



.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

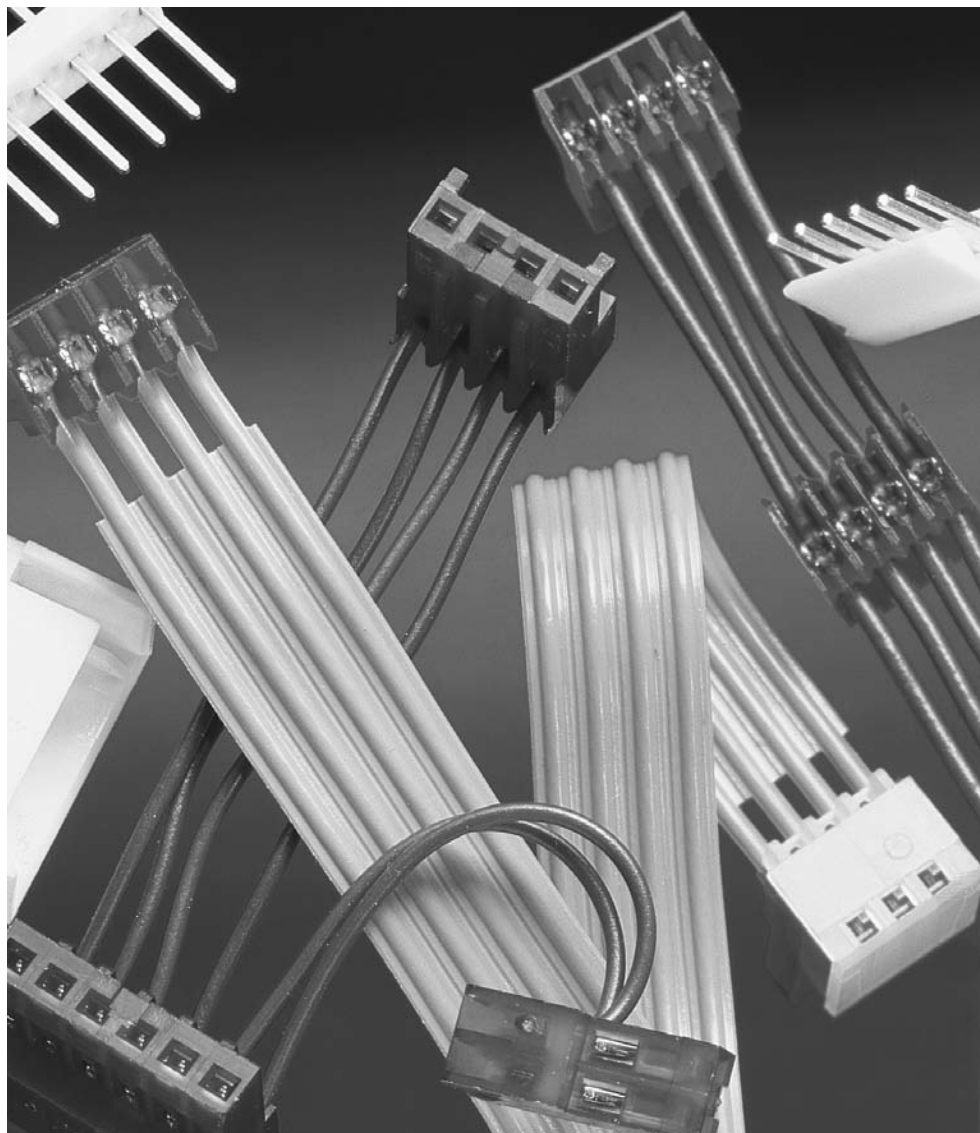
Product Specification

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.

MTA-100 Connector/Header Mateability Guide (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 header and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

**Matrix for .000030
[0.00076] Gold Plated
Part Numbers**

Connectors	Headers																									
	641211	641212	641213	641214	641215	641216	644487	644489	644884	644885	644886	644887	644896	644897	644898	647108	647109	647114	647116	647117	647168	647626	647624	647534	744047	744163
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	Y

**Matrix for .000015
[0.00038] Gold Plated
Part Numbers**

Connectors	Headers																									
	641122	641123	641124	641125	641126	641127	644888	644889	644890	644891	647075	647076	647078	647079	647107	647167	647467	647625	647627	647533	1744074					
641190	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641191	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641192	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641193	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641198	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641199	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641200	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
641201	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644038	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
644040	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
647477	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
647480	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	
*1375820	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	Y	Y	Y	Y
1744020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	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

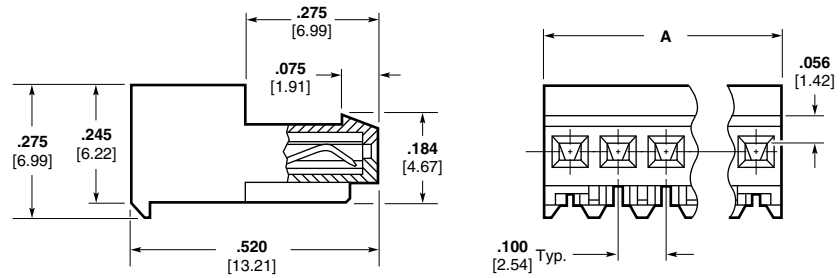
For mateability options, see matrix on pages 12 and 13.

