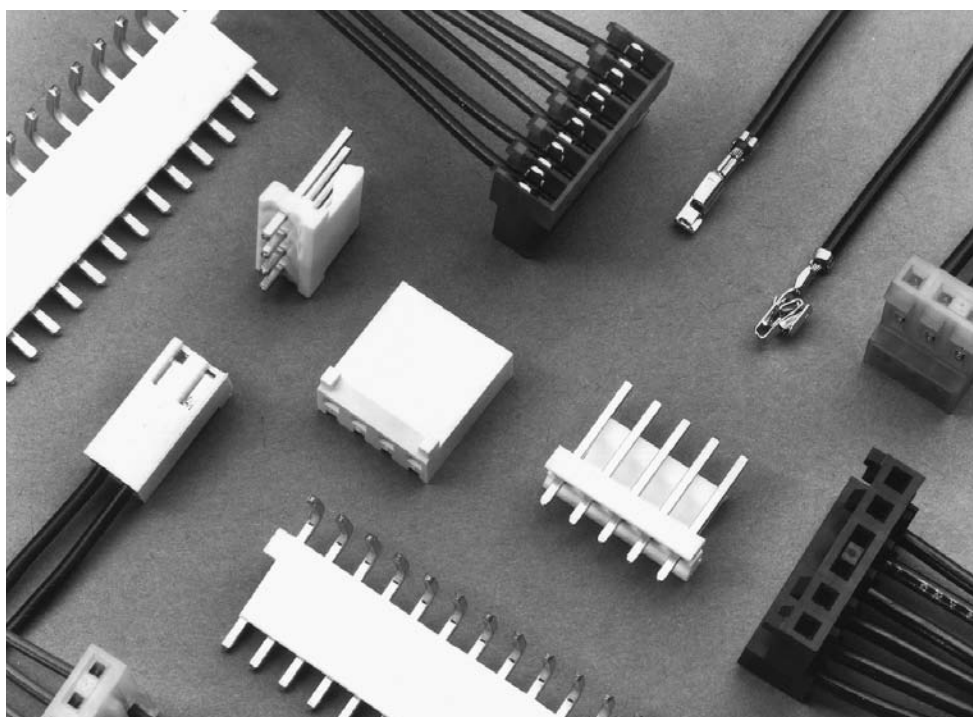


.156 [3.96] Centerline MTA-156 IDC Connectors and Headers

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 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
.156 [3.96]

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	N	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

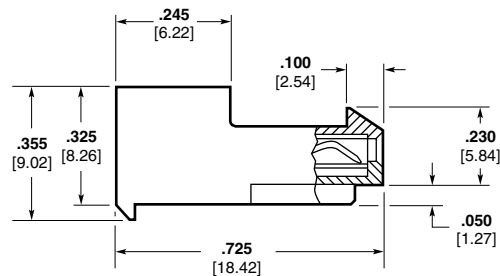
26 AWG—Blue
24 AWG—White
22 AWG—Red
20 AWG—Yellow
18 AWG—Orange

All Wire Sizes in UL94V-0—Black

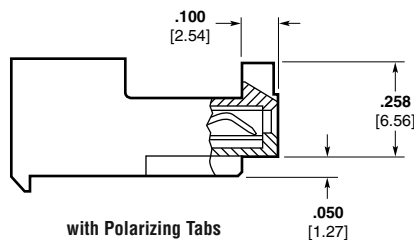
Notes:

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].

