

# AMPMODU 2.54MM INTERCONNECT SYSTEM

.100 [2.54] X .100 [2.54] CENTERLINE

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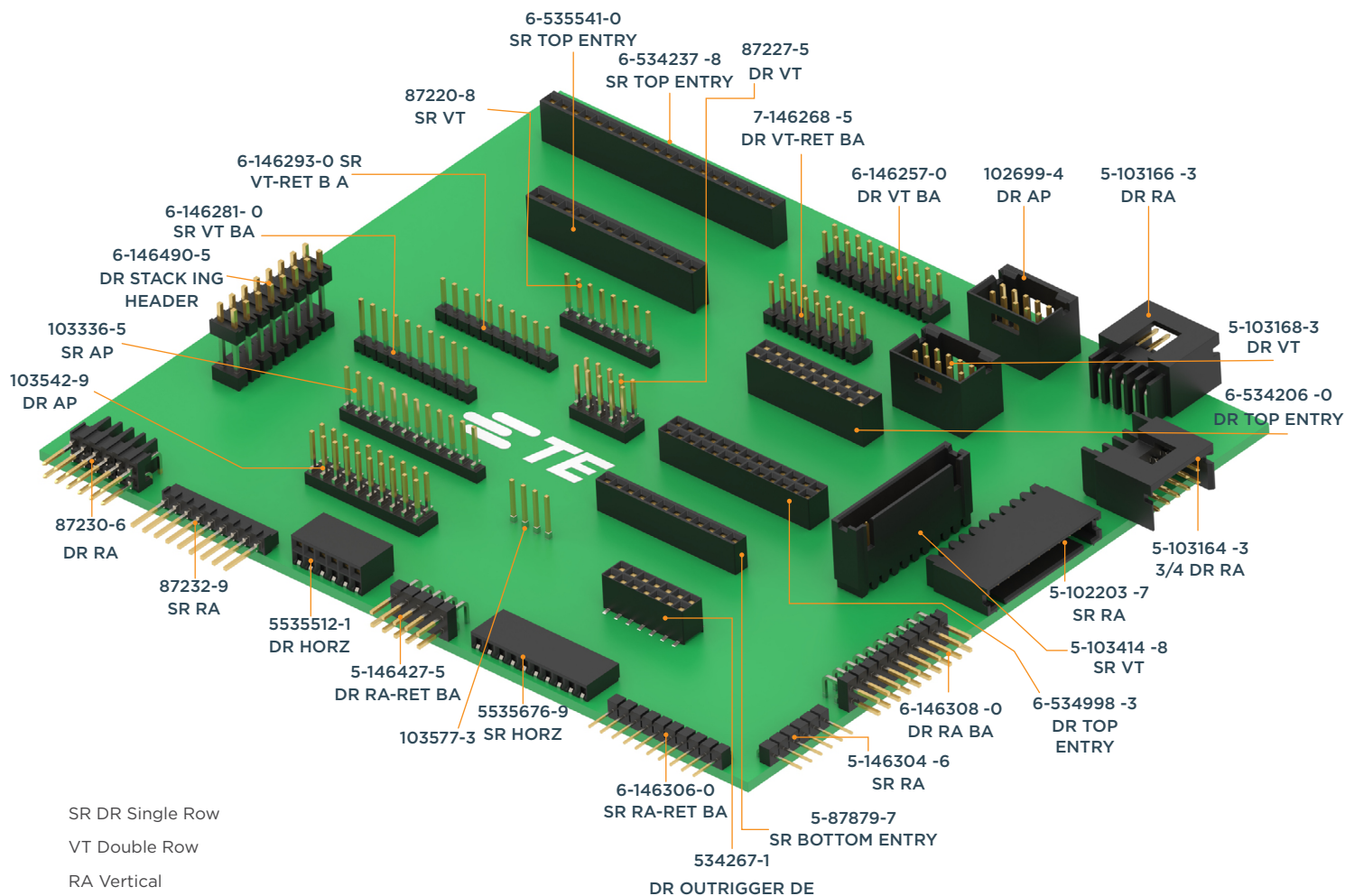
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#### **Technical Documents** .....

## AMPMODU 2.54MM INTERCONNECT SYSTEM

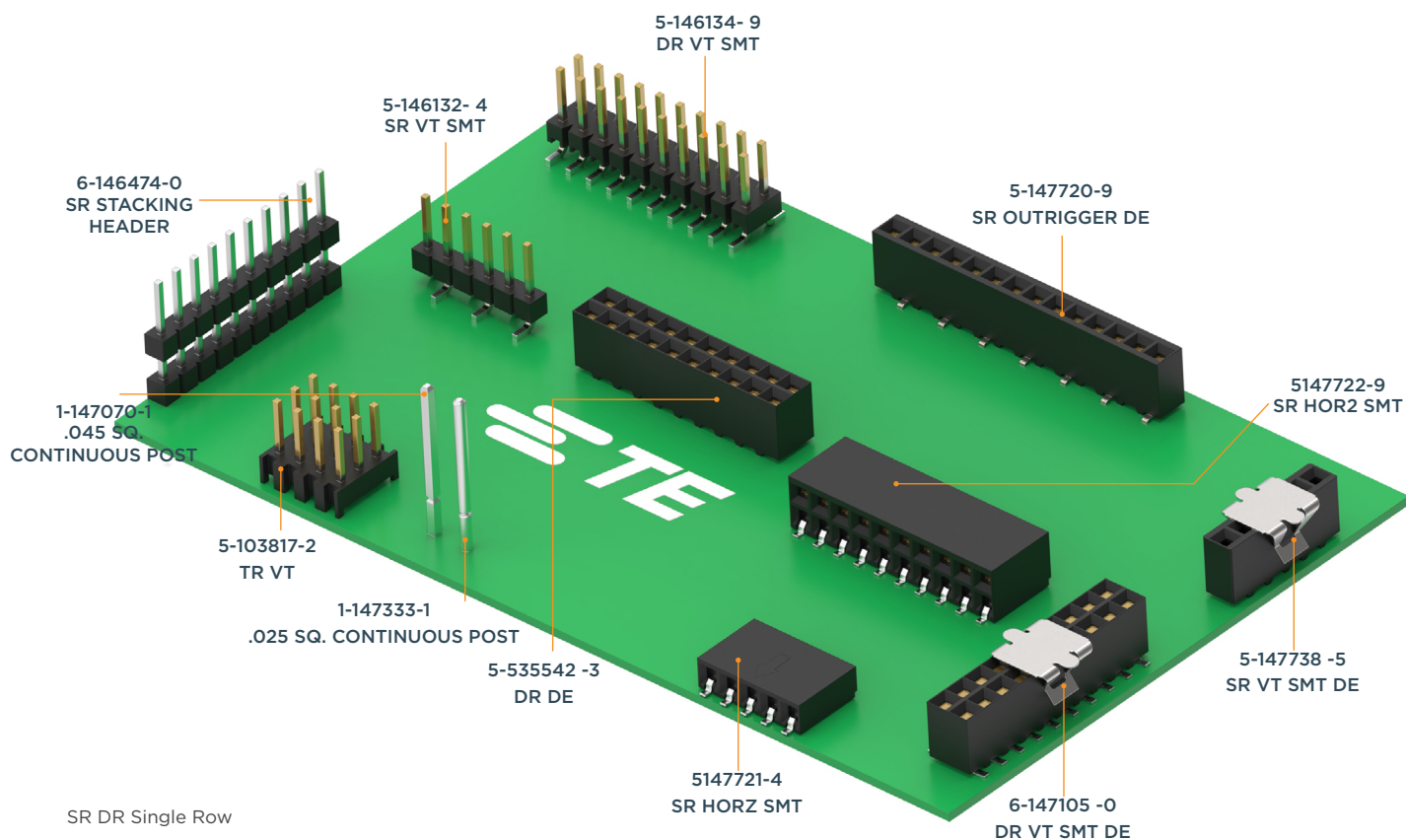
### AMPMODU .025 [0.64] SQUARE INTERCONNECTION SYSTEM

#### AMPMODU HEADERS AND RECEPTACLES, .100 [2.54] CENTERLINE



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### AMPMODU HEADERS AND RECEPTACLES, .100 [2.54] CENTERLINE



SR DR Single Row  
DR Double Row  
VT Vertical  
TR Triple Row  
SMT Surface Mount  
HORZ Horizontal  
DE Dual Entry



### AMPMODU .025 [0.64] SQUARE INTERCONNECTION SYSTEM

#### INTRODUCTION

The AMPMODU 2.54 mm interconnection system provides interconnections with a unique modular concept, utilizing precision formed receptacle contacts and mating posts. Mating of the post and receptacle contacts of this system is very tolerant. This is made possible by a post with a burr-free lead-in and a receptacle contact featuring double cantilever beams and antioverstress stops. AMPMODU receptacle contacts and posts categorically fall into three general classifications of products, which include: board mounted posts and receptacle assemblies, post headers and wire-applied contact Housings for crimp snap-in pin and receptacle contacts.

Board mounted receptacle assemblies are available in various geometries, offering packaging interconnections that include perpendicular, parallel and stacking capabilities. Crimp snap-in pins for 26-22 AWG [0.12-0.4 mm<sup>2</sup>] wire and crimp snap-in receptacles for 32-20 AWG [0.03-0.6

mm<sup>2</sup>] wire provide excellent discrete wire terminations. Housings for these contacts provide ease of handling terminations in high density applications. Machine applied terminations, through matched application equipment, are geared for virtually any production volume requirement, for the lowest possible applied cost.

AMPMODU mating posts are supplied typically as headers. They are available in various populations to meet the interconnection and packaging requirements of most systems. However, in instances where packaging configurations do not lend themselves to the economies of headers, TE can provide application equipment for the discrete location of individual posts. Looking at the electronic industry's standard "levels of packaging,". The .025 [0.64] square interconnection system offers the most complete line of post/receptacle packaging products available today. This system, rated at 3 amperes per contact, has been used by

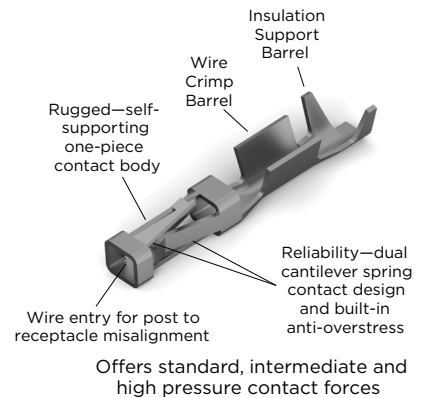
almost every industry and marketplace over the last decade and is one of the oldest, most versatile and reliable interconnection systems employing .025 [0.64] square packaging technology.

#### TERMS EXPLAINED

##### RECEPTACLE CONTACTS

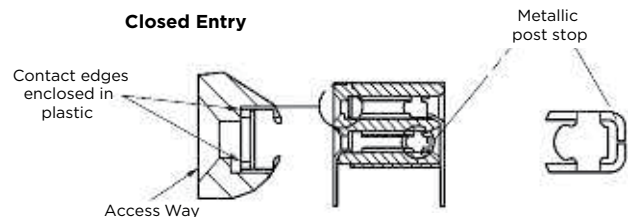
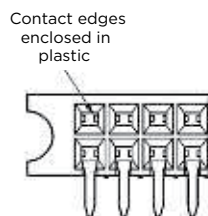
The AMPMODU receptacle cross-section is primarily rectangular, with rounded corners. Two integral cantilever beams contact the mating square or round male posts. Deflection of these spring members is limited by anti-overstress stops, and excessive permanent deformation is prevented. This feature allows a wide range for tolerance of misalignment of mating contacts. The configuration of the receptacle completely encloses the spring members preventing damage during handling and assembly and makes the system compatible with automatic application techniques.

**Note:** Application of a contact lubricant is part of the manufacturing process of all AMPMODU tin-plated crimp products. However, it is not part of the manufacturing process of products that customers will solder, then clean. For these products, TE recommends that customers use contact lubricant. See the TE web page for further information.



##### RECEPTACLE-CLOSED ENTRY HOUSING DESIGN

The closed entry housing style better eliminates the chance of a mating post stubbing on the edges of the receptacle contact.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### WIRE SIZES

Wire Size		Product Family
AWG	[mm <sup>2</sup> ]	
20	0.5-0.6	Locking Clip, Mod. IV, IV.v, V, MT, Short Point
22-30	0.3-0.05	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point
32	0.03	Mod. IV, IV.v, V, Short Point

### CONTACT PLATINGS

Platings	Product Family
.000015 [0.00038] Gold	Mod. IV, IV.v, V, MTE, MT, Short Point
.000030 [0.00076] Gold	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point
.000050 [0.00127] Gold	Locking Clip, Mod. IV, IV.v, V, MT
Tin	Locking Clip, Mod. IV, IV.v, V, MTE, MT, Short Point

### MATING POST LENGTHS

Post Lengths	Product Family
.210-.283 [5.33-7.19]	Mod. IV (.600 [15.24] Profile Height)
.205-.283 [5.21-7.19]	Mod. IV.v (.600 [15.24] Profile Height)
.185-.283 [4.70-7.19]	Mod. V (.600 [15.24] Profile Height)
.256-.323 [6.50-8.20]	Mod. IV (.645 [16.38] Profile Height)
.251-.323 [6.38-8.20]	Mod. IV.v (.645 [16.38] Profile Height)
.231-.323 [5.87-8.20]	Mod. V (.645 [16.38] Profile Height)
.222-.273 [5.64-6.93]	MT Assembly with Standard Pressure Contacts
.200-.273 [5.08-6.93]	MT Assembly with High Pressure Contacts
.200-.250 [5.08-6.35]	MTE Assembly
.169-.259 [4.29-6.58]	Short Point Connector Assembly
.273-.350 [6.93-8.89]	Locking Clip (Connector Assembly)
.200-.277 [5.08-7.04]	Locking Clip (Single Contact)

APPLICATION TOOLING

Application Tooling Description	Product Family				
	Mod. IV, IV.v, V	MT	Locking Clip	MTE	Short Point
Manual Hand Tools (Wire Crimp)	●		●	●	●
Manual Hand Tools (IDC)		●		●	
Pneumatic Hand Tools	●	●	●	●	●
Ocean Applicator	●		●	●	●

