



## Quick Reference Guide

### AMPMODU MTE Interconnect System

The TE Connectivity AMPMODU MTE interconnection system is utilized in wire-to-board and wire-to-wire applications, and can be found in many types of electronic equipment including computers, copiers, commercial printers, appliances, medical equipment, and automotive controls. The product implements Insulation Displacement Contacts (IDC) or Crimp Snap-In contacts to suit customer's needs.

#### FEATURES AND BENEFITS

- Assembly designs offer latching and polarization
- Coupling shrouds permit ganging of smaller receptacle and pin assemblies with guide ribs to form larger single or double row latching connectors
- Available in three platings
- Swage option on posts provides retention in PC board
- High temperature option is SMT compatible
- Applicable Sizes 2-25

#### PRODUCT APPLICATIONS

- Medical Instruments
- Automotive Controls
- Copiers
- Appliances
- Commercial Printers
- Vending
- Computers
- Instrumentation & Test Equipment
- Telecommunications
- Storage Equipment

## Insulation Displacement vs. Crimp Snap-In

### IDC

- Time savings
- Preloaded contacts
- Automation
- Mates with same headers as crimp

### Crimp Snap-In

- Cost effective
- Flexibility (AWG)
- Manual labor
- Mates with same headers as IDC

## Receptacle Assemblies



IDC AMPMODU MTE



Crimp Snap-In Short Point Contact



AMPMODU MTE Housing

| RECEPTACLES |       |               |               |            |
|-------------|-------|---------------|---------------|------------|
| Size        | AWG   | Plating       |               |            |
|             |       | 15 $\mu$ " Au | 30 $\mu$ " Au | Matte Tin  |
| 2           | 22-26 | 5-103957-1    | 5-103958-1    | 5-103956-1 |
| 3           |       | 5-103957-2    | 5-103958-2    | 5-103956-2 |
| 4           |       | 5-103957-3    | 5-103958-3    | 5-103956-3 |
| 5           |       | 5-103957-4    | 5-103958-4    | 5-103956-4 |
| ...         |       | ...           | ...           | ...        |
| 25          | 26-30 | 7-103644-4    | 7-103734-4    | 7-103645-4 |
| 2           |       | 5-103960-1    | 5-103961-1    | 5-103959-1 |
| 3           |       | 5-103960-2    | 5-103961-2    | 5-103959-2 |
| 4           |       | 5-103960-3    | 5-103961-3    | 5-103959-3 |
| 5           |       | 5-103960-4    | 5-103961-4    | 5-103959-4 |
| ...         |       | ...           | ...           | ...        |
| 25          |       | 7-103640-4    | 7-103897-4    | 7-103641-4 |

| SHORT POINT REPLACEMENT CONTACTS |       |            |             |
|----------------------------------|-------|------------|-------------|
| Plating                          | AWG   | Strip      | Loose Piece |
| 15 $\mu$ " Au                    | 20-24 | 104479-9   | 1-104479-2  |
| 30 $\mu$ " Au                    |       | 1-104479-0 | 1-104479-3  |
| Matte Tin                        |       | 104479-8   | 1-104479-1  |
| 15 $\mu$ " Au                    | 22-26 | 1-104480-2 | 1-104480-5  |
| 30 $\mu$ " Au                    |       | 1-104480-3 | 1-104480-6  |
| Matte Tin                        |       | 1-104480-7 | 1-104480-4  |
| 15 $\mu$ " Au                    | 28-32 | 1-104481-0 | 1-104481-2  |
| 30 $\mu$ " Au                    |       | 1-104481-1 | 1-104481-3  |
| Matte Tin                        |       | 5-104481-2 | 5-104481-6  |

| MTE RECEPTACLE HOUSINGS |             |
|-------------------------|-------------|
| Size                    | Part Number |
| 2                       | 104257-1    |
| 3                       | 104257-2    |
| 4                       | 104257-3    |
| 5                       | 104257-4    |
| ...                     | ...         |
| 25                      | 2-104257-4  |

## Pin Counterparts



IDC AMPMODU MTE



Crimp Snap-In Pin Contact



AMPMODU MTE Housing

| PINS |       |               |               |            |
|------|-------|---------------|---------------|------------|
| Size | AWG   | Plating       |               |            |
|      |       | 15 $\mu$ " Au | 30 $\mu$ " Au | Matte Tin  |
| 2    | 22-26 | 5-103945-1    | 5-103946-1    | 5-103944-1 |
| 3    |       | 5-103945-2    | 5-103946-2    | 5-103944-2 |
| 4    |       | 5-103945-3    | 5-103946-3    | 5-103944-3 |
| 5    |       | 5-103945-4    | 5-103946-4    | 5-103944-4 |
| ...  |       | ...           | ...           | ...        |
| 25   | 26-30 | 7-103660-4    | 7-103893-4    | 7-103661-4 |
| 2    |       | 5-103948-1    | 5-103949-1    | 5-103947-1 |
| 3    |       | 5-103948-2    | 5-103949-2    | 5-103947-2 |
| 4    |       | 5-103948-3    | 5-103949-3    | 5-103947-3 |
| 5    |       | 5-103948-4    | 5-103949-4    | 5-103947-4 |
| ...  |       | ...           | ...           | ...        |
| 25   |       | 7-103658-4    | 7-103894-4    | 7-103659-4 |

