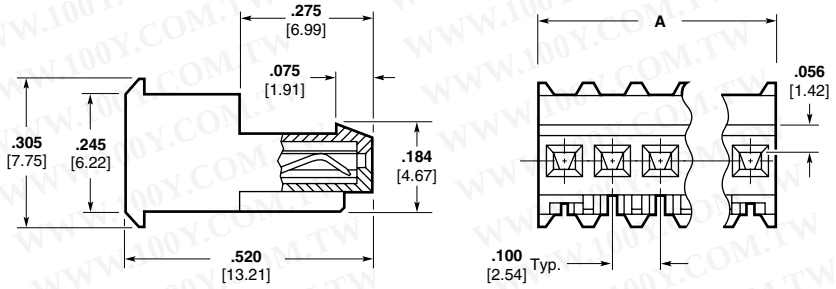


Without Polarizing Tabs

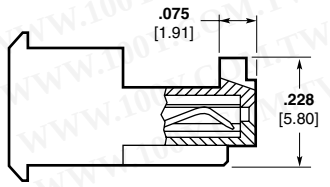


With Polarizing Tabs

Feed-Thru Connectors



Without Polarizing Tabs



With Polarizing Tabs

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

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.

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.
Standard UL94V-2, Tin Plated								
22 AWG 0.3–0.4 mm²	640440	2–28 **32–58**	643813	2–28 **32–58**	640620	2–28 **32–58**	644540[1]	2–15 **32–45**
24 AWG 0.2 mm²	640441	2–28 **32–58**	643814	2–28 **32–58**	640621	2–28 **32–58**	644563[1]	2–24 **32–54**
26 AWG 0.12–0.15 mm²	640442	2–28 **32–58**	643815	2–28 **32–58**	640622	2–28 **32–58**	644564[1]	2–15 **32–45**
28 AWG 0.08–0.09 mm²	640443	2–28 **32–58**	643816	2–28 **32–58**	640623	2–28 **32–58**	644565[1]	2–15 **32–45**
Tape Mounted on Reel UL94V-2, Tin Plated								
22 AWG 0.3–0.4 mm²	640468	2–28 **32–58**	644511	2–28 **42–68**	641311	2–28 **32–58**	—	—
24 AWG 0.2 mm²	640469	2–28 **32–58**	644512	2–28 **32–58**	641312	2–28 **32–58**	—	—
26 AWG 0.12–0.15 mm²	640470	2–28 **32–58**	644513	2–28 **32–58**	641313	2–28 **32–58**	—	—
28 AWG 0.08–0.09 mm²	640471	2–28 **32–58**	644514	2–28 **32–58**	641314	2–28 **32–58**	—	—
Standard UL94V-2, .000030 [0.00076] Gold Plated								
22 AWG 0.3–0.4 mm²	641237	2–28 **32–58**	644042	2–28 **32–58**	641241	2–28 **32–58**	644702[1]	2–15 **32–45**
24 AWG 0.2 mm²	641238	2–28 **32–58**	644020	2–28 **32–58**	641242	2–28 **32–58**	—	—
26 AWG 0.12–0.15 mm²	641239	2–28 **32–58**	644043[1]	2-14 **32–44**	641243	2–28 **32–58**	644726[1]	2–15 **32–45**
28 AWG 0.8–0.9 mm²	641240	2–28 **32–58**	644044[1]	2-14 **32–44**	641244	2–28 **32–58**	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated								
22 AWG 0.3–0.4 mm²	641190	2–28 **32–58**	644038[1]	2-14 **32–44**	641198	2–28 **32–58**	647477	2-16 **32–46**
24 AWG 0.2 mm²	641191	2–28 **32–58**	1744020[1]	2-14 **32–44**	641199	2–28 **32–58**	—	—
26 AWG 0.12–0.15 mm²	641192	2–28 **32–58**	644040[1]	2-14 **32–44**	641200	2–28 **32–58**	647480	2-13 **32–43**
28 AWG 0.08–0.09 mm²	641193	2–28 **32–58**	—	—	641201	2–28 **32–58**	—	—
LED*, UL94V-2, Tin Plated (See Note 1)								
22 AWG 0.3–0.4 mm²	641534	2–3 **32–33**	—	—	641653	2–3 **32–33**	—	—
24 AWG 0.2 mm²	641535	2–3 **32–33**	644795	2–3 **32–33**	641654	2–3 **32–33**	—	—
26 AWG 0.12–0.15 mm²	641536	2–3 **32–33**	—	—	641655	2–3 **32–33**	—	—
28 AWG 0.08–0.09 mm²	641537	2–3 **32–33**	—	—	641656	2–3 **32–33**	—	—
Standard UL94V-0, Tin Plated (Gold is available, minimums may apply.) (Black in color)								
22 AWG 0.3–0.4 mm²	643498[1]	2–15 **32–45**	644083[1]	2–15 **32–45**	644575[1]	2–15 **32–45**	644578[1]	2–15 **32–45**
24 AWG 0.2 mm²	644574[1]	2–15 **32–45**	644312[1]	2–15 **32–45**	644576[1]	2–15 **32–45**	644579[1]	2–15 **32–45**
26 AWG 0.12–0.15 mm²	643828[1]	2–15 **32–45**	644313[1]	2–15 **32–45**	644577[1]	2–15 **32–45**	644497[1]	2–15 **32–45**

*LED connectors are designed to mate with .014–.020 [0.36–0.51] diameter posts or square leads.
[1] Other circuit sizes are available upon request. Minimums may apply.
[2] Tape mounted.

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

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UK: 44-141-810-8967

MTA-100 IDC Connector Accessories

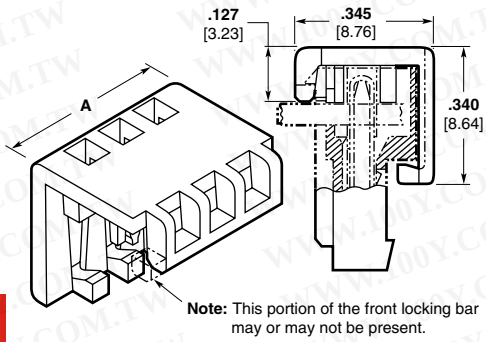
Covers

Material (RoHS Compliant)

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

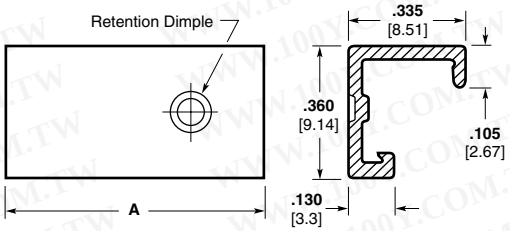
Dust Covers — UL94V-0 rated, polyester, white

Closed End Strain Relief Covers

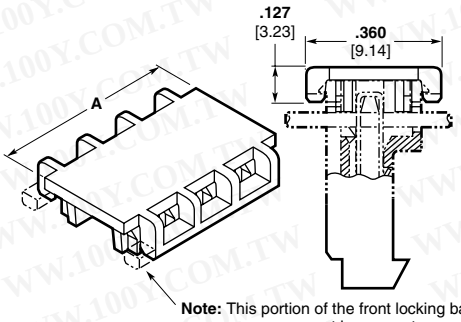


Note: This portion of the front locking bar may or may not be present.

Closed End Dust Covers

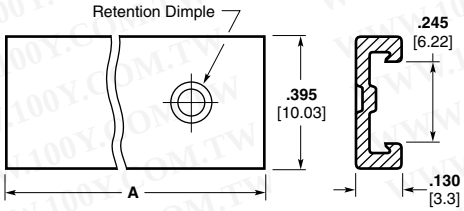


Feed-Thru Strain Relief Covers



Note: This portion of the front locking bar may or may not be present.

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

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MTA-100 IDC Connector Accessories (Continued)

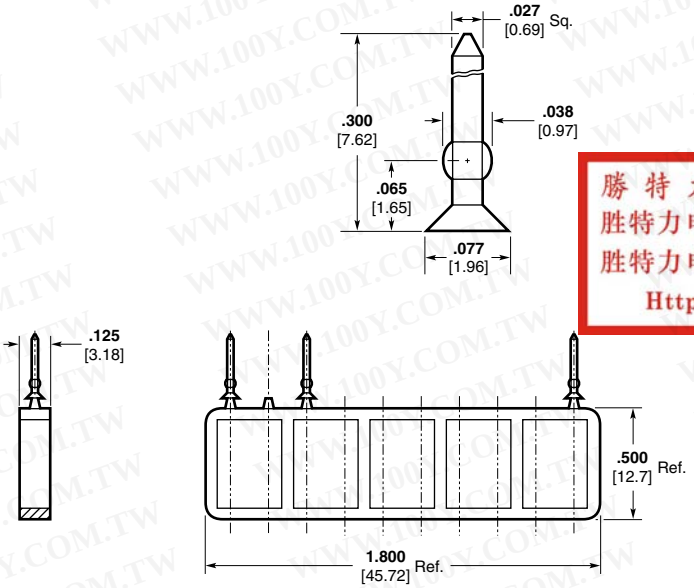
Keying Plug with Carrier Strip (10 plugs per strip)

Part No. 641994-1

Material (RoHS Compliant)

UL94V-2 rated, nylon, natural color

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



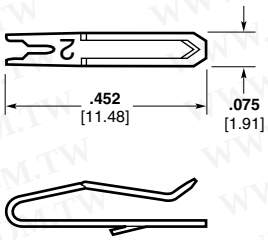
Replacement IDC Contacts

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.

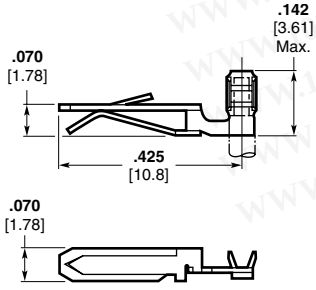
Wire Size		Part Numbers			
AWG	mm²	Standard Tin Plated	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated	LED Tin Plated
22	0.3–0.4	640636-3	641186-4	641186-3	641643-2
24	0.2	640637-3	641187-4	641187-3	641644-2
26	0.12–0.15	640638-3	641188-4	641188-3	641645-2
28	0.08–0.09	640639-2	641189-4	641189-3	641646-2



Crimp Snap-In Contacts

Material and Finish

Phosphor bronze, tin plated



Wire Size		Part Nos.	
AWG	mm²	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.

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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

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

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

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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

Connectors	647008	647009	647010	647011	647012	647013	647014	647015
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

Connectors	647008	647009	647010	647011	647012	647013	647014	647015
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.

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UK: 44-141-810-8967

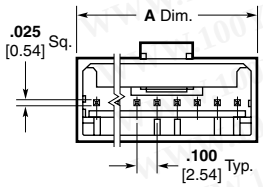
MTA-100 IDC Posted Connectors (Wire-to-Wire)—Closed End, Feed-Thru

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.



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.