## AMPMODU 2.54MM INTERCONNECT SYSTEM

Problem or Concern	TE's Potential Solution	Single-Row Vertical Headers and Receptacles (Page Ref.)	Single-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.)	Double-Row Vertical Headers and Receptacles (Page Ref.)	Double-Row Right-Angle Headers, Horizontal Receptacles (Page Ref.)
Headers Float Off Board Soldering Operation	<b>HEADERS</b> Retention Feature: Unshrouded Shrouded	<a href="#">Page 28</a> -	<a href="#">Page 28</a> -	<a href="#">Page 33</a> <a href="#">Page 117</a>	<a href="#">Page 33</a> <a href="#">Page 119</a>
Header Contacts Damaged During Manufacturing Operation or In-Field Use	Shrouded <b>HEADERS</b> : Standard Profile	<a href="#">Page 48</a>	<a href="#">Page 48</a>	<a href="#">Page 60</a>	<a href="#">Page 60</a>
Board/Backplane Requires High Temperature Surface-Mount Compatibility	Press-Fit ACTION PIN POST <b>HEADERS</b> : Unshrouded Shrouded	- -	- -	- -	- -
	Machine Applied Posts	<a href="#">Page 72</a>			
	Surface-Mount Compatible Thru-Hole: <b>HEADERS</b> : Unshrouded Shrouded (Low Profile) <b>RECEPTACLES</b>	<a href="#">Page 26</a> - -	<a href="#">Page 26</a> - -	<a href="#">Page 30</a> <a href="#">Page 115</a>	<a href="#">Page 33</a> <a href="#">Page 115</a>
	Surface-Mount: <b>HEADERS</b> <b>RECEPTACLES</b>	<a href="#">Page 38</a> <a href="#">Page 103</a>	- <a href="#">Page 79</a>	<a href="#">Page 39</a> <a href="#">Page 107</a>	- -
Application Requires Board Guidance, Polarization and/or Blind-Mate Capability	Two-Piece Family: w/Guide Posts: <b>HEADERS</b> <b>RECEPTACLES</b>	-	-	<a href="#">Page 117</a> <a href="#">Page 115</a>	<a href="#">Page 119</a> <a href="#">Page 115</a>
Reduction in Parallel Board-to-Board Stack Height Necessary (Refer to Parallel Stack Guide on Page 62.)	Mod IV Low Profile <b>RECEPTACLES</b> : <b>TOP ENTRY</b> : Thru-Hole Surface-Mount <b>BOTTOM ENTRY</b> : Thru-Hole Surface-Mount <b>DUAL ENTRY</b> : Thru-Hole Surface Mount	<a href="#">Page 90</a> - <a href="#">Page 90</a> - <a href="#">Page 95</a> <a href="#">Page 103</a>	- - - -	<a href="#">Page 92</a> - - - <a href="#">Page 97</a> <a href="#">Page 107</a>	- - -
Soldering Problems with Thru-Hole Bottom Entry Receptacles (Must Mask Post Holes in Board During Soldering Operation)	<b>RECEPTACLES</b> : Bottom Entry Outrigger (Separate Holes for Receptacle Leads and Mating Leads)	<a href="#">Page 95</a>	-	<a href="#">Page 97</a>	-
Application Requires Connectors to be End-to-End Stackable on .100 [2.54] Grid	End-to-End Stackable: <b>HEADERS</b> (Unshrouded): Thru-Hole Thru-Hole* Surface-Mount <b>RECEPTACLES</b> : Thru-Hole Surface Mount	<a href="#">Page 14, Page 26</a> <a href="#">Page 26</a> <a href="#">Page 38</a> <a href="#">Page 84, Page 90, Page 95</a> <a href="#">Page 105</a>	<a href="#">Page 14, Page 26</a> <a href="#">Page 26</a> - <a href="#">Page 84</a> <a href="#">Page 79</a>	<a href="#">Page 21</a> <a href="#">Page 30</a> <a href="#">Page 37</a> <a href="#">Page 86, Page 92, Page 97</a> <a href="#">Page 99, Page 109</a>	<a href="#">Page 21, Page 30</a> <a href="#">Page 37</a> - <a href="#">Page 81</a> <a href="#">Page 79</a>

\*High temperature compatible version, refer to page ref. listed.

### WIRE-TO-BOARD SOLUTIONS GUIDE, .100 [2.54] CENTERLINE PRODUCTS

Customer Requirement	TE's Potential Solution	Catalog Page(s)
Application Requires Guidance, Polarization	Mod IV Polarized Housing	<a href="#">Page 144</a>
	Latched Receptacle and Header	<a href="#">Page 156</a> , <a href="#">Page 170</a>
	MT with Polarizing Covers	<a href="#">Page 189</a>
	Short Point Polarized Housing	<a href="#">Page 149</a>
Wire-to-Wire Application	Mod IV Receptacle Contacts and Pins	<a href="#">Page 130</a>
Wire-to-Wire Application (Latched)	MTE Latched Receptacle and Shrouded Pin Assembly	<a href="#">Page 156</a> , <a href="#">Page 162</a>
Wire-to-Wire Application (Through Panel)	MTE Panel Mount	<a href="#">Page 169</a>
High Vibration and Shock Applications	Locking Clip Contacts and Housings	<a href="#">Page 124</a>
Printed Circuit Board Polarization	MTE Header with PC Board Orientation Peg	<a href="#">Page 174</a>
Board Requires Surface Mount Capability	MTE Surface Mount Headers	<a href="#">Page 179</a>
	MTE High Temperature Compatible Headers	<a href="#">Page 175</a>
Need to mate to AMP-LATCH Eject Headers	Mod IV Ejection Housing	<a href="#">Page 144</a>
Need to Minimize Strain to Cable	MT with Eject Covers	<a href="#">Page 189</a>
	Mod IV Housing with Strain Relief	<a href="#">Page 144</a>
Application Requires Self-Retaining Contacts	Locking Clip Contacts	<a href="#">Page 124</a>
Header Secured to Board During/Prior to Soldering	MTE Headers with Post Retention or Holddowns	<a href="#">Page 170</a>
Mate to Unshrouded Header with Retention Requirements	Mod IV plain Housing with Mod V Contacts	<a href="#">Page 131</a> , <a href="#">Page 144</a>
	MTE with High Pressure Contacts	<a href="#">Page 160</a>
Multiple Cables to be Common to One Header	MTE Coupling Shroud, Double- or Single-Row	<a href="#">Page 166</a>
Right-Angle Cable Dress	MT with Hermaphroditic Covers	<a href="#">Page 155</a> , <a href="#">Page 189</a> , <a href="#">Page 191</a>
Application Requires Crimp Contacts and MTE Housings	Short Point Contacts	<a href="#">Page 147</a>
Housings and End-to-End and Side-to-Side Stackable	Short Point Double-Row Housing, MTE Plain Housing	<a href="#">Page 148</a> , <a href="#">Page 154</a>
Connector Must Mate to Post Lengths of .169 [4.29] Min.	Short Point Contacts	<a href="#">Page 147</a>

## MATING POST SELECTION GUIDE

The following selection guide is provided to help in choosing a mating product after a receptacle, header or post has been selected. In some instances references are given on the catalog page to specific mating connectors. In other instances the reader is referred here to the selection guide for mating product recommendations. If your application requirement is not answered here, consult TE for further recommendations.

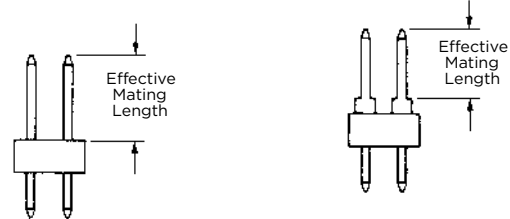
### POSTS WITHOUT SHOULDERS

For drawn wire products (ie, AMPMODU Breakaway and Low Profile Headers) and for products having the shoulder of the post below the Housing or pc board surface (ie, AMPMODU MTE and Single Row Shrouded Headers) the effective mating length starts at the Housing or pc board surface.

Receptacle Type	Recommended Effective Mating Posts Lengths	
	Minimum	Maximum
AMPMODU Mod II Horizontal Board Mount Receptacle, Single and Double Row, Short Point-of-Contact-pages 169, 170, 172, 173	.230 [5.84]	.280 [7.11]
AMPMODU Mod II Vertical Board Mount Receptacle, Single Row, Standard Profile, Top Entry-page 175	.183 [4.65]	.330 [8.38]
AMPMODU Mod II Vertical Board Mount Receptacle, Standard Profile, Double Row, Top Entry, 100 x .100 mt.-page 176	.183 [4.65]	.330 [8.38]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Top Entry, Single Tine-page 178	.183 [4.65]	.255 [6.48]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Bottom Entry-page 177	.280 [7.11]	*
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Double Row, Top Entry-pages 179, 180	.183 [4.65]	.255 [6.48]
AMPMODU Surface-Mount Receptacle, Vertical Board Mount, Single Row, Dual Entry-page 187, 188	Top Entry: .183 [4.65]	*
	Bottom Entry: .204 [5.18]	*
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Double Row, Dual Entry-page 182	Top Entry: .183 [4.65]	*
	Bottom Entry: .204 [5.18]	*
AMPMODU Surface-Mount Receptacle, Vertical Board Mount, Double Row, Dual Entry-page 189-192	Top Entry: .183 [4.65]	*
	Bottom Entry: .204 [5.18]	*
AMPMODU .600 [15.24] Mod IV Housing with Standard Pressure Contacts- pages 211-220	.210 [5.33]	.283 [7.19]
AMPMODU .600 [15.24] Mod IV Housing with Intermediate Pressure Contacts- pages 211-220	.205 [5.21]	.283 [7.19]
AMPMODU .600 [15.24] Mod IV Housing with High Pressure Contacts-pages 211-220	.185 [4.70]	.283 [7.19]
AMPMODU Mod IV Vertical Board Mount Receptacle, Low Profile, Single Row, Dual Entry- page 181	Top Entry: .183 [4.65]	*
	Bottom Entry: .204 [5.18]	*

### POSTS WITH SHOULDERS

For product having the shoulder of the post extending above the Housing or pc board surface (ie, Standard AMPMODU Shrouded and Unshrouded Headers) the effective mating length starts at the top of the shoulder.



Receptacle Type		Recommended Effective Mating Posts Lengths	
		Minimum	Maximum
Short Point Housing with Contacts-pages 222-224		.169 [4.29]	.259 [6.58]
AMPMODU MTE Unloaded Housing with Short Point Contacts-pages 222, 229, 231, 233		.169 [4.29]	.259 [6.58]
AMPMODU MTE IDC Assemblies		.200 [5.08]	.250 [6.35]
AMPMODU MT IDC Assembly with Standard Pressure Contacts-page 256		.222 [5.64]	.273 [6.93]
AMPMODU MT IDC Assembly with High Pressure Contacts-page 257		.200 [5.08]	.273 [6.93]
Locking Clip Housing with Contacts-pages 207-209		.273 [6.93]	.350 [8.89]
Locking Clip Contact without Housing-page 207		.200 [5.08]	.277 [7.04]
Flexible Flat Conductor Cable Receptacle with Round Wire Crimp High Pressure Contact- Catalog 82007	Single Row	.267 [6.78]	.323 [8.20]
	Double Row	.282 [7.16]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Multiple Wire Crimp High Pressure Contact-Catalog 82007	Single Row	.210 [5.33]	.323 [8.20]
	Double Row	.225 [5.72]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Round Wire Crimp Standard Pressure Contact-Catalog 82007	Single Row	.267 [6.78]	.323 [8.20]
	Double Row	.282 [7.16]	.323 [8.20]
Flexible Flat Conductor Cable Receptacle with Multiple Crimp Standard Pressure Contact-Catalog 82007	Single Row	.220 [5.59]	.323 [8.20]
	Double Row	.235 [5.97]	.323 [8.20]

\*Maximum post length is determined by customer's application; (i.e., available space beyond rear of horizontal receptacle assembly, or above bottom entry vertical receptacle assembly or below vertical receptacle assemblies used in pass through applications).



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PARALLEL STACKING GUIDE FOR BOARD-TO-BOARD APPLICATIONS

See Figure Below	Dimension Between PC Boards	Product Family Headers (See Note 1.)	Single-Row (Page Ref.)	Double-Row (Page Ref.)	Product Family Receptacles	Single-Row (Page Ref.)	Double-Row (Page Ref.)
	.060 [1.52]	Bandolier Posts	<a href="#">Page 72</a>	-	Dual Entry, Mod IV	<a href="#">Page 90, Page 95, Page 103, Page 105</a>	<a href="#">Page 97, Page 107</a>
1	.090 [2.29]	Breakaway** (Unshrouded)	<a href="#">Page 26</a>	<a href="#">Page 30</a>	Dual Entry, Mod IV	<a href="#">Page 90, Page 95, Page 103, Page 105</a>	<a href="#">Page 97, Page 107</a>
	.153 [3.89]	Surface Mount** Breakaway (Unshrouded)	-	<a href="#">Page 39</a>	Dual Entry, Mod IV	<a href="#">Page 90, Page 95, Page 103, Page 105</a>	<a href="#">Page 97, Page 107</a>
	.265 [6.73]	Bandolier Posts	<a href="#">Page 72</a>	-	Top Entry, Mod IV	<a href="#">Page 90, Page 95, Page 103, Page 105</a>	<a href="#">Page 92, Page 97, Page 107</a>
2	.355 [9.02]	Breakaway** (Unshrouded)	<a href="#">Page 26</a>	<a href="#">Page 30</a>	Top Entry, Mod IV	<a href="#">Page 90, Page 95, Page 103, Page 105</a>	<a href="#">Page 92, Page 97, Page 107</a>
	.385 [9.78]	Low Profile Shrouded	-	-	Top Entry, Mod IV	-	<a href="#">Page 92</a>
3	.418 [1.06]	Surface Mount** Breakaway (Unshrouded)	<a href="#">Page 38</a>	<a href="#">Page 39</a>	Surface Mount**, Mod IV, Top Entry	<a href="#">Page 103, Page 105</a>	<a href="#">Page 107</a>
2*	.430 [10.92]	Breakaway** (Unshrouded)	<a href="#">Page 26</a>	<a href="#">Page 30</a>	Top Entry, Mod II	<a href="#">Page 84</a>	<a href="#">Page 86</a>
4*	.440 [11.18]	Shrouded, Mod II	<a href="#">Page 48</a>	<a href="#">Page 60</a>	Top Entry, Mod II or Mod IV	<a href="#">Page 84, Page 90</a>	<a href="#">Page 86, Page 92</a>
	.528 [13.41]	Staking Shroud (See Note. 2)	-	-	Inner board receptacle (see Note 2.)	-	-
	.547 [13.89]	Staking Shroud (See Note. 2)	-	-	Outer board receptacle (see Note 2.)	-	-
4	.550 [13.97]	Two-Piece Header Connector System	-	<a href="#">Page 117</a>	Two-Piece receptacle** Connector System	-	<a href="#">Page 115</a>
	.748 [19.00]	Staking Shroud (See Note. 2)	-	-	Inner board receptacle (see Note 2.)	-	-
	.768 [19.51]	Staking Shroud (See Note. 2)	-	-	Outer board receptacle (see Note 2.)	-	-
	Various	Stacking Unshrouded	<a href="#">Page 41</a>	<a href="#">Page 43</a>	Mod II/IV receptacle, Top/Bottom Entry	Various	Various

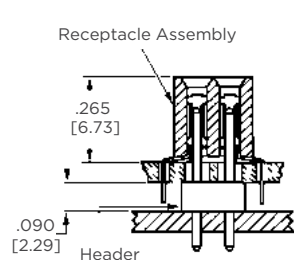
\*\*High temperature version available, see page ref. listed.

Notes: 1. Headers listed are standard thru-hole versions. Many headers are available with retention feature and ACTION PIN posts. See **product specification** pages in individual sections for option availability.

