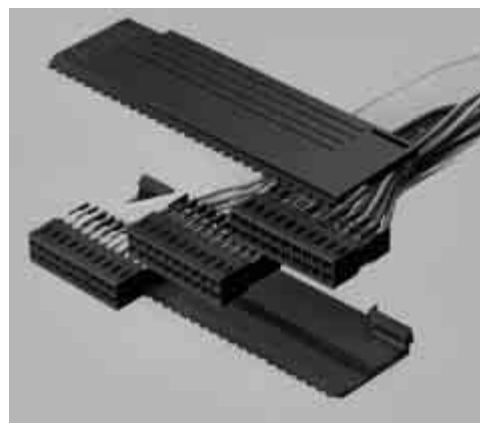
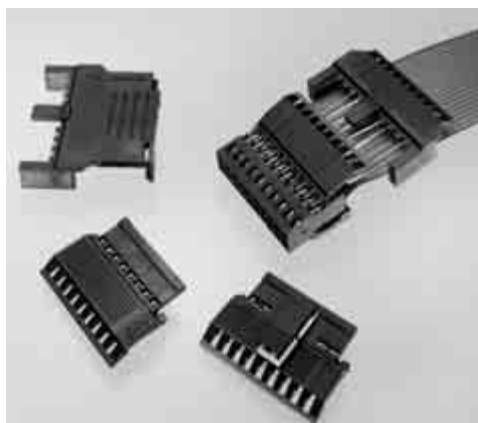


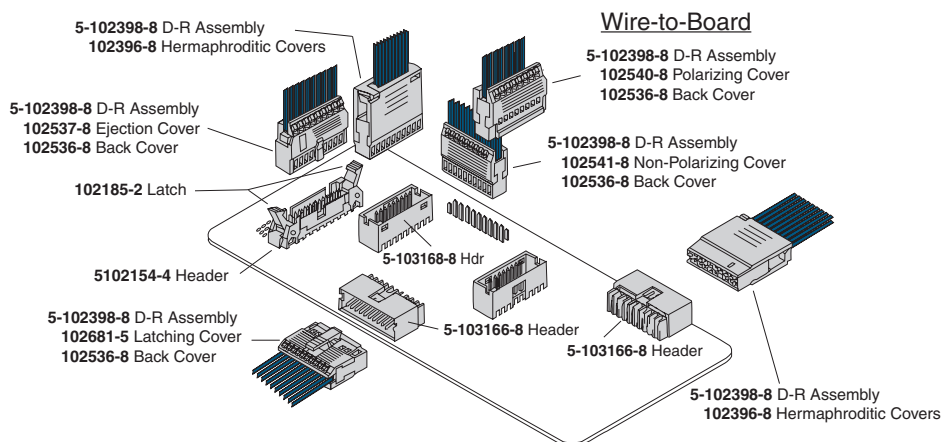
MT and Shielded MT Interconnection System

Product Facts

- Full line of mass termination tooling offers lowest installed cost for most production needs
- Dual cantilever beams with anti-overstress features provide redundant contact of mating post and limit beam deflection, preventing permanent deformation
- Redundant insulation displacement slots provide for maximum reliability
- Integral wire strain relief on contact can prevent wire motion from being transmitted to wire termination areas
- Built-in contact post stop can protect terminated wire from being disturbed by over-insertion of mating post, prevents wire from entering contact area and positively limits mating connector depth
- Insulation displacement contacts and crimp, snap-in contacts are interchangeable
- Complete serviceability with replacement contacts
- Cover styles include low profile (polarized, non-polarized, latching and ejection) and standard profile (hermaphroditic and ejection)
- Connector housings may be stacked end-to-end within one pair of covers. All varieties of covers in this catalog are suitable for multiple housing stacking applications similar to the example illustrated in the photograph to the right
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189



Typical Application of End-to-End Stacking



The AMPMODU MT and Shielded MT Interconnection System offers labor and cost savings through mass termination technology, while maintaining the time-proven reliability of the AMPMODU product family. The MT system is comprised of preloaded, double-row receptacle assemblies with snap-on covers and a variety of shielding hardware and accessories. The system is supported by a full line of mass termination tooling to meet virtually most production needs.

The insulation displacement contact, the heart of the MT

system, features a mating interface that is the same as the conventional AMPMODU crimp, snap-in contact, featuring dual cantilever beams, built-in overstress protection and a completely enclosed "box" design.

To reduce EMI/ESD (electromagnetic interference/electrostatic discharge) at the input-output interface, add-on metal shields can be used to convert standard MT connectors to shielded MT connectors.