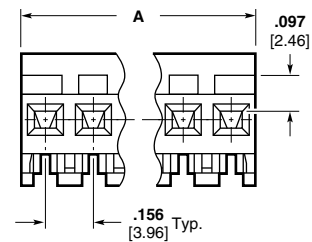
Closed End with Locking Ramp



without Polarizing Tabs



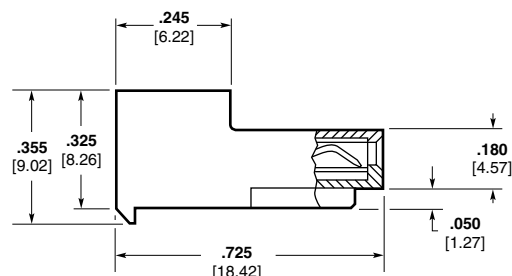
with Polarizing Tabs



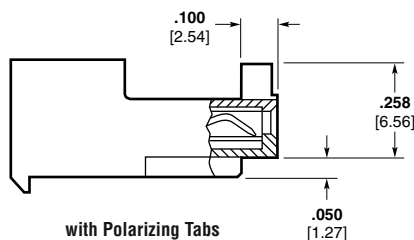
For mateability options, see matrix on pages 34 and 35.

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).

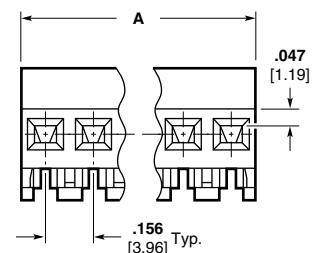
Closed End without Locking Ramp



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.

MTA-156 IDC Connectors—Closed End (Continued)

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

4 — -0

The correct ordering number is

4-640426-0

All part numbers in **bold face** are the RoHS equivalent version. Example:

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

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.	Connector RoHS Equiv.	Connector Part Nos.	Connector RoHS Equiv.	Connector Part Nos.	RoHS Equiv.	Part Nos.	RoHS Equiv.
Standard UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640426	32–54	643817	32–54	640431	32–54	644461 ¹	32–44
20 AWG 0.5–0.6 mm ²	640427	32–54	643818	32–54	640432	32–54	644462 ¹	32–44
22 AWG 0.3–0.4 mm ²	640428	32–54	643819	32–54	640433	32–54	644463 ¹	32–44
24 AWG 0.2 mm ²	640429	32–54	643820	32–54	640434	32–54	644464 ¹	32–44
26 AWG 0.12–0.15 mm ²	640430	32–54	643821	32–54	640435	32–54	—	—
Tape Mounted on Reel UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640472	32–54	644878	32–54	640477	32–54	—	—
20 AWG 0.5–0.6 mm ²	640473	32–54	—	—	640478	32–54	—	—
22 AWG 0.3–0.4 mm ²	640474	32–54	644783	32–54	640479	32–54	644791 ¹	32–44
24 AWG 0.2 mm ²	640475	32–54	—	—	640480	32–54	—	—
26 AWG 0.12–0.15 mm ²	640476	32–54	—	—	640481	32–54	—	—
Standard UL94V-2, .000030 [0.00076] Gold Plated								
18 AWG 0.8–0.9 mm ²	641217	32–54	644460 ¹	32–42	641222	32–54	—	—
20 AWG 0.5–0.6 mm ²	641218	32–54	644663 ¹	32–42	641223	32–54	—	—
22 AWG 0.3–0.4 mm ²	641219	32–54	644662 ¹	32–42	641224	32–54	644687 ¹	32–44
24 AWG 0.2 mm ²	641220	32–54	—	—	641225	32–54	—	—
26 AWG 0.12–0.15 mm ²	641221	32–54	—	—	641226	32–54	—	—
Standard UL94V-2, .000015 [0.00038] Gold Plated								
18 AWG 0.8–0.9 mm ²	641148	32–54	644284 ¹	32–42	641153	32–54	—	—
20 AWG 0.5–0.6 mm ²	641149	32–54	—	—	641154	32–54	—	—
22 AWG 0.3–0.4 mm ²	641150	32–54	647478 ¹	32–42	641155	32–54	—	—
24 AWG 0.2 mm ²	641151	32–54	—	—	641156	32–54	—	—
26 AWG 0.12–0.15 mm ²	641152	32–54	—	—	641157	32–54	—	—
Standard UL94V-0, Tin Plated (Black in color)								
18 AWG 0.8–0.9 mm ²	644860 ¹	32–42	—	—	644502 ¹	32–42	644082 ¹	32–42
22 AWG 0.3–0.4 mm ²	—	—	—	—	644501 ¹	32–42	644566 ¹	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