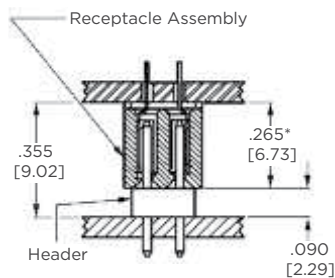
Notes: 2. These headers and receptacles are Related Board-to-Board products. They are not part of the AMPMODU .025 [0.64] Square Product Family.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

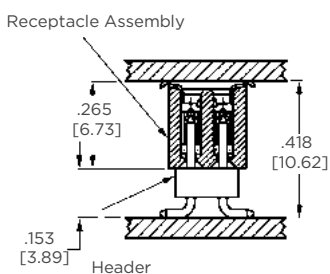
### BOARD-TO-BOARD STACKING HEIGHTS (BY RECEPTACLE/HEADER COMBINATION)



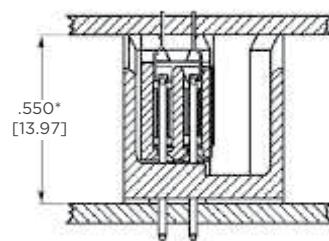
**Figure 1**  
**Double-Row, Mod IV,**  
**Bottom Entry, Breakaway Header**



**Figure 2**  
**Double-Row, Mod IV,**  
**Top Entry, Breakaway Header**  
\*Mod II Receptacle Height  
is .340 [8.64] for a total  
stack height of .430 [10.92]

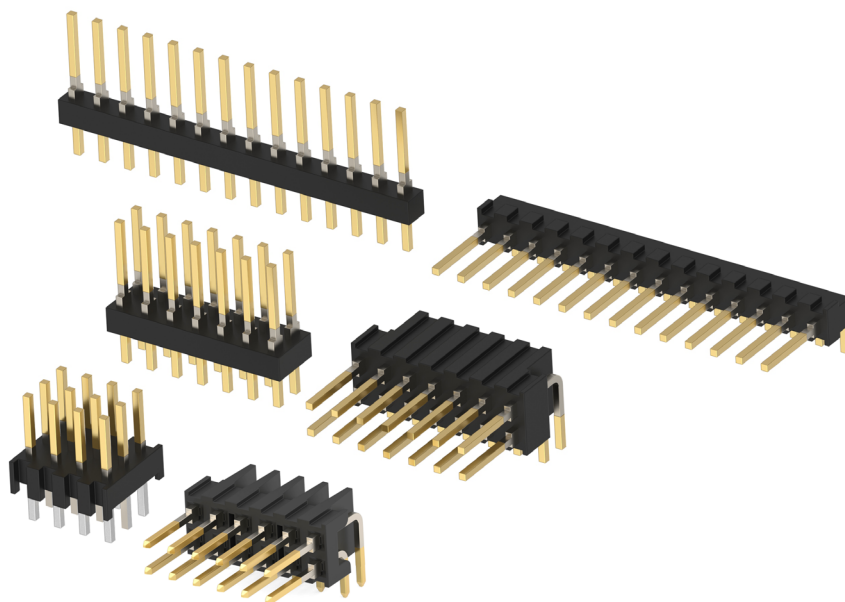


**Figure 3**  
**Double-Row, Mod IV,**  
**Surface-Mount, Top Entry,**  
**Receptacle and Surface-Mount**  
**Breakaway Header**



**Figure 4**  
**Double-Row, Two-Piece**  
**Receptacle and Two-Piece**  
**Shrouded Header**  
\*Mod II Shrouded Header Height  
is .440 [11.18] for a total  
stack height of .858 [21.80]

### STANDARD HEADERS-UNSHROUDED



#### PRODUCT FACTS

- Variety of popular sizes available
- Substantial time/labor savings-install all posts at one time
- Vertical and right-angle versions available in single- and double-row configurations
- Triple-row version available in vertical configuration with .230 [5.84] mating length
- Copper alloy posts Choice of select gold or tin plated posts
- Mating length for single and double row is .318 [8.08] (.278 [7.06] effective mating length-see page 90)
- Flame retardant, black thermoplastic Housings; 94V-0 rated
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

##### ELECTRICAL

**Insulation Resistance** - 5,000 megohms minimum initial

**Dielectric Withstanding Voltage** - 750 V rms at sea level

##### ENVIRONMENTAL

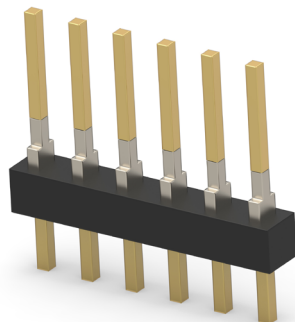
**Operating Temperature** - -65°C to +105°C (black thermoplastic Housings)

**Current** - 3 amperes maximum per contact (dependent upon mating connector)

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD HEADERS-UNSHROUDED, SINGLE ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] Square Straight Post



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated as follows:

**Plating A** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Plating B** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

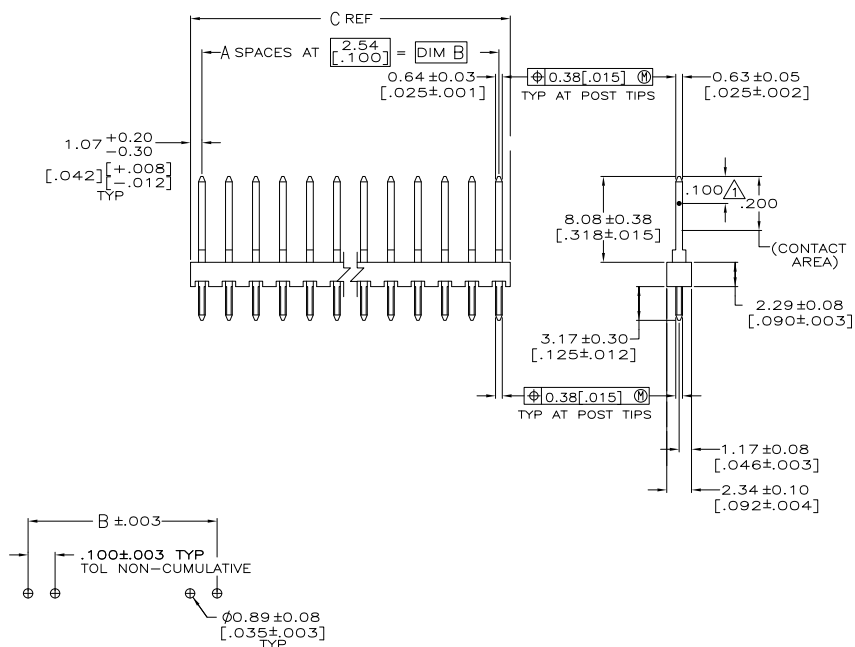
#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195

See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

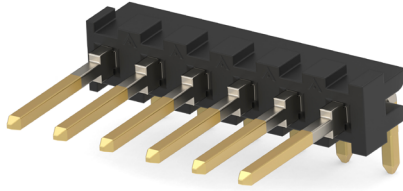
### PRODUCT INFORMATION

No. of Pos.	Dimensions		Post Plating/Part Nos.	
	C	B	Plating A	Plating B
1	.084 [2.13]	-	87220-1	87224-1
2	.184 [4.67]	.100 [2.54]	87220-2	87224-2
3	.284 [7.21]	.200 [5.08]	87220-3	87224-3
4	.384 [9.75]	.300 [7.62]	87220-4	87224-4
5	.484 [12.29]	.400 [10.16]	87220-5	87224-5
6	.584 [14.83]	.500 [12.70]	87220-6	87224-6
7	.684 [17.37]	.600 [15.24]	87220-7	87224-7
8	.784 [19.91]	.700 [17.78]	87220-8	87224-8
9	.884 [22.45]	.800 [20.32]	87220-9	-
10	.984 [24.99]	.900 [22.86]	1-87220-0	1-87224-0
11	1.084 [27.53]	1.000 [25.40]	1-87220-1	-
12	1.184 [30.07]	1.100 [27.94]	1-87220-2	1-87224-2
13	1.284 [32.61]	1.200 [30.48]	1-87220-3	-
14	1.384 [35.15]	1.300 [33.02]	1-87220-4	1-87224-4
15	1.484 [37.69]	1.400 [35.56]	1-87220-5	1-87224-5
16	1.584 [40.23]	1.500 [38.10]	1-87220-6	-
17	1.684 [42.77]	1.600 [40.64]	1-87220-7	-
18	1.784 [45.31]	1.700 [43.18]	1-87220-8	-
19	1.884 [47.85]	1.800 [45.72]	1-87220-9	-
20	1.984 [50.39]	1.900 [48.26]	2-87220-0	-
21	2.084 [52.93]	2.000 [50.80]	2-87220-1	-
22	2.184 [55.47]	2.100 [53.34]	2-87220-2	-
23	2.284 [58.01]	2.200 [55.88]	2-87220-3	-
24	2.384 [60.55]	2.300 [58.42]	2-87220-4	-
25	2.484 [63.09]	2.400 [60.96]	2-87220-5	-
26	2.584 [65.63]	2.500 [63.50]	2-87220-6	-
27	2.684 [68.17]	2.600 [66.04]	2-87220-7	-
28	2.784 [70.71]	2.700 [68.58]	2-87220-8	-
29	2.884 [73.25]	2.800 [71.12]	2-87220-9	-
30	2.984 [75.79]	2.900 [73.66]	3-87220-0	-
31	3.084 [78.33]	3.000 [76.20]	3-87220-1	-
32	3.184 [80.87]	3.100 [78.74]	3-87220-2	-
33	3.284 [83.41]	3.200 [81.28]	3-87220-3	-
34	3.384 [85.95]	3.300 [83.82]	3-87220-4	-
35	3.484 [88.49]	3.400 [86.36]	3-87220-5	-
36	3.584 [91.03]	3.500 [88.90]	3-87220-6	-
37	3.684 [93.57]	3.600 [91.44]	3-87220-7	-
38	3.784 [96.11]	3.700 [93.98]	3-87220-8	-
39	3.884 [98.65]	3.800 [96.52]	3-87220-9	-
40	3.984 [101.19]	3.900 [99.06]	4-87220-0	4-87224-0

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD HEADERS-UNSHROUDED, SINGLE ROW, .100 [2.54] CENTERLINE (Continued)

#### .025 [0.64] SQUARE RIGHT-ANGLE POST



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated as follows:

**Plating A** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Plating B** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

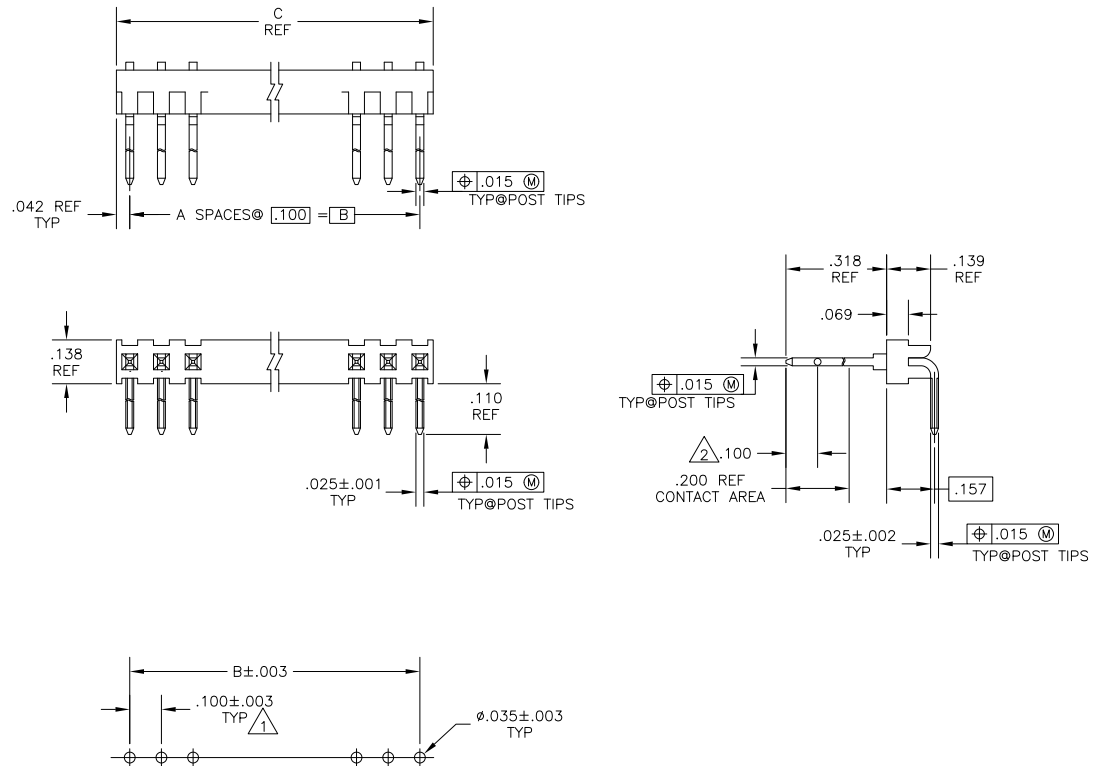
**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\* $\pm .003$  [ $\pm 0.08$ ] tolerances not to accumulate within one connector pattern.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

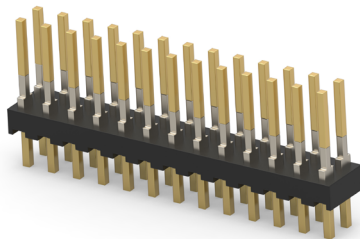
No. of Pos.	Dimensions		Post Plating/Part Nos.
	C	B	Plating B
1	.084 [2.13]	-	87233-1
2	.184 [4.67]	.100 [2.54]	87233-2
3	.284 [7.21]	.200 [5.08]	87233-3
4	.384 [9.75]	.300 [7.62]	87233-4
5	.484 [12.29]	.400 [10.16]	87233-5
6	.584 [14.83]	.500 [12.70]	87233-6
7	.684 [17.37]	.600 [15.24]	87233-7
9	.884 [22.45]	.800 [20.32]	87233-9
10	.984 [24.99]	.900 [22.86]	1-87233-0
11	1.084 [27.53]	1.000 [25.40]	1-87233-1
12	1.184 [30.07]	1.100 [27.94]	1-87233-2
13	1.284 [32.61]	1.200 [30.48]	1-87233-3
14	1.384 [35.15]	1.300 [33.02]	1-87233-4
15	1.484 [37.69]	1.400 [35.56]	1-87233-5
16	1.584 [40.23]	1.500 [38.10]	1-87233-6
17	1.684 [42.77]	1.600 [40.64]	1-87233-7
18	1.784 [45.31]	1.700 [43.18]	1-87233-8
19	1.884 [47.85]	1.800 [45.72]	1-87233-9
20	1.984 [50.39]	1.900 [48.26]	2-87233-0
21	2.084 [52.93]	2.000 [50.80]	2-87233-1
22	2.184 [55.47]	2.100 [53.34]	2-87233-2
23	2.284 [58.01]	2.200 [55.88]	2-87233-3
24	2.384 [60.55]	2.300 [58.42]	2-87233-4
25	2.484 [63.09]	2.400 [60.96]	2-87233-5
26	2.584 [65.63]	2.500 [63.50]	2-87233-6
27	2.684 [68.17]	2.600 [66.04]	2-87233-7
28	2.784 [70.71]	2.700 [68.58]	2-87233-8
29	2.884 [73.25]	2.800 [71.12]	2-87233-9
30	2.984 [75.79]	2.900 [73.66]	3-87233-0
31	3.084 [78.33]	3.000 [76.20]	3-87233-1
32	3.184 [80.87]	3.100 [78.74]	3-87233-2
33	3.284 [83.41]	3.200 [81.28]	3-87233-3
34	3.385 [85.95]	3.300 [83.82]	3-87233-4
35	3.484 [88.49]	3.400 [86.36]	3-87233-5
36	3.584 [91.03]	3.500 [88.90]	3-87233-6
37	3.684 [93.57]	3.600 [91.44]	3-87233-7
38	3.784 [96.11]	3.700 [93.98]	3-87233-8
39	3.884 [98.65]	3.800 [96.52]	3-87233-9
40	3.984 [101.19]	3.900 [99.06]	4-87233-0

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] Square Straight Post



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated as follows:

**Plating A** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Plating B** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

