MTA-100 Polarized Headers — Straight and Right Angle

Material and Finish

Housing — UL94V-0 rated, polyester, white

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

Notes:
1. Post(s) can be omitted for keying purposes. Specify the desired post(s) to be omitted using the figure to identify Post No. 1.
2. Gold headers are duplex plated, gold on mating end of post and tin on the soldertail.

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

For mating half visuals, see pages 6, 7 and 15.

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 posts would be:

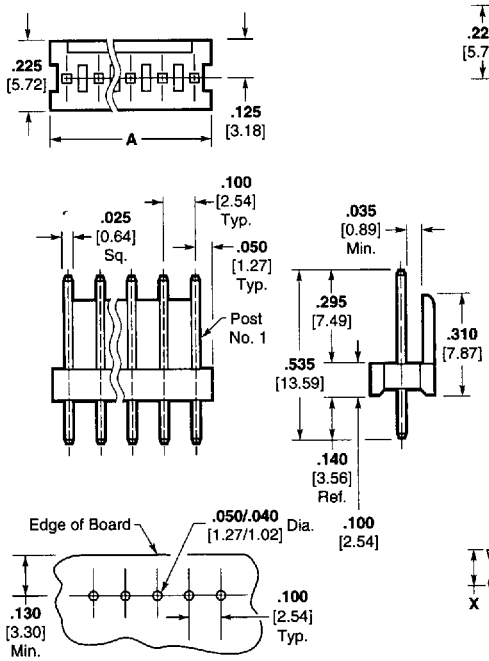
Base number **640454** plus prefix-and-suffix

1- — -0

The correct ordering number is

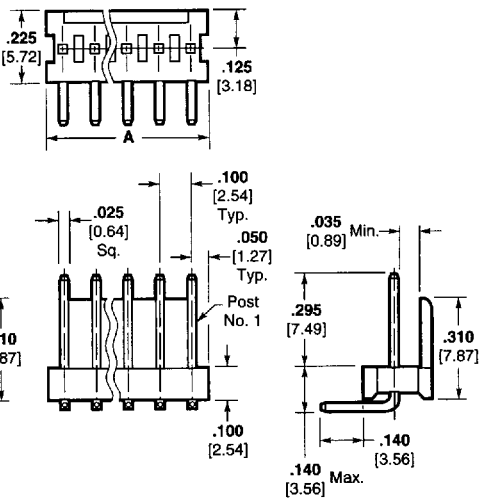
1-640454-0

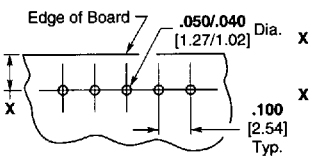
Straight Post (.025 [0.64] Square)



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

Right Angle Post (.025 [0.64] Square)





X = .110 [2.79] min., .160 [4.06] max. when mated with MTA-100 Connector.
X = .110 [2.79] min., .120 [3.05] max. when mated with CST-100 Connector.

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

Base Part Numbers

Straight Posts		Right Angle Posts	
Header Part Nos.	No. of Posts	Header Part Nos.	No. of Posts
Standard UL94V-0, Tin Plated			
640454	2-28	640455	2-28
Standard UL94V-0, .000030 [0.00076] Gold Plated			
641213	2-28	641214	2-28
Standard UL94V-0, .000015 [0.00038] Gold Plated			
641124	2-28	641125	2-28