| CRIMP PIN REPLACEMENT CONTACTS |       |            |             |
|--------------------------------|-------|------------|-------------|
| Plating                        | AWG   | Strip      | Loose Piece |
| 15 $\mu$ " Au                  | 22-26 | 5-104505-4 | 5-104505-5  |
| 30 $\mu$ " Au                  |       | 5-104505-6 | 5-104505-7  |
| Matte Tin                      |       | 5-104505-2 | 5-104505-3  |
| 15 $\mu$ " Au                  | 28-32 | 5-104506-4 | 5-104506-5  |
| 30 $\mu$ " Au                  |       | 5-104506-6 | 5-104506-7  |
| Matte Tin                      |       | 5-104506-2 | 5-104506-3  |

| MTE CRIMP PIN HOUSINGS |             |
|------------------------|-------------|
| Size                   | Part Number |
| 2                      | 103653-1    |
| 3                      | 103653-2    |
| 4                      | 103653-3    |
| 5                      | 103653-4    |
| ...                    | ...         |
| 25                     | 2-103653-4  |

Coupling Shrouds



Single Row



Double Row

Typical Application of Single-Row Coupling Shroud and Mating AMPMODU MTE Products



Typical Application of Double-Row Coupling Shroud and Mating AMPMODU MTE Products



Board Mount Products — With Latching



Right Angle



Surface Mount



Vertical

| PERFORMANCE SPECIFICATIONS |               |                       |                |                           |
|----------------------------|---------------|-----------------------|----------------|---------------------------|
| Type                       | Position Size | Soldering Temperature | Current Rating | Application Specification |
| Right Angle                | 2-25          | 265°C Wave            | 3 amps*        | 114-25026                 |
| Surface Mount              | 2-25          | 245°C Reflow          | 3 amps*        | 114-25026                 |
| Vertical                   | 2-25          | 265°C Wave            | 3 amps*        | 114-25026                 |

\* For a single contact in free air

Miscellaneous (Non-MTE) Board Mount Solutions & Configurations



Right Angle / Breakaway Header\*\*



Surface Mount / Breakaway Header\*\*



Vertical / Shrouded Header

| PERFORMANCE SPECIFICATIONS |               |                       |                |                           |
|----------------------------|---------------|-----------------------|----------------|---------------------------|
| Type                       | Position Size | Soldering Temperature | Current Rating | Application Specification |
| Right Angle                | 2-25          | 265°C Wave            | 3 amps*        | N/A                       |
| Surface Mount              | 3-15          | 245°C Reflow          | 3 amps*        | N/A                       |
| Vertical                   | 8-50          | 265°C Wave            | 3 amps*        | N/A                       |

\* For a single contact in free air

\*\* Only breakaway header configurations with .230 mating post length

Product / Application Specification

**Product Specification** — 108-25034 (Standard Product)  
108-25034-2 (Surface Mount Product)  
**Application Specification** — 114-25026  
**Operating Temperature** — -65 to +105°C  
**Current** — 3 amps max. (single contact in free air)

| APPLICATION TOOLING                               |                     |                                        |                   |
|---------------------------------------------------|---------------------|----------------------------------------|-------------------|
| AMPMODU MTE Part Number                           | Tooling Part Number | Tooling Description                    | Instruction Sheet |
| All Receptacle Assembly Part Numbers Listed Below | 58074-1             | Manual Pistol Grip                     | 408-6790          |
|                                                   | 58075-1             | Pneumatic Pistol Grip                  | 408-6789          |
|                                                   | 58338-1             | Bench Mounted Pneumatic Power Assembly | 408-9393          |
|                                                   | 931800-1            | IDC Electric Power Unit                | 409-5746          |
|                                                   | 58336-1             | MTE Modular Head                       | 408-9359          |
|                                                   | 856002-1            | Tube Fed Ribbon Cable Machine          | 409-5832          |



## Questions that will help you better select the product that you need:

### What are the current rating (amps) and voltage requirements of AMPMODU MTE connectors?

3 amps for a single contact in free air, 267 V (operating voltage)

### What type and size requirements?

#22-#30 AWG range for IDC configurations; #20-#32 AWG for crimp snap-in replacement contacts

### What are the number of positions needed?

2-25 positions, double row coupling shrouds allow 8-50 position configurations

### Available space?

.100 centerline and .100 x .100 centerline (coupling shrouds mating to PCB headers)

### Configuration/orientation?

right angle, vertical, single/double row

### Operating temperature requirements?

Will accommodate -65°C to +105°C range

### Environmental Considerations?

Refer to TE product specifications 108-25034, 108-25034-2 (MTE surface mount product), 108-1472 and 108-1472-1 (Short Point)

## FOR MORE INFORMATION

### TE Technical Support Center

|                   |                       |
|-------------------|-----------------------|
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Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise.

\*as defined [www.te.com/leadfree](http://www.te.com/leadfree)

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4-1773458-0 CIS LUG FP 1M 03/2011

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