For mating half visuals, see pages 20 thru 30.

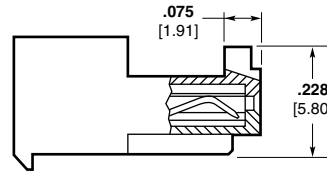
Notes:

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

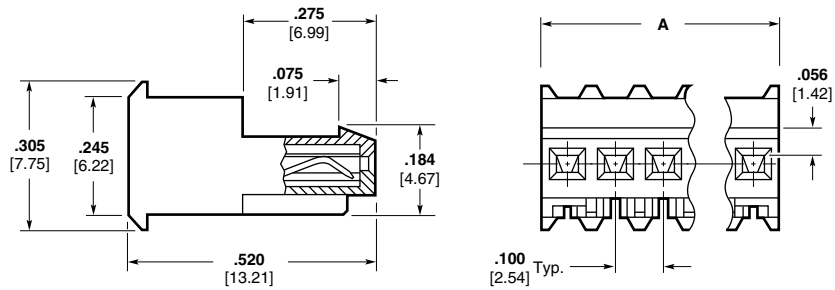


Without Polarizing Tabs

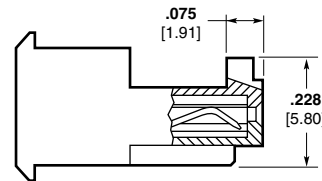


With Polarizing Tabs

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, 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
4- -0

The correct ordering number is **4-640440-0**

All part numbers are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-640440-2
3	3-640440-3
4	3-640440-4
5	3-640440-5
6	3-640440-6
7	3-640440-7
8	3-640440-8
9	3-640440-9
10	4-640440-0
11	4-640440-1
12	4-640440-2
13	4-640440-3
14	4-640440-4
15	4-640440-5
16	4-640440-6
17	4-640440-7
18	4-640440-8
19	4-640440-9
20	5-640440-0
21	5-640440-1
22	5-640440-2
23	5-640440-3
24	5-640440-4
25	5-640440-5
26	5-640440-6
27	5-640440-7
28	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.	RoHS Equiv.	Connector Part Nos.	RoHS Equiv.	Connector Part Nos.	RoHS Equiv.	Connector Part Nos.	RoHS Equiv.
Standard UL94V-2, Tin Plated								
22 AWG 0.3–0.4 mm ²	640440	32-58	643813	32-58	640620	32-58	644540 ¹	32-45
24 AWG 0.2 mm ²	640441	32-58	643814	32-58	640621	32-58	644563 ¹	32-54
26 AWG 0.12–0.15 mm ²	640442	32-58	643815	32-58	640622	32-58	644564 ¹	32-45
28 AWG 0.08–0.09 mm ²	640443	32-58	643816	32-58	640623	32-58	644565 ¹	32-45
Tape Mounted on Reel UL94V-2, Tin Plated								
22 AWG 0.3–0.4 mm ²	640468	32-58	644511	42-68	641311	32-58	—	—
24 AWG 0.2 mm ²	640469	32-58	644512	32-58	641312	32-58	—	—
26 AWG 0.12–0.15 mm ²	640470	32-58	644513	32-58	641313	32-58	—	—
28 AWG 0.08–0.09 mm ²	640471	32-58	644514	32-58	641314	32-58	—	—
Standard UL94V-2, .000030 [0.00076] Gold Plated								
22 AWG 0.3–0.4 mm ²	641237	32-58	644042	32-58	641241	32-58	644702 ¹	32-45
24 AWG 0.2 mm ²	641238	32-58	644020	32-58	641242	32-58	—	—
26 AWG 0.12–0.15 mm ²	641239	32-58	644043 ¹	32-44	641243	32-58	644726 ¹	32-45
28 AWG 0.8–0.9 mm ²	641240	32-58	644044 ¹	32-44	641244	32-58	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated								
22 AWG 0.3–0.4 mm ²	641190	32-58	644038 ¹	32-44	641198	32-58	647477	32-46
24 AWG 0.2 mm ²	641191	32-58	1744020 ¹	32-44	641199	32-58	—	—
26 AWG 0.12–0.15 mm ²	641192	32-58	644040 ¹	32-44	641200	32-58	647480	32-43
28 AWG 0.08–0.09 mm ²	641193	32-58	—	—	641201	32-58	—	—
LED*, UL94V-2, Tin Plated (See Note 1)								
22 AWG 0.3–0.4 mm ²	641534	32-33	—	—	641653	32-33	—	—
24 AWG 0.2 mm ²	641535	32-33	644795	32-33	641654	32-33	—	—
26 AWG 0.12–0.15 mm ²	641536	32-33	—	—	641655	32-33	—	—
28 AWG 0.08–0.09 mm ²	641537	32-33	—	—	641656	32-33	—	—
Standard UL94V-0, Tin Plated (Gold is available, minimums may apply.) (Black in color)								
22 AWG 0.3–0.4 mm ²	643498 ¹	32-45	644083 ¹	32-45	644575 ¹	32-45	644578 ¹	32-45
24 AWG 0.2 mm ²	644574 ¹	32-45	644312 ¹	32-45	644576 ¹	32-45	644579 ¹	32-45
26 AWG 0.12–0.15 mm ²	643828 ¹	32-45	644313 ¹	32-45	644577 ¹	32-45	644497 ¹	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.

