

**MTA-100 IDC Connectors — Closed End and Feed-Thru**

**Material and Finish**

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

**Notes:**

1. Refer to pages 42 thru 46 for approved wire listing.
2. For strain reliefs and dust covers, see page 8.
3. For keying plugs, see page 9.

**UL94V-2 Color Coding by Wire Size**

**28 AWG** — Green

**26 AWG** — Blue

**24 AWG** — White

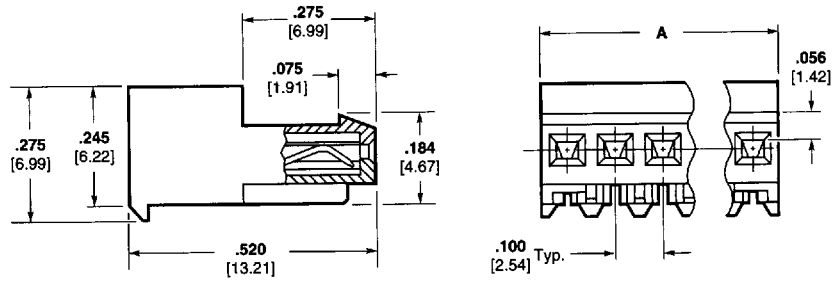
**22 AWG** — Red

**UL94V-0** — Black

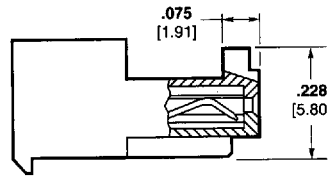
For mateability options, see matrix on pages 4 and 5.

For mating half visuals, see pages 10 thru 14.

**Closed End Connectors**

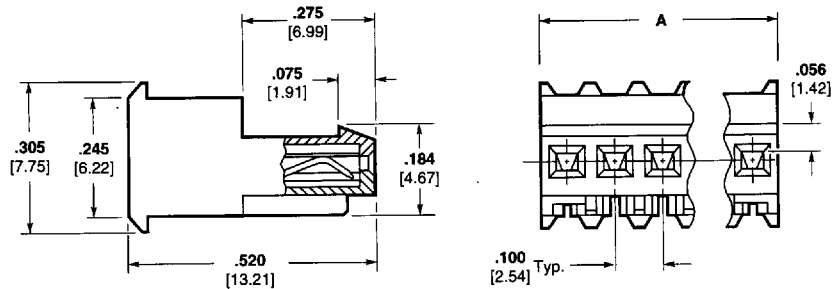


Without Polarizing Tabs

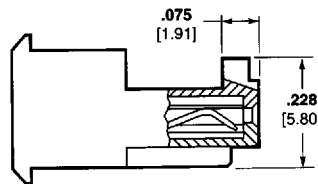


With Polarizing Tabs

**Feed-Thru Connectors**



Without Polarizing Tabs



With Polarizing Tabs

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

### Connector Ordering Information

The "Base Part Numbers" Chart at right shows the base part number and 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 without polarizing tabs for 22 AWG wire would be:

Base number **640440** plus prefix-and-suffix

**1- - - 0**

The correct ordering number is

**1-640440-0**

#### Notes:

1. Connector circuits can be molded closed for keying purposes. Minimums may apply.
2. Other circuit sizes are available upon request. Minimums may apply.
3. 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

- 28 AWG** — Green
- 26 AWG** — Blue
- 24 AWG** — White
- 22 AWG** — Red

**UL94V-0** — Black

For mateability options, see matrix on pages 4 and 5.

For mating half visuals, see pages 10 thru 14.

### Connector Length

No. of Circuits	Dim. A	Prefix/Suffix
2	.200 5.08	-2
3	.300 7.62	-3
4	.400 10.16	-4
5	.500 12.7	-5
6	.600 15.24	-6
7	.700 17.78	-7
8	.800 20.32	-8