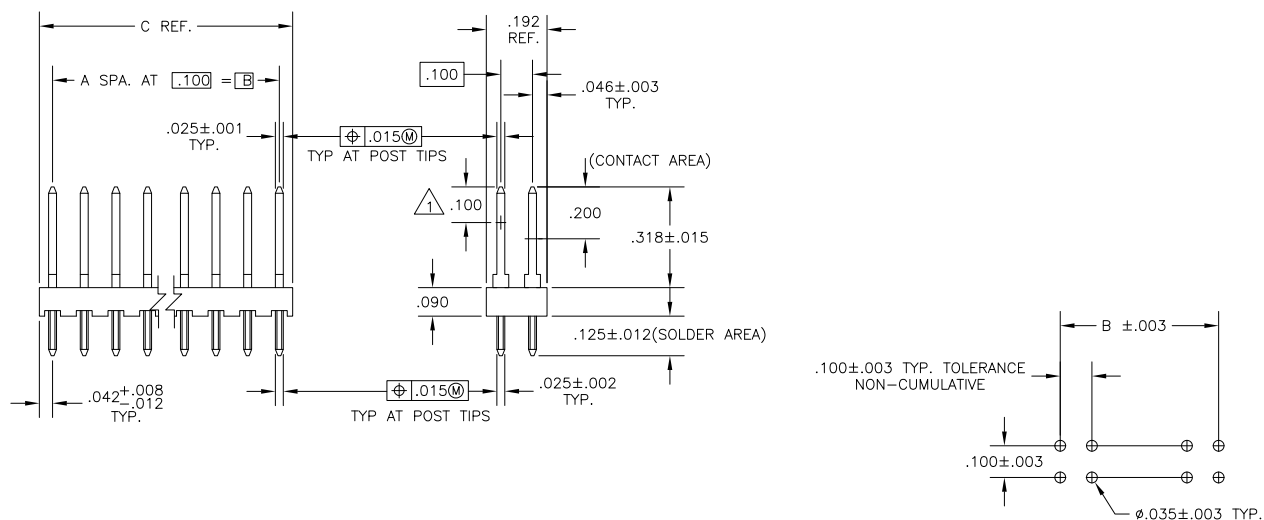
#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Accessories** - Barrier Insert - page 125-127

**Technical Documents** See mating connector for applicable product and application specifications Page 195.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Post Plating/Part Nos.	
	A	B	Plating A	Plating B
2	.084 [2.13]	-	1-87215-0	87227-1
4	.184 [4.67]	.100 [2.54]	1-87215-1	87227-2
6	.284 [7.21]	.200 [5.08]	1-87215-2	87227-3
8	.384 [9.75]	.300 [7.62]	87215-1	87227-4
10	.484 [12.29]	.400 [10.16]	87215-2	87227-5
12	.584 [14.83]	.500 [12.70]	87215-3	87227-6
14	.684 [17.37]	.600 [15.24]	87215-4	87227-7
16	.784 [19.91]	.700 [17.78]	87215-5	87227-8
18	.884 [22.45]	.800 [20.32]	87215-6	87227-9
20	.984 [24.99]	.900 [22.86]	87215-7	1-87227-0
22	1.084 [27.53]	1.000 [25.40]	1-87215-3	-
24	1.184 [30.07]	1.100 [27.94]	87215-8	1-87227-2
26	1.284 [32.61]	1.200 [30.48]	87215-9	1-87227-3
28	1.384 [35.15]	1.300 [33.02]	1-87215-4	-
30	1.484 [37.69]	1.400 [35.56]	1-87215-5	-
32	1.584 [40.23]	1.500 [38.10]	1-87215-6	-
34	1.684 [42.77]	1.600 [40.64]	1-87215-7	-
36	1.784 [45.31]	1.700 [43.18]	1-87215-8	-
38	1.884 [47.85]	1.800 [45.72]	1-87215-9	-
40	1.984 [50.39]	1.900 [48.26]	2-87215-0	-
42	2.084 [52.93]	2.000 [50.80]	2-87215-1	-
44	2.184 [55.47]	2.100 [53.34]	2-87215-2	-
46	2.284 [58.01]	2.200 [55.88]	2-87215-3	-
48	2.384 [60.55]	2.300 [58.42]	2-87215-4	-
50	2.484 [63.09]	2.400 [60.96]	2-87215-5	-
52	2.584 [65.63]	2.500 [63.50]	2-87215-6	-
54	2.684 [68.17]	2.600 [66.04]	2-87215-7	-
56	2.784 [70.71]	2.700 [68.58]	2-87215-8	-
58	2.884 [73.25]	2.800 [71.12]	2-87215-9	-
60	2.984 [75.79]	2.900 [73.66]	3-87215-0	-

**Note:** All part numbers are RoHS compliant.

### PRODUCT INFORMATION

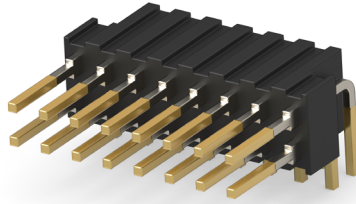
No. of Pos.	Dimensions		Post Plating/Part Nos.	
	A	B	Plating A	Plating B
62	3.084 [78.33]	3.000 [76.20]	3-87215-1	-
64	3.184 [80.87]	3.100 [78.74]	3-87215-2	-
66	3.284 [83.41]	3.200 [81.28]	3-87215-3	-
68	3.384 [85.95]	3.300 [83.82]	3-87215-4	-
70	3.484 [88.49]	3.400 [86.36]	3-87215-5	-
72	3.584 [91.03]	3.500 [88.90]	3-87215-6	-
74	3.684 [93.57]	3.600 [91.44]	3-87215-7	-
76	3.784 [96.11]	3.700 [93.98]	3-87215-8	-
78	3.884 [98.65]	3.800 [96.52]	3-87215-9	-
80	3.984 [101.19]	3.900 [99.06]	4-87215-0	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] Square Right-Angle Post



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated as follows:

**Plating A** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

**Plating B** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire post

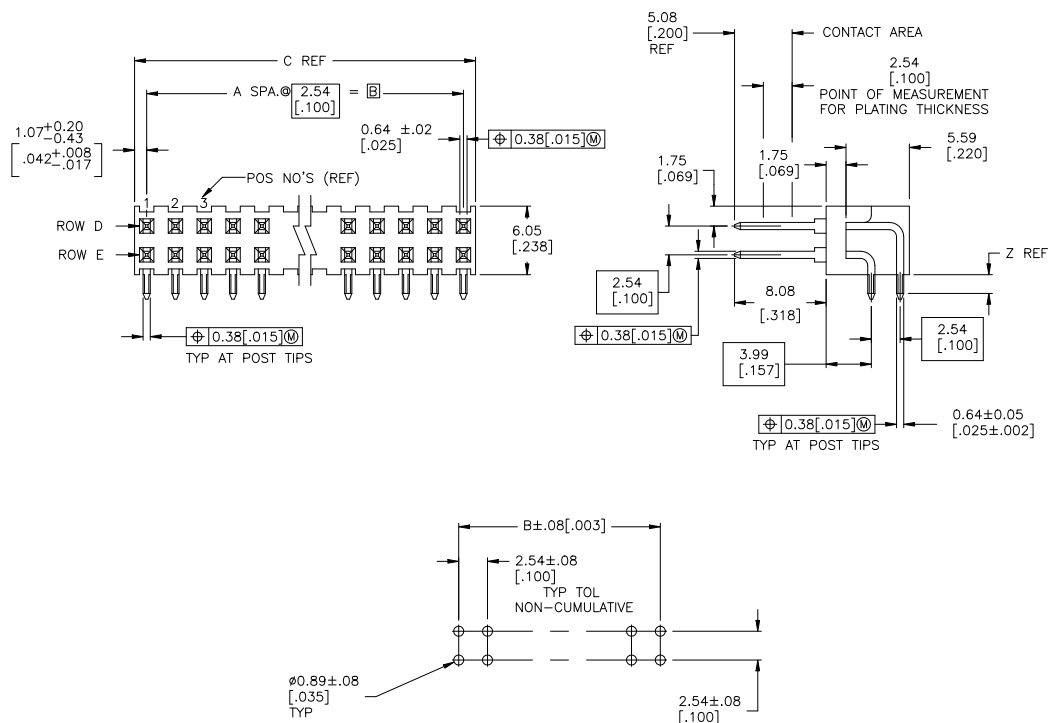
**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and **application specifications**.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Post Plating/Part Nos.	
	A	B	Plating A	Plating B
2	.084 [2.13]	-	1-86479-3	-
4	.184 [4.67]	.100 [2.54]	1-86479-4	87230-2
6	.284 [7.21]	.200 [5.08]	1-86479-5	87230-3
8	.384 [9.75]	.300 [7.62]	-	87230-4
10	.484 [12.29]	.400 [10.16]	86479-3	87230-5
12	.584 [14.83]	.500 [12.70]	86479-4	87230-6
14	.684 [17.37]	.600 [15.24]	86479-5	87230-7
16	.784 [19.91]	.700 [17.78]	86479-2	87230-8
18	.884 [22.45]	.800 [20.32]	-	87230-9
20	.984 [24.99]	.900 [22.86]	86479-1	1-87230-0
22	1.084 [27.53]	1.000 [25.40]	1-86479-7	-
24	1.184 [30.07]	1.100 [27.94]	86479-7	-
26	1.284 [32.61]	1.200 [30.48]	1-86479-0	-
28	1.384 [35.15]	1.300 [33.02]	1-86479-8	-
30	1.484 [37.69]	1.400 [35.56]	1-86479-9	-
32	1.584 [40.23]	1.500 [38.10]	2-86479-0	-
34	1.684 [42.77]	1.600 [40.64]	2-86479-1	-
36	1.784 [45.31]	1.700 [43.18]	2-86479-2	-
38	1.884 [47.85]	1.800 [45.72]	2-86479-3	-
40	1.984 [50.39]	1.900 [48.26]	2-86479-4	-
42	2.084 [52.93]	2.000 [50.80]	2-86479-5	-
44	2.184 [55.47]	2.100 [53.34]	2-86479-6	-
46	2.284 [58.01]	2.200 [55.88]	2-86479-7	-
48	2.384 [60.55]	2.300 [58.42]	2-86479-8	-
50	2.484 [63.09]	2.400 [60.96]	2-86479-9	-
52	2.584 [65.63]	2.500 [63.50]	3-86479-0	-
54	2.684 [68.17]	2.600 [66.04]	3-86479-1	-
56	2.784 [70.71]	2.700 [68.58]	3-86479-2	-
58	2.884 [73.25]	2.800 [71.12]	3-86479-3	-
60	2.984 [75.79]	2.900 [73.66]	3-86479-4	-
62	3.084 [78.33]	3.000 [76.20]	3-86479-5	-
64	3.184 [80.87]	3.100 [78.74]	3-86479-6	-
66	3.284 [83.41]	3.200 [81.28]	3-86479-7	-
68	3.384 [85.95]	3.300 [83.82]	3-86479-8	-
70	3.484 [88.49]	3.400 [86.36]	3-86479-9	-
72	3.584 [91.03]	3.500 [88.90]	4-86479-0	-
74	3.684 [93.57]	3.600 [91.44]	4-86479-1	-
76	3.784 [96.11]	3.700 [93.98]	4-86479-2	-
78	3.884 [98.65]	3.800 [96.52]	4-86479-3	-
80	3.984 [101.19]	3.900 [99.06]	4-86479-4	-

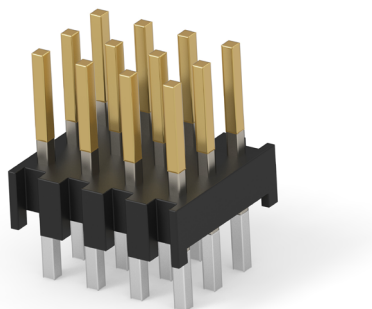
**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD HEADERS-UNSHROUDED, TRIPLE-ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST



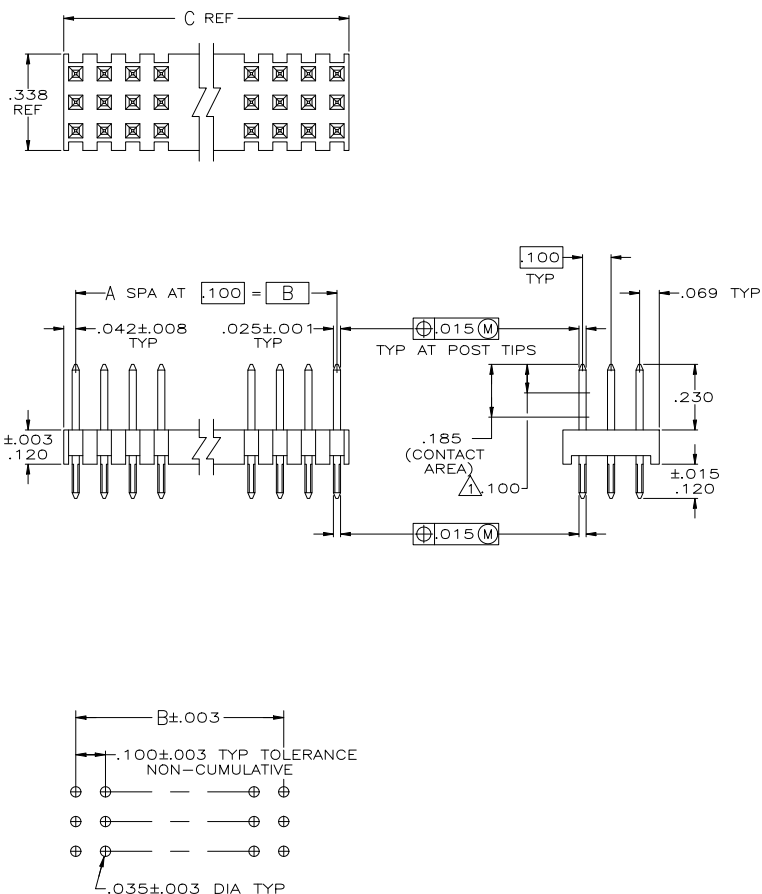
#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, duplex plated 000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel.

