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### 5-147278-5 Product Details



5-147278-5

TE Internal Number: 5-147278-5



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# .100 AMPMODU Headers, Housings & Contacts

Always EU RoHS/ELV Compliant (Statement of Compliance)

#### **Product Highlights:**

- Connector
- Header
- Connector Style = Plug
- Contact Type = Pin
- 2.54 mm Centerline

View all Features

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### **Documentation & Additional Information**

#### **Product Drawings:**

None Available

#### Catalog Pages/Data Sheets:

- AMPMODU\_INTERCONNECTION\_SYSTEM\_SECTION5\_CONT (PDF, English)
- AMPMODU\_MTE\_INTERCONNECT\_SYSTEM\_QRG\_4-1773458-0 (PDF, English)

Product Features (Please use the Product Drawing for all design activity)

### **Product Specifications:**

None Available

### **Application Specifications:**

AMPMODU MTE Interconnection System (PDF, English)

### **Instruction Sheets:**

None Available

### **CAD Files:** (CAD Format & Compression Information)

- 2D Drawing (DXF, Version L)
- 3D Model (IGES, Version L)
- 3D Model (STEP, Version L)

#### **Additional Information:**

Product Line Information

### **Related Products:**

Tooling

### List all Documents

### **Product Type Features:**

- Product Type = Connector
- Connector Type = Header
- Post Size (mm [in]) = 0.64 [.025]
- PCB Mounting Orientation = Right Angle
- PCB Mount Style = Surface Mount
- PCB Mount Retention = With
- PCB Orientation Feature = No
- Connector Series = MTE

### **Electrical Characteristics:**

- Contact Rated Current (A) = 3
- Termination Resistance (m $\Omega$ ) = 15
- Insulation Resistance (M $\Omega$ ) = 5,000
- Dielectric Withstanding Voltage (V) = 600

### Configuration Features:

- Number of Positions = 6
- Number of Rows = 1

### **Industry Standards:**

- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Reflow solder capable to 245°C
- RoHS/ELV Compliance History = Always was RoHS compliant
- Approved Standards = CSA LR7189, UL E28476

### **Environmental:**

• Operating Temperature (°C) = -65 - +105

**Termination Features:** 

 Termination Method to Wire/Cable = Crimp, Insulation Displacement Crimp (IDC)

**Body Features:** 

• Row-to-Row Spacing (mm [in]) = 2.54 [0.100]

**Contact Features:** 

• Contact Type = Pin

• Contact Plating, Mating Area, Material = Gold (15)

• Solder Tail Contact Plating = Tin

• Contact Base Material = Brass

**Housing Features:** 

• Connector Style = Plug

• Centerline (mm [in]) = 2.54 [0.100]

• Mating Alignment = With

• Mating Alignment Type = Latched

• Housing Color = Black

• UL Flammability Rating = UL 94V-0

• Housing Material = Thermoplastic - GF

Conditions for Usage:

• Applies To = Printed Circuit Board

• Temperature Rating = High

**Packaging Features:** 

• Packaging Method = Tape & Reel

Other:

• Brand = AMP

• Comment = Use Keying Tool No. 91417-1 to remove post for keying.

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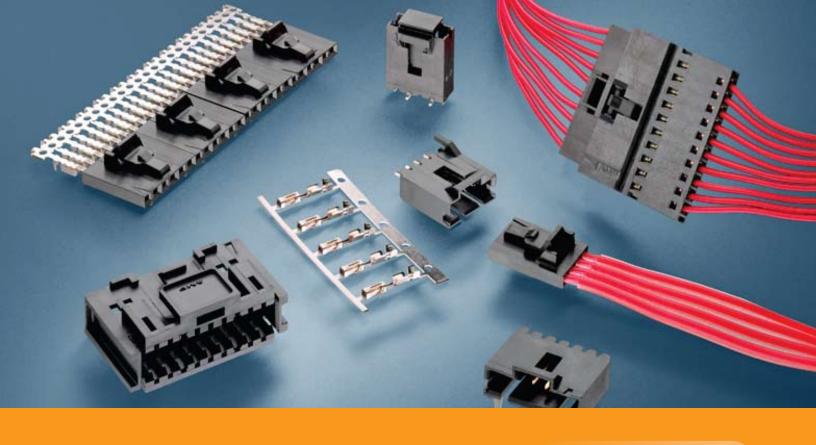








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# **Quick Reference Guide**

# **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

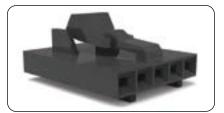
- Time savings
- Preloaded contacts
- Automation
- Mates with same headers as crimp

### **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		
Size		15 μ" Au	30 μ" Au	Matte Tin
2		5-103957-1	5-103958-1	5-103956-1
3	22-26	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		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	26-30	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