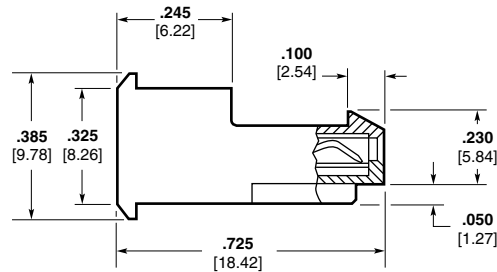
26 AWG — Blue
24 AWG — White
22 AWG — Red
20 AWG — Yellow
18 AWG — Orange

All Wire Sizes in UL94V-0 —
Black

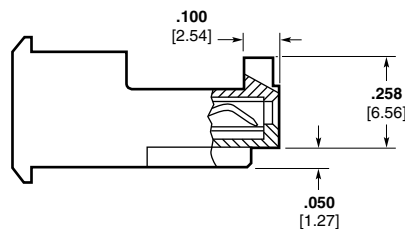
Notes:

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].

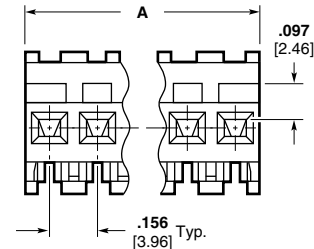
Feed-Thru with Locking Ramp



without Polarizing Tabs



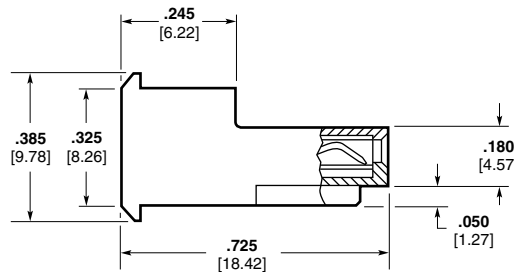
with Polarizing Tabs



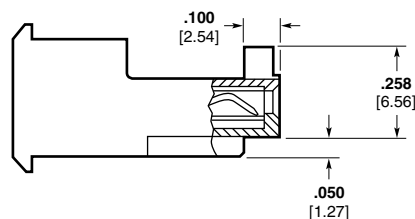
For mateability options, see matrix on pages 34 and 35.

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).

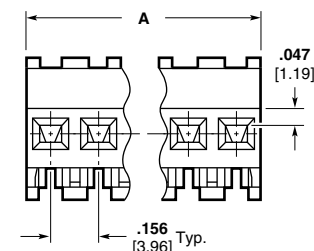
Feed-Thru without Locking Ramp



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.

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

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
4- -0

The correct ordering number is

4-640599-0

The part numbers in **bold face** are the RoHS equivalent version. Example:

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

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.	Connector RoHS Equiv.	Connector Part Nos.	Connector RoHS Equiv.	Connector Part Nos.	RoHS Equiv.	Part Nos.	RoHS Equiv.
Standard UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	640599	32–54	644465 ¹	32–44	640604	32–54	644469 ¹	32–44
20 AWG 0.5–0.6 mm ²	640600	32–54	644466 ¹	32–44	640605	32–54	644470 ¹	32–44
22 AWG 0.3–0.4 mm ²	640601	32–54	644467 ¹	32–44	640606	32–54	644471 ¹	32–44
24 AWG 0.2 mm ²	640602	32–54	644468 ¹	32–44	640607	32–54	644472 ¹	32–44
26 AWG 0.12–0.15 mm ²	640595	32–54	—	—	640608	32–54	—	—
Tape Mounted on Reel UL94V-2, Tin Plated								
18 AWG 0.8–0.9 mm ²	641302	32–54	—	—	641306	32–54	—	—
20 AWG 0.5–0.6 mm ²	641303	32–54	—	—	641307	32–54	—	—
22 AWG 0.3–0.4 mm ²	641304	32–54	—	—	641308	32–54	—	—
24 AWG 0.2 mm ²	641305	32–54	—	—	641309	32–54	—	—
26 AWG 0.12–0.15 mm ²	641301	32–54	—	—	641310	32–54	—	—
Standard UL94V-2, .00003 [.00076] Gold Plated								
18 AWG 0.8–0.9 mm ²	641227	32–54	644718 ¹	32–44	641232	32–54	—	—
20 AWG 0.5–0.6 mm ²	641228	32–54	—	—	641233	32–54	—	—
22 AWG 0.3–0.4 mm ²	641229	32–54	644720 ¹	32–44	641234	32–54	—	—
24 AWG 0.2 mm ²	641230	32–54	—	—	641235	32–54	—	—
26 AWG 0.12–0.15 mm ²	641231	32–54	—	—	641236	32–54	—	—
Standard UL94V-2, .000015 [.00038] Gold Plated								
18 AWG 0.8–0.9 mm ²	641168	32–54	647479 ¹	32–42	641173	32–54	—	—
20 AWG 0.5–0.6 mm ²	641169	32–54	—	—	641174	32–54	—	—
22 AWG 0.3–0.4 mm ²	641170	32–54	647496 ¹	32–42	641175	32–54	—	—
24 AWG 0.2 mm ²	641171	32–54	—	—	641176	32–54	—	—
26 AWG 0.12–0.15 mm ²	641172	32–54	—	—	641177	32–54	—	—
Standard UL94V-0, Tin Plated								
18 AWG 0.8–0.9 mm ²	—	—	—	—	644567 ¹	32–42	644570 ¹	32–42
22 AWG 0.3–0.4 mm ²	—	—	—	—	644569 ¹	32–42	644572 ¹	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

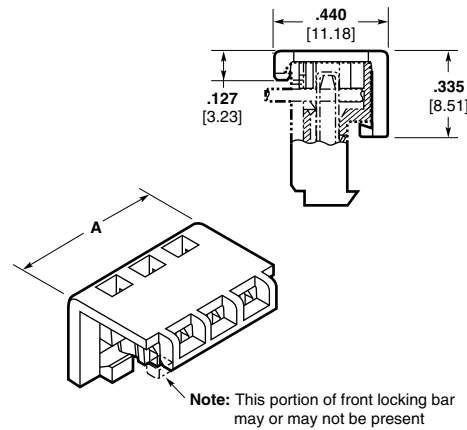
Closed End Covers

Material (RoHS Compliant)

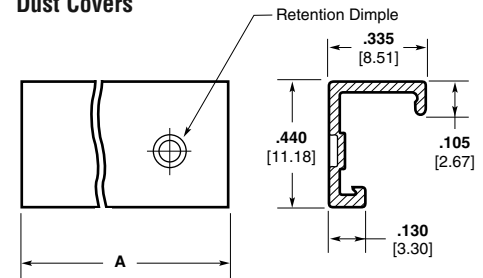
Strain Relief Covers—UL94V-2 rated, nylon, white

Dust Covers—UL94V-0 rated, polyester, white

Strain Relief Covers



Dust Covers



Base Part Numbers

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

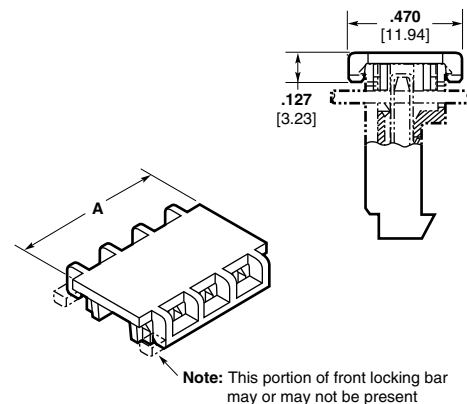
Feed-Thru Covers

Material (RoHS Compliant)

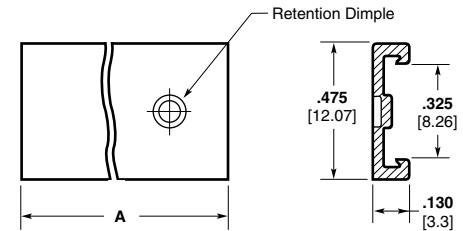
Strain Relief Covers—UL94V-2 rated, nylon, white

