

# 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

Crimp Snap-InCost effective

Manual labor

Flexibility (AWG)

• Mates with same headers as IDC

### IDC

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

# **Receptacle Assemblies**



**IDC AMPMODU MTE** 



**Crimp Snap-In Short Point Contact** 



AMPMODU MTE Housing

RECEPTACLES SHORT POIL							
0'	414/0		Plating			CONTAC	TS
Size	AWG	15 µ" Au	30 µ" Au	Matte Tin		Plating	AM
2		5-103957-1	5-103958-1	5-103956-1			
3		5-103957-2	5-103958-2	5-103956-2		15 µ" Au	
4	- 22-26	5-103957-3	5-103958-3	5-103956-3		30 µ" Au	20-
5		5-103957-4	5-103958-4	5-103956-4		Matte Tin	
						15 µ" Au	
25		7-103644-4	7-103734-4	7-103645-4		30 µ" Au	22-
2		5-103960-1	5-103961-1	5-103959-1	-	Matte Tin	
3		5-103960-2	5-103961-2	5-103959-2	-		
4		5-103960-3	5-103961-3	5-103959-3		15 µ" Au	
5	26-30	5-103960-4	5-103961-4	5-103959-4		30 µ" Au	28-
						Matte Tin	
25		7-103640-4	7-103897-4	7-103641-4			

Plating

30 µ" Au

5-103946-1

5-103946-2

5-103946-3

5-103946-4

7-103893-4

5-103949-2

5-103949-3

5-103949-4

5-103948-1 5-103949-1

Matte Tin

5-103944-1

5-103944-2

5-103944-3

5-103944-4

7-103661-4

5-103947-1

5-103947-2

5-103947-3

5-103947-4

7-103659-4

HORT POINT REPLACEMENT ONTACTS			
Plating	AWG	Strip	Loose Piece
15 µ" Au		104479-9	1-104479-2
30 µ" Au	20-24	1-104479-0	1-104479-3
Aatte 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
Aatte 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
Aatte 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**

PINS

Size

2

3

4

5

25

2

3

4

5



IDC AMPMODU MTE

15 µ" Au

5-103945-1

5-103945-2

5-103945-3

5-103945-4

7-103660-4

5-103948-2

5-103948-3

5-103948-4

AWG

22-26

			-34	
	-	0	1	
1	P			

**Crimp Snap-In Pin Contact** 

Plating

15 µ" Au

30 µ" Au

Matte Tin

15 µ" Au

30 µ" Au

Matte Tin

CONTACTS

**CRIMP PIN REPLACEMENT** 

AWG

22-26

28-32

Strip

5-104505-4

5-104505-6

5-104505-2

5-104506-4

5-104506-6

5-104506-2



**AMPMODU MTE Housing** 

Loose

Piece

5-104505-5

5-104505-7

5-104505-3

5-104506-5

5-104506-7

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		



25	7-103658-4	7-103894-4

26-30

# **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				
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

\* 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

\* 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
	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**

USA:	+1 (800) 522-6752
Canada:	+1 (905) 475-6222
Mexico	+52 (0) 55-1106-0800
Latin/S. America:	+54 (0) 11-4733-2200
Germany:	+49 (0) 6251-133-1999
UK:	+44 (0) 800-267666
France:	+33 (0) 1-3420-8686
Netherlands:	+31(0)73-6246-999
China:	+86 (0) 400-820-6015

Part numbers in this brochure are RoHS Compliant\*, unless marked otherwise. \*as defined www.te.com/leadfree

#### te.com

© 2011 Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved. 4-1773458-0 CIS LUG FP 1M 03/2011

AMPMODU, TE Connectivity, TE connectivity (logo) and TE (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners.

While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