Insulation Resistance — 5000 MΩ min. initial

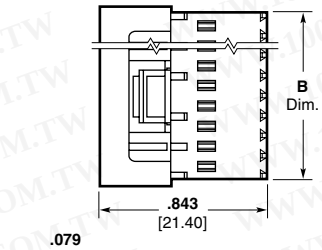
Operating Temperature — –55°C to +105°C

Technical Documents

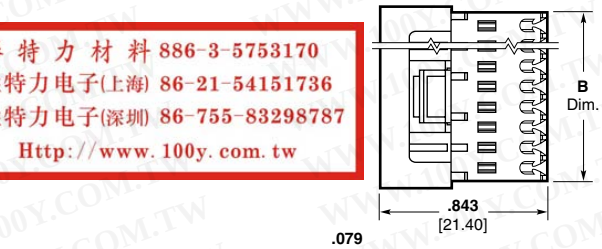
Product Specification
108-1050-1 MTA-100 Posted Connector

Application Specification
114-1019 MTA-100 Connectors

Closed End



Feed-Thru



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
Standard UL 94V-2, Tin Plated				
22 AWG 0.3–0.4 mm²	647000	2–19[1] **32–49**	647004	—[2]
24 AWG 0.2 mm²	647001	2–19[1] **32–49**	647005	—[2]
26 AWG 0.12–0.15 mm²	647002	2–19[1] **32–49**	647006	—[2]
28 AWG 0.08–0.09 mm²	647003	2–19[1] **32–49**	647007	—[2]
Standard UL 94V-2, .000030 [0.00076] Gold Plated				
22 AWG 0.3–0.4 mm²	647008	2–19[1] **32–49**	647012	—[2]
24 AWG 0.2 mm²	647009	2–19[1] **32–49**	647013	—[2]
26 AWG 0.12–0.15 mm²	647010	2–19[1] **32–49**	647014	—[2]
28 AWG 0.08–0.09 mm²	647011	2–19[1] **32–49**	647015	—[2]
Standard UL 94V-2, .000015 [0.00038] Gold Plated				
22 AWG 0.3–0.4 mm²	647016	2–19[1] **32–49**	647020	—[2]
24 AWG 0.2 mm²	647017	2–19[1] **32–49**	647021	—[2]
26 AWG 0.12–0.15 mm²	647018	2–19[1] **32–49**	647022	—[2]
28 AWG 0.08–0.09 mm²	647019	2–19[1] **32–49**	647023	—[2]

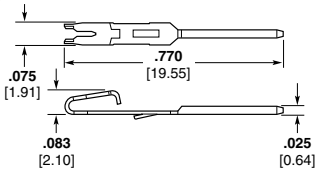
[1] 2 and 3 position MTA-100 Posted Connectors (Closed End) **can not mate** with MTA-100 connectors with polarizing tabs.
[2] Parts may be manufactured upon request. Minimums may apply. Contact product engineer or product manager for details.

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

Replacement IDC Contacts

Material and Finish

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



Wire Size AWG	Wire Size mm²	Part Numbers Tin Plated	Part Numbers .000030 [.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

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:

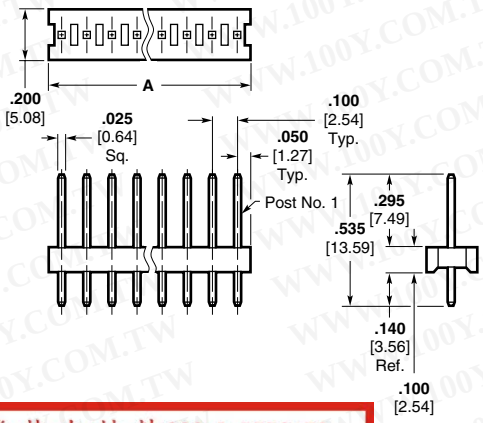
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641211–2	3-641211–2
	thru	
28	2-641211-8	5-641211-8

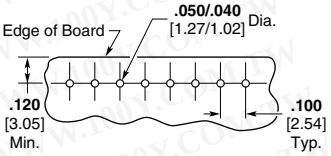
See page 15 for an explanation of RoHS lead free equivalents.

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.

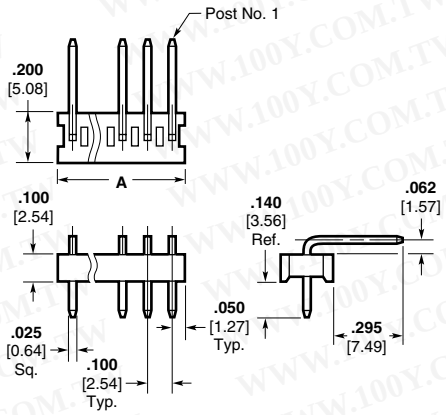
Straight Post (.025 [0.64] Square)



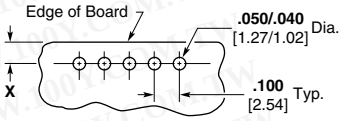


Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

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

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.
Standard UL94V-0, Tin Plated			
640452	**2–28**	640453	**2–28**
Standard UL94V-0, .000030 [0.00076] Gold Plated			
641211	2–28 **32–58**	641212	2–28 **32–58**
Standard UL94V-0, .000015 [0.00038] Gold Plated			
641122	2–28 **32–58**	641123	2–28 **32–58**

Catalog 82056
Revised 4-05

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

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

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 Narrow 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. 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:

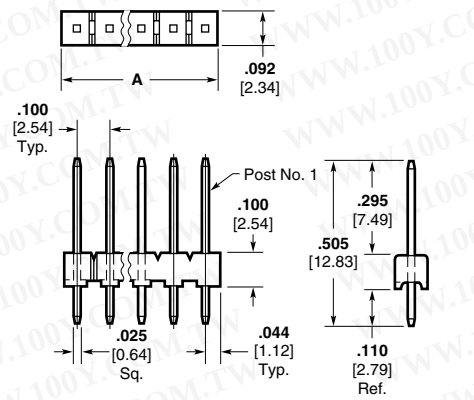
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644456-2	3-644456-2
thru		
28	2-644456-8	5-644456-8

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

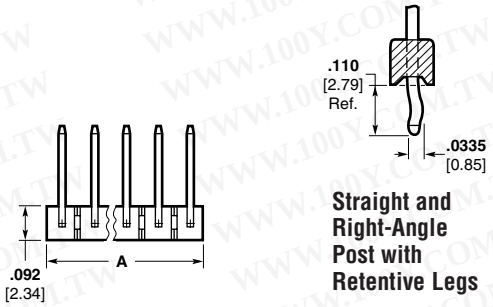
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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

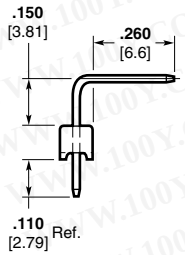
Straight Post (.025 [0.64] Square)

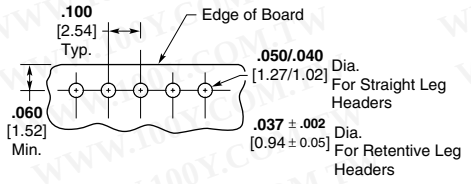


Right-Angle Post (.025 [0.64] Square)

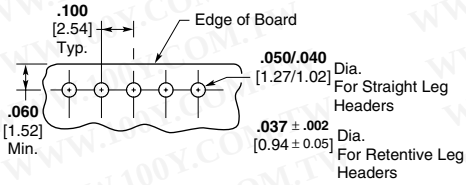


Straight and Right-Angle Post with Retentive Legs





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.
Standard UL94V-0, Tin Plated							
644456	2–28 **32–58**	644695	2–28 **32–58**	644457	2–28 **32–58**	644694	2–28 **32–58**
Standard UL94V-0, .000030 [0.00076] Gold Plated							
644884	**2–28**	644886	**2–28**	644885	**2–28**	644887	**2–28**
Standard UL94V-0, .000015 [0.00038] Gold Plated							
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:

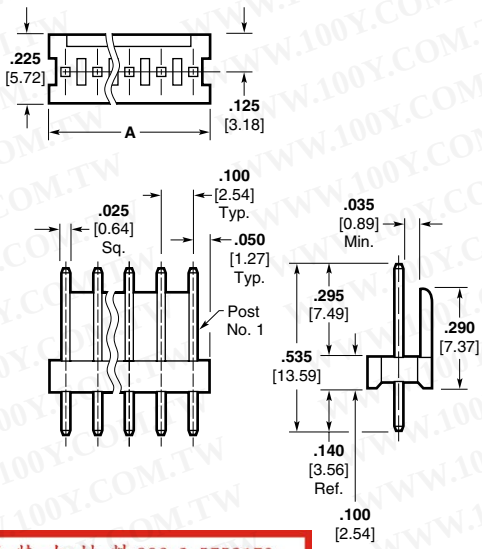
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641213-2	3-641213-2
thru		
28	2-641213-8	5-641213-8

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

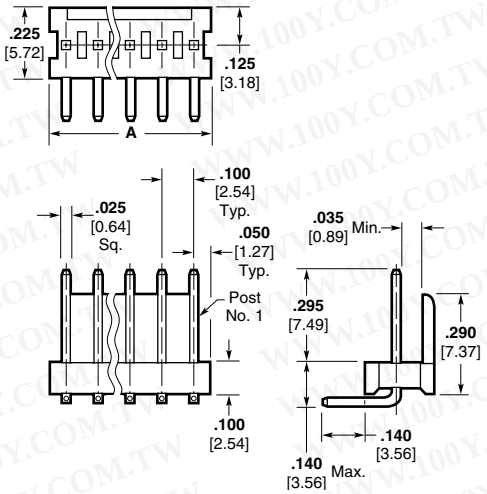
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

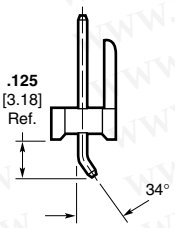
Note:
Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Straight Post (.025 [0.64] Square)

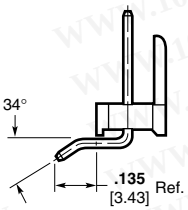


Right-Angle Post (.025 [0.64] Square)

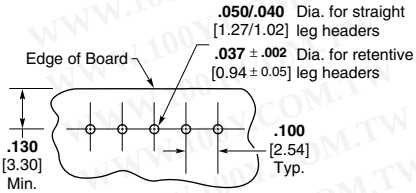




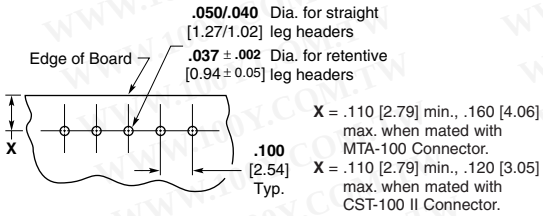
Retentive Leg



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.
Standard UL94V-0, Tin Plated							
640454	**2–28**	644876	**2–28**	640455	**2–28**	644877	**2–28**
Standard UL94V-0, .000030 [0.00076] Gold Plated							
641213	2–28 **32–58**	—	—	641214	2–28 **32–58**	—	—
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641124	2–28 **32–58**	—	—	641125	2–28 **32–58**	—	—

Catalog 82056
Revised 4-05

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

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

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 Friction Lock 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 **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:

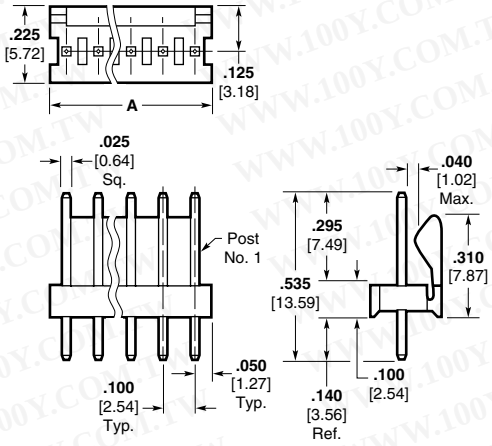
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641215-2	3-641215-2
	thru	
28	2-641215-8	5-641215-8

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

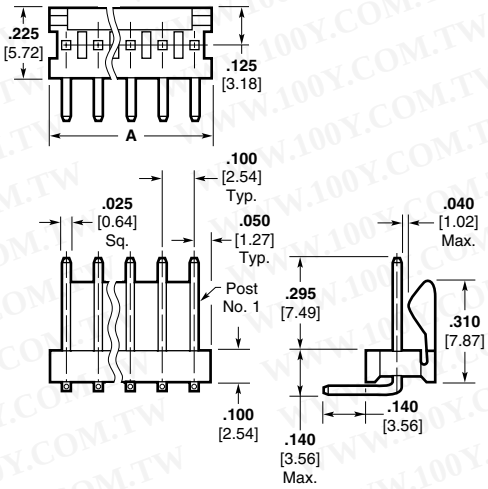
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

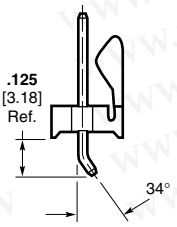
Note:
Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.