**Technical Documents** - Page 195, See mating connector for applicable product and **application specifications**.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

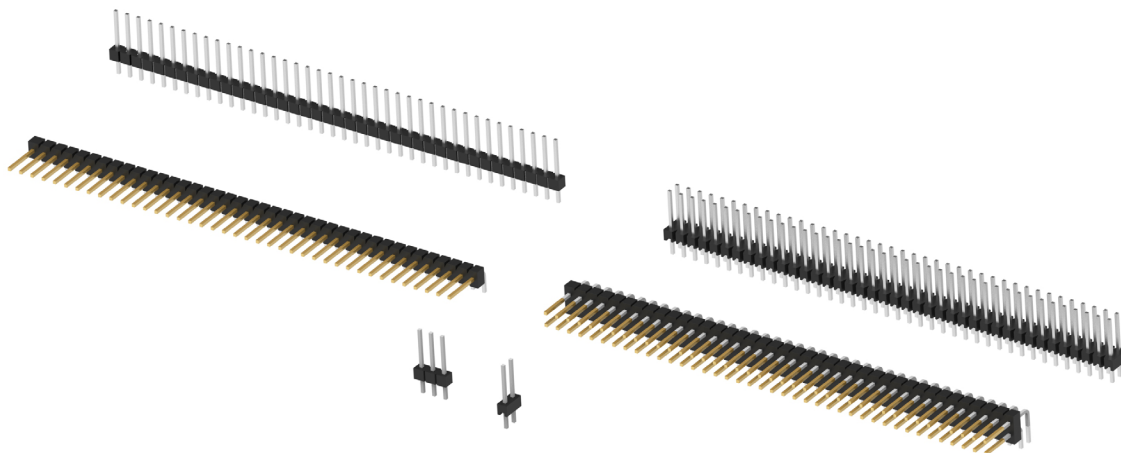
\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

PRODUCT INFORMATION

No. of Pos.	Dimensions		Part Nos.
	C	B	
12	.384 [9.75]	.300 [7.62]	5-103817-2
24	.784 [19.91]	.700 [17.78]	5-103817-6
42	1.384 [35.15]	1.300 [33.02]	5-146285-1
120	3.984 [101.19]	3.900 [99.06]	8-103817-8

**Note:** All part numbers are RoHS compliant.

### BREAKAWAY AND RETENTION HEADERS-UNSHROUDED



#### PRODUCT FACTS

- Design and inventory versatility-headers can be broken into any size needed
- Variety of popular sizes available
- Substantial time/labor savings can install all posts at one time
- Vertical and right-angle versions available in single- and double-row configurations
- Phosphor bronze posts
- Choice of gold duplex or tin plated posts
- Post lengths include .230 [5.84] and .318 [8.08] for connector mating
- Board retention feature available
- Black, glass-filled thermoplastic Housings; high temperature compatible
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

##### ELECTRICAL

**Insulation Resistance** - 5,000 megohms minimum initial

**Dielectric Withstanding Voltage** - 750 V rms at sea level

##### ENVIRONMENTAL

**Operating Temperature** - -65°C to +105°C (black thermoplastic Housings)

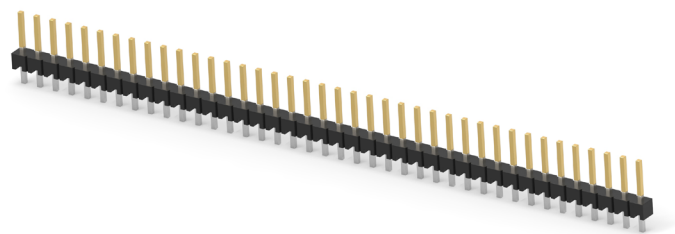
**Current** - 3 amperes maximum per contact (dependent upon mating receptacle)

## AMPMODU 2.54MM INTERCONNECT SYSTEM

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### BREAKAWAY HEADERS-UNSHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100- .000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel

**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

#### PERFORMANCE CHARACTERISTICS (BOARD RETENTION TAILS)

**Insertion Force** - 12 lb [53.4N] max.

**Retention Force** - .25 lb [1.11N] min.

#### RELATED PRODUCT DATA

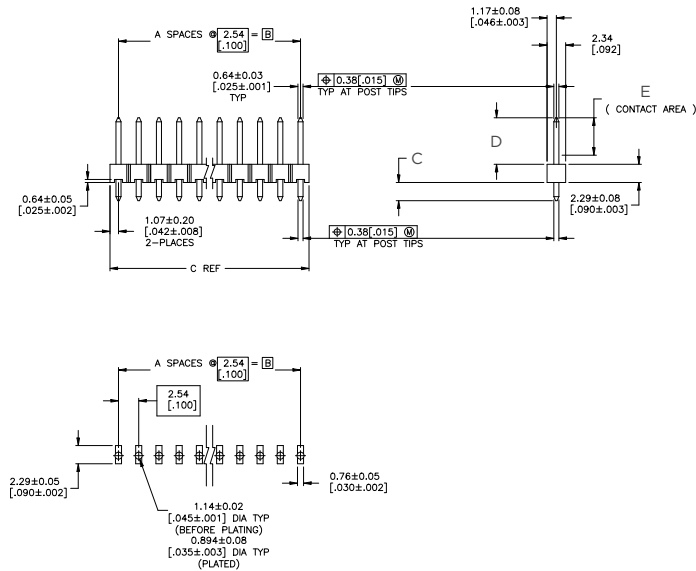
**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### DIMENSIONS

#### HEADERS WITH SOLDER TAILS



#### Recommended PC Board Mounting Pattern (for .062 [1.57] thick PC board; .008 [.203] thick stencil)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions		C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]			C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
				Post Plating/Part Nos.			Post Plating/Part Nos.			Post Plating/Part Nos		
		C	B	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
With Solder Tails See Notes 1 and 2.)	1	.084 [2.13]	-	5-146285-1	-	5-146282-1	5-146281-1	5-146280-1	5-146278-1	5-146277-1	5-146276-1	5-146274-1
	40	3.984 [101.19]	3.900 [99.06]	9-146285-0	9-146284-0	9-146282-0	9-146281-0	9-146280-0	9-146278-0	9-146277-0	9-146276-0	9-146274-0

#### Notes:

1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).
2. Headers are also available in sizes 2 thru 39 positions (with Solder Tails) and 4 thru 39 positions (with Board Retention Tails). When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the desired size. For example, the complete part number for an 8-position header with solder tails (C dimension .090 [2.29], post plating A) would be 5-146285-8. The complete part number for a 26-position header with board retention tails (C dimension .120 [3.05], post plating B) would be 7-146292-6. This part numbering system applies only to this page.
3. For C dimensions .120 [3.05] and .125 [3.18], board retention using kinked tails are for headers 6 positions and smaller; headers 7 positions and larger use swaged tails. Headers with a C dimension of .090 [2.29] have swaged tails for all sizes.

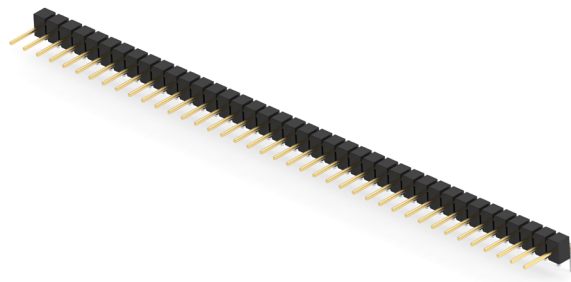
**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

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### BREAKAWAY HEADERS-UNSHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE (Continued)

#### .025 [0.64] SQUARE RIGHT-ANGLE POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated, high temperature compatible

**Posts** - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254- 0.00508] matte tin on solder tail, with entire post underplated .000050 [0.00127] nickel

#### PERFORMANCE CHARACTERISTICS (BOARD RETENTION TAILS)

**Insertion Force** - 12 lb [53.4N] max.

**Retention Force** - .25 lb [1.11N] min.

#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

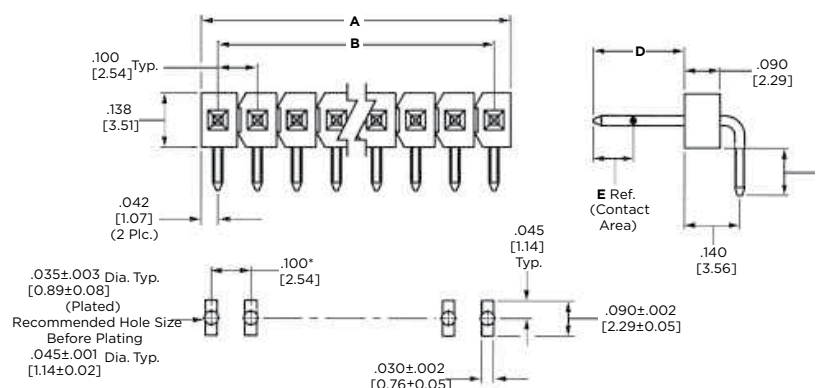
**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### DIMENSIONS

#### HEADERS WITH SOLDER TAILS



#### Recommended PC Board Mounting Pattern (for .062 [1.57] thick PC board; .008 [.203] thick stencil)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]	C = .110 [2.79] D = .318 [8.08] E = .200 [5.08]
		A	B	Part Nos.	Part Nos.
With Solder Tails (See Notes 1 and 2.)	40	3.984 [101.19]	3.900 [99.06]	9-146304-0	9-146305-0

#### Notes:

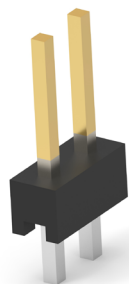
- Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).
- Headers are also available in sizes 2 thru 39 positions (with Solder Tails) and 4 thru 39 positions (with Board Retention Tails). When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the number of positions. For example, the complete part number for an 8-position header with solder tails (C dimension .120 [3.05]) would be 5-146304-8. The complete part number for a 26-position header with board retention tails (C dimension .120 [3.05]) would be 7-146306-6. This part numbering system applies only to this page.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

---

### BREAKAWAY HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE .025 [0.64] SQUARE STRAIGHT POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated, high temperature compatible

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel

**Tin/Nickel** - Plating option available; minimum order quantities may apply. Consult TE.

#### PERFORMANCE CHARACTERISTICS (BOARD RETENTION TAILS)

Insertion Force - 12 lb [53.4N] max.

Retention Force - .25 lb [1.11N] min.

#### RELATED PRODUCT DATA

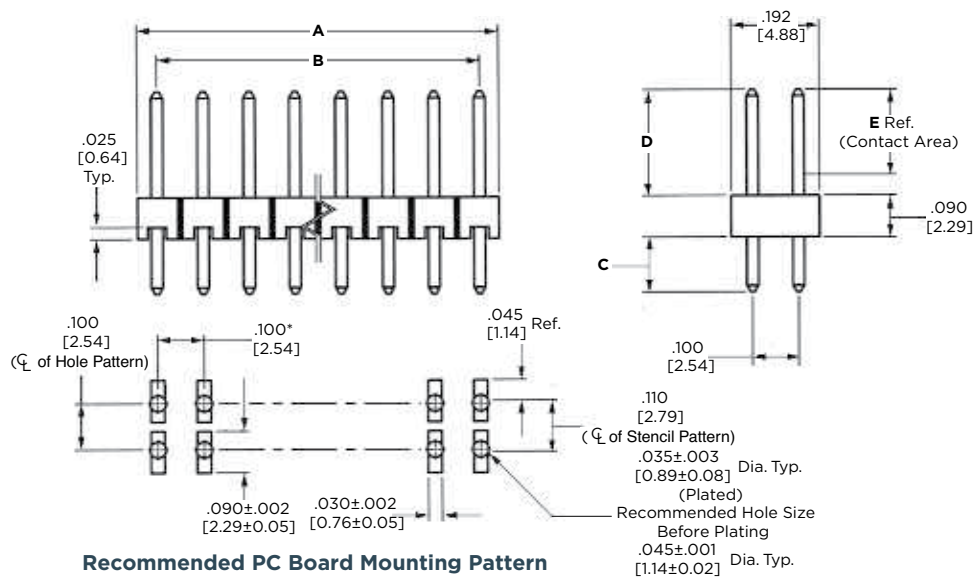
**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

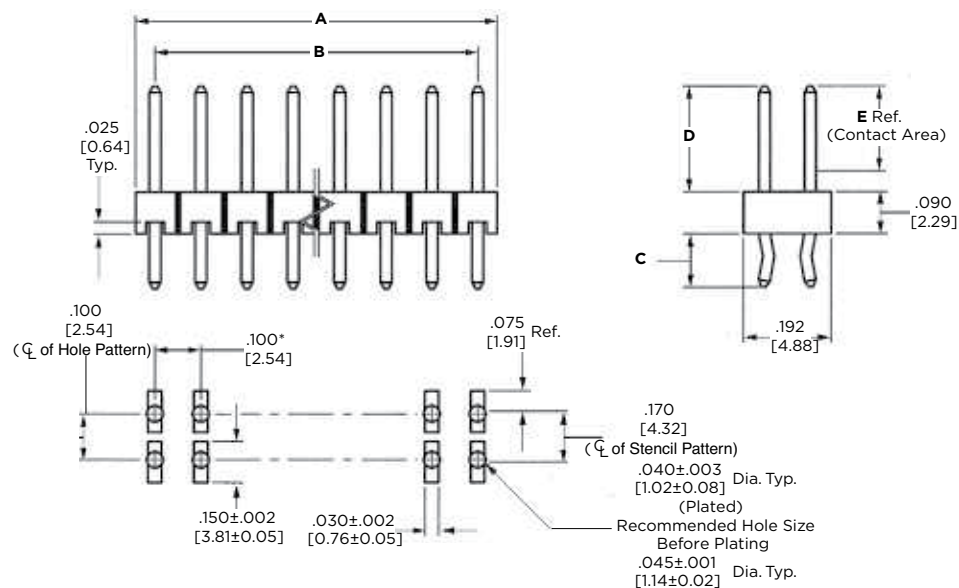
### DIMENSIONS

#### HEADERS WITH SOLDER TAILS



\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

#### HEADERS WITH BOARD RETENTION TAILS



\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

Header Style	No. of Pos.	Dimensions		C = .090 [2.29] D = .230 [5.84] E = .185 [4.70]		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]			C = .125 [3.18] D = .318 [8.08] E = .200 [5.08]		
				Post Plating/Part Nos.		Post Plating/Part Nos.			Post Plating/Part Nos.		
		A	B	Plating A	Plating C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
With Solder Tails (See Notes 1 and 2.)	2	.084 [2.13]	-	5-146261-1	-	5-146257-1	5-146256-1	5-146254-1	5-146253-1	-	5-146250-1
	80	3.984 [101.19]	3.900 [99.06]	9-146261-0	9-146258-0	9-146257-0	9-146256-0	9-146254-0	9-146253-0	9-146252-0	9-146250-0
With Board Retention Tails (See Notes 2 and 3.)	2	.284 [2.13]	-	-	-	5-146269-1	-	-	-	-	-

#### Notes:

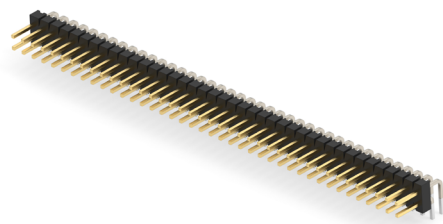
1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).
2. Headers are also available in sizes 4 thru 78 positions. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the number of positions per row. For example, the complete part number for a 16-position header with solder tails (C dimension .090 [2.29], post plating A) would be 5-146261-8. The complete part number for a 40-position header with board retention tails (C dimension .120 [3.05], post plating B) would be 7-146268-0. This part numbering system applies only to this page.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### BREAKAWAY HEADERS-UNSHROUDED, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE (CONTINUED)

#### .025 [0.64] SQUARE RIGHT-ANGLE POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated, high temperature compatible

**Posts** - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder tail, with entire post underplated .000050 [0.00127] nickel

#### PERFORMANCE CHARACTERISTICS (BOARD RETENTION TAILS)

**Insertion Force** - 12 lb [53.4N] max.

**Retention Force** - .25 lb [1.11N] min.

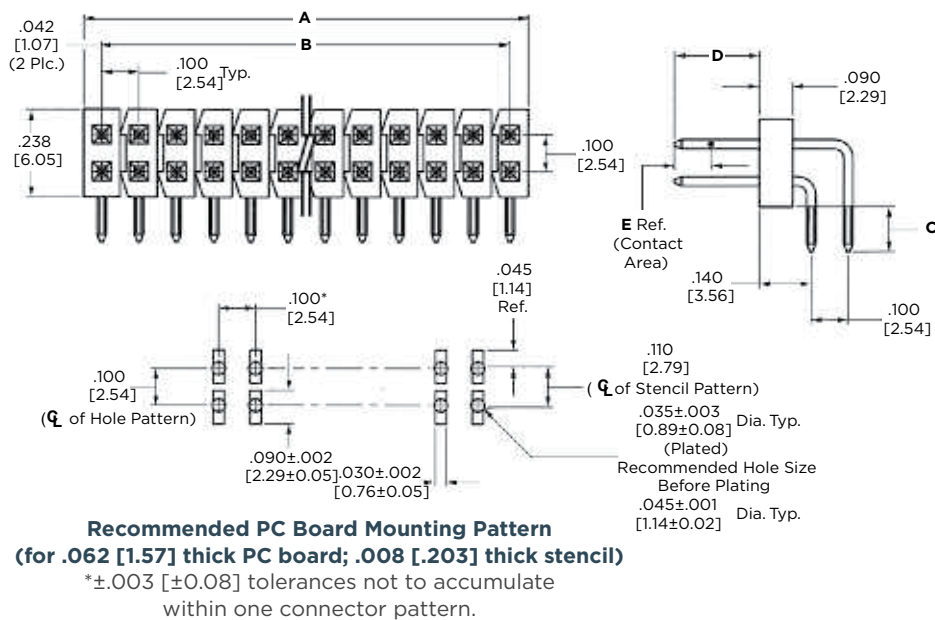
#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and **application specifications**.

