

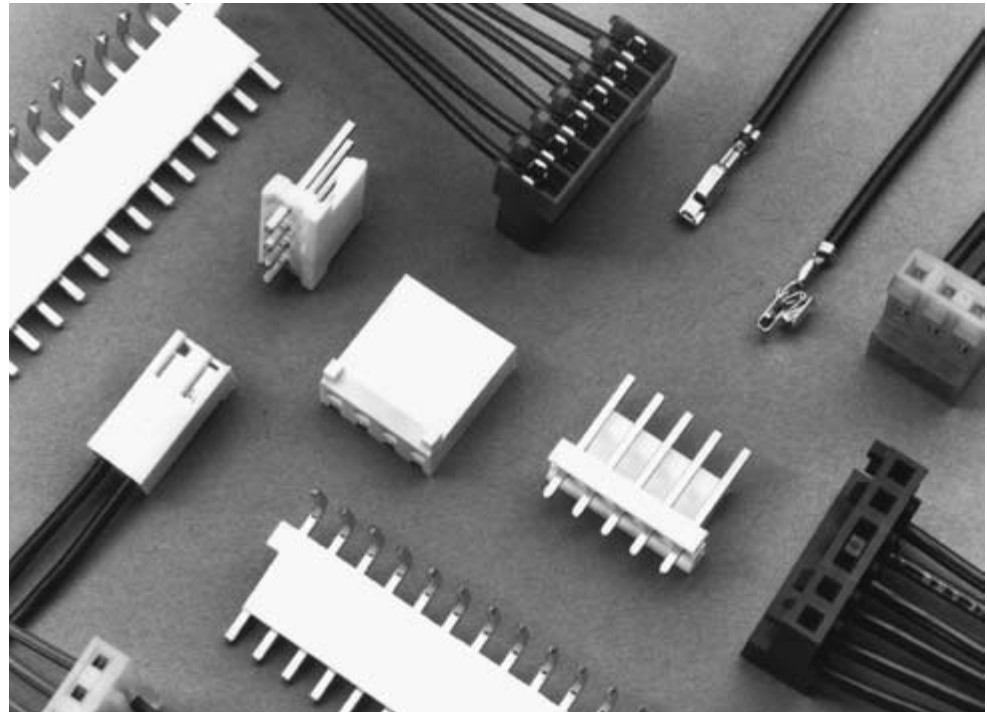


.156 [3.96] Centerline MTA-156 IDC Connectors and Headers

Product Facts

- Connectors and headers for 2 through 24 positions; wire sizes of 18, 20, 22, 24 and 26 AWG [0.9–0.12 mm²]
- Connectors and headers, except shrouded headers, are end-to-end stackable
- Quad Connectors for higher current rating (page 54)
- Posted connectors for 2, 3, 4, 6, 9, 12, 15 and 24 positions
- Card edge connectors for 3, 6, 9, 12, 15, 18 and 20 through 24 positions
- Connectors preloaded with IDC contacts
- All contacts are slotted for insulation displacement (IDC) termination technique
- Connector styles include both closed end and feed-thru, with and without locking ramps and polarizing tabs
- Molded ribs on housing do not allow reverse mating
- Contacts are lubricated for fretting corrosion protection
- Benefits derived from the MTA-156 system include increases quality and ease of handling such as —
 - One-step assembly
 - No wire stripping
 - No contact damage
 - Reduced wiring errors
 - Simpler tooling
 - Simple maintenance and repair
- Meets the material requirements of Table 23.1 of UL 1410 Standards for Television Receiver and Video Products (wire-to-post connectors only)
- Recognized under the Component Program of Underwriters Laboratories Inc.,  File No. E28476
- Certified by Canadian Standards Association,  File No. LR7189



MTA-156
.156 [3.96]

MTA-156 connectors accept discrete and ribbon cable wire sizes ranging from 18–26 AWG [0.9–0.12 mm²] with maximum insulation outside diameter .095 [2.41] for single wire and .070 [1.78] for mass termination of wires. Tin plated solid, fused stranded or stranded (7, 16, and 19 strands) wire with PVC insulation can be used on 18 AWG [0.8–0.9 mm²] MTA-156 connectors; 7, 10, and 19 stranded wire on 20 AWG [0.5–0.6 mm²] MTA-156 connectors; and 7 and 19 stranded wire on 22–26 AWG [0.4–0.12 mm²] MTA-156 connectors.

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

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

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

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

Performance Data*

- Voltage Rating**—600 vac
- Current Rating**—7 amp max. for MTA-156 Connector
- Low-Level Resistance**—3.0 mΩ max. initial
- Dielectric Withstanding Voltage**—2200 vac/1 min.
- Insulation Resistance**—5000 MΩ min. initial
- Operating Temperature**—–55° C to +105° C

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

Technical Documents

Product Specification

108-1051 MTA-156 Connectors

Application Specifications

- 114-1020 MTA-156 Connectors, Posted Connectors and Card Edge Connectors
- 114-1032 MTA-156 Ribbon Cable Assembly

Note: Refer to page 70 for approved wire listings.