MTA-100 IDC Connector Accessories

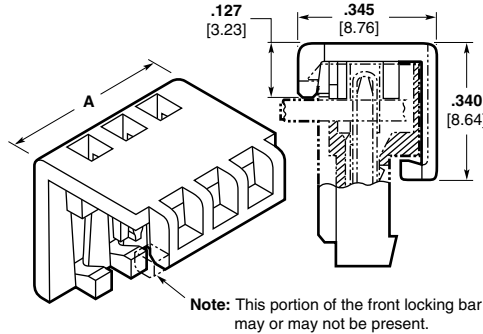
Covers

Material (RoHS Compliant)

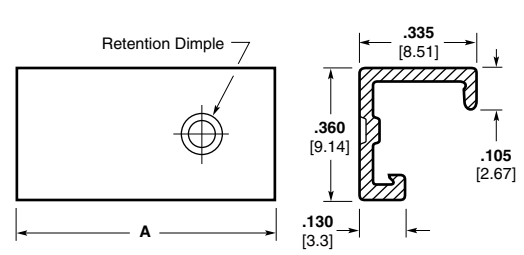
Strain Relief Cover — UL94V-2 rated, nylon, white

Dust Covers — UL94V-0 rated, polyester, white

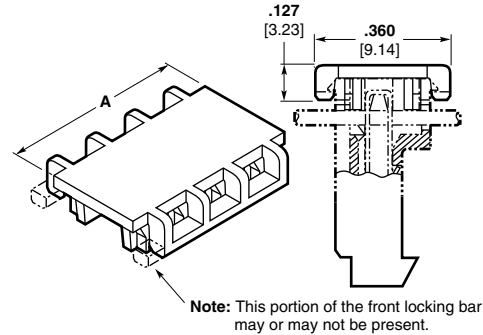
Closed End Strain Relief Covers



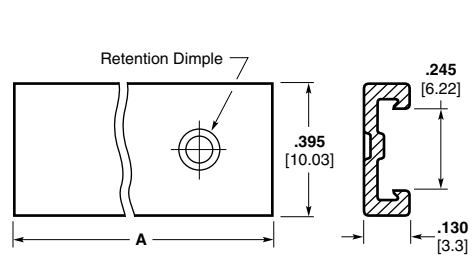
Closed End Dust Covers



Feed-Thru Strain Relief Covers



Feed-Thru Dust Covers



Cover Ordering Information

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

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

Base number **643075** plus prefix-and-suffix

1- -0

The correct ordering number is

1-643075-0

Base Part Numbers

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

Cover Length

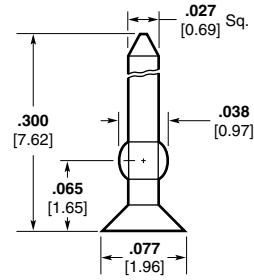
No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix
2	.200 5.08	-2	9	.900 22.86	-9	16	1.600 40.64	1- -6	23	2.300 58.42	2- -3
3	.300 7.62	-3	10	1.00 25.4	1- -0	17	1.700 43.18	1- -7	24	2.400 60.96	2- -4
4	.400 10.16	-4	11	1.100 27.94	1- -1	18	1.800 45.72	1- -8	25	2.500 63.5	2- -5
5	.500 12.7	-5	12	1.200 30.48	1- -2	19	1.900 48.26	1- -9	26	2.600 66.04	2- -6
6	.600 15.24	-6	13	1.300 33.02	1- -3	20	2.000 50.8	2- -0	27	2.700 68.58	2- -7
7	.700 17.78	-7	14	1.400 35.56	1- -4	21	2.100 53.34	2- -1	28	2.800 71.12	2- -8
8	.800 20.32	-8	15	1.500 38.1	1- -5	22	2.200 55.88	2- -2			

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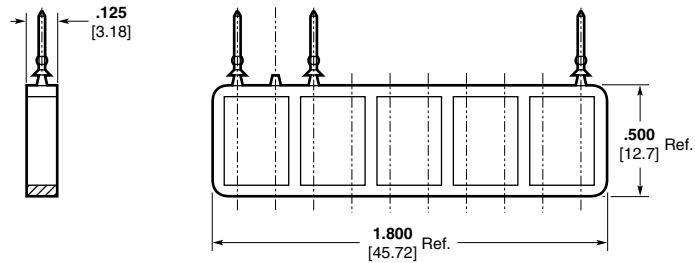
MTA-100 IDC Connector Accessories (Continued)

**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.



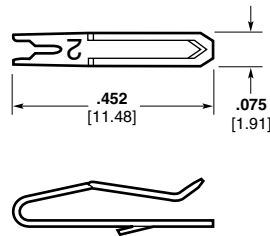
Replacement IDC Contacts

Material and Finish

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

Wire Size		Part Numbers			
AWG	mm ²	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

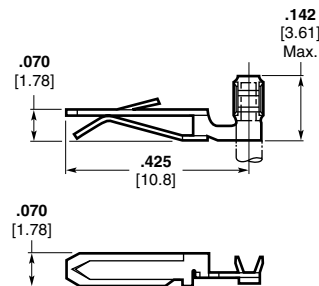
Note: Tyco Electronics does not recommend terminating an MTA contact more than one time. Use replacement contacts when required for field repairs or wire changes.