#### DIMENSIONS

##### HEADERS WITH SOLDER TAILS



### PRODUCT INFORMATION

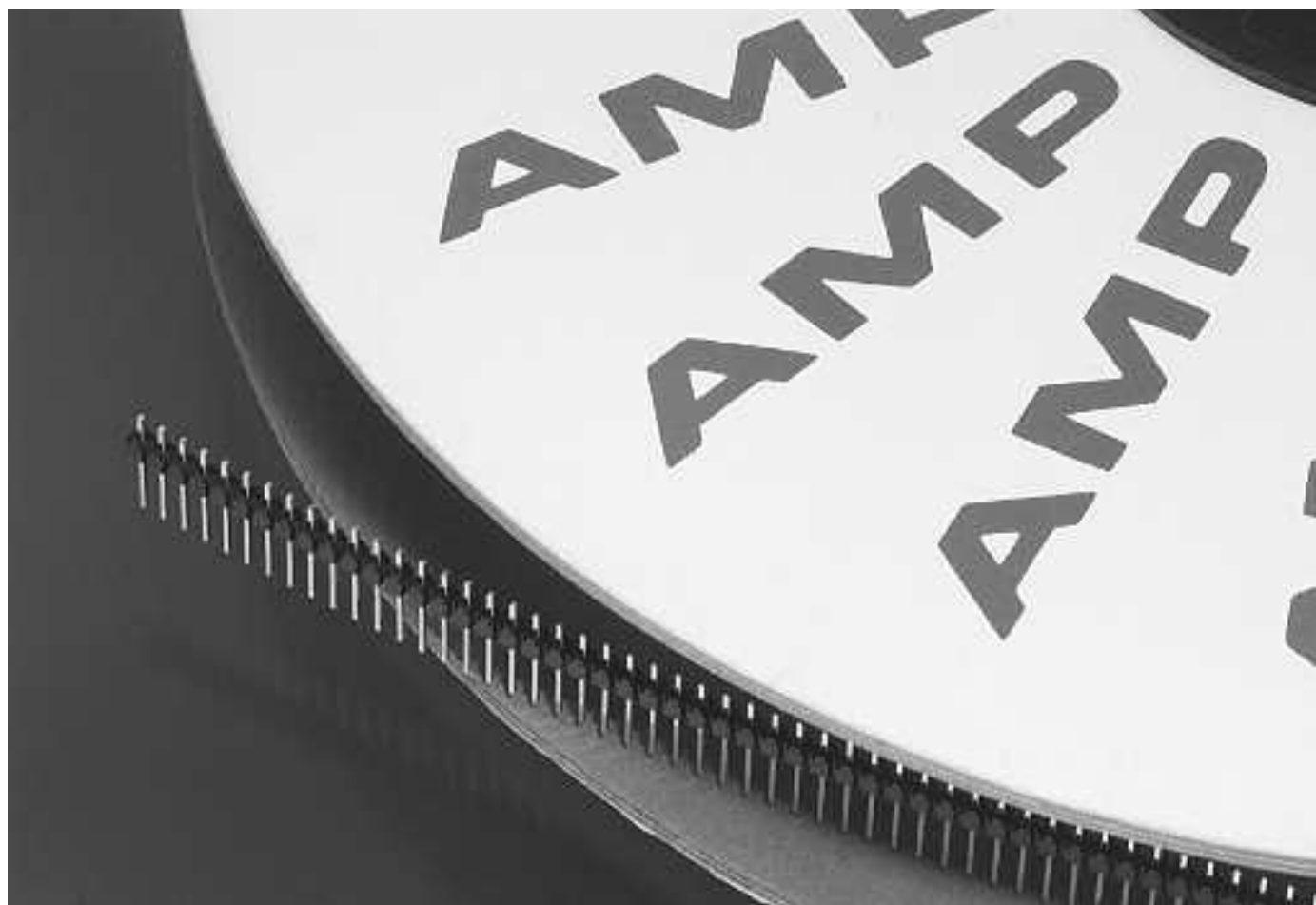
Header Style	No. of Pos.	Dimensions		C = .120 [3.05] D = .230 [5.84] E = .185 [4.70]	C = .110 [2.79] D = .318 [8.08] E = .200 [5.08]
		A	B	Part Nos.	Part Nos.
With Solder Tails (See Notes 1 and 2.)	80	3.984 [101.19]	3.900 [99.06]	9-146308-0	9-146309-0

#### Notes:

1. Headers without retention tails may be broken to the desired number of positions using Tool Kit No. 314818-1 (not shown).
2. Headers are also available in sizes 4 thru 78 positions. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the number of positions per row. For example, the complete part number for a 16- position header with solder tails (C dimension .120 [3.05]) would be 5-146308-8. The complete part number for a 40-position header with board retention tails (C dimension .120 [3.05]) would be 7-146310-0. This part numbering system applies only to this page.

**Note:** All part numbers are RoHS compliant.

AMPMODU REELED BREAKAWAY HEADERS



INTRODUCTION

TE now offers AMPMODU reeled breakaway headers, which are used for board-to-board interconnections, on a continuous reel. The reeled breakaway headers are an economy version of the standard breakaway headers, and continue to provide the same high quality standards that TE is known for in the connector industry. Reeled breakaway headers provide the flexibility to cut the headers to many different lengths, while only having to stock one part number. As a result, the amount of part numbers that need to be purchased and stored can be greatly reduced.

Reeled breakaway headers can be purchased in single and double rows with tin, 5 Au, 15 Au, and 30 Au duplex plating. The lower applied cost also offers .230" and .318" mating lengths. (See standard breakaway-to-reeled header conversion chart for vertical headers on the reverse side of this sheet) Potential industries include: computer peripherals, telecommunications equipment, consumer, automotive, medical and test equipment. Tooling available from: Robo-Pak, Inc. 814 Lakeshore Drive East Bethel, MN 55902 A pin retention and pin removal tooling option is also available in addition to cutting.

FEATURES OF  
BREAKAWAY HEADERS

- Design and inventory versatility - headers can easily be made into a variety of sizes High Temperature Compatible
- Reduced part number base
- Reduced inventory burden

APPLICATIONS

- Desktops & workstations
- Set-top boxes
- Televisions
- Automotive instrument panels & radios
- Medical and test equipment

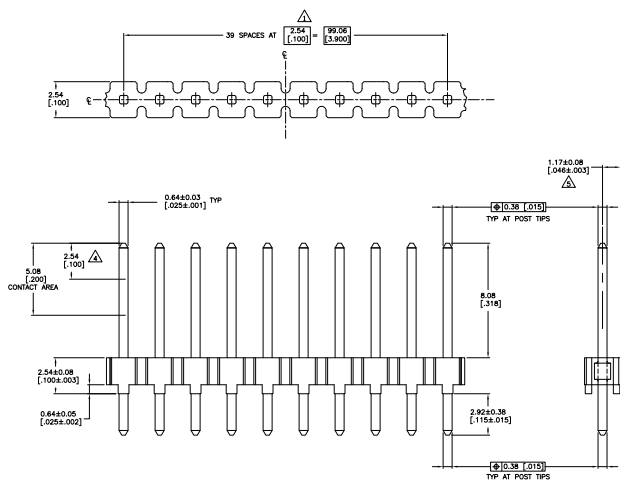
BENEFITS

- Off the shelf availability
- Various header length capability using the same reel
- Reduction of inventory costs
- Economy version of the standard breakaway headers

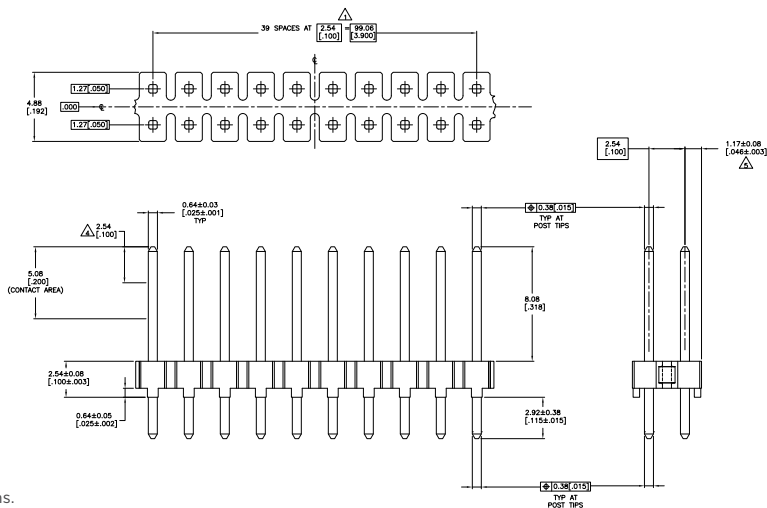
AMPMODU 2.54MM INTERCONNECT SYSTEM

AMPMODU REELED BREAKAWAY HEADERS

SINGLE ROW



DOUBLE ROW



See table for other mate and tail lengths.

PRODUCT INFORMATION

Standard Breakaway-to-Reeled Header Conversion Chart (Vertical)								
Plating Options	Double Row Headers				Single Row Headers			
	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N	Existing TE P/N	Make From Reeled P/N
	Mate: .318 Tail: .125	Mate: .318 Tail: .115	Mate: .230 Tail: .120	Mate: .230 Tail: .110	Mate: .318 Tail: .125	Mate: .318 Tail: .115	Mate: .230 Tail: .120	Mate: .230 Tail: .110
Tin	103322 146250	5-146853-1	103328 146254	5-146851-1	103321 146274	5-146852-1	103327 146278	5-146850-1
15 Au Duplex	102973 146252	5-146861-1	103186 146256	5-146859-1	102972 146276	5-146860-1	103185 146280	5-146858-1
30 Au Duplex	102977 146253	5-146871-1	103240 146257	5-146869-1	102976 146277	5-146870-1	103239 146281	5-146868-1

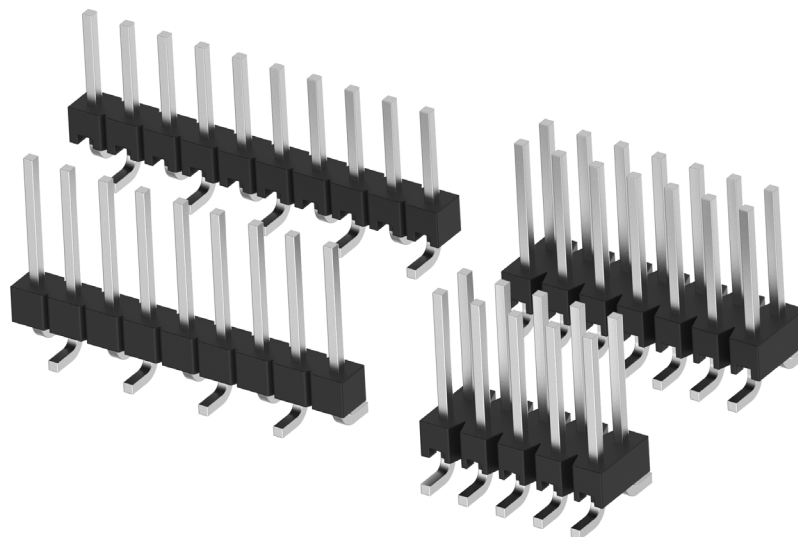
Notes:

Reeled Headers are a functional substitute for standard breakaways, however there are visual differences (i.e. Housing appearance and bow due to reeling requirement).

**Note:** All part numbers are RoHS compliant.



### **BREAKAWAY SURFACE MOUNT HEADERS, .100 X .100 [2.54 X 2.54] CENTERLINE**



#### **INTRODUCTION**

An extension of the AMPMODU Breakaway Header product family are the surface mount, vertical breakaway headers. The AMPMODU Surface Mount breakaway headers (Unshrouded) are available in single- and double-row vertical configurations with mating lengths of .230 [5.84] and .320 [8.13].

Posts are offered with a choice of either .000030 [.0007] gold duplex or tin plating. Current packaging is in a single tube but tape and reel is available for automatic pick-and-place. We also can provide a pickand- place cap for vacuum placement if required.

#### **PRODUCT FACTS**

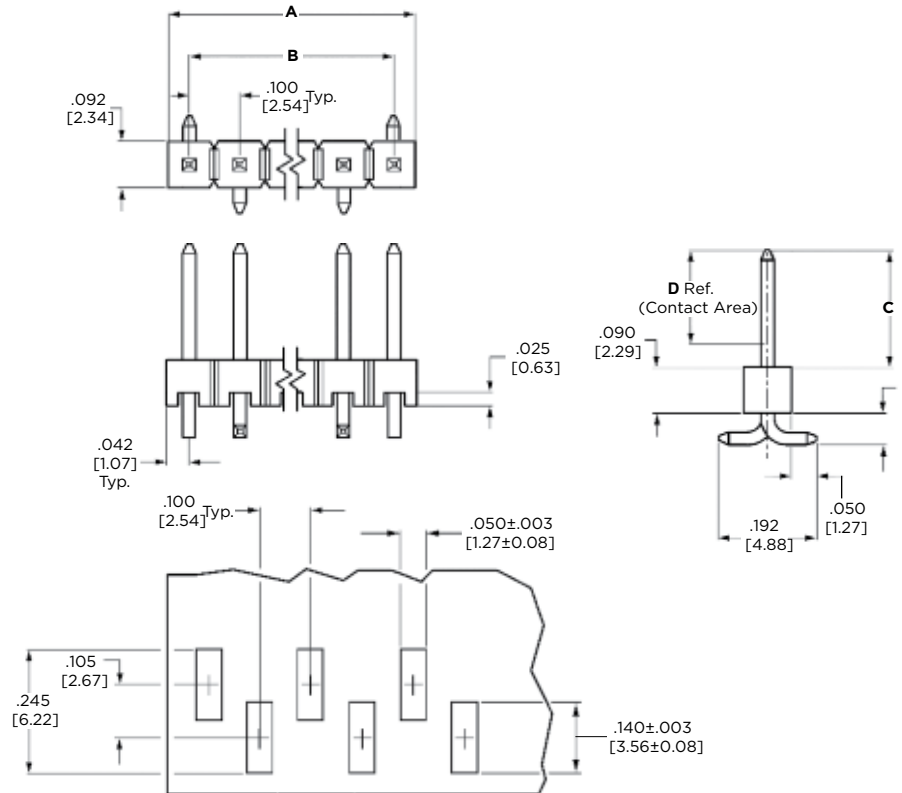
- Surface Mount Leads
- Contact Material: phosphor bronze
- High temperature, black thermoplastic Housings, 94V-0 rated, capable of withstanding IR or vaporphase reflow
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189
- Choice of gold duplex or tin plated posts
- Posts coplanar within .006 [0.15] Tape and reel packaging available in addition to single tube packaging. Contact TE
- Pick-and-place cap available for vacuum placement. Contact TE

## BREAKAWAY SURFACE MOUNT HEADERS - UNSHROUDED SINGLE-ROW, .100 [2.54] CENTERLINE

### .025 [0.64] SQUARE STRAIGHT POSTS



#### DIMENSIONS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100 - .000200 [0.00254 - 0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel entire post

#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

#### Recommended Etched Circuit Layout (Using .008 [0.20] thick stencil)

### PRODUCT INFORMATION

No. of Pos.	Dimensions		C = .230 [5.84] D = .185 [4.70]		C = .320 [8.13] D = .200 [5.08]
			Post Plating/Part Nos.		Post Plating/Part Nos.
	A	B	Plating A	Plating B	Plating A
3	.284 [7.21]	.200 [5.08]	5-146128-1	5-146132-1	5-146129-1
4	.384 [9.75]	.300 [7.62]	5-146128-2	5-146132-2	-
5	.484 [12.29]	.400 [10.16]	5-146128-3	-	-
6	.584 [14.83]	.500 [12.70]	5-146128-4	5-146132-4	-
7	.684 [17.37]	.600 [15.24]	5-146128-5	-	-
8	.784 [19.91]	.700 [17.78]	5-146128-6	5-146132-6	-
9	.884 [22.45]	.800 [20.32]	5-146128-7	-	-
10	.984 [24.99]	.900 [22.86]	5-146128-8	-	-
15	1.484 [37.69]	1.400 [35.56]	6-146128-3	6-146132-3	-

Note: All part numbers are RoHS compliant.