### Base Part Numbers

Connector Type & Wire Size	Closed End <sup>3</sup>				Feed-Thru <sup>3</sup>			
	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>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	640440	2-28	643813	2-28	640620	2-28	644540 <sup>2</sup>	2-15
<b>24 AWG</b> 0.2 mm <sup>2</sup>	640441	2-28	643814	2-28	640621	2-28	644563 <sup>2</sup>	2-15
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	640442	2-28	643815	2-28	640622	2-28	644564 <sup>2</sup>	2-15
<b>28 AWG</b> 0.08-0.09 mm <sup>2</sup>	640443	2-28	643816	2-28	640623	2-28	644565 <sup>2</sup>	2-15
<b>Tape Mounted on Reel UL94V-2, Tin Plated</b>								
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	640468	2-28	644511	2-28	641311	2-28	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	640469	2-28	644512	2-28	641312	2-28	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	640470	2-28	644513	2-28	641313	2-28	—	—
<b>28 AWG</b> 0.08-0.09 mm <sup>2</sup>	640471	2-28	644514	2-28	641314	2-28	—	—
<b>Standard UL94V-2, .000030 [0.00076] Gold Plated</b>								
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641237	2-28	644042	2-28	641241	2-28	644702 <sup>2</sup>	2-15
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641238	2-28	644020	2-28	641242	2-28	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641239	2-28	644043 <sup>2</sup>	2-14	641243	2-28	644726 <sup>2</sup>	2-15
<b>28 AWG</b> 0.8-0.9 mm <sup>2</sup>	641240	2-28	644044 <sup>2</sup>	2-14	641244	2-28	—	—
<b>Standard UL94V-2, .000015 [0.00038] Gold Plated</b>								
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641190	2-28	644038 <sup>2</sup>	2-14	641198	2-28	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641191	2-28	—	—	641199	2-28	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641192	2-28	644040 <sup>2</sup>	2-14	641200	2-28	—	—
<b>28 AWG</b> 0.08-0.09 mm <sup>2</sup>	641193	2-28	—	—	641201	2-28	—	—
<b>LED*, UL94V-2, Tin Plated (See Note 2)</b>								
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	641534	2-3	—	—	641653	2-3	—	—
<b>24 AWG</b> 0.2 mm <sup>2</sup>	641535	2-3	644795	2-3	641654	2-3	—	—
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	641536	2-3	—	—	641655	2-3	—	—
<b>28 AWG</b> 0.08-0.09 mm <sup>2</sup>	641537	2-3	—	—	641656	2-3	—	—
<b>Standard UL94V-0, Tin Plated (Gold is available, minimums may apply.)</b>								
<b>22 AWG</b> 0.3-0.4 mm <sup>2</sup>	643498	2-15	644083	2-15	644575	2-15	644578	2-15
<b>24 AWG</b> 0.2 mm <sup>2</sup>	644574	2-15	644312	2-15	644576	2-15	644579	2-15
<b>26 AWG</b> 0.12-0.15 mm <sup>2</sup>	643828	2-15	644313	2-15	644577	2-15	644497	2-15

\*LED connectors are designed to mate with .014-.020 [0.36-0.51] diameter posts or square leads.

No. of Circuits	Dim. A	Prefix/Suffix
9	.900 22.86	-9
10	1.00 25.4	1- -0
11	1.100 27.94	1- -1
12	1.200 30.48	1- -2
13	1.300 33.02	1- -3
14	1.400 35.56	1- -4
15	1.500 38.1	1- -5

No. of Circuits	Dim. A	Prefix/Suffix
16	1.600 40.64	1- -6
17	1.700 43.18	1- -7
18	1.800 45.72	1- -8
19	1.900 48.26	1- -9
20	2.000 50.8	2- -0
21	2.100 53.34	2- -1
22	2.200 55.88	2- -2

No. of Circuits	Dim. A	Prefix/Suffix
23	2.300 58.42	2- -3
24	2.400 60.96	2- -4
25	2.500 63.5	2- -5
26	2.600 66.04	2- -6
27	2.700 68.58	2- -7
28	2.800 71.12	2- -8

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

### Product Facts

- Connectors and headers for 2 through 28 positions; wire sizes of 22, 24, 26 and 28 AWG [0.4-0.08] mm<sup>2</sup>
- Wire-to-Post Connectors preloaded with dual beam contacts
- Connectors and headers are end-to-end stackable
- Connector styles include both closed end and feed-thru connectors with locking ramps, with and without polarizing tabs
- Connectors preloaded with IDC contact
- All contacts are slotted for insulation displacement (IDC) terminal technique
- Contacts are lubricated to prevent fretting corrosion
- Benefits derived from the MTA-100 system include increased quality and ease of handling such as—
  - One step assembly
  - No wire stripping
  - No contact damage
  - Reduced wiring errors
  - Simpler tooling
  - Simple maintenance and repair
- Meets the material requirements of Table 23.1 of UL1410 Standards for Television Receiver and Video Products (wire-to-post connectors only)

■ Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476



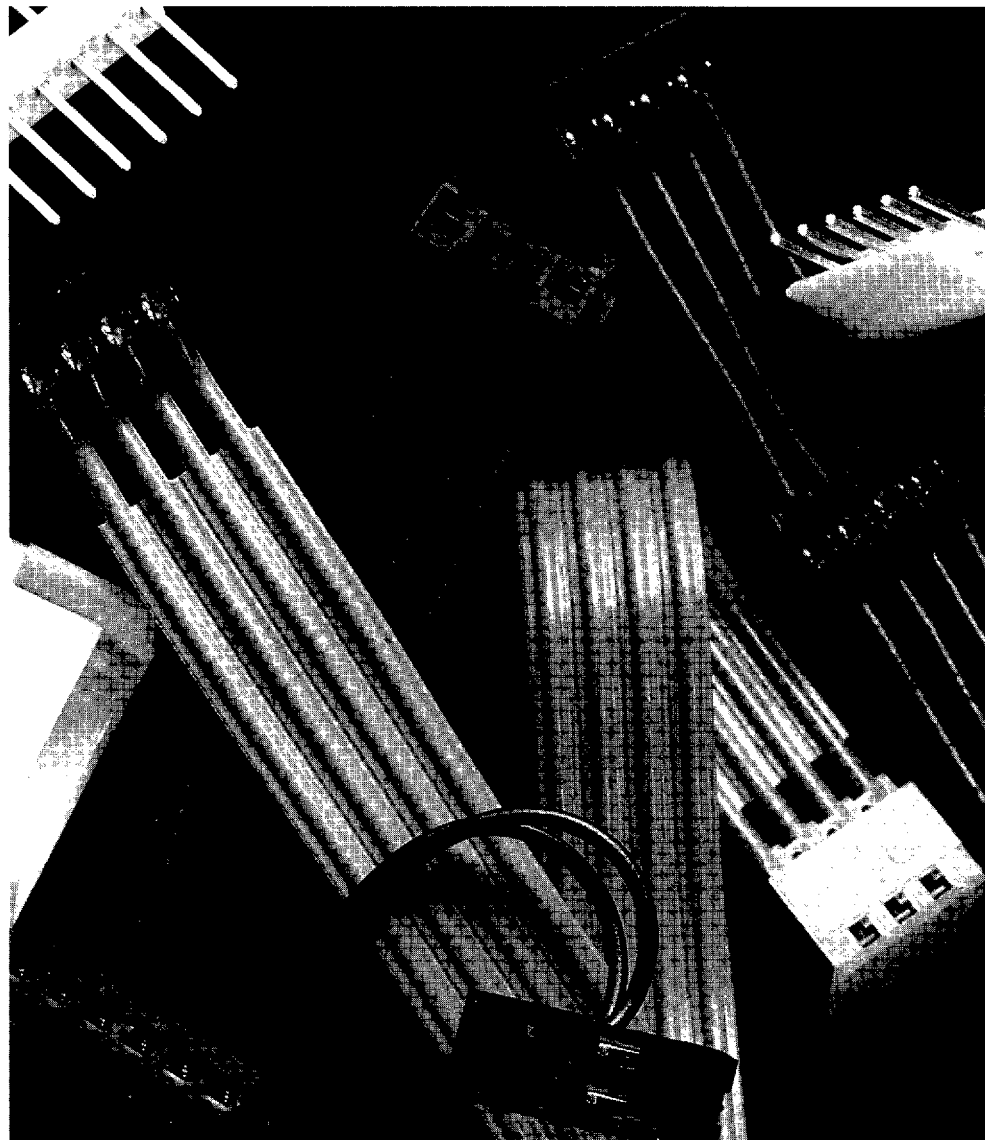
■ Certified by Canadian Standards Association



### Technical Documents

**Product Specification**  
108-1050 MTA-100 Connectors

**Application Specifications**  
114-1019 MTA-100 Connectors  
114-1031 MTA-100 Ribbon Cable Assembly



MTA-100 connectors accept discrete and ribbon cable wire sizes ranging from 22–28 AWG [0.4–0.08 mm<sup>2</sup>] with maximum insulation outside diameter of .060 [1.52] for terminating single wire and .050 [1.27] for mass termination of wires. Tin plated solid, fused stranded, or stranded (7 and 19 strands) wire with PVC insulation can be used on 22–24 AWG [0.4–0.2 mm<sup>2</sup>] on MTA-100 connectors and 7 stranded wire on 28–26 [0.09–0.15 mm<sup>2</sup>] MTA-100 connectors. Only one wire

to be terminated into an IDC contact slot.

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

A full line of .100 [2.54] centerline headers completes the system. Headers are available with straight or right angle posts, in flat, polarized or friction lock styles. Headers are available in 2 through 28 positions.

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

### Performance Data\*

- Voltage Rating** — 250 vac
- Current Rating** — 4 amp max.
- Low-Level Resistance** — 5 mΩ max. initial
- Dielectric Withstanding Voltage** — 750 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.

MTA-100  
.100 [2.54]