Straight Post (.025 [0.64] Square)

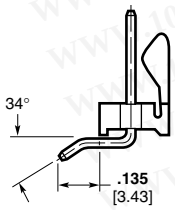


Right-Angle Post (.025 [0.64] Square)

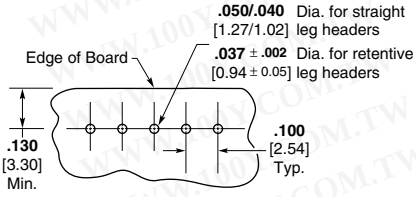




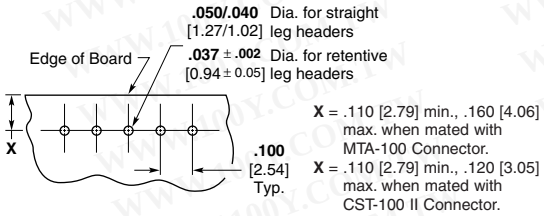
Retentive Leg



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.
Standard UL94V-0, Tin Plated							
640456	**2–28**	644874	**2–28**	640457	**2–28**	644875	**2–28**
Standard UL94V-0, .000030 [0.00076] Gold Plated							
641215	2–28 **32–58**	—	—	641216	2–28 **32–58**	—	—
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641126	2–28 **32–58**	—	—	641127	2–28 **32–58**	—	—

Catalog 82056
Revised 4-05

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

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Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 Headers with Retention Peg—Straight

Material and Finish

Housing — UL94V-0 rated, thermoplastic, 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

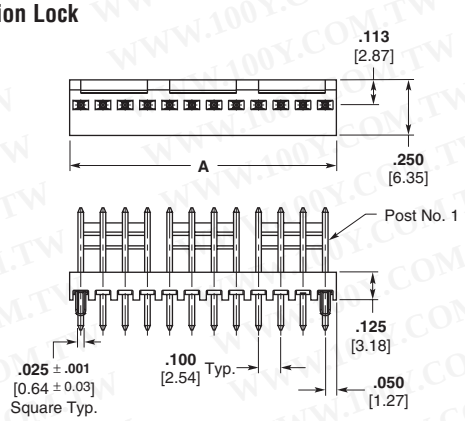
The correct ordering number is
1-647609-0

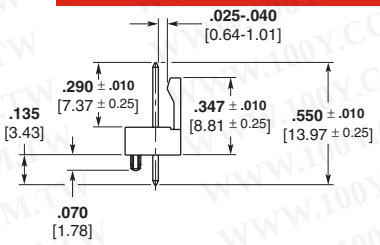
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

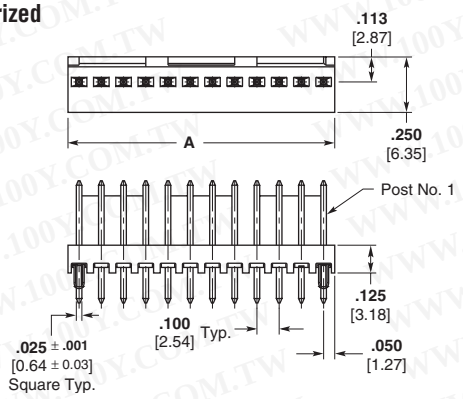
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

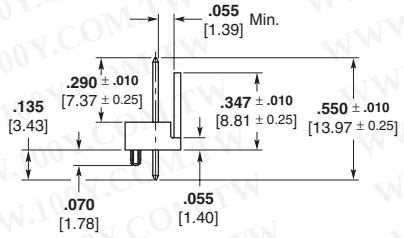
Friction Lock

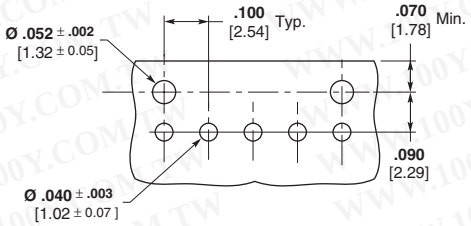




Polarized







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.
Standard UL94V-0, Tin Plated			
647609	2–12 **32-42**	647623	2–12 **32-42**
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647626	2–12 **32-42**	647624	2–12 **32-42**
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647627	2–12 **32-42**	647625	2–12 **32-42**

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

Catalog 82056
Revised 4-05

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Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 High Profile Headers—Right-Angle

Material and Finish

Housing — UL94V-0 rated, thermoplastic, 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

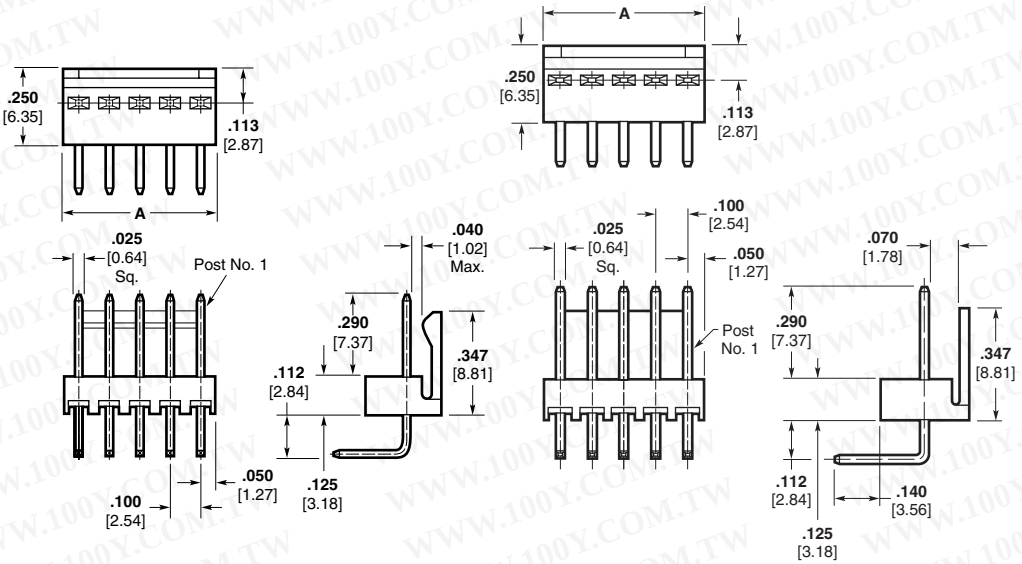
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

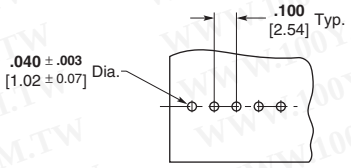
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	647630-2	3-647630-2
3	647630-3	3-647630-3
4	647630-4	3-647630-4
5	647630-5	3-647630-5
6	647630-6	3-647630-6
7	647630-7	3-647630-7
8	647630-8	3-647630-8
9	647630-9	3-647630-9
10	1-647630-0	4-647630-0
11	1-647630-1	4-647630-1
12	1-647630-2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

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.
Standard UL94V-0, Tin Plated			
647630	2–12 **32-42**	647651	2–12 **32-42**
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647629	2–12 **32-42**	647653	2–12 **32-42**
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647628	2–12 **32-42**	647652	2–12 **32-42**

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

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Revised 4-05

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Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 Polarized 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

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

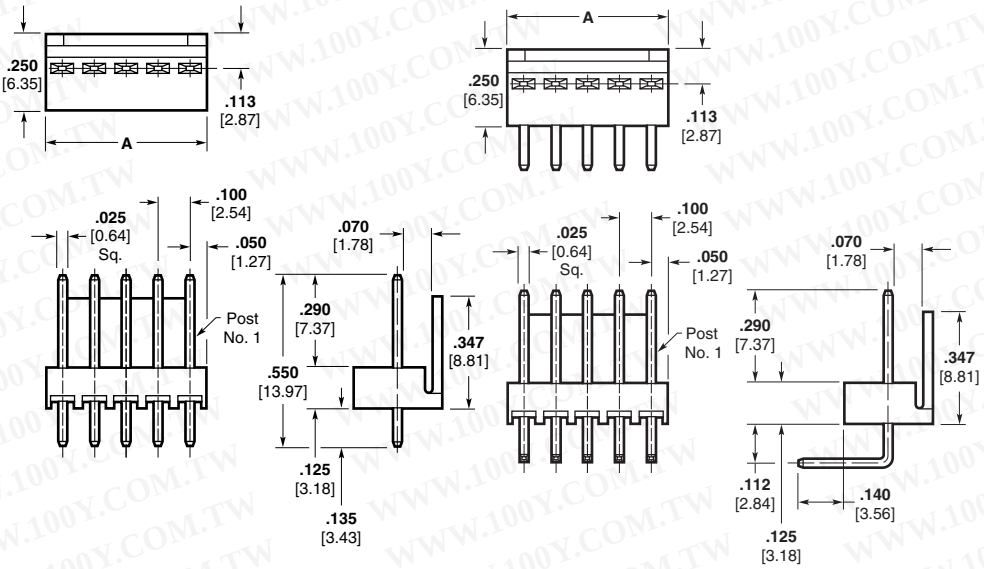
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

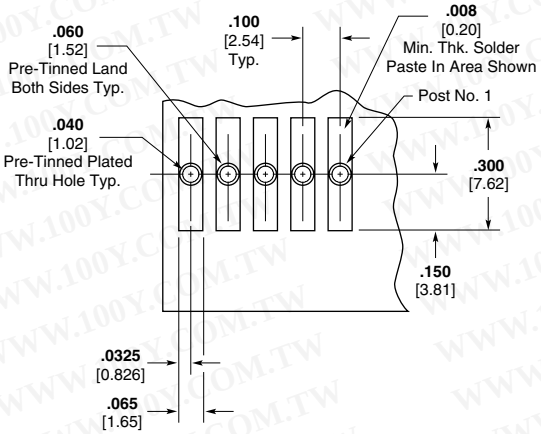
See page 15 for an explanation of RoHS lead free equivalents.

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.

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.
Standard UL94V-0, Tin Plated					
647047	2–18 **32–42**	647298	2–18 **32–42**	647048	2–18 **32–42**
Standard UL94V-0, .000030 [0.00076] Gold Plated					
647109	2–18 **32–42**	647300	2–18 **32–42**	647114	2–18 **32–42**
Standard UL94V-0, .000015 [0.00038] Gold Plated					
647075	2–18 **32–42**	647299	2–18 **32–42**	647076	2–18 **32–42**

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

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Japan: 81-44-844-8013
UK: 44-141-810-8967

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

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

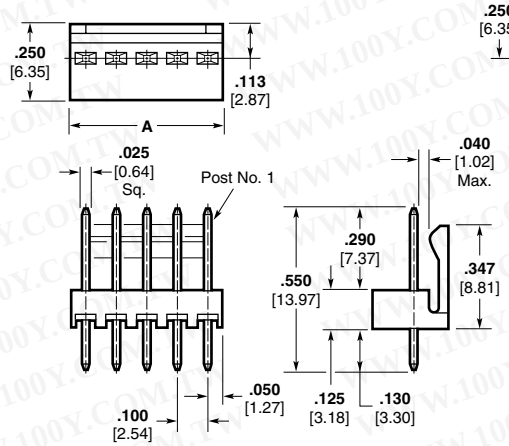
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

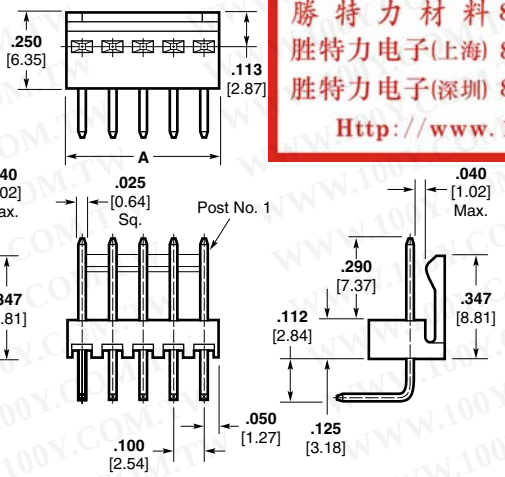
See page 15 for an explanation of RoHS lead free equivalents.