MTA-156 Connector/Header Mateability Guide (Continued)

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

Matrix for .000030
[0.00076] Gold Plated
Part Numbers

Connectors	Headers															
	641202	641203	641204	641207	641208	641209	641210	641211	641212	641213	641214	641215	641216	641217	641218	641219
641217	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641218	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641219	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641220	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641221	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641222	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641223	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641224	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641225	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641226	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641227	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641228	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641229	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641230	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641231	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641232	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641233	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641234	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641235	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641236	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644460	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644662	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644663	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644687	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644718	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644720	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Matrix for .000015
[0.00038] Gold Plated
Part Numbers

Connectors	Headers															
	641113	641114	641115	641118	641119	641120	641121	641122	641123	641124	641125	641126	641127	641128	641129	641130
641148	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641149	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641150	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641151	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641152	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641153	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641154	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641155	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641156	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641157	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641168	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641169	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641170	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641171	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641172	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641173	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641174	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641175	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641176	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
641177	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
644284	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
647478	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
647479	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
647496	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

MTA-156 IDC Connectors—Closed End

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

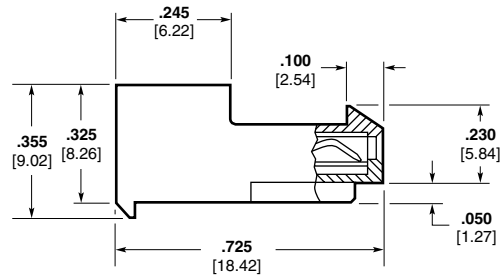
- 26 AWG — Blue
- 24 AWG — White
- 22 AWG — Red
- 20 AWG — Yellow
- 18 AWG — Orange

All Wire Sizes in UL94V-0 — Black

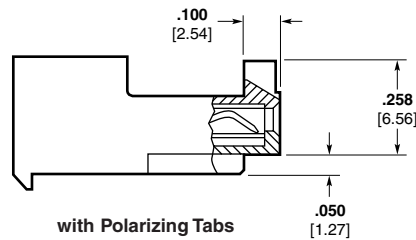
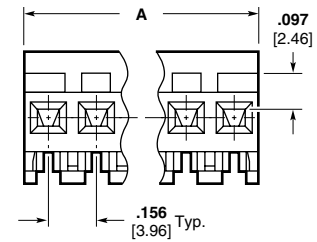
Notes:

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

Closed End with Locking Ramp



without Polarizing Tabs

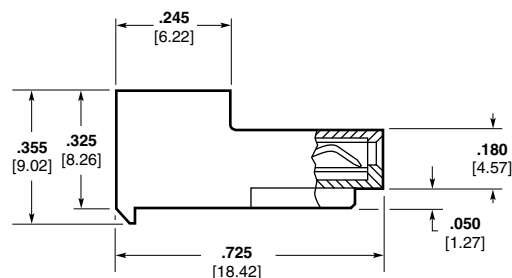


with Polarizing Tabs

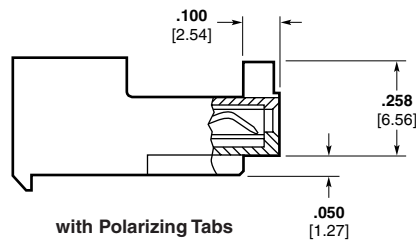
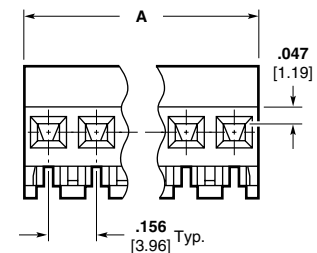
For mateability options, see matrix on pages 34 and 35.

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

Closed End without Locking Ramp



without Polarizing Tabs



with Polarizing Tabs

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

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

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.156 [3.96]

Connector Ordering Information

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

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

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

1- -0

The correct ordering number is

1-640426-0

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

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

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

MTA-156 IDC Connectors—Closed End (Continued)

Base Part Numbers

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

¹ Other circuit sizes are available upon request. Minimums may apply.

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

MTA-156 IDC Connectors—Feed-Thru

Material and Finish

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

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

Color Coding by Wire Size for UL94V-2 Connectors

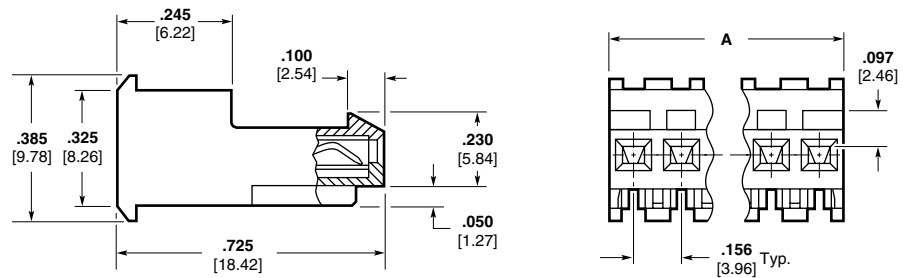
- 26 AWG — Blue
- 24 AWG — White
- 22 AWG — Red
- 20 AWG — Yellow
- 18 AWG — Orange

All Wire Sizes in UL94V-0 — Black

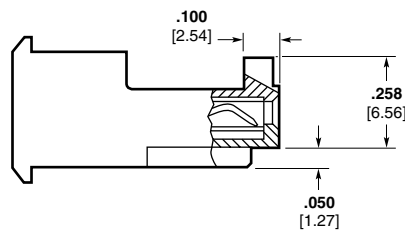
Notes:

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

Feed-Thru with Locking Ramp



without Polarizing Tabs

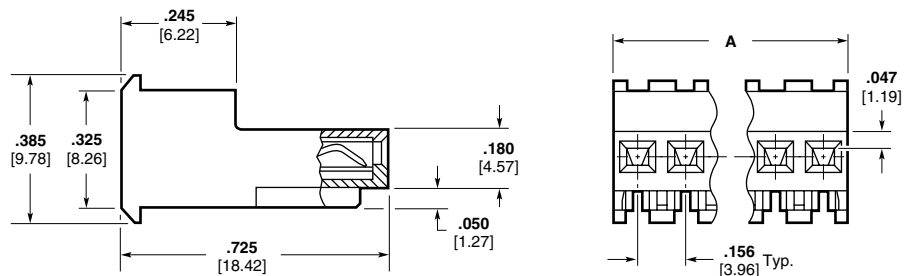


with Polarizing Tabs

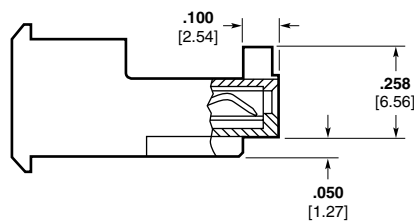
For mateability options, see matrix on pages 34 and 35.