Performance Characteristics

- Contact Current Rating** — 3 amperes for single contact in free air. (Amperage could vary due to ambient temperature, wire size and duty cycles.)
- Operating Temperature** — -65°C to +105°C
- Termination Resistance** — 12 milliohms max.
- Max. Mating Force** — High pressure - 26 oz. [7.23 N]
Standard pressure - 9 oz. [2.50 N]
- Min. Unmating Force** — High pressure — 5 oz. [1.39 N]
Standard pressure — 1.5 oz. [0.417 N]
- Contact Retention in Housing** — 5 lb. [22.24 N] per contact min.

Note: All part numbers are RoHS compliant.

MT Receptacle Assemblies, Double-Row .100 x .100 [2.54 x 2.54] Centerline

Housings Pre-loaded with Standard Pressure Contacts



Material and Finish

Housing — Glass-filled thermoplastic, black, 94V-0 rated

Contacts — Copper alloy, duplex plated .000030 [0.00076] gold in mating area, .000050 [0.00127] tin on solder tail, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Connectors — pages 117, 122, 126, 130, 264

Cable Insulation Wall Thickness — .015 [0.39] max.

Cable Insulation Diameter — .050 [1.27] max.

Mating Post Length — .222-.273 [5.64-6.94] max.

Performance Characteristics — page 255

Replacement Contacts — page 265

Connector Covers — pages 258, 259

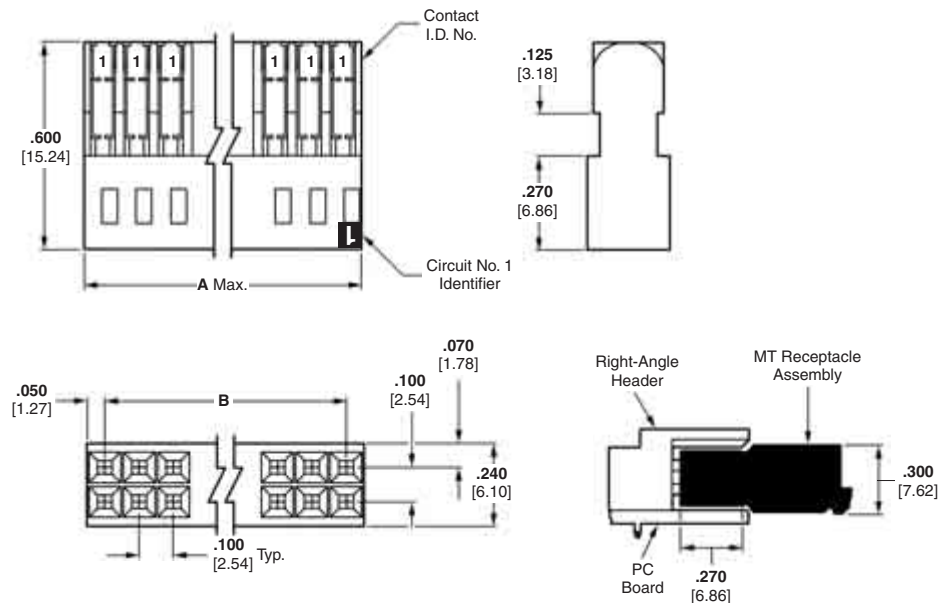
Application Tooling — pages 273-275

Technical Documents — pages 277, 278

Product Specification
108-25015, 108-25018, 108-25030

Application Specification
114-25032

Instruction Sheet
408-6532



No. of Pos.	Dimensions		Part Nos. (Stamped)			Unloaded Housings
	A	B	Wire Size Range			
			30-26 AWG [0.05-0.15 mm ²]	26-22 AWG [0.12-0.3 mm ²]	22-20 AWG [0.3-0.6 mm ²]	
6	.300 [7.62]	.200 [5.08]	5-102393-1	5-102398-1	5-102448-1	102394-1
8	.400 [10.16]	.300 [7.62]	5-102393-2	5-102398-2	5-102448-2	102394-2
10	.500 [12.70]	.400 [10.16]	5-102393-3	5-102398-3	5-102448-3	102394-3
12	.600 [15.24]	.500 [12.70]	5-102393-4	5-102398-4	5-102448-4	102394-4
14	.700 [17.78]	.600 [15.24]	5-102393-5	5-102398-5	5-102448-5	102394-5
16	.800 [20.32]	.700 [17.78]	5-102393-6	5-102398-6	5-102448-6	102394-6
18	.900 [22.86]	.800 [20.32]	5-102393-7	5-102398-7	5-102448-7	102394-7
20	1.000 [25.40]	.900 [22.86]	5-102393-8	5-102398-8	5-102448-8	102394-8
22	1.100 [27.94]	1.000 [25.40]	5-102393-9	5-102398-9	5-102448-9	102394-9
24	1.200 [30.48]	1.100 [27.94]	6-102393-0	6-102398-0	6-102448-0	1-102394-0
26	1.300 [33.02]	1.200 [30.48]	6-102393-1	6-102398-1	6-102448-1	1-102394-1
28	1.400 [35.56]	1.300 [33.02]	6-102393-2	6-102398-2	6-102448-2	1-102394-2
30	1.500 [38.10]	1.400 [35.56]	6-102393-3	6-102398-3	6-102448-3	1-102394-3
32	1.600 [40.64]	1.500 [38.10]	6-102393-4	6-102398-4	6-102448-4	1-102394-4
34	1.700 [43.18]	1.600 [40.64]	6-102393-5	6-102398-5	6-102448-5	1-102394-5
40	2.000 [50.80]	1.900 [48.26]	6-102393-8	6-102398-8	6-102448-8	1-102394-8
50	2.500 [63.50]	2.400 [60.96]	7-102393-3	7-102398-3	7-102448-3	2-102394-3
60	3.000 [76.20]	2.900 [73.66]	7-102393-8	7-102398-8	7-102448-8	2-102394-8
64	3.200 [81.28]	3.100 [78.74]	8-102393-0	8-102398-0	8-102448-0	3-102394-0