Crimp Snap-In Contacts

Material and Finish

Phosphor bronze, tin plated



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

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

- Special applications for crimp snap-in contacts are:
1. Double wire per contact
 2. Coax or shielded wire
 3. Mixed wire size in same connector

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

MTA-100 Posted Connector/Connector Mateability Guide

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 posted connector and connector combination. Where a “Y” is indicated the combination is a valid mating pair. Where an “N” is indicated the combination is not acceptable for mating.

Matrix for Tin Plated Part Numbers

Posted Connectors

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

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

MTA-100
.100 [2.54]

Connectors

MTA-100 Posted Connector/Connector Mateability Guide (Continued)

This matrix has been prepared to assist you, our customer, in defining the correct mating halves for the MTA-100 posted connector and connector combination. Where a "Y" is indicated the combination is a valid mating pair. Where an "N" is indicated the combination is not acceptable for mating.

**Matrix for .000030
[0.00076] Gold Plated
Part Numbers**

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

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

**Matrix for .000015
[0.00038] Gold Plated
Part Numbers**

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

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

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

Material and Finish

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

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

Notes:

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



Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number.

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 **4-2**

The correct ordering number is **4-647000-2**

All part numbers are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-647000-2
	thru
19	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 —

Closed End



Feed-Thru



Base Part Numbers

Connector Type & Wire Size	Closed End Connector		Feed-Thru Connector	
	Part Nos.	RoHS Equiv.	Part Nos.	No. of Circuits
Standard UL 94V-2, Tin Plated				
22 AWG 0.3–0.4 mm ²	647000	32–49 ¹	647004	— ²
24 AWG 0.2 mm ²	647001	32–49 ¹	647005	— ²
26 AWG 0.12–0.15 mm ²	647002	32–49 ¹	647006	— ²
28 AWG 0.08–0.09 mm ²	647003	32–49 ¹	647007	— ²
Standard UL 94V-2, .000030 [0.00076] Gold Plated				
22 AWG 0.3–0.4 mm ²	647008	32–49 ¹	647012	— ²
24 AWG 0.2 mm ²	647009	32–49 ¹	647013	— ²
26 AWG 0.12–0.15 mm ²	647010	32–49 ¹	647014	— ²
28 AWG 0.08–0.09 mm ²	647011	32–49 ¹	647015	— ²
Standard UL 94V-2, .000015 [0.00038] Gold Plated				
22 AWG 0.3–0.4 mm ²	647016	32–49 ¹	647020	— ²
24 AWG 0.2 mm ²	647017	32–49 ¹	647021	— ²
26 AWG 0.12–0.15 mm ²	647018	32–49 ¹	647022	— ²
28 AWG 0.08–0.09 mm ²	647019	32–49 ¹	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.		No. of Circuits	Dim.		No. of Circuits	Dim.		No. of Circuits	Dim.	
	A	B		A	B		A	B		A	B
2	.300 [7.62]	.227 [5.77]	6	.700 [17.78]	.627 [15.93]	10	1.100 [27.94]	1.027 [26.09]	14	1.500 [38.10]	1.427 [36.25]
3	.400 [10.16]	.327 [8.31]	7	.800 [20.32]	.727 [18.47]	11	1.200 [30.48]	1.127 [28.63]	15	1.600 [40.64]	1.527 [38.79]
4	.500 [12.70]	.427 [10.85]	8	.900 [22.86]	.827 [21.01]	12	1.300 [33.02]	1.227 [31.17]	16	1.700 [43.18]	1.627 [41.33]
5	.600 [15.24]	.527 [13.39]	9	1.000 [25.40]	.927 [23.55]	13	1.400 [35.56]	1.327 [33.71]	17	1.800 [45.72]	1.727 [43.87]
									18	1.900 [48.26]	1.827 [46.41]
									19	2.000 [50.80]	1.927 [48.95]

–55°C to +105°C

Technical Documents

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

Application Specification
114-1019 MTA-100 Connectors

Replacement IDC Contacts

Material and Finish

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



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

MTA-100
.100 [2.54]

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.

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 **4- — 0**

The correct ordering number is **4-641211-0**

All part numbers are the RoHS equivalent version. Example:

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

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

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

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

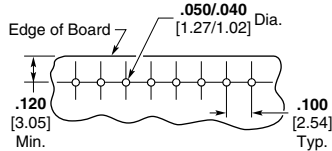
Straight Post (.025 [0.64] Square)



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



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



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



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

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

Base Part Numbers

Straight Posts		Right-Angle Posts	
Header Part Nos.	No. of Posts/RoHS Equiv.	Header Part Nos.	No. of Posts/RoHS Equiv.
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

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.

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 **4- -0**

The correct ordering number is **4-644456-0**

All part numbers are the RoHS equivalent version. Example:

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

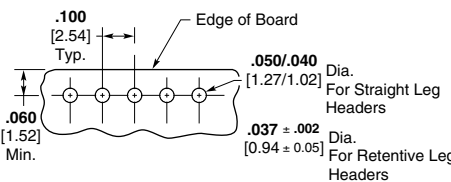


Right-Angle Post (.025 [0.64] Square)



Straight and Right-Angle Post with Retentive Legs

Connector Ordering Information



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



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

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

Base Part Numbers

Straight Posts				Right-Angle Posts			
Without Retentive Legs		With Retentive Legs		Without Retentive Legs		With Retentive Legs	
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated							
644456	32-58	644695	32-58	644457	32-58	644694	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

High temperature product available. Please contact Sales Engineer or Product Information Center.