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

Feed-Thru without Locking Ramp



without Polarizing Tabs



with Polarizing Tabs

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

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

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Connector Ordering Information

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

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

Base number **640599** plus
prefix-and-suffix
1- -0

The correct ordering number is

1-640599-0

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

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

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

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

Base Part Numbers

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

¹ Other circuit sizes are available upon request. Minimums may apply.

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

MTA-156 Connector Accessories

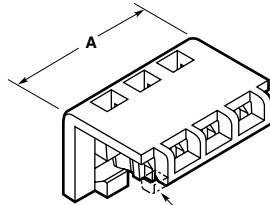
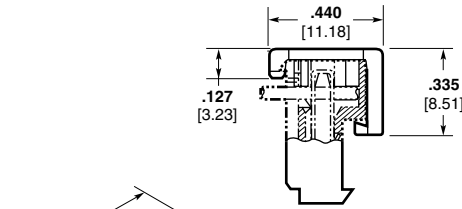
Closed End Covers

Material (RoHS Compliant)

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

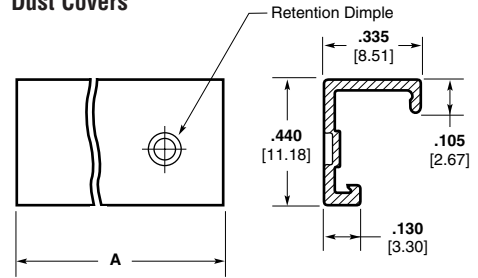
Dust Covers — UL94V-0 rated, polyester, white

Strain Relief Covers



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

Dust Covers



Base Part Numbers

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

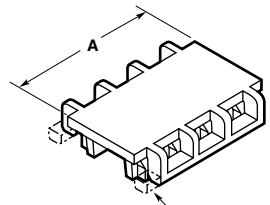
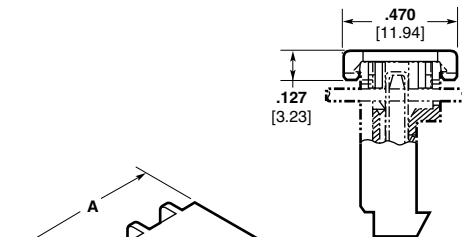
Feed-Thru Covers

Material (RoHS Compliant)

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

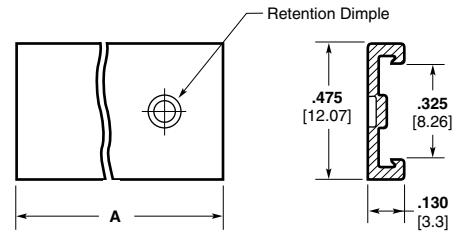
Dust Covers — UL94V-0 rated, polyester, white

Strain Relief Covers



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

Dust Covers



Base Part Numbers

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

Cover Ordering Information

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

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

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

1 - - 0

The correct ordering number is

1-643067-0

Cover Length

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

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

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

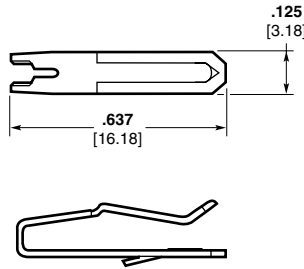
MTA-156 Connector Accessories (Continued)

Replacement IDC Contacts

Material and Finish

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

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

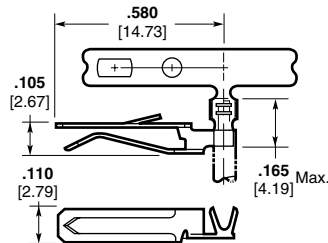


Wire Size		Part Numbers		
AWG	mm ²	Tin Plated	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated
18	0.8–0.9	640631-3	641143-4	641143-3
20	0.5–0.6	640632-3	641144-4	641144-3
22	0.3–0.4	640633-3	641145-4	641145-3
24	0.2	640634-3	641146-4	641146-3
26	0.12–0.15	640635-3	641147-4	641147-3

Crimp Snap-in Contacts

Material and Finish

Contacts — Phosphor bronze, tin plated



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

*Hand Tool No. 59837-1 (408-6528)
**AMP-O-LECTRIC Model "G" Termination Machine (Request Catalog 65828)
Note: Requires applicator. For part number, call Technical Support.

