

## MTA-156 IDC Connectors — Feed-Thru

### Material and Finish

**Housing** — UL94V-2 rated, type 6/6 or 6/12 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

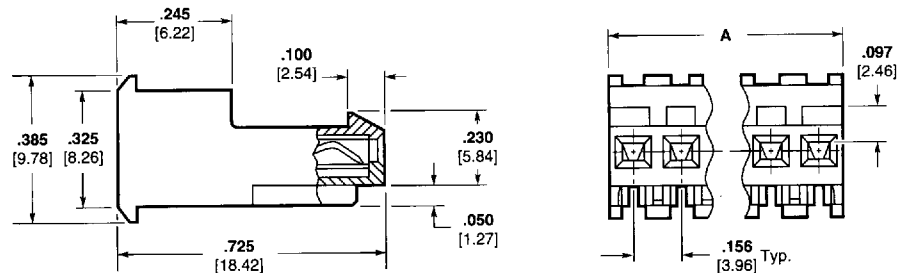
### UL94V-2 Color Coding by Wire Size

- 26 AWG — Blue
- 24 AWG — White
- 22 AWG — Red
- 20 AWG — Yellow
- 18 AWG — Orange
- UL94V-0 — Black

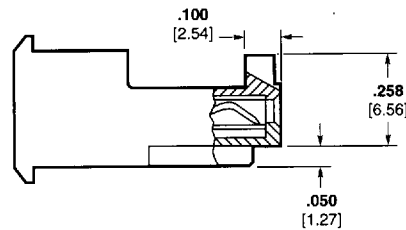
### Notes:

1. Only connectors with locking ramp and without polarizing tabs mate with posted connectors on page 27.
2. Refer to pages 42 thru 46 for approved wire listing.
3. For strain reliefs and dust covers, see pages 24 and 25.
4. For keying plugs and panel mount end caps, see page 26.

### Feed-Thru with Locking Ramp



without Polarizing Tabs

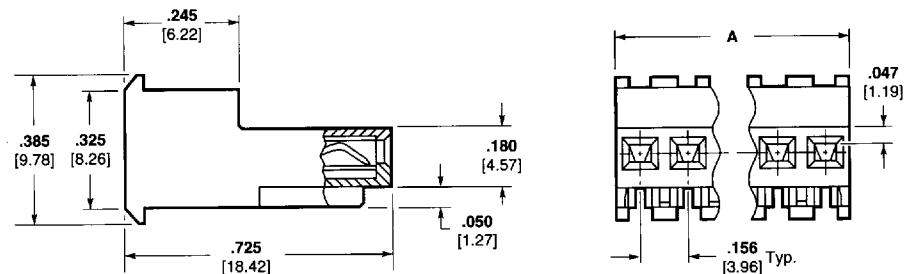


with Polarizing Tabs

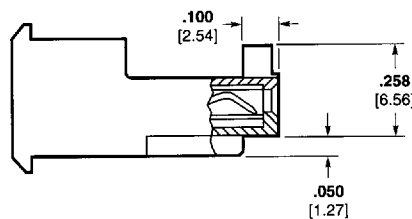
For mateability options, see matrix on pages 18 and 19.

Mating half visuals for Feed-Thru Connectors with Locking Ramp, see pages 28, 29, 30 and 32, (31 and 33 Front Bend Headers Only).

### Feed-Thru without Locking Ramp



without Polarizing Tabs



with Polarizing Tabs

For mateability options, see matrix on pages 18 and 19.

Mating half visuals for Feed-Thru Connectors without Locking Ramp, see pages 28 thru 33.

## 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

**1- -0**

The correct ordering number is

**1-640599-0**

#### Notes:

1. Only connectors with locking ramps and without polarizing tabs mate with posted connectors on page 27.
2. Other circuit sizes are available upon request. Minimums may apply.
3. Connector circuits can be molded closed for keying purposes. Minimums may apply.
4. Where no part numbers appear in the chart, parts can be made available upon request. Minimums may apply.

### UL94V-2 Color Coding by Wire Size

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

**UL94V-0** — Black

### Connector 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

### 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	Connector Part Nos.	No. of Circuits	Connector Part Nos.	No. of Circuits	Connector Part Nos.	No. of Circuits
<b>Standard UL94V-2, Tin Plated</b>								
<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	640599	2-24	644465	2-14	640604	2-24	644469	2-14
<b>20 AWG</b> 0.5-0.6 mm <sup>2</sup>	640600	2-24	644466	2-14	640605	2-24	644470	2-14
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	640601	2-24	644467	2-14	640606	2-24	644471	2-14
<b>24 AWG</b> 0.2 mm <sup>2</sup>	640602	2-24	644468	2-14	640607	2-24	644472	2-14
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	640595	2-24	—	—	640608	2-24	—	—

### Tape Mounted on Reel UL94V-2, Tin Plated

<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	641302	2-24	—	—	641306	2-24	—	—
<b>20 AWG</b> 0.5-0.6 mm <sup>2</sup>	641303	2-24	—	—	641307	2-24	—	—
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641304	2-24	—	—	641308	2-24	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641305	2-24	—	—	641309	2-24	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641301	2-24	—	—	641310	2-24	—	—