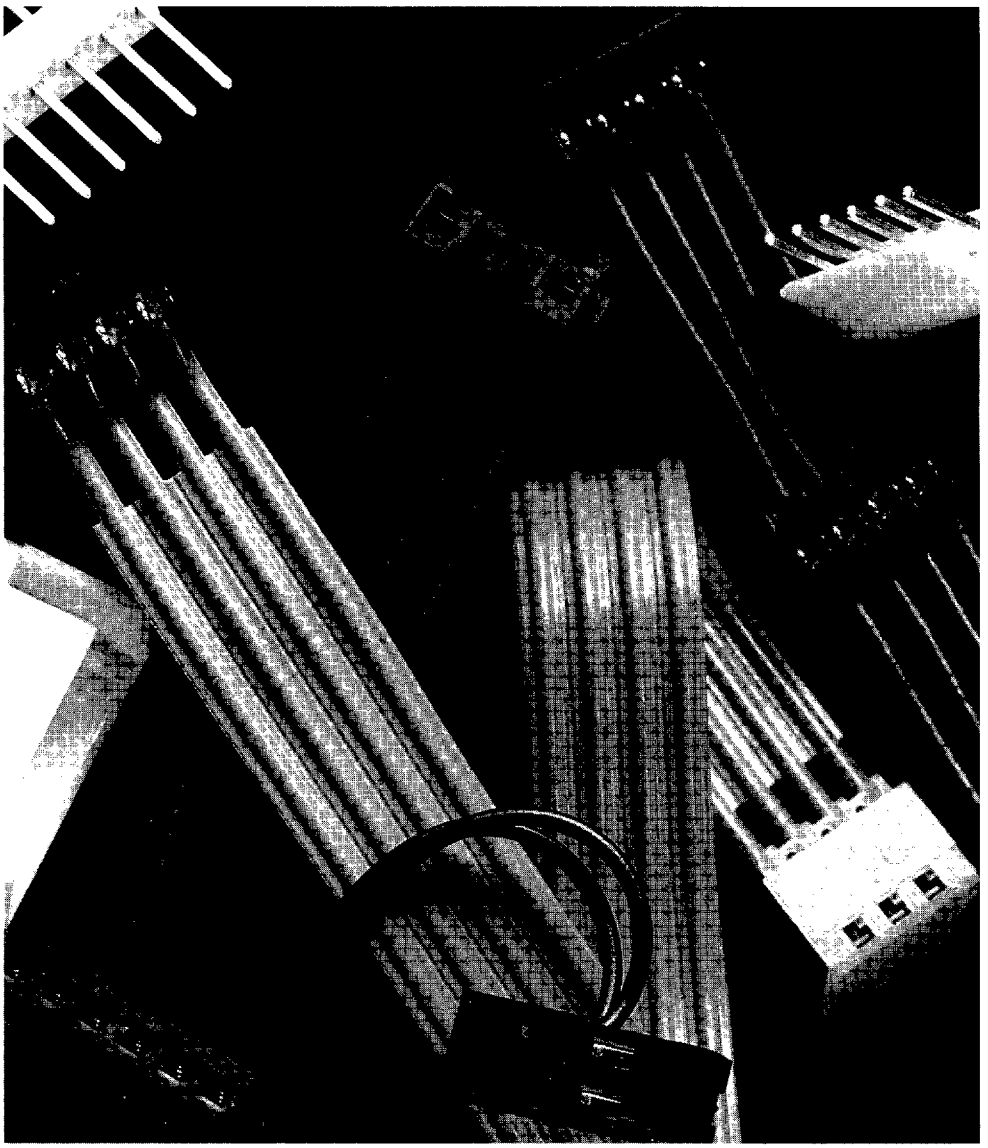
Header Length

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
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
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
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] mm²
- 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



MTA-100 connectors accept discrete and ribbon cable wire sizes ranging from 22–28 AWG [0.4–0.08 mm²] with maximum insulation outside diameter of .060 [1.52] for terminating single wire and .050 [1.27] for mass termination of wires. Tin plated solid, fused stranded, or stranded (7 and 19 strands) wire with PVC insulation can be used on 22–24 AWG [0.4–0.2 mm²] on MTA-100 connectors and 7 stranded wire on 28–26 [0.09–0.15 mm²] MTA-100 connectors. Only one wire to be terminated into an IDC contact slot.

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

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

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.

Technical Documents

Product Specification

108-1050 MTA-100 Connectors

Application Specifications

114-1019 MTA-100 Connectors

114-1031 MTA-100 Ribbon Cable Assembly