Special applications for crimp snap-in contacts are:

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

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

Electronics

MTA-156 Connector Accessories (Continued)

Keying Plugs

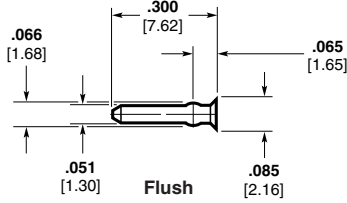
Material (RoHS Compliant)

UL94V-2 rated, nylon, natural color

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

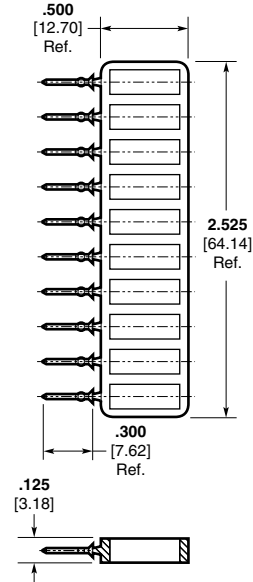
Loose Piece

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

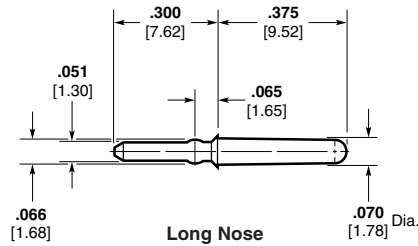


On Carrier Strip

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



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



Panel Mount End Caps

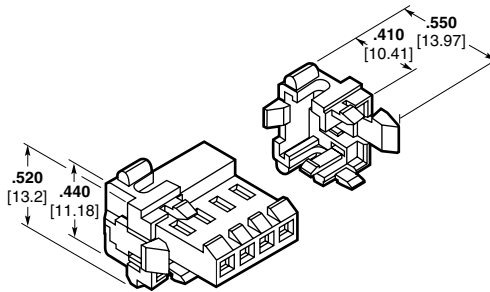
Part No. 641440-1
Part No. 641533-1
(2-position only)

Material (RoHS Compliant)

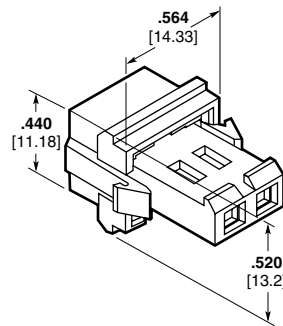
UL94V-2 rated, nylon, black

Notes:

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

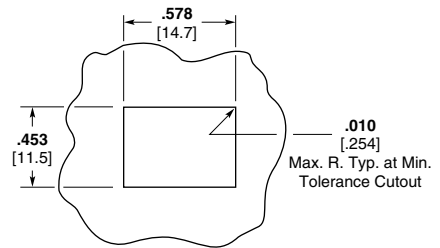
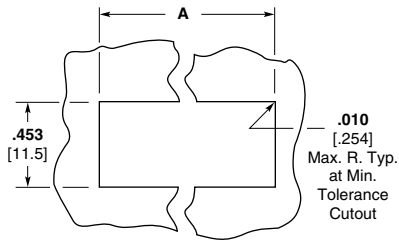


3- thru 24-Position
641440-1
See Note 1



Two-Position Only
641533-1

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



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

MTA-156
.156 [3.96]

Electronics

**MTA-156 Posted
Connector/Connector
Mateability Guide**

**Matrix for Tin Plated
Part Numbers**

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

Connectors

**Posted
Connectors**

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

**MTA-156
.156 [3.96]**

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

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

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

Posted Connectors

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

Connectors

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

Posted Connectors

	643895	647476	647481	647497
641148	Y	Y	Y	Y
641149	Y	Y	Y	Y
641150	Y	Y	Y	Y
641151	Y	Y	Y	Y
641152	Y	Y	Y	Y
641153	N	N	N	N
641154	N	N	N	N
641155	N	N	N	N
641156	N	N	N	N
641157	N	N	N	N
641168	Y	Y	Y	Y
641169	Y	Y	Y	Y
641170	Y	Y	Y	Y
641171	Y	Y	Y	Y
641172	Y	Y	Y	Y
641173	N	N	N	N
641174	N	N	N	N
641175	N	N	N	N
641176	N	N	N	N
641177	N	N	N	N
644284	N	N	N	N
647478	N	N	N	N
647479	N	N	N	N
647496	N	N	N	N

Connectors

MTA-156
.156 [3.96]

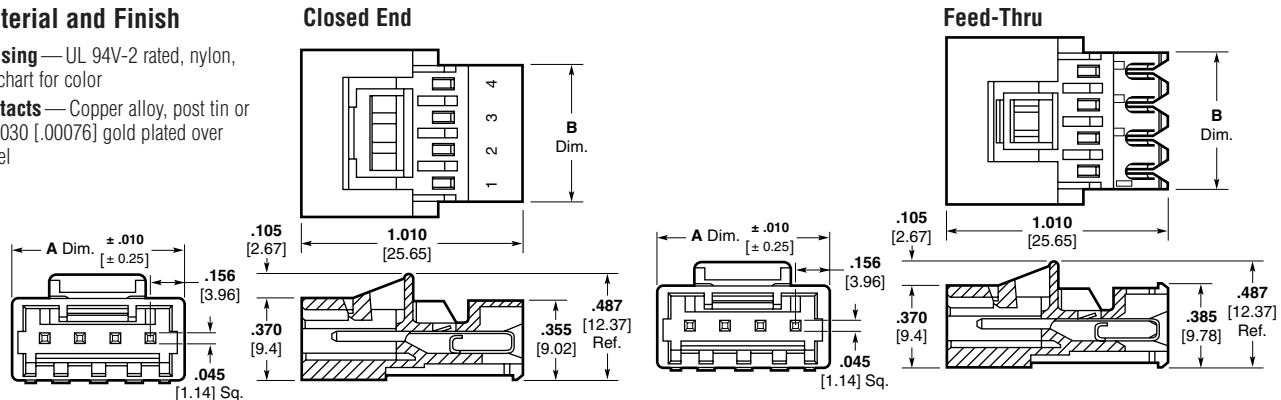
Electronics

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

Material and Finish

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

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



Notes:

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

Connector Ordering Information

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

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

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

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

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

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

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

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

Performance Data

Voltage Rating — 600 VAC

Current Rating — 7 amp max.