Note: Contact Extraction/Lance Reset Tool No. 843477-3, see page 265.

Keying Plugs



Part No. 86286-1
(Plugs into receptacle contact)



Part No. 87077-2
(Plugs directly into housing)

Material — Natural color nylon

Note: All part numbers are RoHS compliant.

MT Receptacle Assemblies, Double-Row .100 x .100 [2.54 x 2.54] Centerline (Continued)

Housings Pre-loaded with High Pressure Contacts



Material and Finish

Housing — Glass-filled thermoplastic, black, 94V-0 rated

Contacts — Copper alloy, duplex plated .000030 [0.00076] gold in mating area, .000050 [0.00127] tin on solder tails, with entire contact underplated .000050 [0.00127] nickel

Related Product Data

Mateable Connectors — pages 117, 122, 126, 130, 264

Cable Insulation Wall Thickness — .015 [0.39] max.

Cable Insulation Diameter — .050 [1.27] max.

Mating Post Length — .200-.273 [5.64-6.94] max.

Performance Characteristics — page 255

Replacement Contacts — page 265

Connector Covers — pages 258, 259

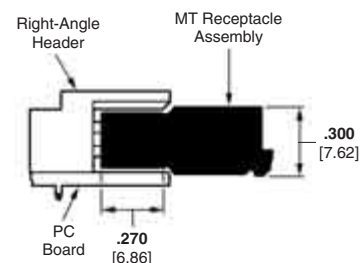
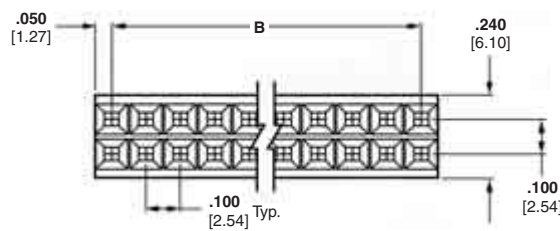
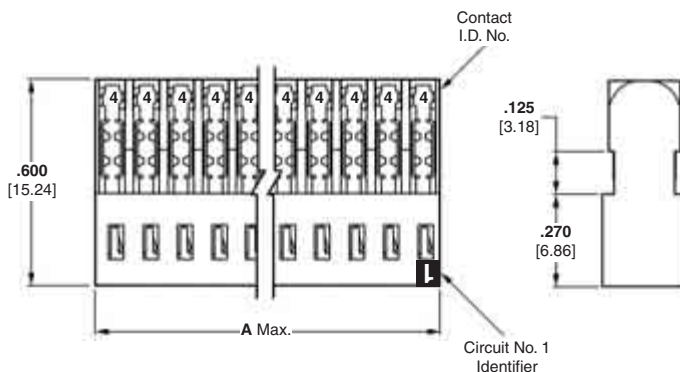
Application Tooling — pages 273-275

Technical Documents — pages 277, 278

Product Specification
108-25015, 108-25018, 108-25030

Application Specification
114-25032

Instruction Sheet
408-6532



No. of Pos.	Dimensions		Part Nos. (Stamped*)		
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18	.900 [22.86]	.800 [20.32]	5-102693-7	5-102694-7	5-102695-7
20	1.000 [25.40]	.900 [22.86]	5-102693-8	5-102694-8	5-102695-8

*Cavity identification — first cavity (one side); Tyco Electronics Part No. and date code stamped on housing where size permits.

Note: Contact **Extraction/Lance Reset Tool No. 843477-3**, see page 265.

Keying Plugs



Part No. 86286-1
(Plugs into receptacle contact)



Part No. 87077-2
(Plugs directly into housing)

Material — Natural color nylon

Note: All part numbers are RoHS compliant.