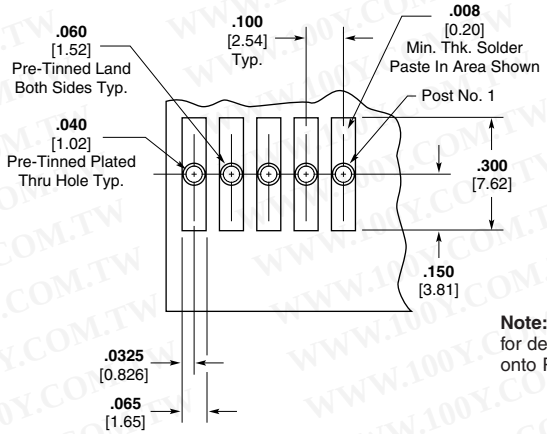
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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.
Standard UL94V-0, Tin Plated					
647050	2–18 **32-42**	647295	2–18 **32-42**	647051	2–18 **32-42**
Standard UL94V-0, .000030 [0.00076] Gold Plated					
647116	2–18 **32-42**	647297	2–18 **32-42**	647117	2–18 **32-42**
Standard UL94V-0, .000015 [0.00038] Gold Plated					
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

For use with Infrared Reflow Process

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

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

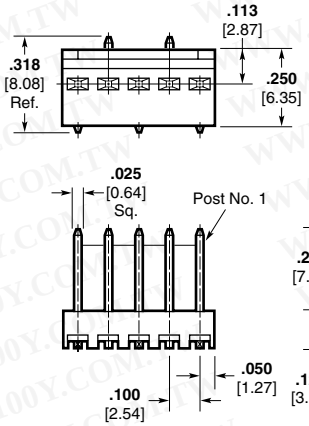
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

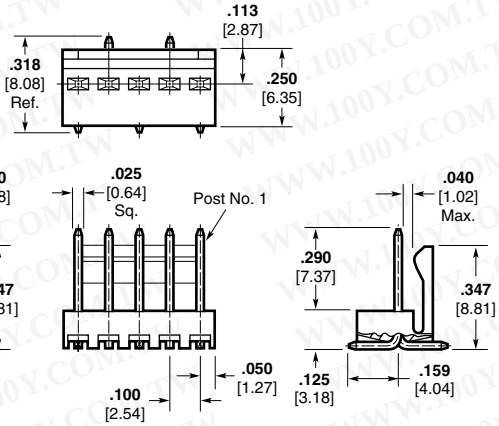
See page 15 for an explanation of RoHS lead free equivalents.

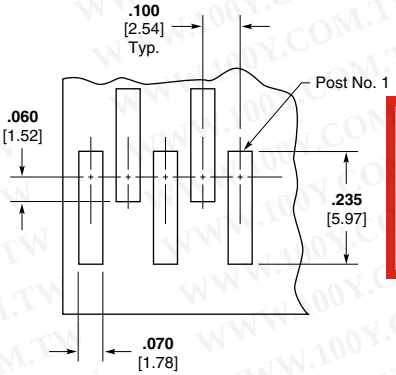
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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.
Standard UL94V-0, Tin Plated			
647106	2–18[1] **32-42**	647166	2–18[1] **32-42**
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647108	2–18[1] **32-42**	647168	2–18[1] **32-42**
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647107	2–18[1] **32-42**	647167	2–18[1] **32-42**

[1] 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.

Catalog 82056
Revised 4-05

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Japan: 81-44-844-8013
UK: 44-141-810-8967

MTA-100 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 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

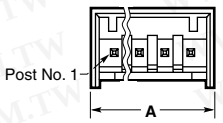
1-644486-0

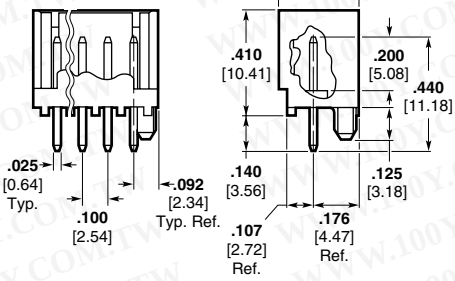
See page 15 for an explanation of RoHS lead free equivalents.

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.

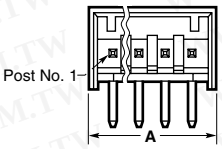
Notes:
1. Select load headers (omitted pin headers) are available upon request. Please contact product engineer or product manager for details.
2. MTA-100 shrouded headers **do not mate** with CST-100 II housings.

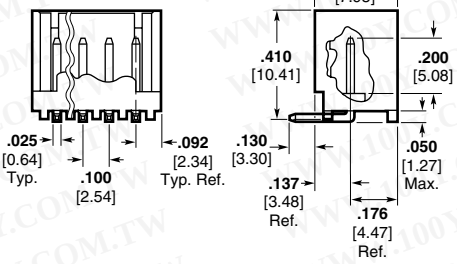
Straight Post (.025 [0.64] Square)





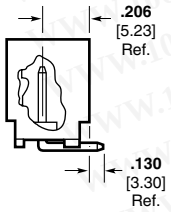
Right-Angle (.025 [0.64] Square)



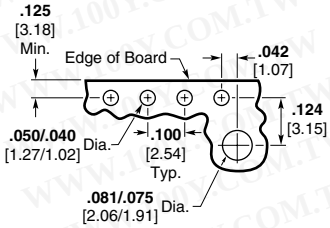


Front Bend

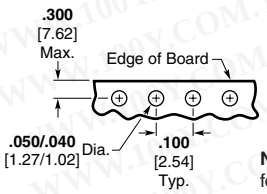
Polarized Retention Peg



Rear Bend



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)

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

Base Part Numbers

Straight Posts				Right-Angle Posts			
With Pegs		Without Pegs		Without Pegs Only			
				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.
Standard UL94V-0, Tin Plated							
644486	2-14 **22-34**	644861	2-14 **22-34**	644488	2-14 **22-34**	644803	2-14 **22-34**
Standard UL94V-0, .000030 [0.00076] Gold Plated							
644487	2-14 **22-34**	—	—	644489	2-14 **22-34**	—	—

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
6	**.684** 17.37	-6
7	**.784** 19.91	-7
8	**.884** 22.45	-8
9	**.984** 24.99	-9
10	**1.084** 27.53	1- -0
11	**1.184** 30.07	1- -1
12	**1.284** 32.61	1- -2
13	**1.384** 35.15	1- -3
14	**1.484** 37.69	1- -4

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

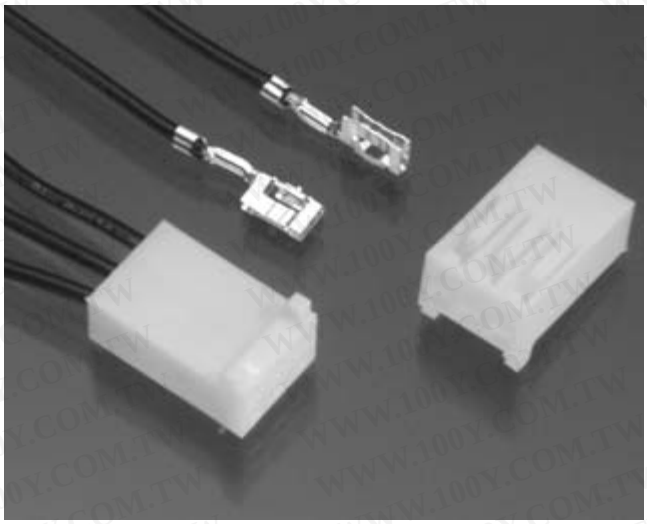
Product Facts

- **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**

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.



Application Tooling

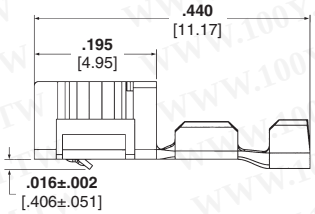
Loose Piece Contacts —
Hand Tool No. 58517-3 (408-4064)

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 CQM) (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 mm²]

Max. Ins. Dia. — .065 [1.65]

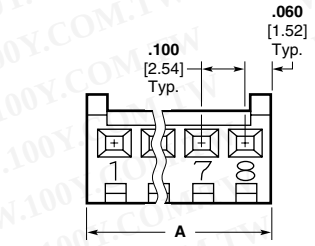
Housing*

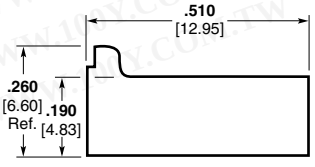
Material (RoHS Compliant)

UL94V-0 rated, nylon, white

No. of Pos.	Dim. A	Part Numbers
2	.220 5.59	1375820-2
3	.320 8.13	1375820-3
4	.420 10.67	1375820-4
5	.520 13.21	1375820-5
6	.620 15.75	1375820-6
7	.720 18.29	1375820-7
8	.820 20.83	1375820-8
9	.920 23.37	1375820-9
10	1.020 25.91	1-1375820-0
11	1.120 28.45	1-1375820-1
12	1.220 30.99	1-1375820-2
13	1.320 33.53	1-1375820-3
14	1.420 36.07	1-1375820-4
15	1.520 38.61	1-1375820-5

No. of Pos.	Dim. A	Part Numbers
16	1.620 41.15	1-1375820-6
17	1.720 43.69	1-1375820-7
18	1.820 46.23	1-1375820-8
19	1.920 48.77	1-1375820-9
20	2.020 51.31	2-1375820-0
21	2.120 53.85	2-1375820-1
22	2.220 56.39	2-1375820-2
23	2.320 58.93	2-1375820-3
24	2.420 61.47	2-1375820-4
25	2.520 64.01	2-1375820-5
26	2.620 66.55	2-1375820-6
27	2.720 69.09	2-1375820-7
28	2.820 71.63	2-1375820-8





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

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

Catalog 82056
Revised 4-05

www.tycoelectronics.com

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

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

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

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:

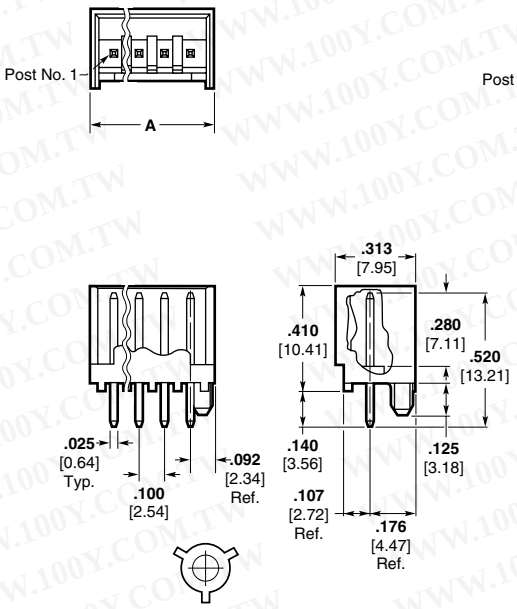
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	644893-2	3-644893-2
	thru	
14	1-644893-4	4-644893-4

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

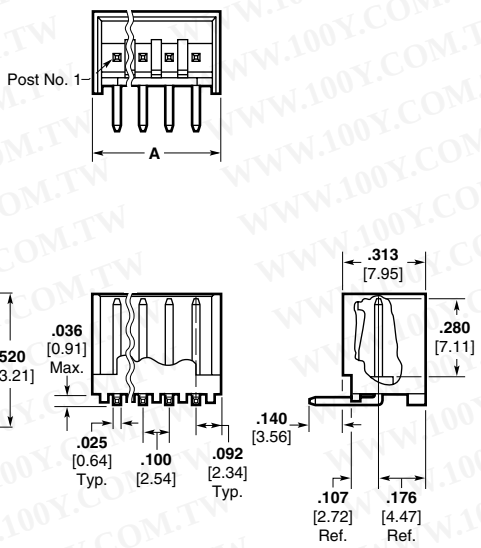
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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)

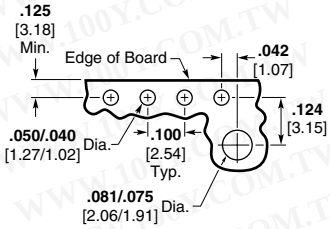


Right-Angle (.025 [0.64] Square)

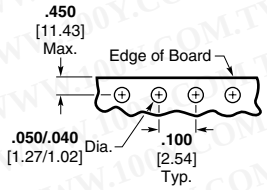


Polarized Retention Peg

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.
Standard UL94V-0, Tin Plated					
644893	2-14 **32-44**	644892	2-14 **32-44**	644894	2-14 **32-44**
Standard UL94V-0, .000030 [0.00076] Gold Plated					
644897	2-14 **32-44**	644896	2-14 **32-44**	644898	2-14 **32-44**

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
6	**.684** 17.37	-6
7	**.784** 19.91	-7
8	**.884** 22.45	-8
9	**.984** 24.99	-9
10	**1.084** 27.53	1- -0

Catalog 82056
Revised 4-05

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

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

USA: 1-800-522-6752
Canada: 1-905-470-4425
Mexico: 01-800-733-8926
C. America: 52-55-5-729-0425

South America: 55-11-3611-1514
Hong Kong: 852-2735-1628
Japan: 81-44-844-8013
UK: 44-141-810-8967

Miniature Rectangular (MR) Contacts and Housings

NOTE

All numerical values are in metric units [with U.S. customary units in brackets]. Dimensions are in millimeters [and inches]. Unless otherwise specified, dimensions have a tolerance of ±0.13 [.005] and angles have a tolerance of ±2°. Figures and illustrations are for identification only and are not drawn to scale.