MTA-100 .100 [2.54]

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.

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 **4- -0**

The correct ordering number is **4-641213-0**

All part numbers are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-641213-2
	thru
28	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.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	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	32-58	—	—	641214	32-58	—	—
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641124	32-58	—	—	641125	32-58	—	—

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.

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 **4- -0**

The correct ordering number is **4-641215-0**

All part numbers are the RoHS equivalent version. Example:

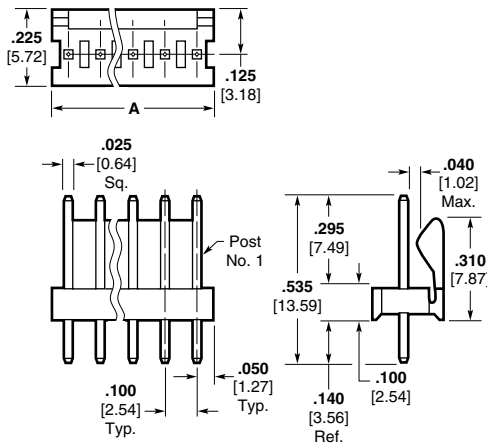
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	641215-2	3-641215-2
thru		
28	2-641215-8	5-641215-8

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

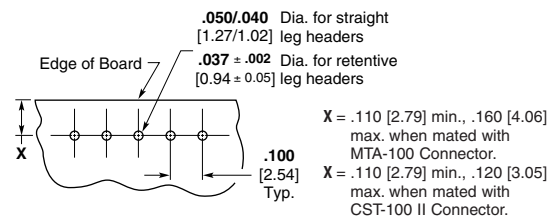
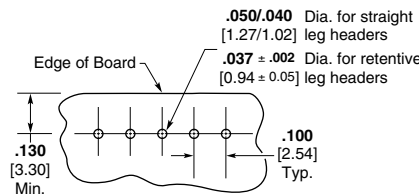
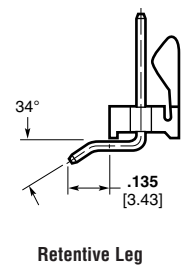
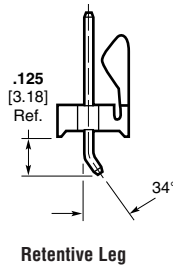
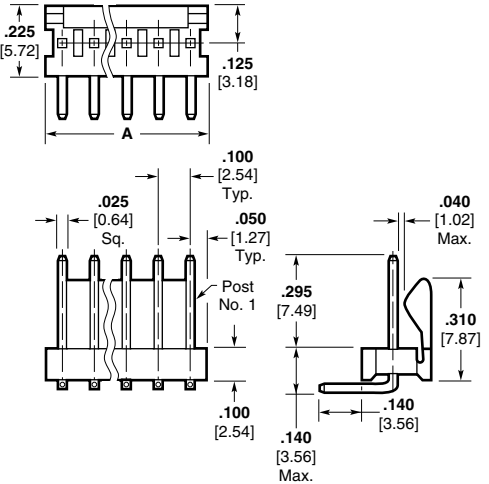
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

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)



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.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	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	32-58	—	—	641216	32-58	—	—
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641126	32-58	—	—	641127	32-58	—	—

MTA-100 .100 [2.54]

MTA-100 Headers with Retention Peg—Straight

Material and Finish

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

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

Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

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

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

Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number.

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
4- -0

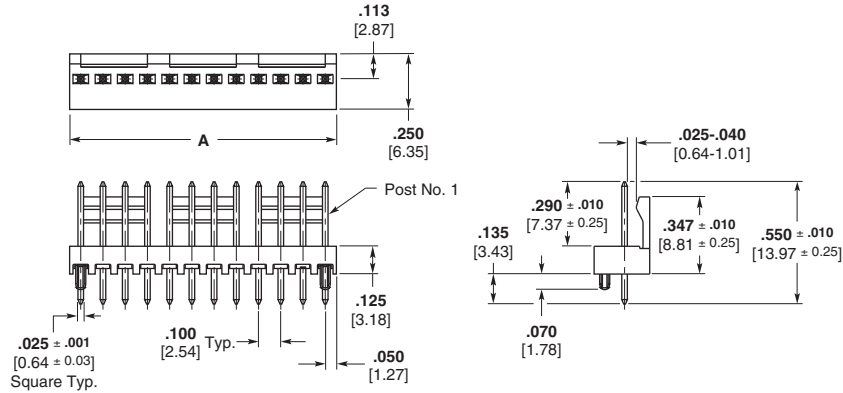
The correct ordering number is **4-647609-0**

All part numbers are the RoHS equivalent version. Example:

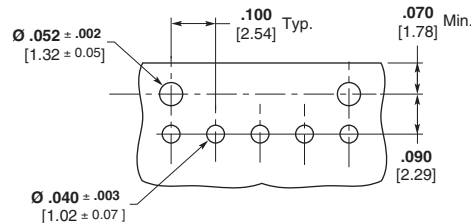
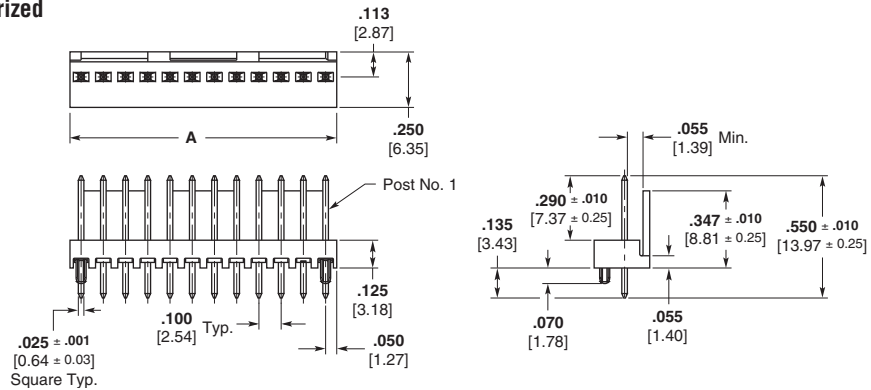
No. of Pos.	Standard Prefix/Suffix	Lead Free RoHS Prefix/Suffix
2	647609-2	3-647609-2
3	647609-3	3-647609-3
4	647609-4	3-647609-4
5	647609-5	3-647609-5
6	647609-6	3-647609-6
7	647609-7	3-647609-7
8	647609-8	3-647609-8
9	647609-9	3-647609-9
10	1-647609-0	4-647609-0
11	1-647609-1	4-647609-1
12	1-647609-2	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.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated			
647609	32-42	647623	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647626	32-42	647624	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647627	32-42	647625	32-42

Note:

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

MTA-100 High Profile Headers—Right-Angle

Material and Finish

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

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

Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].
4. This product can be mounted in the middle of the PC Board as shown in the PCB layout.

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

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

Header Ordering Information

The "Base Part Numbers" Chart at right shows the base part number.

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
4- -0

The correct ordering number is **4-647630-0**

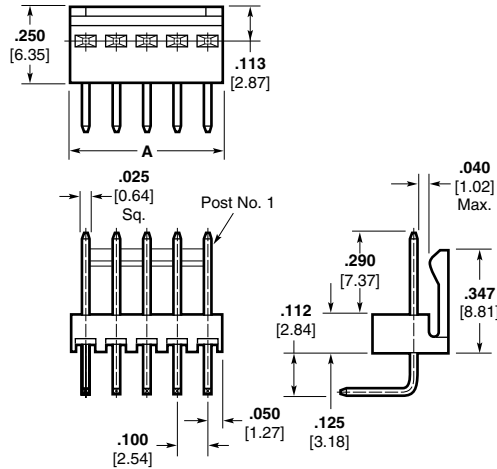
All part numbers are the RoHS equivalent version. Example:

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

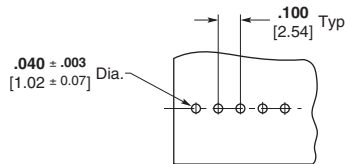
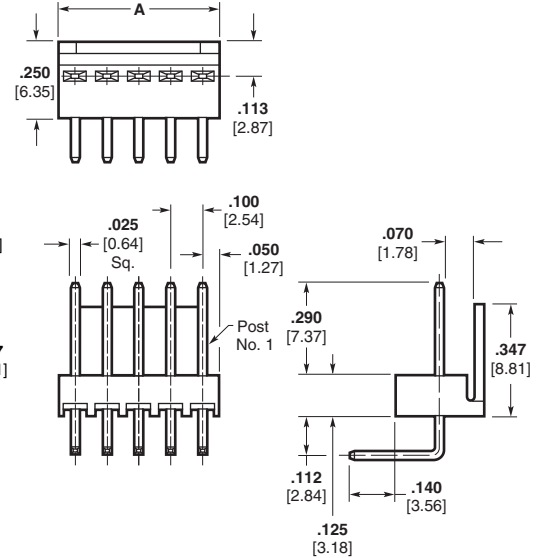
Friction Lock

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.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated			
647630	32-42	647651	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647629	32-42	647653	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647628	32-42	647652	32-42

Note:

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

MTA-100
.100 [2.54]

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

Material and Finish

Housing —

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

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

Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

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

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

Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number.

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
4- -0

The correct ordering number is
4-647047-0

All part numbers are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-647047-2
	thru
12	4-647047-2
13	NA
	thru
18	NA

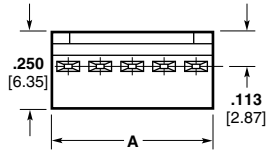
See page 15 for an explanation of RoHS lead free equivalents.