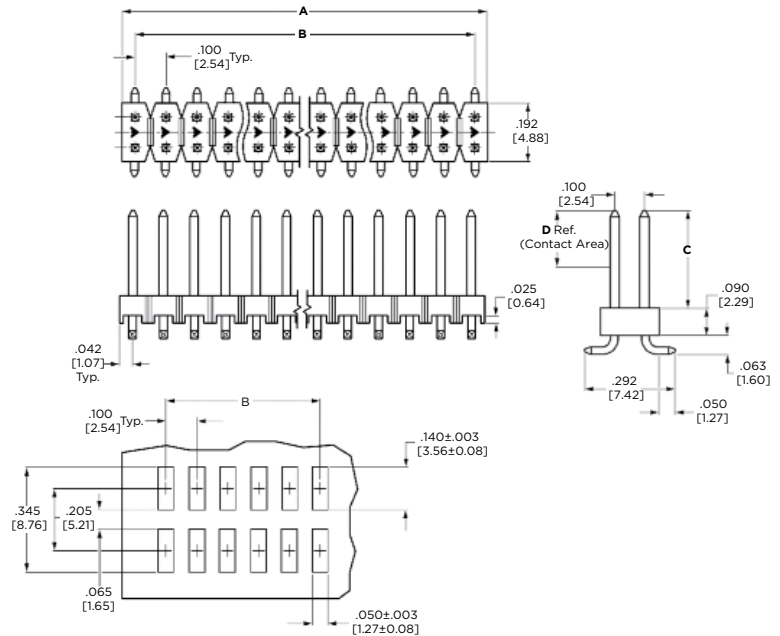
## AMPMODU 2.54MM INTERCONNECT SYSTEM

### BREAKAWAY SURFACE MOUNT HEADERS - UNSHROUDED DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POSTS



#### DIMENSIONS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel entire post

#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

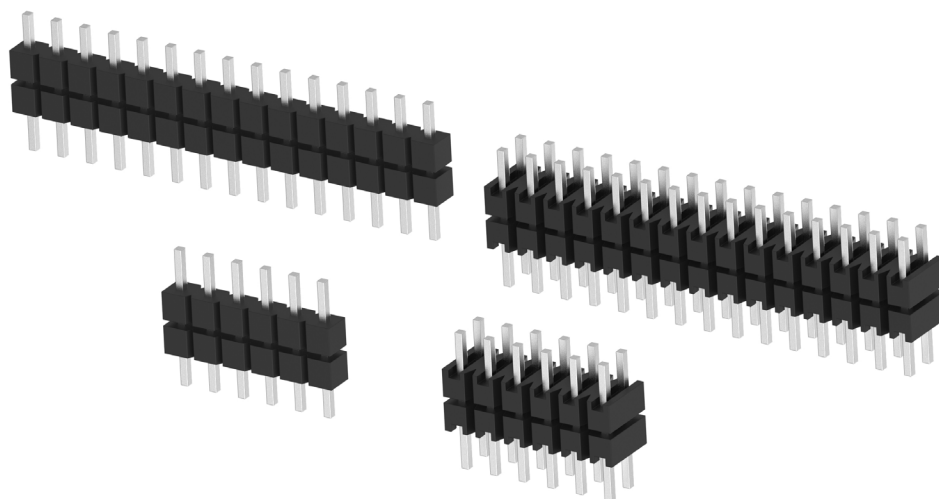
#### Recommended Etched Circuit Layout (Using .008 [0.20] thick stencil)

### PRODUCT INFORMATION

No. of Pos.	Dimensions		C = .230 [5.84] D = .185 [4.70]		C = .320 [8.13] D = .200 [5.08]	
			Post Plating/Part Nos.		Post Plating/Part Nos.	
	A	B	Plating A	Plating B	Plating A	Plating B
4	.184 [4.67]	.100 [2.54]	5-146130-1	5-146134-1	-	-
6	.284 [7.21]	.200 [5.08]	5-146130-2	5-146134-2	5-146131-2	1-146135-6
8	.384 [9.75]	.300 [7.62]	5-146130-3	5-146134-3	5-146131-3	5-146135-3
10	.484 [12.29]	.400 [10.16]	5-146130-4	1-146134-7	5-146131-4	5-146135-4
12	.584 [14.83]	.500 [12.70]	5-146130-5	5-146134-5	5-146131-5	-
14	.684 [17.37]	.600 [15.24]	5-146130-6	5-146134-6	5-146131-6	5-146135-6
16	.784 [19.91]	.700 [17.78]	5-146130-7	1-146134-9	-	5-146135-7
20	.984 [24.99]	.900 [22.86]	5-146130-9	-	5-146131-9	-
24	1.184 [30.07]	1.100 [27.94]	6-146130-1	-	-	-
26	1.284 [32.61]	1.200 [30.48]	6-146130-2	-	6-146131-2	-
28	1.384 [35.15]	1.300 [33.02]	-	6-146134-3	-	-
30	1.484 [37.69]	1.400 [35.56]	6-146130-4	2-146134-1	-	-

**Note:** All part numbers are RoHS compliant.

### UNSHROUDED STACKING HEADERS-BREAKAWAY .100 X .100 [2.54 X 2.54] CENTERLINE



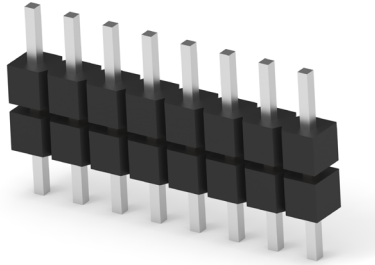
#### PRODUCT FACTS

- Available in single and double row
- Parallel PC board stacking with numerous stack heights available
- Drawn wire posts allow 4 side mateability
- May eliminate the need for additional board spacers
- Can be used in conjunction with bottom entry receptacles
- Gold or tin plated
- Up to 1.430 [36.32] overall post length
- Retention and surface mount features available upon request
- Other header sizes can be made upon request
- Tape and reel packaging available. Contact TE
- Pick-and-place cap available for vacuum placement. Contact TE

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### UNSHROUDED STACKING HEADERS - BREAKAWAY, SINGLE-ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating** - As noted in chart:

**Tin** - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel entire post

**15Au** - .000015 [0.00038] gold over .000050 [0.00127] nickel entire post

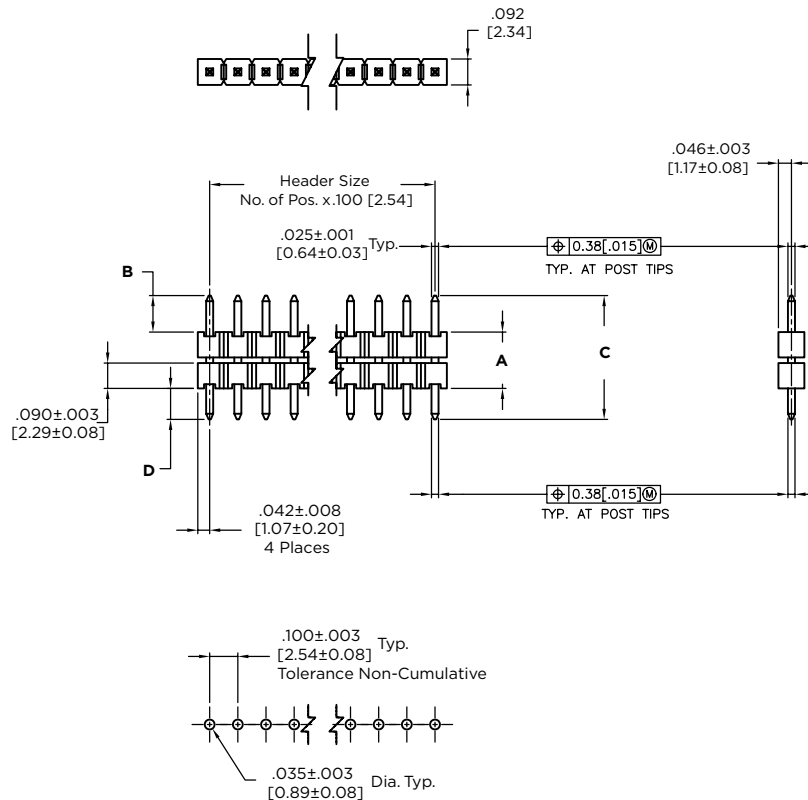
#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

Retention and surface mount features available upon request. Other header sizes can be made upon request.

#### DIMENSIONS



#### Recommended PC Board Hole Layout

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

Base Number (see note)	A	B	C	D	B End Plating	D End Plating
	Stack Height	Tail Length	Post Length	Mating Length		
146455	.200 [5.08]	.130 [3.30]	.440 [11.17]	.110 [2.79]	TIN	TIN
146456	.250 [6.35]	.080 [2.03]	.440 [11.17]	.110 [2.79]	TIN	TIN
146457	.250 [6.35]	.114 [2.89]	.474 [12.03]	.110 [2.79]	TIN	TIN
146458	.300 [7.62]	.123 [3.12]	.533 [13.53]	.110 [2.79]	TIN	TIN
146459	.400 [10.16]	.107 [2.71]	.617 [15.67]	.110 [2.79]	TIN	TIN
146460	.450 [11.43]	.057 [1.45]	.617 [15.67]	.110 [2.79]	TIN	TIN
146461	.500 [12.70]	.129 [3.27]	.739 [18.77]	.110 [2.79]	TIN	TIN
146462	.300 [7.62]	.109 [2.77]	.739 [18.77]	.330 [8.38]	TIN	15 AU
146463	.600 [15.24]	.107 [2.71]	.817 [20.75]	.110 [2.79]	TIN	TIN
146464	.400 [10.16]	.087 [2.20]	.817 [20.75]	.330 [8.38]	TIN	15 AU
146465	.700 [17.78]	.120 [3.05]	.930 [23.62]	.110 [2.79]	TIN	TIN
146466	.500 [12.70]	.100 [2.54]	.930 [23.62]	.330 [8.38]	TIN	15 AU
146467	.270 [6.86]	.330 [8.38]	.930 [23.62]	.330 [8.38]	15 AU	15 AU
146468	.800 [20.32]	.120 [3.05]	1.030 [26.16]	.110 [2.79]	TIN	TIN
146469	.600 [15.24]	.100 [2.54]	1.030 [26.16]	.330 [8.38]	TIN	15 AU
146470	.370 [9.39]	.330 [8.38]	1.030 [26.16]	.330 [8.38]	15 AU	15 AU
146471	.900 [22.86]	.120 [3.05]	1.130 [28.70]	.110 [2.79]	TIN	TIN
146472	.700 [17.78]	.100 [2.54]	1.130 [28.70]	.330 [8.38]	TIN	15 AU
146473	.470 [11.39]	.330 [8.38]	1.130 [28.70]	.330 [8.38]	15 AU	15 AU
146474	1.000 [25.40]	.120 [3.05]	1.230 [31.24]	.110 [2.79]	TIN	TIN
146475	.800 [20.32]	.100 [2.54]	1.230 [31.24]	.330 [8.38]	TIN	15 AU
146476	.570 [14.47]	.330 [8.38]	1.230 [31.24]	.330 [8.38]	15 AU	15 AU
146477	1.100 [27.94]	.120 [3.05]	1.330 [33.78]	.110 [2.79]	TIN	TIN
146478	.900 [22.68]	.100 [2.54]	1.330 [33.78]	.330 [8.38]	TIN	15 AU
146479	.670 [17.01]	.330 [8.38]	1.330 [33.78]	.330 [8.38]	15 AU	15 AU
146480	1.200 [30.48]	.120 [3.05]	1.430 [36.32]	.110 [2.79]	TIN	TIN
146481	1.000 [25.40]	.100 [2.54]	1.430 [36.32]	.330 [8.38]	TIN	15 AU
146482	.770 [19.55]	.330 [8.38]	1.430 [36.32]	.330 [8.38]	15 AU	15 AU

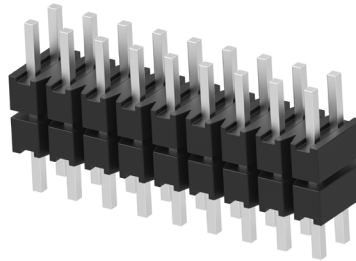
\*Note: Headers are available in sizes 1 thru 40. When ordering, add the prefix and/or suffix (dash) numbers plus 5- -0 to the base part number that corresponds with the number of positions per row. For example, the complete part number for an 8-position header is 5-146455-8. The complete part number for a 16-position of the same series would be 6-146455-6.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### UNSHROUDED STACKING HEADERS - BREAKAWAY, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [.64] SQUARE STRAIGHT POSTS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating** - As noted in chart:

**Tin** - .000100-.000200 [0.00254- 0.00508]  
tin over .000050 [0.00127] nickel entire post

**15Au** - .000015 [0.00038] gold over  
.000050 [0.00127] nickel entire post

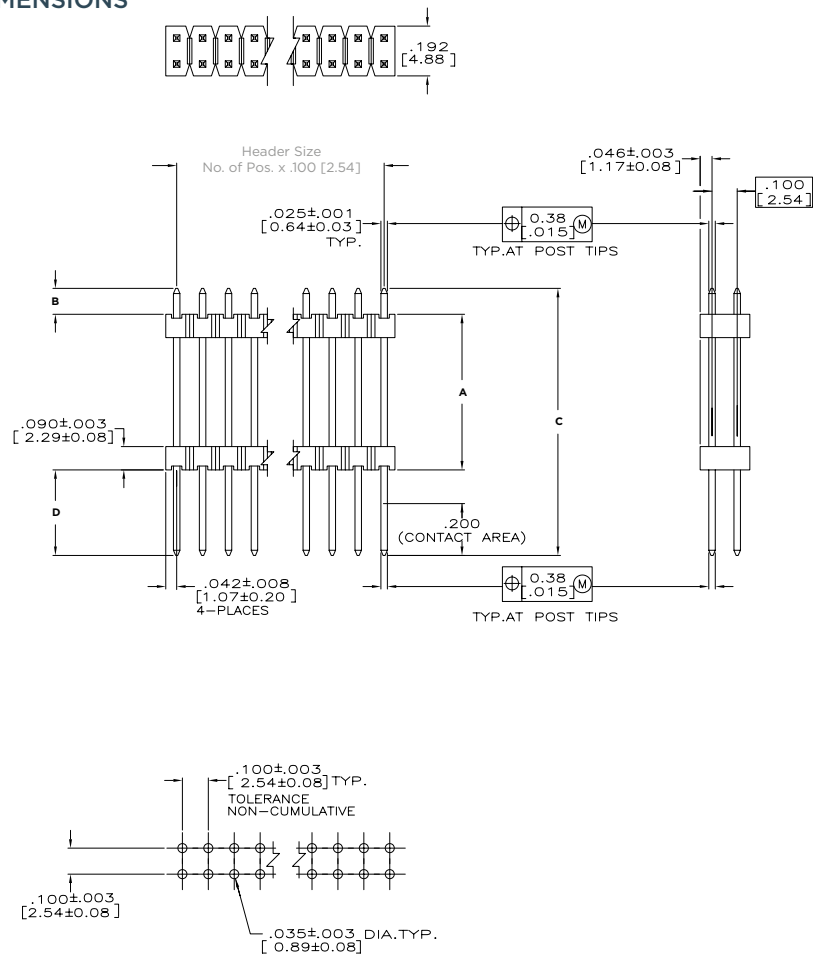
#### RELATED PRODUCT DATA

**Mateable Connectors** - Refer to the Mating  
Post Selection Guide - Page 10

**Technical Documents** - Page 195  
See mating connector for applicable  
product and application specifications.

Retention and surface mount features  
available upon request. Other header  
sizes can be made upon request.