1. INTRODUCTION

This specification covers the requirements for application of Miniature Rectangular (MR) pin and socket contacts and housings. These requirements are applicable to hand or automatic machine crimping tools.

When corresponding with Tyco Electronics personnel, use the terminology provided on this specification to help facilitate your inquiry for information. Basic terms and features of components are provided in Figure 1.

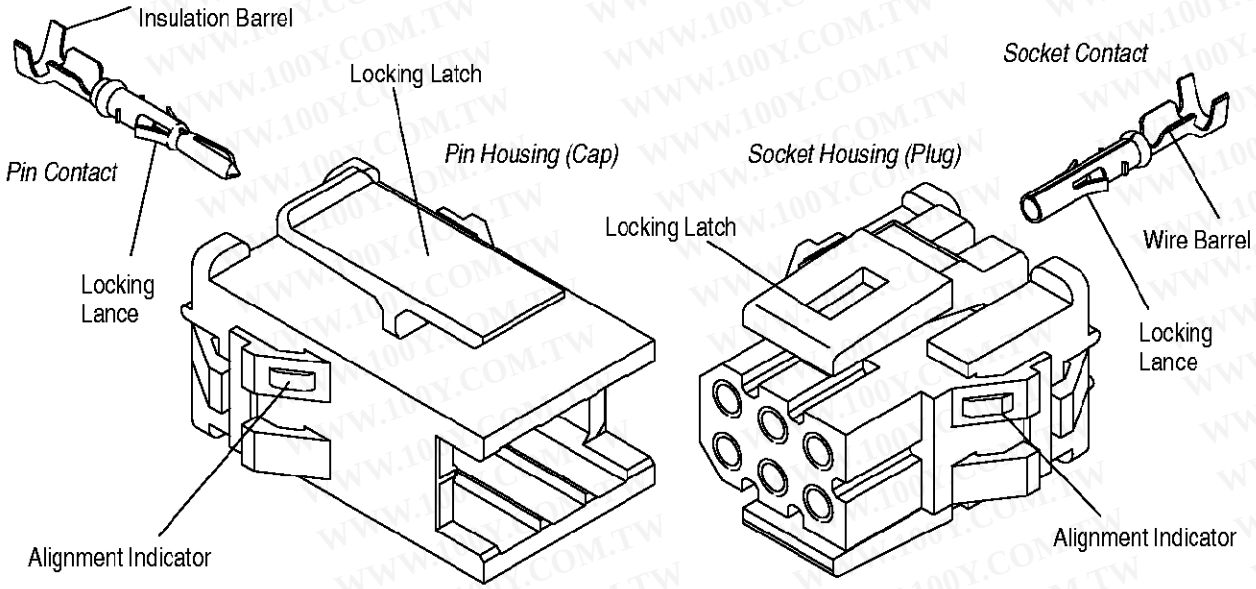


Figure 1

2. REFERENCE MATERIAL

2.1. Revision Summary

This paragraph is reserved for a revision summary of changes and additions made to this specification. The following changes have been made for this revision:

Per EC 0990–0667–02

- Updated document to corporate requirements
- Deleted standard pin and cantilever socket references through–out document
- Added new Paragraphs 3.1 and 3.3 and renumbered
- Added new Figures 3, 4, 6, and 7 and renumbered
- Deleted and added instructional material in Paragraph 2.5
- Deleted and added tooling information in Section 5, TOOLING
- Added new art to Figures 1, 2, 3, 4, 6, 7, 9, and 10

2.2. Customer Assistance

Reference Part Number 350967 and Product Code 1381 are representative numbers of the Miniature Rectangular (MR) Contacts and Housings. Use of these numbers will identify the product line and expedite your inquiries through a service network established to help you obtain product and tooling information. Such information can be obtained through a local Tyco Electronics Representative (Sales Engineer, Field Service Engineer, etc.) or, after purchase, by calling the Tooling Assistance Center or the AMP FAX/Product Information numbers at the bottom of this page.

This controlled document is subject to change.
For latest revision call the AMP FAX* number.

TOOLING ASSISTANCE CENTER 1–800–722–1111
AMP FAX/PRODUCT INFO 1–800–522–6752
For Regional Customer Service, visit our website at
www.tycoelectronics.com

2.3. Drawings

Customer Drawings for specific products are available from the responsible Tyco Electronics Engineering department via the service network. The information contained in the Customer Drawings takes priority if there is a conflict with this specification or with any other technical documentation supplied by Tyco Electronics.

2.4. Product Specifications

Product Specification 108–1022 provides product performance and test information.

2.5. Instructional Material

The following list includes available instruction sheets (408–series) that provide assembly procedures for product, operation, maintenance and repair of tooling; and customer manuals (409–series) that provides setup, operation, and maintenance of machines.

Document Number	Document Title
408–2498	Crimping Head Cross Reference for Pneumatic Tools
408–3295	Preparing Reel of Contacts for Application Tooling
408–4106	Straight Action Crimp Head Adapter 217201–1
408–4190	C–Head Pneumatic Adapter
408–4321	Pneumatic CERTI–CRIMP* Tool Holder 356304–1
408–7424	Checking Terminal Crimp Height or Gaging Die Closure
408–7749	Hand Crimping Tool 90326–1
408–7984	Insertion Tool 455830–1
408–8040	Heavy Duty Miniature Quick–Change Applicators (Side–Feed Type) with Mechanical
408–8059	General Preventive Maintenance for Applicators
408–8620	Service Hand Tool 696202–1
408–9570	Extraction Tool 455822–2 for Miniature Rectangular (MR) Contacts
408–9640	Crimp Quality Monitor Applicators for Side–Feed and End–Feed Applications
408–9816	Handling of Reeled Products
408–9930	PRO–CRIMPER* II Hand Crimping Tool Frame Assembly 354940–1
408–9973	PRO–CRIMPER II Hand Tool Assembly 58514–1 with Die Assembly 58514–2
409–5128	Basic AMP–O–LECTRIC* Model “K” Terminating Machine 565435–5
409–5842	AMP–O–LECTRIC Model “G” Terminating Machines 354500–[ ]
409–5852	AMPOMATOR* CLS III–G Lead Making Machine 122500–[ ]
409–5862	626 Pneumatic Tooling Assemblies 189721–[ ] and 189722–[ ]
409–5866	AMPOMATOR CLS IV Lead–Making Machine 217500–[ ]
409–5878	AMPOMATOR CLS IV+ Lead–making Machine 356500–[ ]
409–10012	AMP–O–MATIC* Side Feed Stripper–Crimper III Machine 1320895–[ ]
409–10016	Entry Level Terminator (ELT) Machine 1338600–[ ]
409–10027	Stripping Modules 1490500 and 1490502
409–10029	Stripping Modules 1490501 and 1490503

3. REQUIREMENTS

3.1. Storage

A. Ultraviolet Light

Prolonged exposure to ultraviolet light may deteriorate the chemical composition used in the connector housing material.

B. Reel Storage

When using reeled contacts, store coil wound reels horizontally and traverse wound reels vertically.

C. Shelf Life

The contacts should remain in the shipping containers until ready for use to prevent deformation to the contact. The contacts should be used on a first in, first out basis to avoid storage contamination that could adversely affect signal transmissions.

D. Chemical Exposure

Do not store contacts near any chemicals listed below as they may cause stress corrosion cracking in the contacts.

Alkalies	Ammonia	Citrates	Phosphates Citrates	Sulfur Compounds
Amines	Carbonates	Nitrites	Sulfides Nitrites	Tartrates

NOTE *Where the above environmental conditions exist, phosphor–bronze contacts are recommended.*

3.2. Wire Selection and Preparation

A. Wire Selection

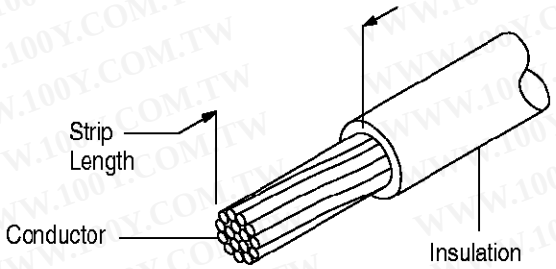
The contacts will accept stranded wire sizes 18 through 26 AWG. Wire insulation minimum and maximum diameters shall be as indicated in Figure 2.

B. Wire Preparation

The wire strip length shall be as indicated in Figure 2.

NOTE *The applied crimp dimension (within the functional range of the product) is dependent on the termination tooling being used. Refer to the documentation (applicator logs and instruction sheets) supplied with the termination tooling for the applied crimp height. See Section 5, TOOLING.*

NOTE *DO NOT nick, scrape, or cut the wire conductor during the stripping operation.*



AUTOMATIC MACHINE WIRE CRIMP DIMENSIONS

CONTACT TYPE		WIRE			WIRE BARREL CRIMP		INSUL BARREL CRIMP	
PIN	SOCKET	SIZE	INSUL DIA RANGE	STRIP LENGTH	HEIGHT RANGE	WIDTH (REF)	HEIGHT (MAX.)	WIDTH
LIVE SPLIT	SOLID	18	1.27–2.92 [.050–.115]	4.34–3.58 [.171–.141]	1.22–1.12 [.048–.044]	1.40 [.055]	3.12 [.123]	3.05 [.120]
		20			1.09–0.99 [.043–.039]			
		22–24			0.91–0.81 [.036–.032]			
		26	1.27–2.92 [.050–.115]	4.34–3.58 [.171–.141]	0.84–0.74 [.033–.029]	1.40 [.055]	3.12 [.123]	3.05 [.120]
		24–26	0.64–1.27 [.025–.050]					1.78 [.070]

HAND TOOL WIRE CRIMP DIMENSIONS

CONTACT TYPE		WIRE			WIRE BARREL CRIMP		INSUL BARREL CRIMP	
PIN	SOCKET	SIZE	INSUL DIA RANGE	STRIP LENGTH	HEIGHT RANGE	WIDTH (REF)	HEIGHT (MAX.)	WIDTH
LIVE SPLIT	SOLID	18–20	1.27–2.92 [.050–.115]	4.34–3.58 [.171–.141]	1.02–0.92 [.040–.036]	1.40 [.055]	3.12 [.123]	3.05 [.120]
		22–26			0.76–0.66 [.030–.026]			
		24–26	0.64–1.27 [.025–.050]					1.78 [.070]

Figure 2

3.3. Crimped Contact Requirements

The contact shall be located in desired tooling and crimped according to the instructions packaged with that tooling. See Section 5, TOOLING, of this document for details on tooling options and instructional materials.

NOTE *Wire insulation shall NOT be cut or broken during the crimping operation, nor shall the insulation be crimped into the contact wire barrel. Reasonable care should be taken by tooling operators to provide undamaged wire terminations.*

A. Wire Barrel Crimp

The crimp applied to the wire portion of the contact is the most compressed area and is most critical in ensuring optimum electrical and mechanical performance of the crimped contact. The contact wire barrel crimp height must be within the dimension provided in Figure 2.

B. Effective Crimp Length

For optimum crimp effectiveness, the crimp must be within the area shown and must meet the crimp dimensions provided in Figure 3. Effective crimp length shall be defined as that portion of the wire barrel, excluding bellmouth(s), fully formed by the crimping tool. Instructions for adjusting, repairing, and inspecting tools are packaged with the tools. See Section 5, TOOLING.