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

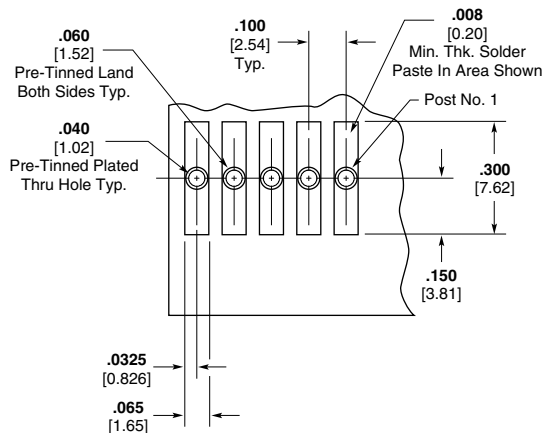
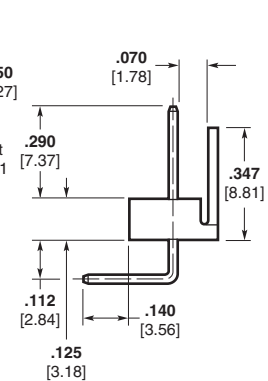
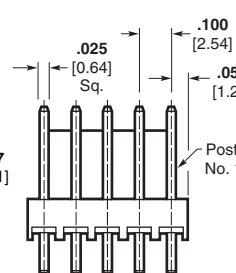
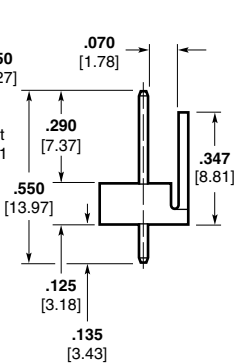
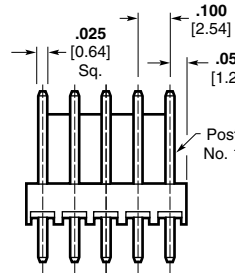
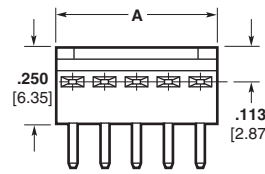
For use with Infrared Reflow Process

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

Straight Post (.025 [0.64] Square)



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



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

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

Base Part Numbers

Straight Posts		Straight Posts (Tube Loaded)		Right-Angle Posts	
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated					
647047	32-42	647298	32-42	647048	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated					
647109	32-42	647300	32-42	647114	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated					
647075	32-42	647299	32-42	647076	32-42

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

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

Material and Finish

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

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

Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

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

Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number.
 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 **4- -0**
 The correct ordering number is **4-647050-0**

All part numbers are the RoHS equivalent version. 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.

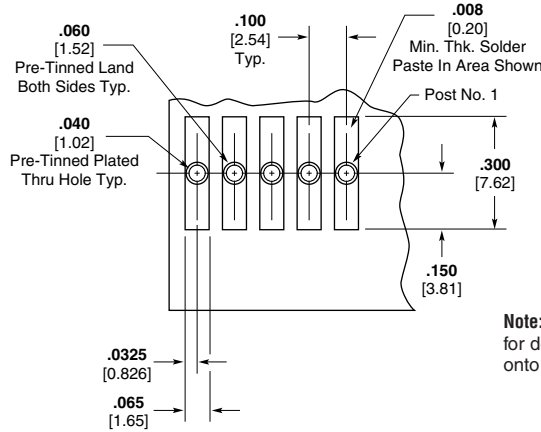
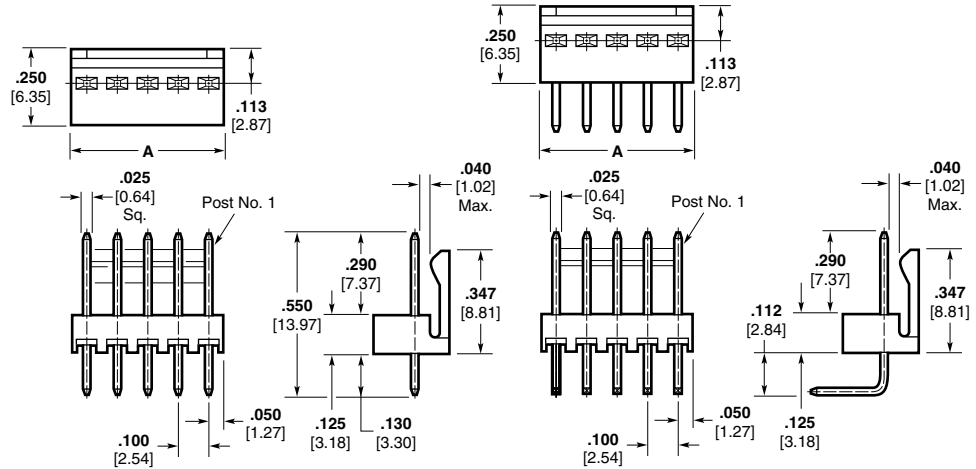
Note: All RoHS equivalent part numbers may not be available upon catalog release. If the number you need is not available, please contact Product Engineering to expedite your request.

For use with Infrared Reflow Process

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

Straight Post (.025 [0.64] Square)

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



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

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

Base Part Numbers

Straight Posts		Straight Posts (Tube Loaded)		Right-Angle Posts	
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated					
647050	32-42	647295	32-42	647051	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated					
647116	32-42	647297	32-42	647117	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated					
647078	32-42	647296	32-42	647079	32-42

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

MTA-100
 .100 [2.54]

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

Material and Finish

Housing —

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

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

Notes:

1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. To determine header overall length (dim. A) multiply .100 x the number of posts. Example: .100 x 10 posts equals 1.000 inch [25.4 mm].

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

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

Header Ordering Information

The “Base Part Numbers” Chart at right shows the base part number.

