

Quick Reference Guide AMPMODU MTE Interconnect System

The Tyco Electronics 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

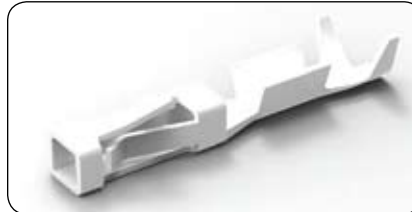
Crimp Snap-In

- 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 μ" Au	30 μ" 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		7-103644-4	7-103734-4	7-103645-4
2	26-30	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 μ" Au	20-24	104479-9	1-104479-2
30 μ" Au		1-104479-0	1-104479-3
Matte Tin		104479-8	1-104479-1
15 μ" Au	22-26	1-104480-2	1-104480-5
30 μ" Au		1-104480-3	1-104480-6
Matte Tin		1-104480-7	1-104480-4
15 μ" Au	28-32	1-104481-0	1-104481-2
30 μ" 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 μ" Au	30 μ" 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		7-103660-4	7-103893-4	7-103661-4
2	26-30	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 μ" Au	22-26	5-104505-4	5-104505-5
30 μ" Au		5-104505-6	5-104505-7
Matte Tin		5-104505-2	5-104505-3
15 μ" Au	28-32	5-104506-4	5-104506-5
30 μ" 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