C. Bellmouths

Front and rear bellmouths shall be evident and conform to the dimensions given in Figure 3.

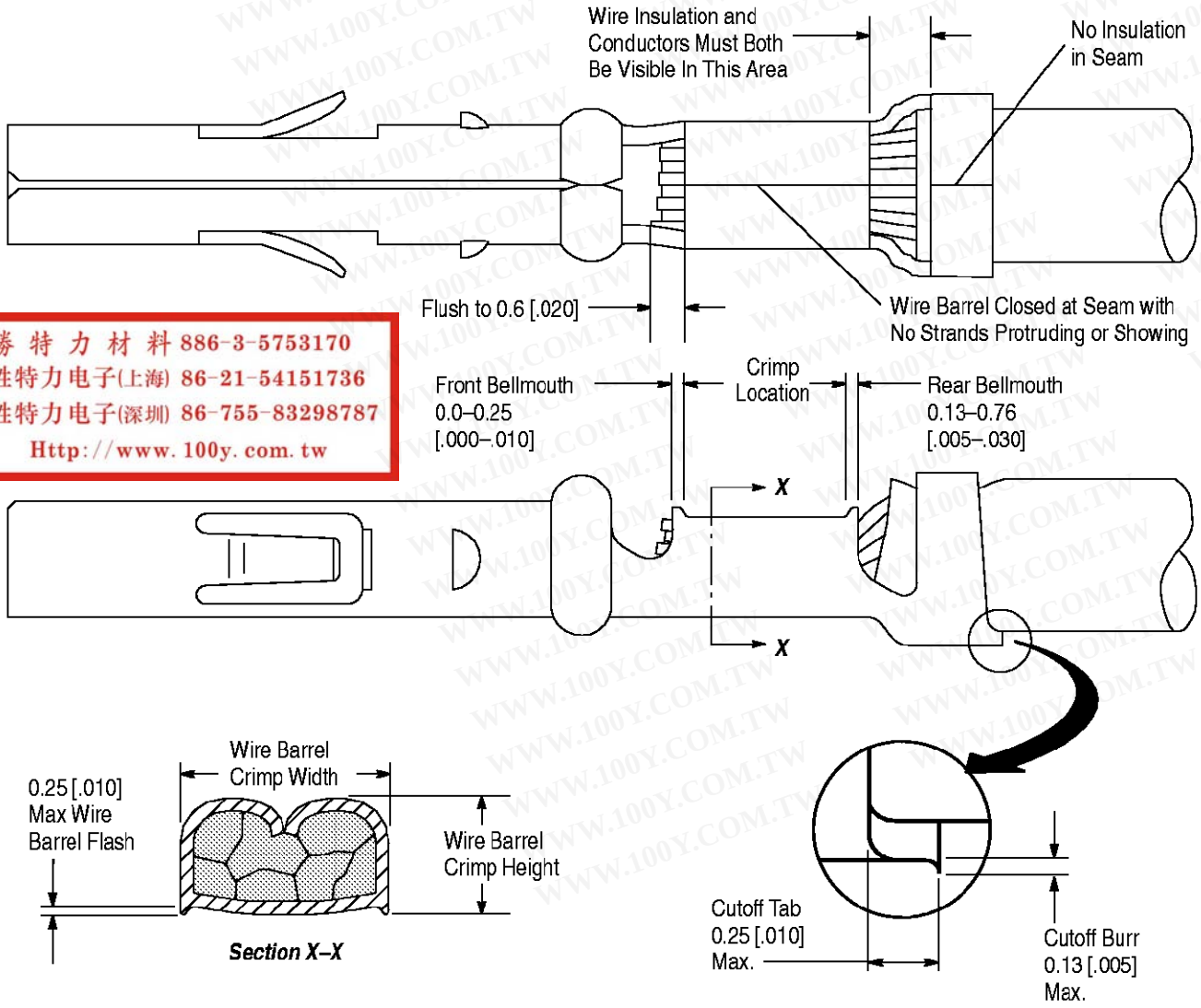


Figure 3

D. Cutoff Tabs

The cutoff tab shall be cut to the dimensions shown in Figure 3.

E. Burrs

The cutoff burr shall not exceed the dimensions shown in Figure 3.

F. Wire Barrel Flash

The wire barrel flash shall not exceed the dimensions shown in Figure 3, Section X–X.

G. Insulation Barrel Crimp

The insulation barrel shall grip the insulation firmly without cutting into it. Care must be taken to prevent cutting, nicking, or scraping of the insulation. Insulation crimp shall comply to width and height provided in Figure 3.

H. Wire Location

The wire conductor and insulation must be visible in the transition area between the wire and insulation barrels.

I. Conductor Extension

The conductor may extend beyond the wire barrel to the maximum shown.

J. Wire Barrel Seam

The wire barrel seam must be closed with no evidence of loose wire strands visible in the seam.

K. Twist and Roll

There shall be no twist, roll, deformation or other damage to the mating portion of the crimped contact that will impair usage of the contact. See Figure 4.

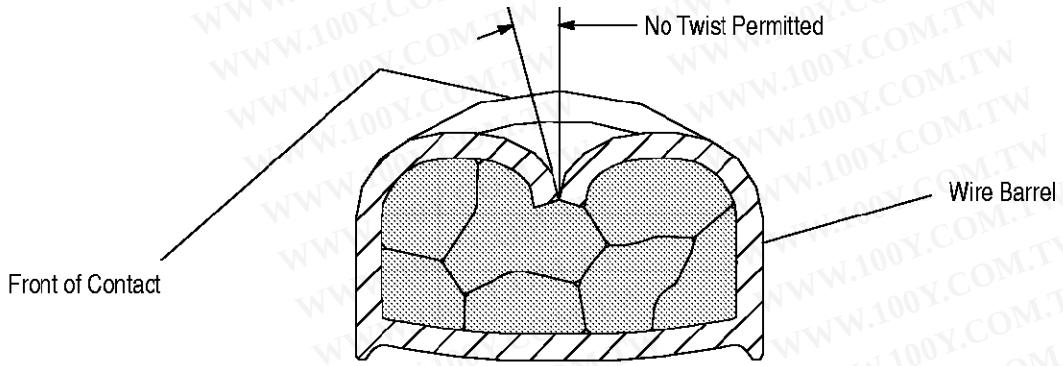


Figure 4

L. Axial Concentricity

NOTE *Periodic inspections must be made to ensure crimped contact formation is consistent as shown.*

1. Crimped insulation barrel shall fall into an area defined by a 3.43 [.135] diameter circle whose center is the centerline of the contact as shown in Figure 5.
2. There shall be no twist or roll in crimped portion that will impair usage of the contact.

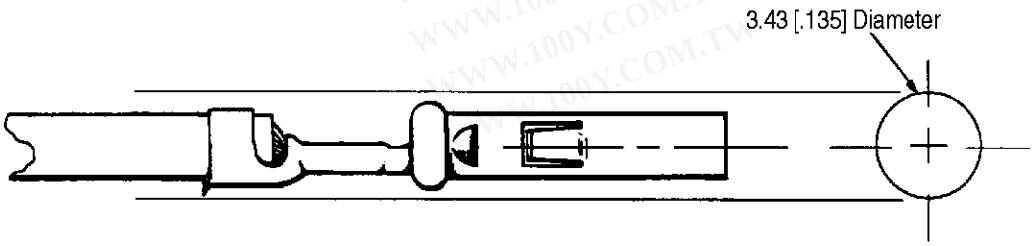


Figure 5

3.4. Housings

The connector assembly consist of a pin housing (cap) that accepts pins (live split); and socket housing (plug) that accept socket (solid) contacts. Both the plug and cap housing assemblies have individually numbered circuit identification on the back surface and are available in 2 through 36 circuit positions. See Figure 6.

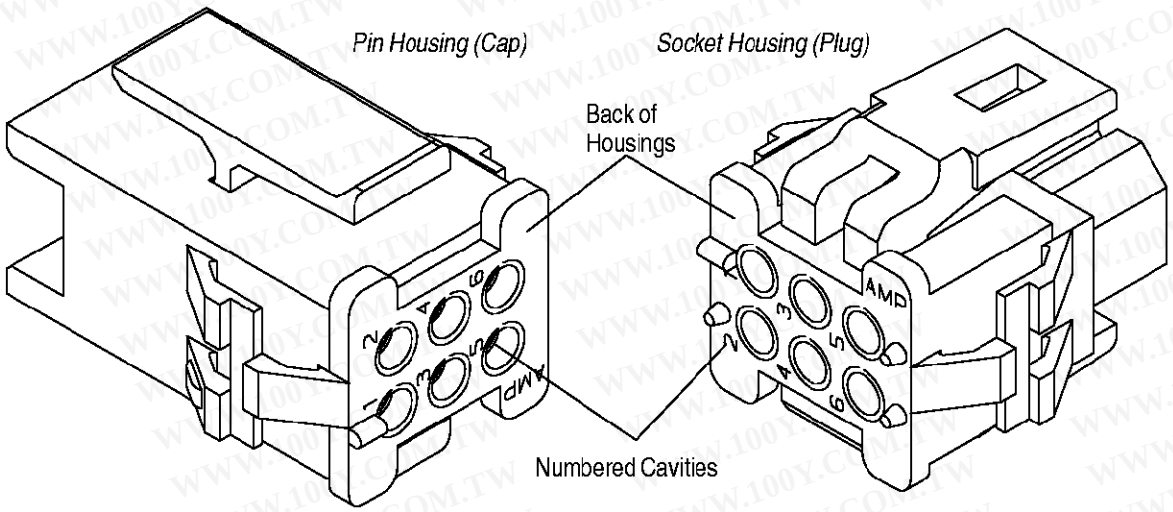


Figure 6

A. Assembly

Crimped pin and socket contacts shall be manually inserted in the rear of their respective housings. Insert contacts and join housing sections together as shown in Figure 7.

Align contact with desired circuit cavity at BACK of rear housing section. Push contact straight into cavity until a tactile and audible "click" is heard. When all necessary contacts have been inserted, complete assembly of the connector by mating the housing latches into the fully locked position. See Figure 7.

B. Disassembly

Depress both locking latches, pull apart to separate the housings.

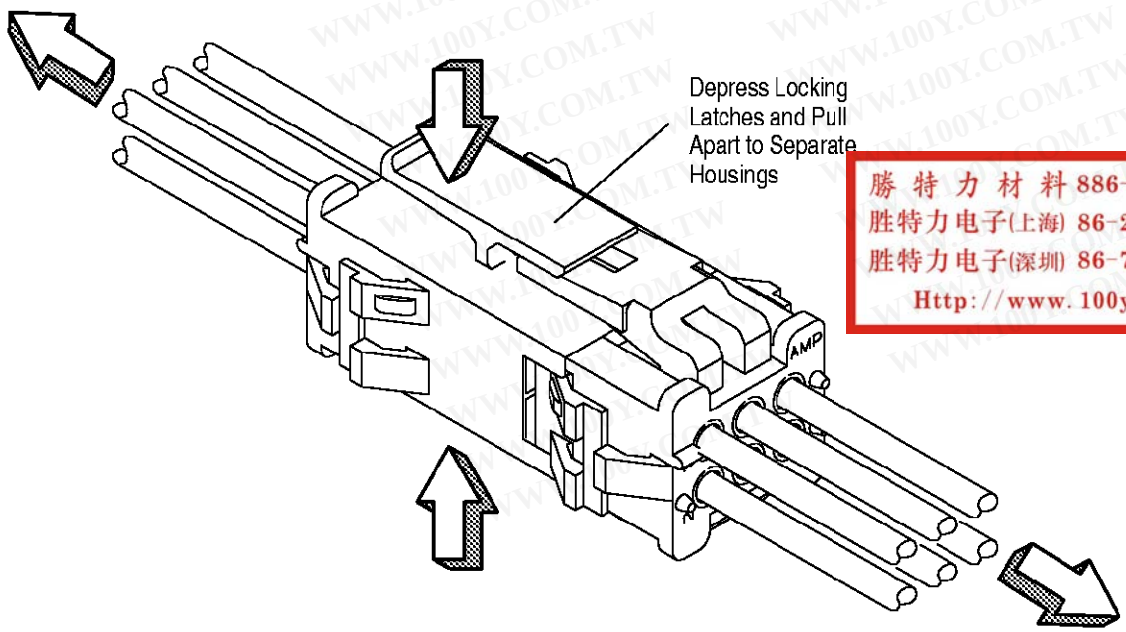


Figure 7

3.5. Panel Cutout Requirements

Typical panel cutout dimensions shown in Figure 8. See customer drawings for other panel cutout variations.