Dust Covers—UL94V-0 rated, polyester, white

Strain Relief Covers



Dust Covers



Base Part Numbers

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

Cover Ordering Information

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

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

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

1- -0

The correct ordering number is

1-643067-0

Cover Length

No. of Circuits	Dim. A	Prefix/Suffix
2	.312 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

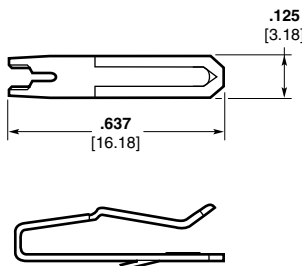
MTA-156 Connector Accessories (Continued)

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.

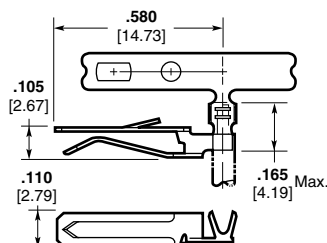


Wire Size		Part Numbers		
AWG	mm ²	Tin Plated	.000030 [0.00076] Gold Plated	.000015 [0.00038] Gold Plated
18	0.8–0.9	640631-3	641143-4	641143-3
20	0.5–0.6	640632-3	641144-4	641144-3
22	0.3–0.4	640633-3	641145-4	641145-3
24	0.2	640634-3	641146-4	641146-3
26	0.12–0.15	640635-3	641147-4	641147-3

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-ELECTRIC Model "G" Termination Machine (Request Catalog 65828)

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

Special applications for crimp snap-in contacts are:

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

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

MTA-156 Connector Accessories (Continued)

Keying Plugs

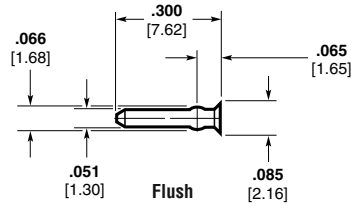
Material (RoHS Compliant)

UL94V-2 rated, nylon, natural color

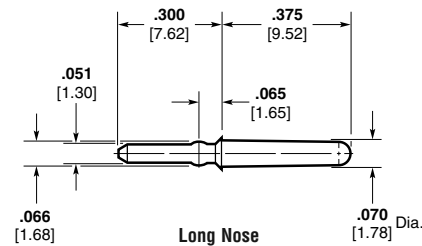
Note: Removal of contact is not necessary when using keying plug.

Loose Piece

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

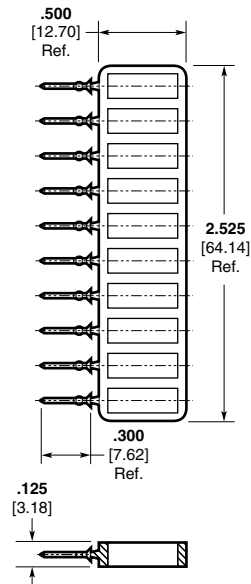


Part No. 640630-1 (Long Nose)
Used with staked post



On Carrier Strip

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



Panel Mount End Caps

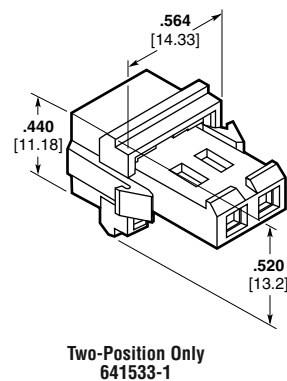
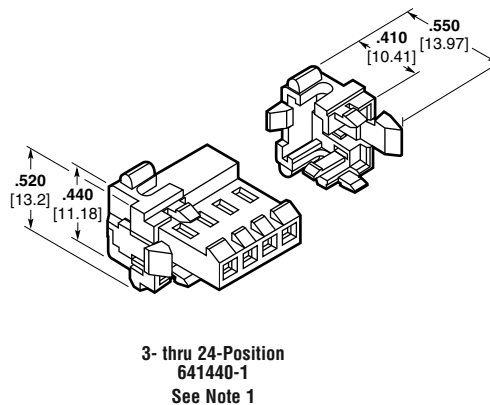
Part No. 641440-1
Part No. 641533-1
(2-position only)