### Standard UL94V-2, .00003 [.00076] Gold Plated

<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	641227	2-24	644718	2-14	641232	2-24	—	—
<b>20 AWG</b> 0.5-0.6 mm <sup>2</sup>	641228	2-24	—	—	641233	2-24	—	—
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641229	2-24	644720	2-14	641234	2-24	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641230	2-24	—	—	641235	2-24	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641231	2-24	—	—	641236	2-24	—	—

### Standard UL94V-2, .00015 [.00038] Gold Plated

<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	641168	2-24	—	—	641173	2-24	—	—
<b>20 AWG</b> 0.5-0.6 mm <sup>2</sup>	641169	2-24	—	—	641174	2-24	—	—
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641170	2-24	—	—	641175	2-24	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641171	2-24	—	—	641176	2-24	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641172	2-24	—	—	641177	2-24	—	—



### Standard UL94V-0, Tin Plated

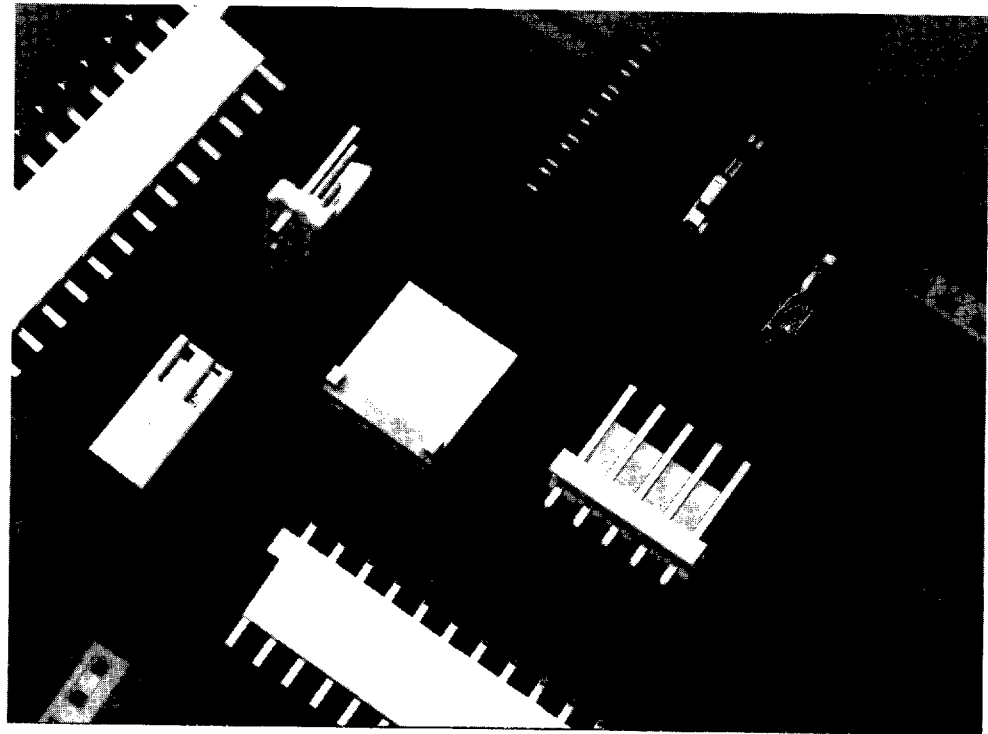
<b>18 AWG</b> 0.8-0.9 mm <sup>2</sup>	—	—	—	—	644567	2-12	644570	2-12
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	—	—	—	—	644569	2-12	644572	2-12

No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix	No. of Circuits	Dim. A	Prefix/Suffix
8	1.248 31.7	-8	14	2.184 55.47	1- -4	20	3.120 79.25	2- -0
9	1.404 35.66	-9	15	2.340 59.44	1- -5	21	3.276 83.21	2- -1
10	1.560 39.62	1- -0	16	2.496 63.4	1- -6	22	3.432 87.17	2- -2
11	1.716 43.59	1- -1	17	2.652 67.36	1- -7	23	3.588 91.14	2- -3
12	1.872 47.55	1- -2	18	2.808 71.32	1- -8	24	3.744 95.1	2- -4
13	2.028 51.51	1- -3	19	2.964 75.29	1- -9			

## .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 mm<sup>2</sup>]
- Wire-to-post connectors preloaded with dual beam contacts
- Connectors and headers are end-to-end stackable
- QUAD Connectors for higher current rating
- 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
- Contacts are lubricated to prevent fretting corrosion
- 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 mm<sup>2</sup>] 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 mm<sup>2</sup>] MTA-156 connectors; 7, 10, and 19 stranded wire on 20 AWG [0.5–0.6 mm<sup>2</sup>] MTA-156 connectors; and 7 and 19 stranded wire on 22–26 AWG [0.4–0.12 mm<sup>2</sup>] 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 or friction lock styles. Headers are available in 2 through 24 positions.

**Note:** Refer to pages 42 thru 46 for approved wire listings.

### Performance Data\*

**Voltage Rating** — 250 vac

**Current Rating** — 5 amp max. for MTA-156 Connector

**Low-Level Resistance** — 3.0 mΩ max. initial

**Dielectric Withstanding Voltage** — 1250 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

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