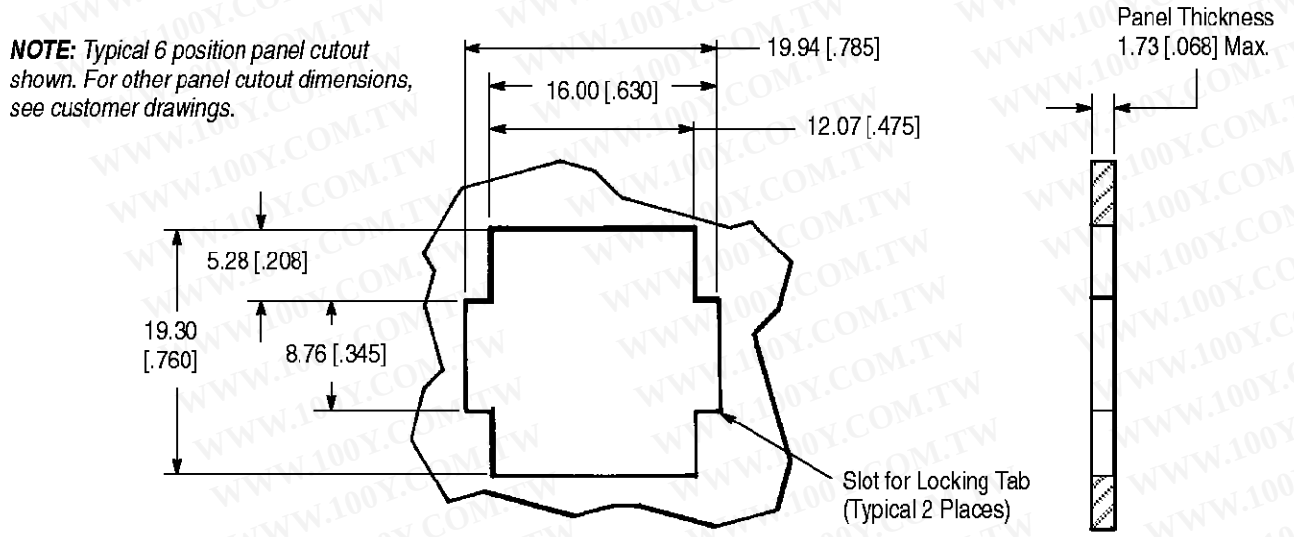


Figure 8

3.6. Polarization

The housings possess, ribs and slots which prohibit accidental inversion of a mating connector.

3.7. Ancillary Items

Contact the Product Information Center number at the bottom of page 1 for information on the following optional items.

A. Keying Plugs

Keying plugs are used in the plug housing to provide connector identification and polarization.

B. Commoning Bars

Commoning bars are used to common adjacent circuits of any row.

C. Strain Relief

Strain relief clamps are used to prevent stress on contacts caused by large wire bundles.

D. Grommets

Grommets are used with a strain relief clamp when a housing is NOT fully loaded and/or wire bundle is small.

3.8. Repair/Replace

Use Extraction Tool 455822–2 to remove individual contacts from housings for replacement or for relocation to another housing cavity. Damaged or worn contacts may be replaced provided there is sufficient slack, after restripping the wire, to insert the new contact.

NOTE *DO NOT re–use damaged or worn contacts. Instead, replace them with new contacts and discard the old ones.*

4. QUALIFICATIONS

Miniature Rectangular (MR) pin and socket contacts and housings are Recognized by Underwriters Laboratories Inc. (UL) under File Number E28476, and Certified with the Canadian Standards Association (CSA) under File number LR7189.

5. TOOLING

Figure 9 provides tool part numbers and instructional material related to wire size.

NOTE *Tyco Electronics Tooling Engineers have designed machines for a variety of application requirements. For assistance in setting up prototype and production line equipment, contact Tyco Electronics Tool Engineering through your local Tyco Electronics Representative or call the Tooling Assistance Center number at the bottom of page 1.*

- **Hand Tool**

  Hand crimping tools that accommodate the full wire size range are designed for prototype and low–volume applications such as repair of damaged contacts.

- **Applicator**

  Applicators are designed for the full wire size range of strip–fed, precision formed contacts, and provide for high volume, heavy duty, production requirements. The applicators can be used in bench or floor model power units.

NOTE *Each applicator is shipped with a metal identification tag attached. DO NOT remove this tag or disregard the information on it. Also, a packet of associated paperwork is included in each applicator shipment. This information should be read before using the applicator; then it should be stored in a clean, dry area near the applicator for future reference. Some changes may have to be made to the applicators to run in all related power units. Contact the Tooling Assistance Center number located at the bottom of page 1 for specific changes.*

- **Power Units**

  A power unit is an automatic or semi–automatic device used to assist in the application of a product. Power unit includes the power source used to supply the force or power to an applicator.

- **Insertion/Extraction Tooling**

  Insertion Tools are designed for contacts crimped to small fragile wire. They are designed to stabilize the contact during insertion. For use of Insertion Tool 455830–1 which may be used with these contacts, refer to Instruction Sheet 408–7984. Extraction Tools are designed to release the locking lance inside the connector housing without damaging the housing or contacts. For use of Extraction Tool 455822–2 which may be used with these contacts, refer to Instruction Sheet 408–9570.

- **Head**

  A head fits into an applicator or hand tool and holds a die used for crimping the product.

- **Dies**

  A tooling component used in conjunction with an applicator or hand tool to apply product.

- **Holder**

  A component used to hold the head and dies in the power assembly or hand tool.

WIRE SIZE		TOOLING						
AWG RANGE	INSUL DIA RANGE	APPLICATOR (DOCUMENT)	POWER UNIT (DOCUMENT)	HAND TOOL (DOCUMENT)	PNEUMATIC TOOLING (DOCUMENT)			
					HAND TOOL	HEAD	DIES	HOLDER
24–26	0.64–1.27 [.025–.050]	466352–1 (408–8040)	122500–2, –3 (409–5852)	90326–1 (408–7749) or 58514–1 (408–9973) or 696202–1 (408–8620)	189721–1 (408–2498) (409–5862) or 189722–1 (408–2498) (409–5862)	217201–1 (408–4106)	90326–2 (——)	189928–1 (408–2498) (409–4190) or 356304–1 (408–4321)
			217500–1, –2 (409–5866)					
			356500–1, –2 (409–5878)					
		466352–2 (408–8040)	354500–1 (409–5842)					
			565435–5 (409–5128)					
			1338600–3, –4 (409–10016)					
		466916–1 (408–8040)	1320895–1, –3 (409–10012)					

Figure 9 (cont'd)

WIRE SIZE		TOOLING						
AWG RANGE	INSUL DIA RANGE	APPLICATOR (DOCUMENT)	POWER UNIT (DOCUMENT)	HAND TOOL (DOCUMENT)	PNEUMATIC TOOLING (DOCUMENT)			
					HAND TOOL	HEAD	DIES	HOLDER
26–18	1.27–2.92 [.050–.115]	466351–1 (408–8040)	122500–2, –3 (409–5852)	91526–1 (—)	189721–1 (408–2498) (409–5862) or 189722–1 (408–2498) (409–5862)	217201–1 (408–4106)	90325–2 (—)	189928–1 (408–2498) (409–4190) or 356304–1 (408–4321)
			217500–1, –2 (409–5866)					
			356500–1, –2 (409–5878)					
		466351–2, –3 (408–8040)	354500–1 (409–5842)					
			565435–5 (409–5128)					
			1338600–3, –4 (409–10016)					
		466351–4 (408–8040)	354500–[ ] (409–5842)					
			1338600–[ ] (409–10016)					
		466913–1 (—)	1320895–1, –3 (409–10012)					
		567658–2 (408–8040)	354500–5 (409–5842)					
		567832–1 (—)	1320895–2, –4 (409–10012)					

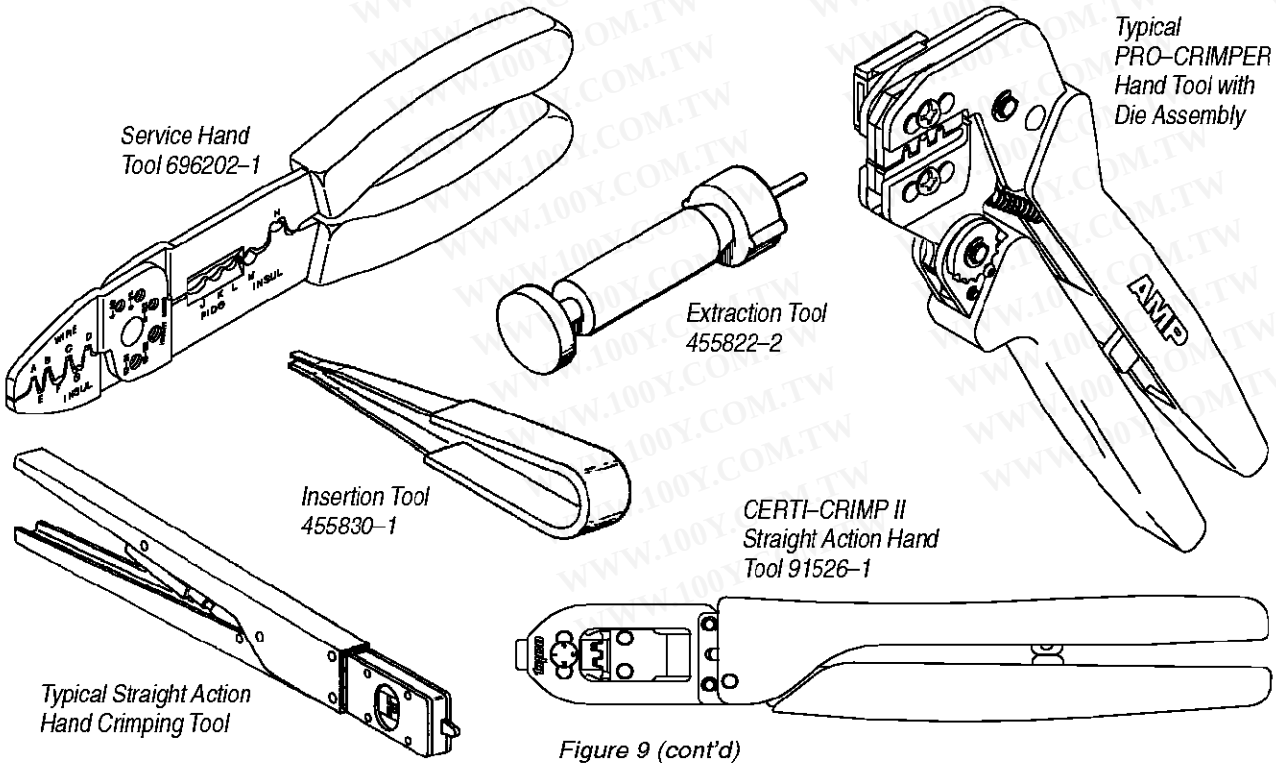
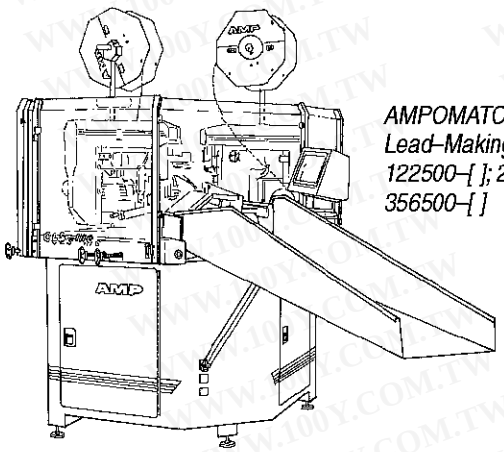
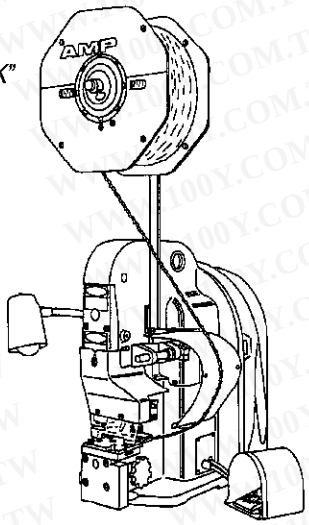