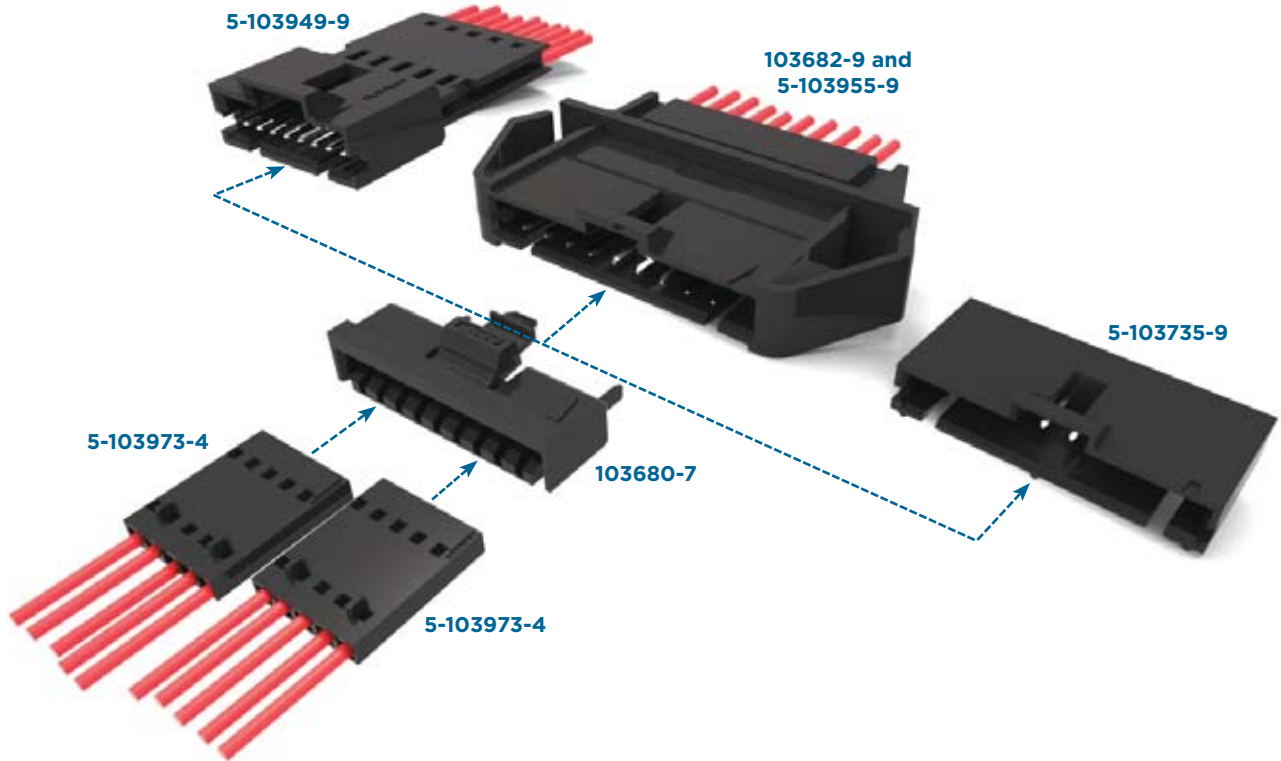


Single Row

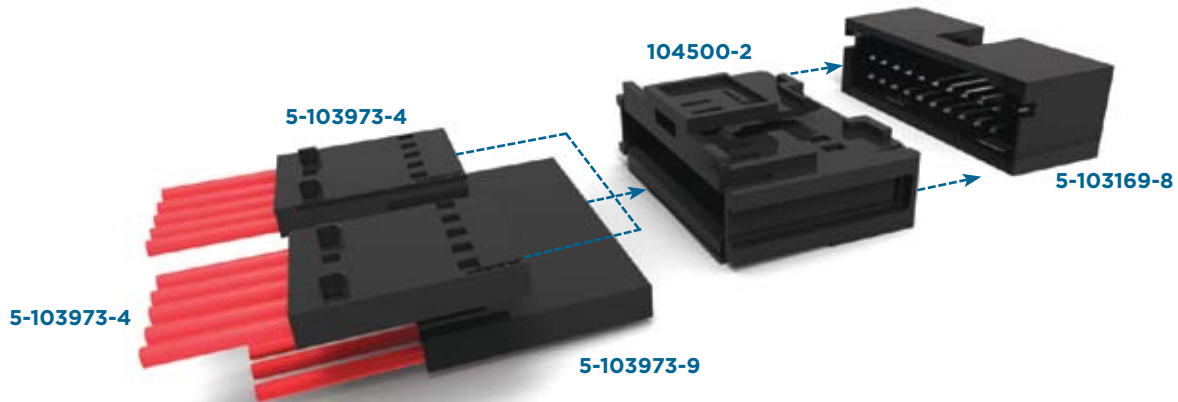


Double Row

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



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



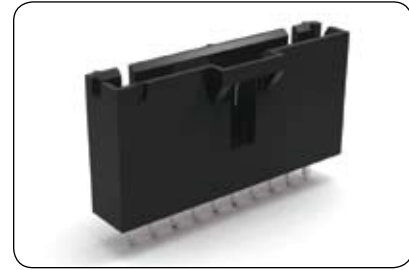
Board Mount Products – With Latching



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)

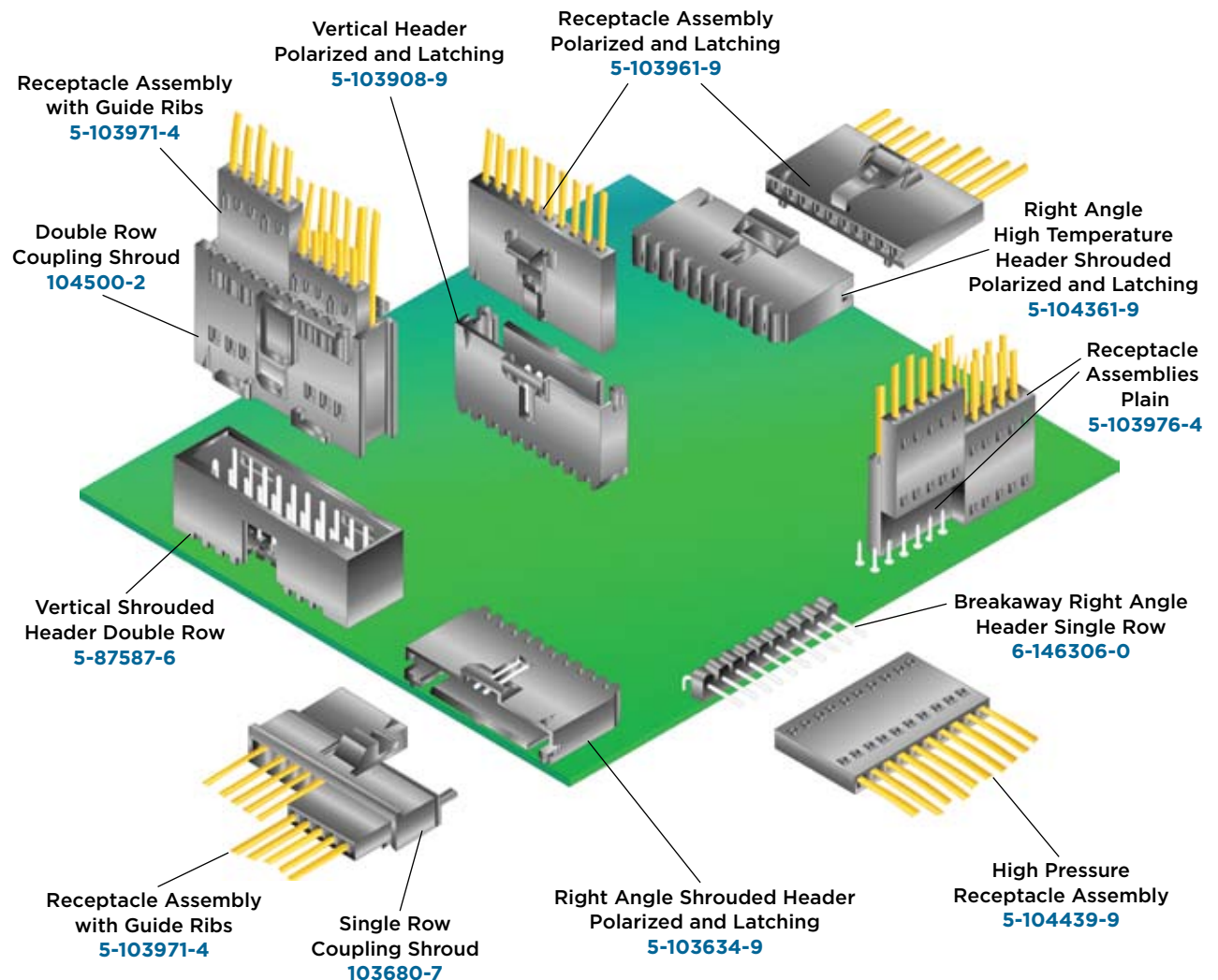
Application Specification — 114-25026

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 Tyco Electronics product specifications 108-25034, 108-25034-2 (MTE surface mount product), 108-1472 and 108-1472-1 (Short Point)

FOR MORE INFORMATION

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

*as defined www.tycoelectronics.com/leadfree

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