Low-Level Resistance — 7 mΩ max. initial

Dielectric Withstanding Voltage — 1500 VAC/1 min.

Insulation Resistance — 5000 MΩ min. initial

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

Base Part Numbers

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

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

² Parts can be made available upon request. Minimums may apply.

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

Technical Documents

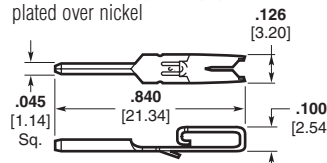
Product Specification
108-1065 MTA-156 Posted Connector

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

Replacement IDC Contacts

Material and Finish

Contacts — Copper alloy, post tin plated over nickel



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

Electronics

MTA-156 Flat Headers—Straight

Material and Finish

Housing — UL94V-0 rated, polyester, white

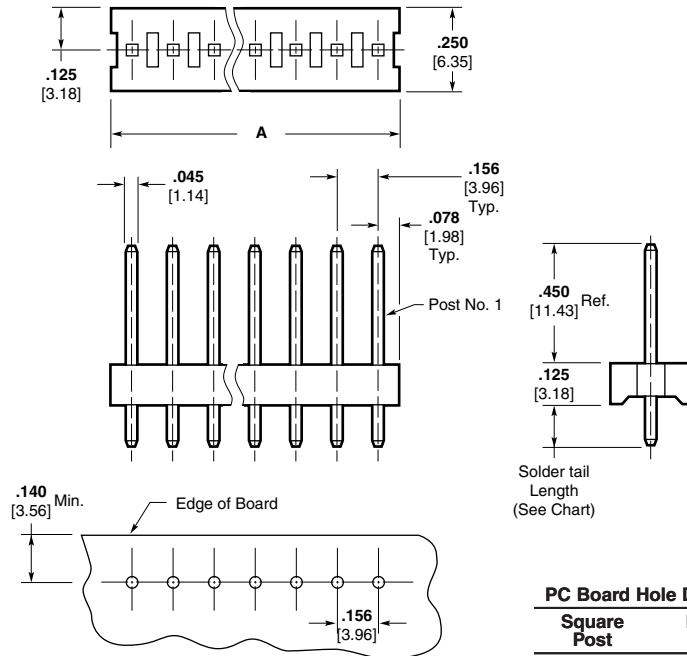
Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

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

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

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



Solder tail Length (See Chart)

PC Board Hole Diameters

Square Post	Round Post
.080/.070 [2.03/1.78]	.070/.060 [1.78/1.52]

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

Header Ordering Information

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

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

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

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

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

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

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

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

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

Base Part Numbers

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

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

MTA-156
.156 [3.96]

MTA-156 Flat Headers—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. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards and .175 [4.45] solder tail lengths are for .093-.125 [2.36-3.18] thick printed circuit boards.
4. To determine header overall length (Dim. A), multiply .156 x the number of posts. Example: .156 x 10 posts equals 1.560 inches [39.62 mm].

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

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

Header Ordering Information

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

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

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

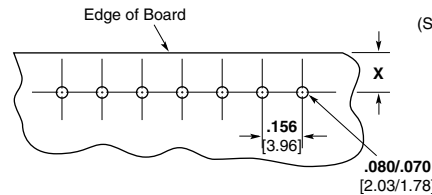
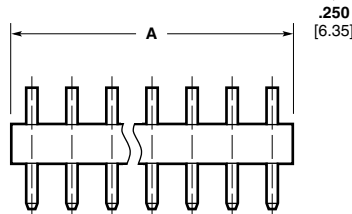
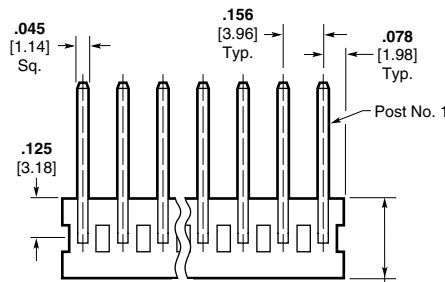
The correct ordering number is **1-641204-0**

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

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

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

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

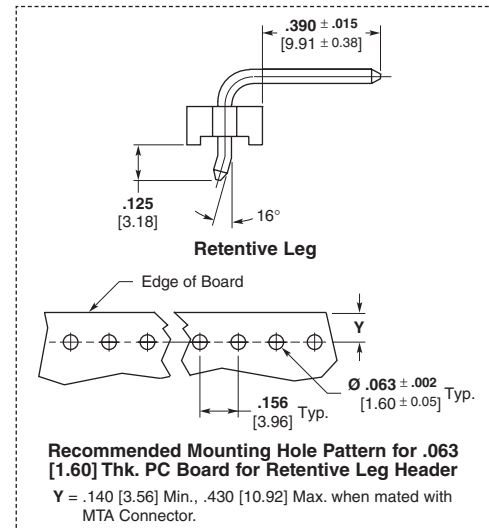
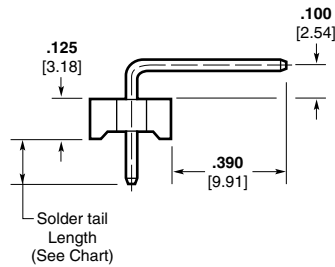