Material (RoHS Compliant)

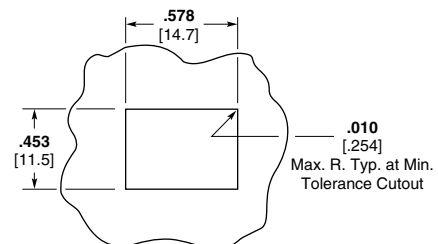
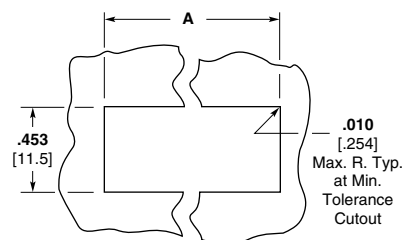
UL94V-2 rated, nylon, black

Notes:

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



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 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

	641435	641436	641437	641438	641522	641523	641524	641525	641526	Posted Connectors
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 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

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

Matrix for .000015
[0.00038] Gold Plated
Part Numbers

Posted Connectors

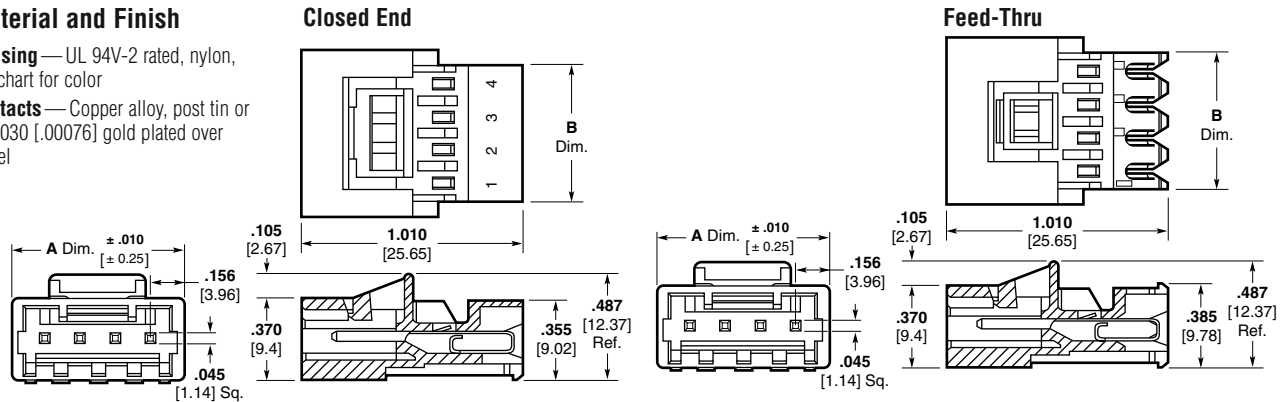
Connectors		Posted Connectors			
		643995	647476	647481	647497
641148	Y	Y	Y	Y	Y
641149	Y	Y	Y	Y	Y
641150	Y	Y	Y	Y	Y
641151	Y	Y	Y	Y	Y
641152	Y	Y	Y	Y	Y
641153	N	N	N	N	N
641154	N	N	N	N	N
641155	N	N	N	N	N
641156	N	N	N	N	N
641157	N	N	N	N	N
641168	Y	Y	Y	Y	Y
641169	Y	Y	Y	Y	Y
641170	Y	Y	Y	Y	Y
641171	Y	Y	Y	Y	Y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

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 [.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
4- -2