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
4- -0

The correct ordering number is **4-647106-0**

All part numbers are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-647106-2
12	4-647106-2

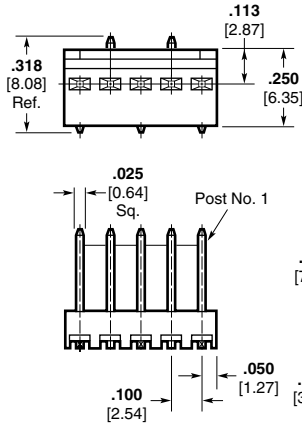
See page 15 for an explanation of RoHS lead free equivalents.

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

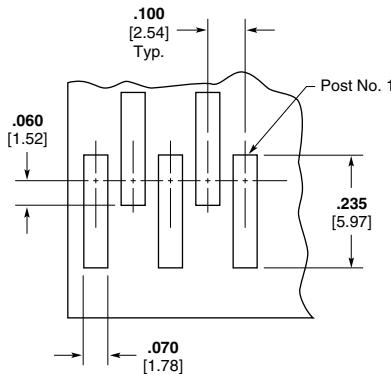
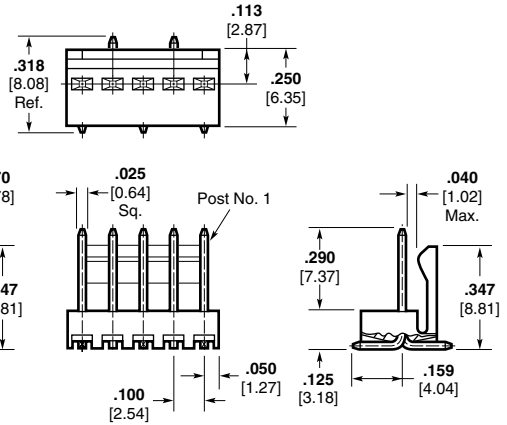
For use with Infrared Reflow Process

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

Polarized Header



Friction Lock Header



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

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

Base Part Numbers

Polarized Headers		Friction Lock Headers	
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated			
647106	32-42	647166	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated			
647108	32-42	647168	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated			
647107	32-42	647167	32-42

Tape Mount Part Numbers

Polarized Headers		Friction Lock Headers	
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.
Standard UL94V-0, Tin Plated			
647531	32-42	647502	32-42
Standard UL94V-0, .000030 [0.00076] Gold Plated			
		1744163	32-42
Standard UL94V-0, .000015 [0.00038] Gold Plated			
		647467	32-42

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

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.

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 **4- -0**

The correct ordering number is **4-644486-0**

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

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

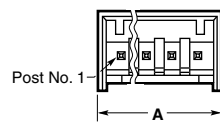
Notes:

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

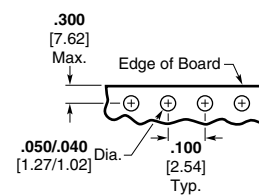
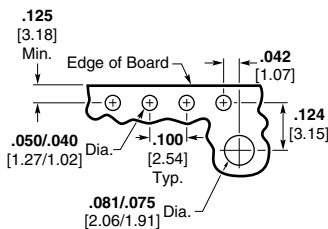
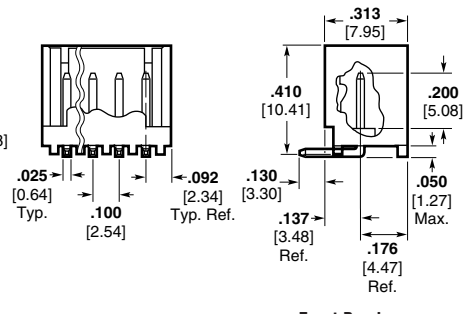
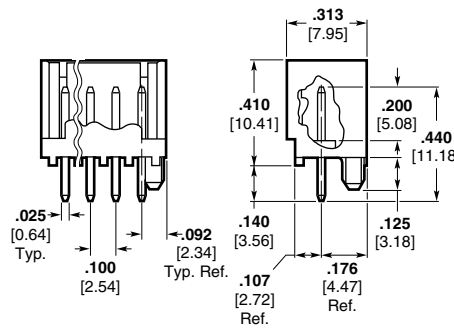
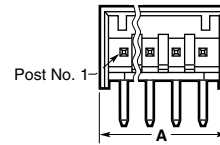
Header Length

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

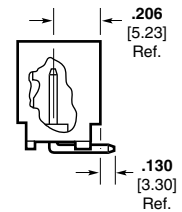
Straight Post (.025 [0.64] Square)



Right-Angle (.025 [0.64] Square)



Front Bend



Rear Bend

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			
With Pegs		Without Pegs		Without Pegs Only			
Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Front Bend	RoHS Equiv.	Rear Bend	RoHS Equiv.
Standard UL94V-0, Tin Plated							
644486	22-34	644861	22-34	644488	22-34	644803	22-34
Standard UL94V-0, .000030 [0.00076] Gold Plated							
644487	22-34	—	—	644489	22-34	—	—

Header Length

No. of Circuits	Dim. A	Prefix/Suffix
6	.684 17.37	3- -6
7	.784 19.91	3- -7
8	.884 22.45	3- -8
9	.984 24.99	3- -9

No. of Circuits	Dim. A	Prefix/Suffix
10	1.084 27.53	4- -0
11	1.184 30.07	4- -1
12	1.284 32.61	4- -2
13	1.384 35.15	4- -3

No. of Circuits	Dim. A	Prefix/Suffix
14	1.484 37.69	4- -4