Figure 9 (cont'd)

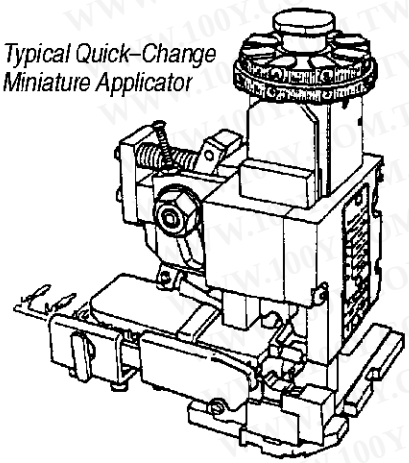


AMPOMATOR CLS
Lead–Making Machines
122500–[ ]; 217500–[ ];
356500–[ ]

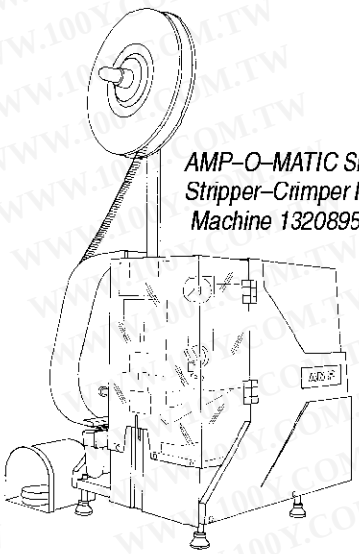
AMP–O–LECTRIC Model "K"
Terminating Unit 565435–5



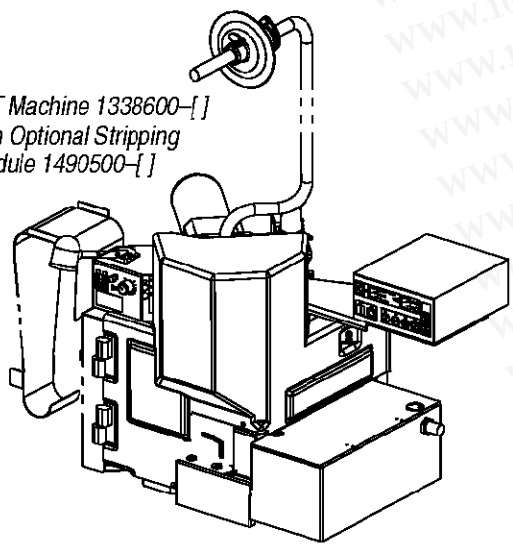
Typical Quick–Change
Miniature Applicator



AMP–O–MATIC Side Feed
Stripper–Crimper II
Machine 1320895–[ ]



ELT Machine 1338600–[ ]
with Optional Stripping
Module 1490500–[ ]



AMP–O–LECTRIC Model "G"
Terminating Machine 354500–[ ]
with Optional Stripping Module
1490501–[ ]

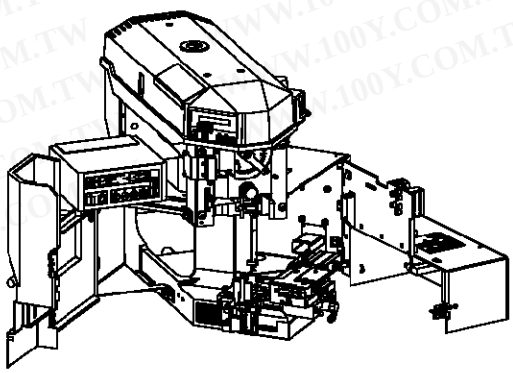


Figure 9 (cont'd)

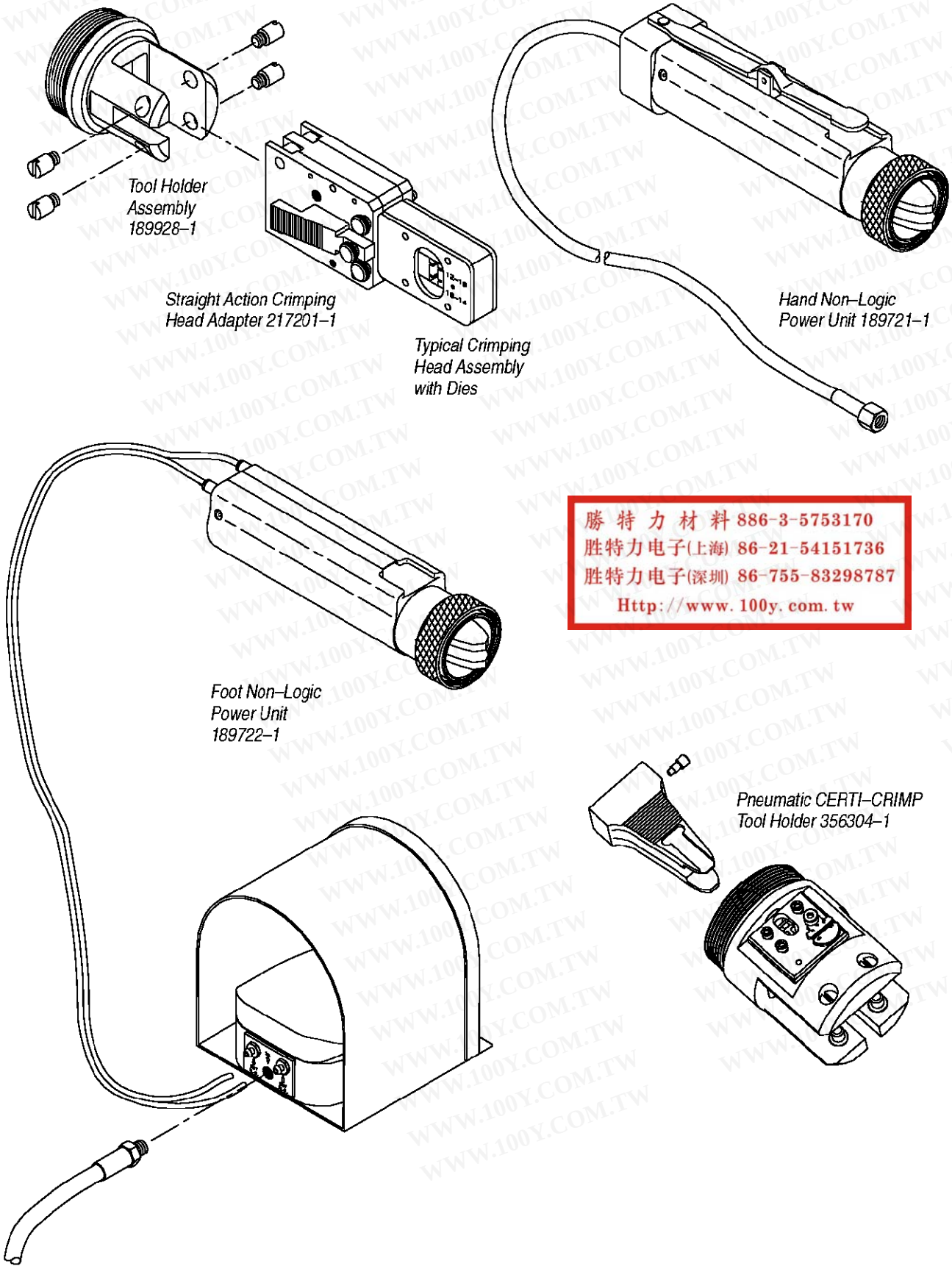


Figure 9 (end)

6. VISUAL AID

Figure 10 shows a typical application of a Miniature Rectangular (MR) Contact and Housing. This illustration should be used by production personnel to ensure a correctly applied product. Applications which DO NOT appear correct should be inspected using the information in the preceding pages of this specification and in the instructional material shipped with the product.

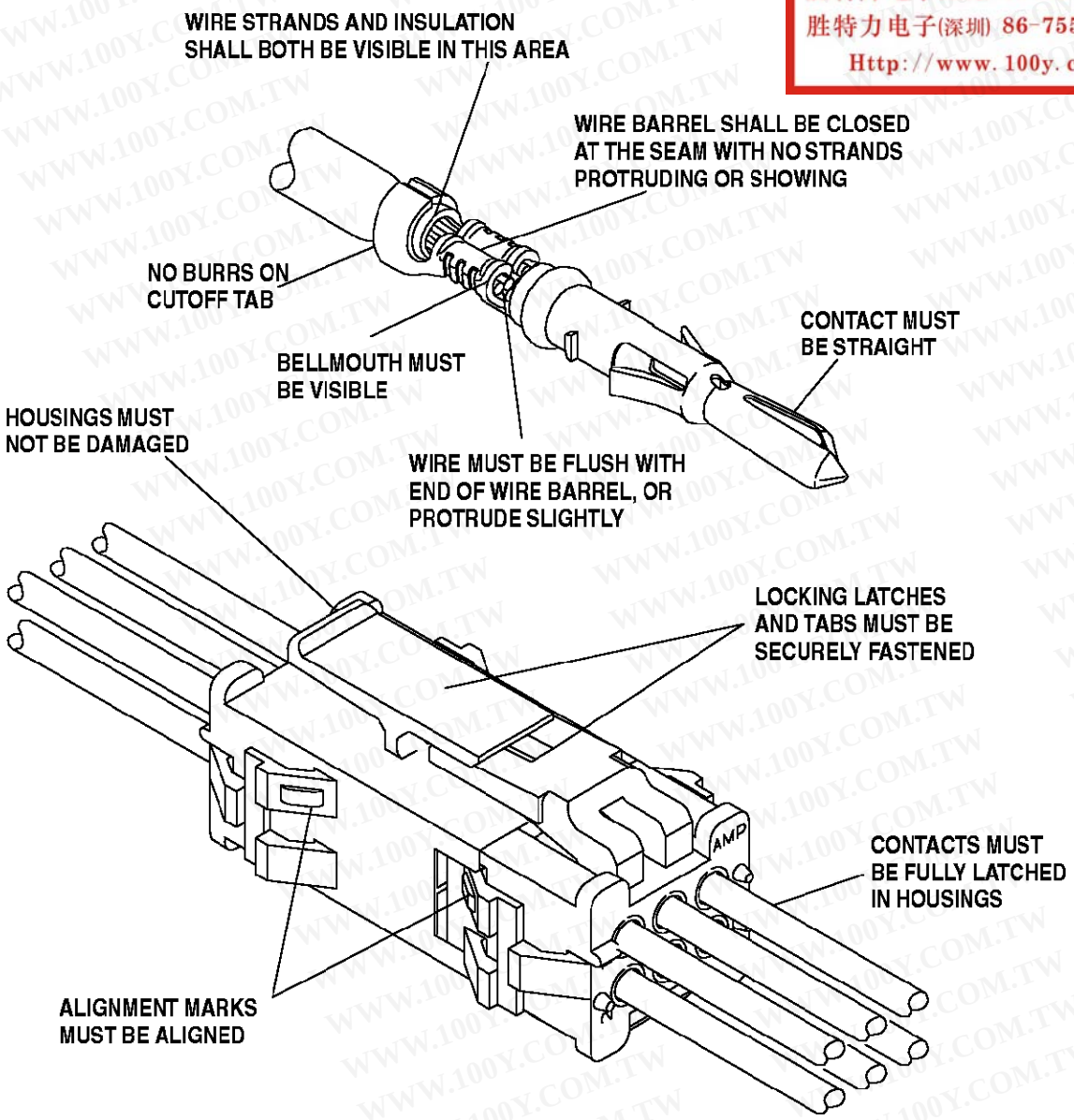


FIGURE 10. VISUAL AID