Recommended Mounting Hole Pattern for .062 [1.57] Thk. PC Board

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

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

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



Recommended Mounting Hole Pattern for .063 [1.60] Thk. PC Board for Retentive Leg Header

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

Base Part Numbers

		Square Posts			
		.125 [3.18] Solder tail		.175 [4.45] Solder tail	
Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated					
647646	2-12	640385	2-24	644751	2-24
Standard UL94V-0, .000030 [0.00076] Gold Plated					
—	—	641204	2-24 32-54	644758	2-24 32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated					
—	—	641115	2-24 32-54	644765	2-24 32-54

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

MTA-156 Friction Lock Headers—Straight

Material and Finish

Housing—UL94V-0 rated, polyester, white

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

Notes:

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

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

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

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

Header Ordering Information

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

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

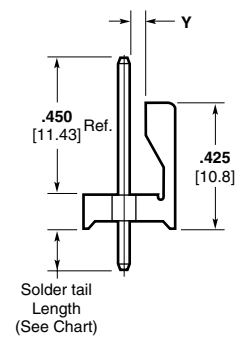
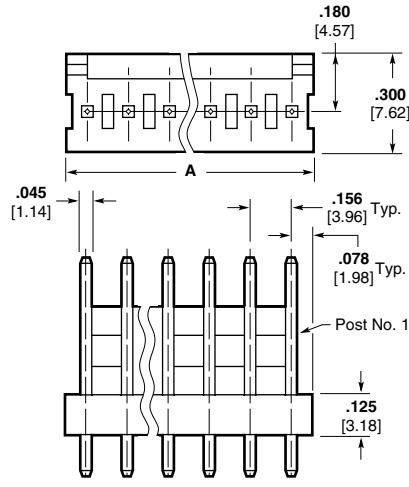
Base number **641208** plus prefix-and-suffix **1- -0**

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

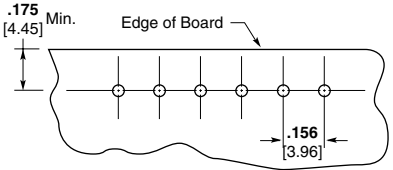
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

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

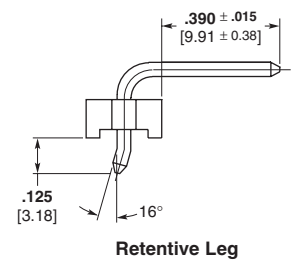


Y = .068 [1.73] Max. 2-8 position tin plated and 2-24 position gold plated headers.
Y = .073 [1.85] 9-24 position tin plated headers.



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

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



Retentive Leg

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

Base Part Numbers

Header Part Nos.	No. of Posts/ RoHS Equiv.	Square Posts		Round Posts	
		Header Part Nos.	No. of Posts/ RoHS Equiv.	Header Part Nos.	No. of Posts/ RoHS Equiv.
Standard UL94V-0, Tin Plated					
1744017	2-12	640445	2-24	644752	2-24
Standard UL94V-0, .000030 [0.00076] Gold Plated					
—	—	641208	2-24 32-54	644759	2-24 32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated					
—	—	641119	2-24 32-54	644766	2-24 32-54

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

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

MTA-156
.156 [3.96]

MTA-156 Friction Lock Headers—Right-Angle

Material and Finish

Housing — UL94V-0 rated, polyester, white

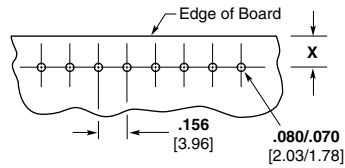
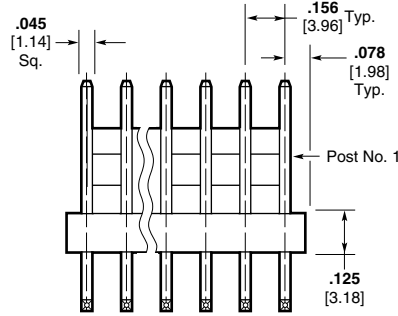
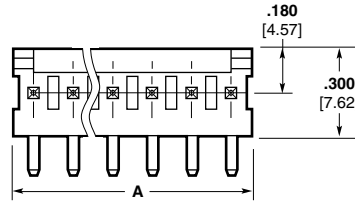
Posts — Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

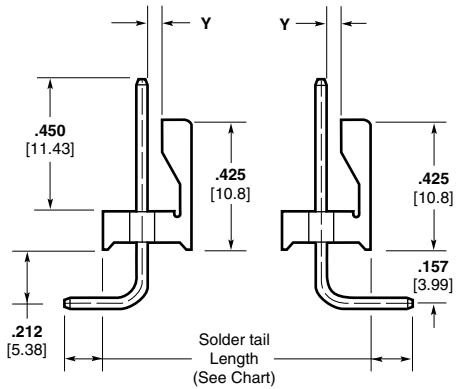
1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the solder tail.
3. .125 [3.18] solder tail lengths are for .062 [1.57] thick printed circuit boards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

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

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



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



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

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

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

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

MTA-156
.156 [3.96]