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

HOUSINGS			
Size	Part Number		
2	104257-1		
3	104257-2		
4	104257-3		

104257-4

2-104257-4

5

25

# **Pin Counterparts**







**IDC AMPMODU MTE** 

**Crimp Snap-In Pin Contact** 

**AMPMODU MTE Housing** 

PINS				
Size	AWG	Plating		
		15 μ" Au	30 μ" Au	Matte Tin
2		5-103945-1	5-103946-1	5-103944-1
3	22-26	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		7-103660-4	7-103893-4	7-103661-4
2		5-103948-1	5-103949-1	5-103947-1
3	26-30	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 Lo				
15 μ" Au		5-104505-4	5-104505-5	
30 μ" Au	22-26	5-104505-6	5-104505-7	
Matte Tin		5-104505-2	5-104505-3	
15 μ" Au		5-104506-4	5-104506-5	
30 μ" Au	28-32	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			



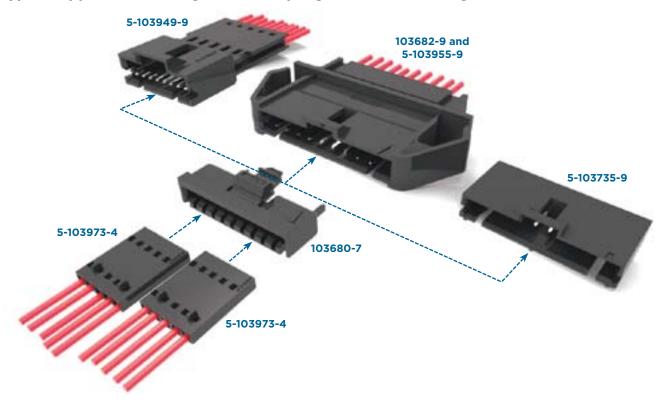
# **Coupling Shrouds**



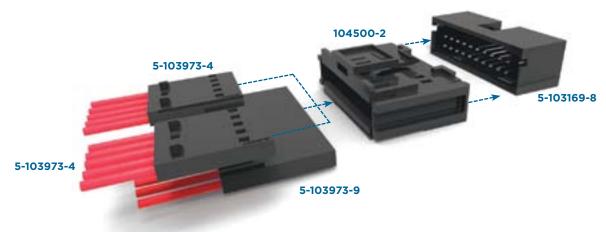


Double Row

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

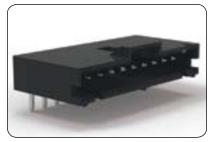


Typical Application of Double-Row Coupling Shroud and Mating AMPMODU MTE Products





# **Board Mount Products — With Latching**







**Right Angle** 

**Surface Mount** 

**Vertical** 

PERFORMANCE SPECIFICATIONS					
Туре	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	

<sup>\*</sup> 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					
Туре	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	

<sup>\*</sup> For a single contact in free air



<sup>\*\*</sup> Only breakaway header configurations with .230 mating post length

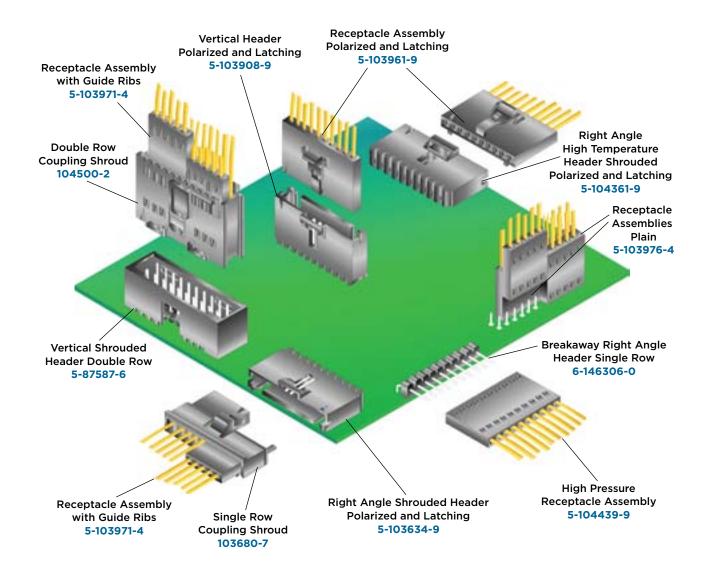
# **Product / Application Specification**

**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			
	58074-1	Manual Pistol Grip	408-6790			
	58075-1	Pneumatic Pistol Grip	408-6789			
All Receptacle Assembly Part Numbers	58338-1	Bench Mounted Pneumatic Power Assembly	408-9393			
Listed Below	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 postions needed?

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

### Available space?

.100 centerline and .100  $\times$  .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

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