The correct ordering number is
4-641435-2

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.	RoHS Equiv.	Part Nos.	RoHS Equiv.
Standard UL 94V-2, Tin Plated				
18 AWG 0.8-0.9 mm ²	641435	32, 33, 34, 36, 39, 42, 45, 54	641522	32, 33, 34, 36, 39, 42, 45, 54
20 AWG 0.5-0.6 mm ²	641436	32, 33, 34, 36, 39, 42, 45, 54	641523	32, 33, 34, 36, 39, 42, 45, 54
22 AWG 0.3-0.4 mm ²	641437	32, 33, 34, 36, 39, 42, 45, 54	641524	32, 33, 34, 36, 39, 42, 45, 54
24 AWG 0.2 mm ²	641438	32, 33, 34, 36, 39, 42, 45, 54	641525	32, 33, 34, 36, 39, 42, 45, 54
26 AWG 0.12-0.15 mm ²	641439	32, 33, 34, 36, 39, 42, 45, 54	641526	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	32, 33, 34, 36, 39, 42, 45, 54	644812	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	32, 33, 34, 36, 39, 42, 45, 54	644814	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	32, 33, 34, 36, 39, 42, 45, 54	647481	32, 33, 34, 36, 39, 42, 45, 54
22 AWG 0.3-0.4 mm ²	643995	32, 33, 34, 36, 39, 42, 45, 54	647497	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 11.89	.316 8.03	-2	9	1.560 39.62	1.408 35.76	-9
3	.624 15.85	.472 11.99	-3	12	2.028 51.51	1.876 47.65	1- -2
4	.780 19.81	.628 15.95	-4	15	2.496 63.40	2.344 59.54	1- -5
6	1.092 27.74	.940 23.88	-6	24	3.900 99.06	3.748 95.20	2- -4

Technical Documents

Product Specification

108-1065 MTA-156 Posted
Connector

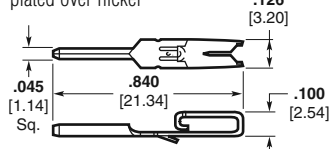
Application Specification

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

Replacement IDC Contacts

Material and Finish

Contacts—Copper alloy, post tin
plated over nickel



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

MTA-156 Flat Headers—Straight

Material and Finish

Housing—UL94V-0 rated, polyester, white

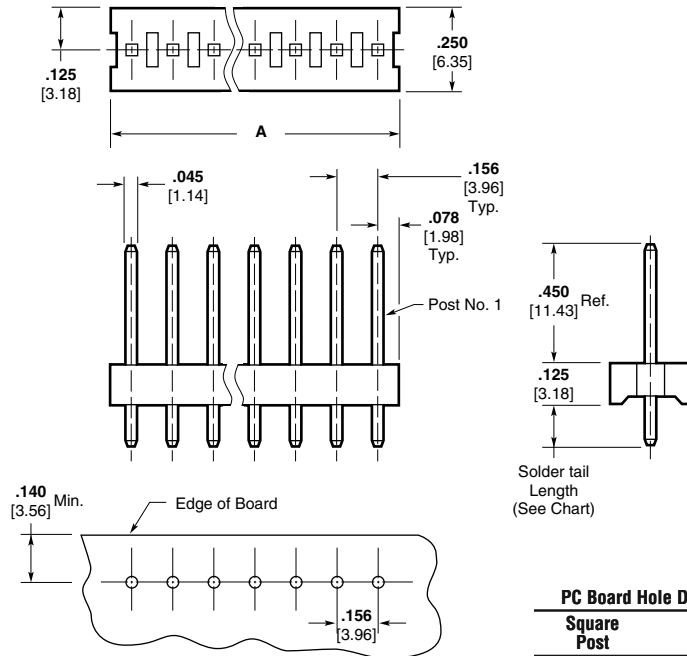
Posts—Copper alloy, tin plated, .000030 [0.00076] or .000015 [0.00038] gold over nickel

Notes:

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

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

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



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

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

Header Ordering Information

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

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

Base number **640383** plus
prefix-and-suffix
4- -0

The correct ordering number is
4-640383-0

The part numbers in **bold face** are the RoHS equivalent version. Example:

No. of Pos.	Lead Free RoHS Prefix/Suffix
2	3-640383-2
	thru
24	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.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	RoHS Equiv.	Header Part Nos.	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	32-54	644756	32-54	641203	32-54	644757	32-54
Standard UL94V-0, .000015 [0.00038] Gold Plated							
641113	32-54	644763	32-54	641114	32-54	644764	32-54

Note:

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