Header Ordering Information

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

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

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

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

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

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

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

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

Base Part Numbers

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

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

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

Electronics

MTA-156 Polarized Lock Headers—Straight

Material and Finish

Housing—UL94V-0 rated, polyester, white

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

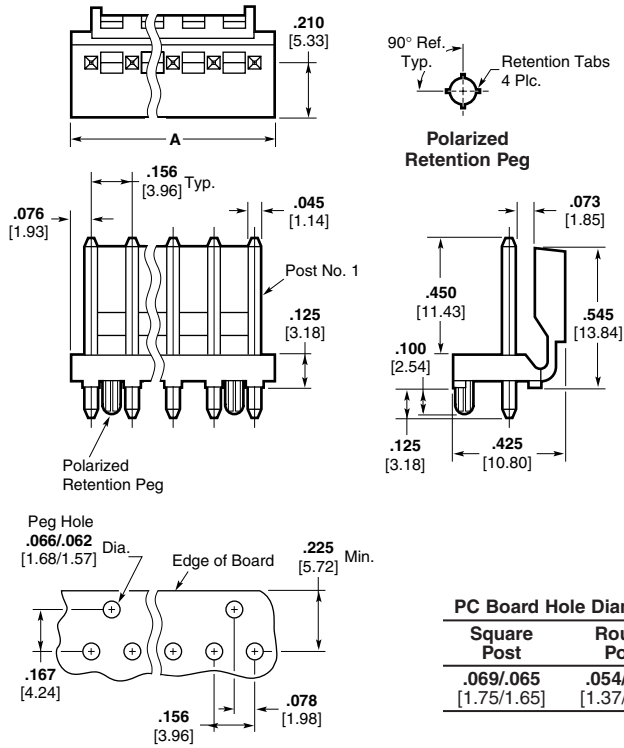
Notes:

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

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

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

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



PC Board Hole Diameters	
Square Post	Round Post
.069/.065 [1.75/1.65]	.054/.050 [1.37/1.27]

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

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

Header Ordering Information

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

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

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

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

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

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

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

Base Part Numbers

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

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

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

MTA-156
.156 [3.96]

MTA-156 Polarized Lock Headers—Right-Angle

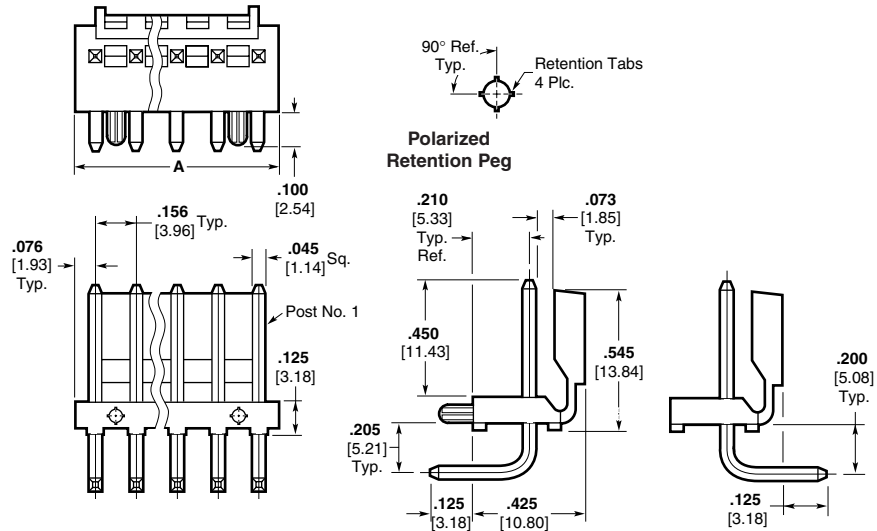
Material and Finish

Housing — UL94V-0 rated, polyester, white

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

Notes:

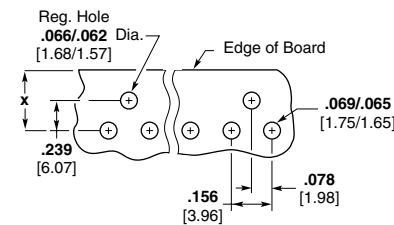
1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Peg holes are not required in PC Boards when headers without pegs are used.
3. One peg only on a 2 position header, other position sizes have two pegs.
4. Headers with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



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

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

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



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

Front Bend
X = .350 [8.89] Min., .825 [20.96] Max., when mated with MTA Connector.
X = .350 [8.89] Min. when mated with SL-156 Connector.

Rear Bend
X = .500 [12.7] Min., .700 [17.78] Max., when mated with MTA Connector.
X = .500 [12.7] Min., when mated with SL-156 Connector.

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

Header Ordering Information

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

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

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

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

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

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

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

Base Part Numbers

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

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

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

MTA-156 Friction Lock High Temperature Headers—Straight

Maximum Temperature Rating: 280°C

Material and Finish

Housing—UL94V-0 rated, nylon, black

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

Notes:

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

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

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

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

Header Ordering Information

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

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

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

The correct ordering number is **1-647648-0**

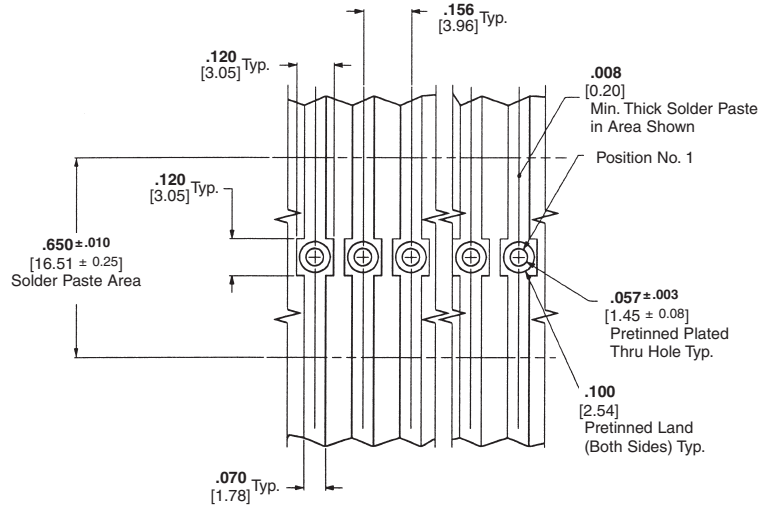
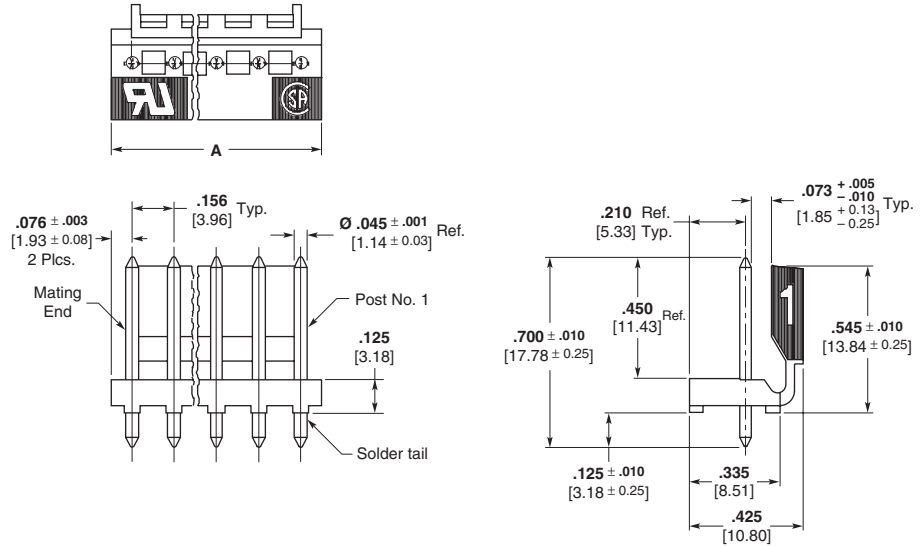
The set of numbers in **bold face** are the RoHS equivalent version of the standard product. Example:

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

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

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

For use with Infrared Reflow Process



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

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

Base Part Numbers

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

Note:

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

MTA-156
.156 [3.96]

MTA-156 Shrouded Headers—Straight and Right-Angle

Material and Finish

Housing—UL94V-0 rated, polyester, black

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

Notes:

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

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

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

Header Ordering Information

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

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

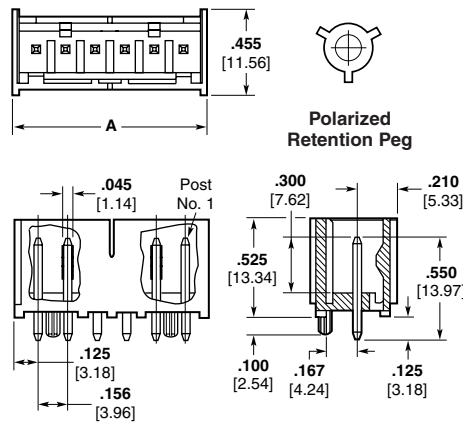
1- -0

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

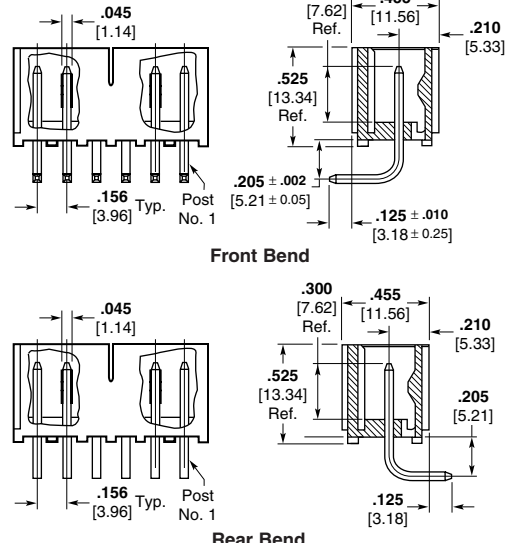
No. of Pos.	Dim. A	Standard Prefix/Suffix	RoHS Prefix/Suffix
2	.406 10.31	-2	2--2
3	.562 14.27	-3	2--3
4	.718 18.24	-4	2--4
5	.874 22.20	-5	2--5
6	1.030 26.16	-6	2--6
7	1.186 30.12	-7	2--7
8	1.342 34.09	-8	2--8
9	1.498 38.05	-9	2--9
10	1.654 42.01	1--0	3--0
11	1.810 45.97	1--1	3--1
12	1.966 49.94	1--2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

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

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



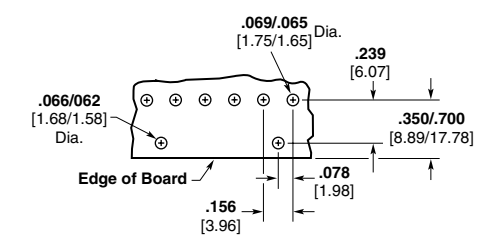
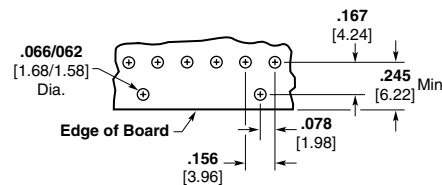
Right-Angle (.045 [1.14] Square)



PC Board Hole Diameters

Square Post	Round Post
.069/.065 [1.75/1.65]	.054/.050 [1.37/1.27]

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



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

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

Base Part Numbers

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

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