#### DIMENSIONS



#### Recommended PC Board Hole Layout

## AMPMODU 2.54MM INTERCONNECT SYSTEM

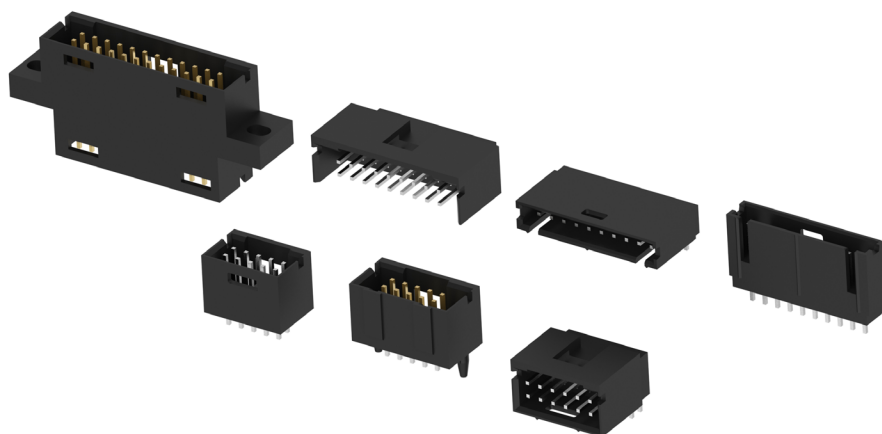
### PRODUCT INFORMATION

Base Number (see note)	A	B	C	D	B End Plating	D End Plating
	Stack Height	Tail Length	Post Length	Mating Length		
146483	.200 [5.08]	.130 [3.30]	.440 [11.17]	.110 [2.79]	TIN	TIN
146484	.250 [6.35]	.080 [2.03]	.440 [11.17]	.110 [2.79]	TIN	TIN
146485	.250 [6.35]	.114 [2.89]	.474 [12.03]	.110 [2.79]	TIN	TIN
146486	.300 [7.62]	.123 [3.12]	.533 [13.53]	.110 [2.79]	TIN	TIN
146487	.400 [10.16]	.107 [2.71]	.617 [15.67]	.110 [2.79]	TIN	TIN
146488	.450 [11.43]	.057 [1.45]	.617 [15.67]	.110 [2.79]	TIN	TIN
146489	.500 [12.70]	.129 [3.27]	.739 [18.77]	.110 [2.79]	TIN	TIN
146490	.300 [7.62]	.109 [2.77]	.739 [18.77]	.330 [8.38]	TIN	15 AU
146491	.600 [15.24]	.107 [2.71]	.817 [20.75]	.110 [2.79]	TIN	TIN
146492	.400 [10.16]	.087 [2.20]	.817 [20.75]	.330 [8.38]	TIN	15 AU
146493	.700 [17.78]	.120 [3.05]	.930 [23.62]	.110 [2.79]	TIN	TIN
146494	.500 [12.70]	.100 [2.54]	.930 [23.62]	.330 [8.38]	TIN	15 AU
146495	.270 [6.86]	.330 [8.38]	.930 [23.62]	.330 [8.38]	15 AU	15 AU
146496	.800 [20.32]	.120 [3.05]	1.030 [26.16]	.110 [2.79]	TIN	TIN
146497	.600 [15.24]	.100 [2.54]	1.030 [26.16]	.330 [8.38]	TIN	15 AU
146498	.370 [9.39]	.330 [8.38]	1.030 [26.16]	.330 [8.38]	15 AU	15 AU
146499	.900 [22.86]	.120 [3.05]	1.130 [28.70]	.110 [2.79]	TIN	TIN
146500	.700 [17.78]	.100 [2.54]	1.130 [28.70]	.330 [8.38]	TIN	15 AU
146501	.470 [11.93]	.330 [8.38]	1.130 [28.70]	.330 [8.38]	15 AU	15 AU
146502	1.000 [25.40]	.120 [3.05]	1.230 [31.24]	.110 [2.79]	TIN	TIN
146503	.800 [20.32]	.100 [2.54]	1.230 [31.24]	.330 [8.38]	TIN	15 AU
146504	.570 [14.74]	.330 [8.38]	1.230 [31.24]	.330 [8.38]	15 AU	15 AU
146505	1.100 [27.94]	.120 [3.05]	1.330 [33.78]	.110 [2.79]	TIN	TIN
146506	.900 [22.68]	.100 [2.54]	1.330 [33.78]	.330 [8.38]	TIN	15 AU
146507	.670 [17.01]	.330 [8.38]	1.330 [33.78]	.330 [8.38]	15 AU	15 AU
146508	1.200 [30.48]	.120 [3.05]	1.430 [36.32]	.110 [2.79]	TIN	TIN
146509	1.000 [25.40]	.100 [2.54]	1.430 [36.32]	.330 [8.38]	TIN	15 AU
146510	.770 [19.55]	.330 [8.38]	1.430 [36.32]	.330 [8.38]	15 AU	15 AU

**Note:** All part numbers are RoHS compliant.



### STANDARD PROFILE HEADERS-SHROUDED



#### PRODUCT FACTS

- Available in several styles- right-angle with three- and four-sided pin protection, and straight post with pin protection and mounting ears
- Post retention feature available
- Can be used for feed-to and feed-thru applications
- Housings are black thermoplastic, flame retardant 94V-0 rated
- Contacts are copper alloy
- Available in gold duplex, gold over nickel and tin over nickel platings
- Headers with .066 [1.68] and .150 [3.81] end dimensions are available in select sizes up to 60 positions
- Can be select loaded, consult TE
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189 R R

#### PERFORMANCE CHARACTERISTICS

##### ELECTRICAL

**Insulation Resistance** - 5,000 megohms minimum initial

**Dielectric Withstanding Voltage** - 750 RMS at sea level

##### ENVIRONMENTAL

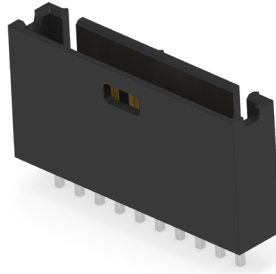
**Operating Temperature** - -65°C to +105°C (black thermoplastic Housings)

**Current** - 3 amperes maximum per contact

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POSTS (WITH STANDOFFS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

**Tin** - .000100-.000200 [0.00254- 0.00508] tin over .000050 [0.00127] nickel entire post

**15Au** - .000015 [0.00038] gold over .000050 [0.00127] nickel entire post

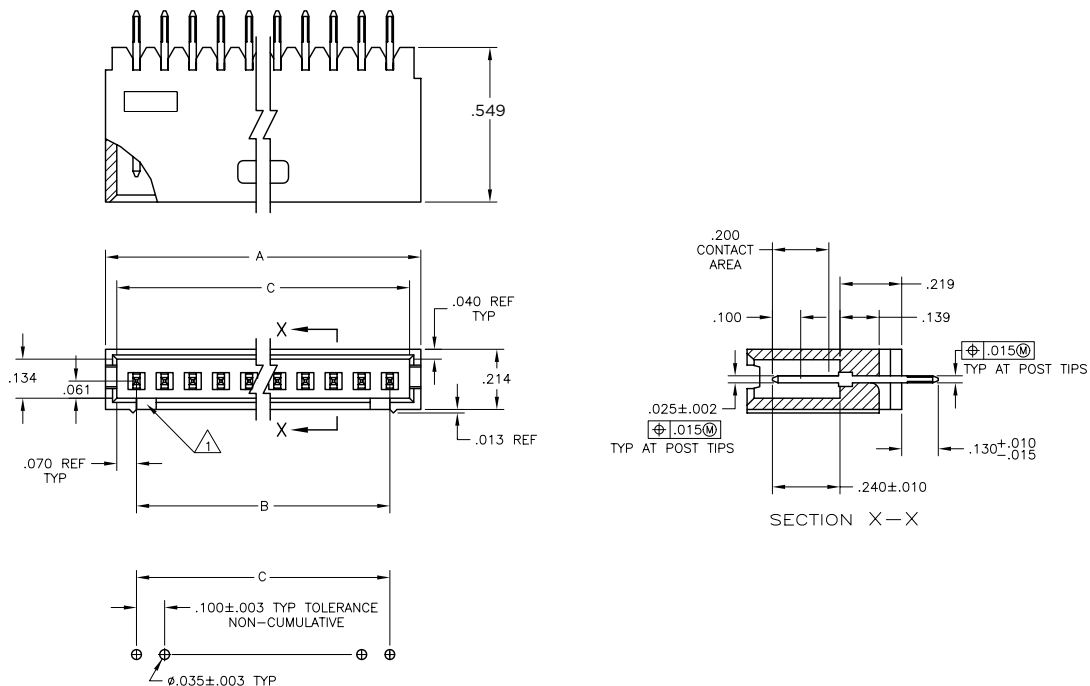
#### RELATED PRODUCT DATA

**Mateable Connectors** - AMPMODU Wire-Applied Receptacles - Page 64

**AMPMODU MTE Receptacles** - Page 154

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

**Note:** All part numbers are RoHS compliant.

### PRODUCT INFORMATION

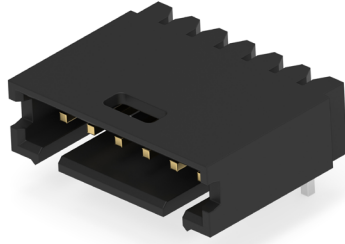
No. of Pos.	Dimensions			Post Plating/Part Nos.		
	A	B	C	Plating A	Plating B	Plating A
3	.420 [10.67]	.340 [8.64]	.200 [5.08]	5-103414-1	8-102202-4	5-103080-1
4	.520 [13.21]	.440 [11.18]	.300 [7.62]	5-103414-2	5-102202-1	5-103080-2
5	.620 [15.75]	.540 [13.72]	.400 [10.16]	5-103414-3	5-102202-2	5-103080-3
6	.720 [18.29]	.640 [16.26]	.500 [12.70]	5-103414-4	5-102202-3	5-103080-4
7	.820 [20.83]	.740 [18.80]	.600 [15.24]	5-103414-5	5-102202-4	5-103080-5
8	.920 [23.37]	.840 [21.34]	.700 [17.78]	5-103414-6	5-102202-5	5-103080-6
9	1.020 [25.91]	.940 [23.88]	.800 [20.32]	5-103414-7	5-102202-6	5-103080-7
10	1.120 [28.45]	1.040 [26.42]	.900 [22.86]	5-103414-8	5-102202-7	5-103080-8
11	1.220 [30.99]	1.140 [28.96]	1.000 [25.40]	5-103414-9	5-102202-8	5-103080-9
12	1.320 [33.53]	1.240 [31.50]	1.100 [27.94]	6-103414-0	5-102202-9	6-103080-0
13	1.420 [36.07]	1.340 [34.04]	1.200 [30.48]	6-103414-1	6-102202-0	6-103080-1
14	1.520 [38.61]	1.440 [36.58]	1.300 [33.02]	6-103414-2	6-102202-1	6-103080-2
15	1.620 [41.15]	1.540 [39.12]	1.400 [35.56]	-	6-102202-2	-
16	1.720 [43.69]	1.640 [41.66]	1.500 [38.10]	6-103414-4	6-102202-3	-
18	1.920 [48.77]	1.840 [46.74]	1.700 [43.18]	-	6-102202-5	-
20	2.120 [53.85]	2.040 [51.82]	1.900 [48.26]	6-103414-8	6-102202-7	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, SINGLE-ROW, .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE RIGHT-ANGLE POST (WITH STANDOFFS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

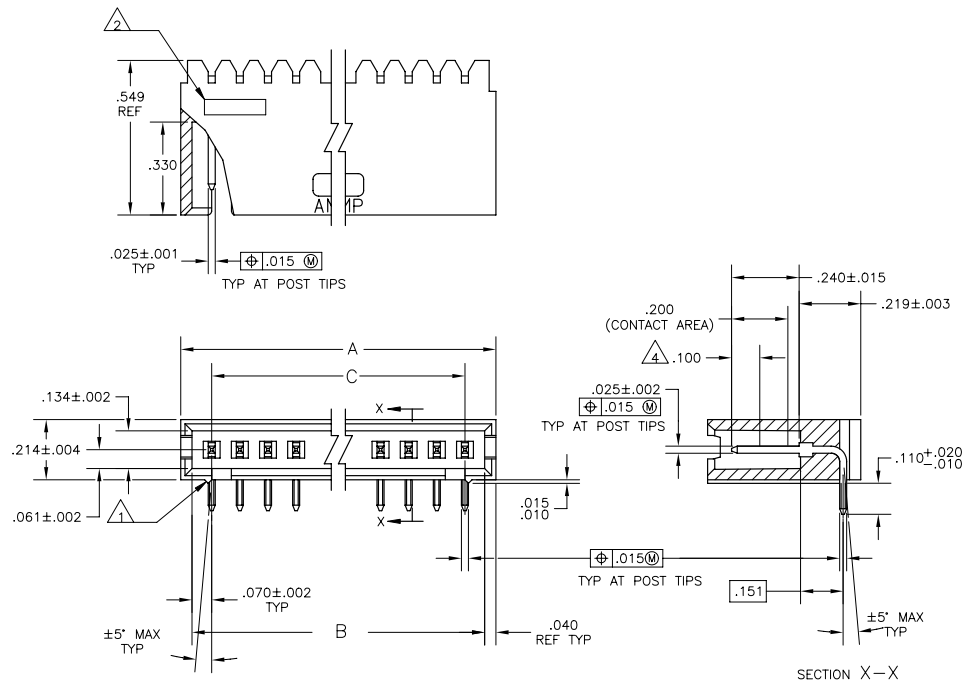
#### RELATED PRODUCT DATA

**Mateable Connectors** - AMPMODU Wire-Applied Receptacles - Page 64

**AMPMODU MTE Receptacles** - Page 154

**Technical Documents** - Page 195  
See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

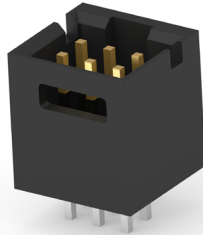
No. of Pos.	Dimensions			Post Plating/Part Nos.		
	A	B	C	Plating A	Plating B	Plating A
3	.420 [10.67]	.340 [8.64]	.200 [5.08]	5-103361-1	8-102203-4	5-102523-1
4	.520 [13.21]	.440 [11.18]	.300 [7.62]	5-103361-2	5-102203-1	5-102523-2
5	.620 [15.75]	.540 [13.72]	.400 [10.16]	5-103361-3	5-102203-2	5-102523-3
6	.720 [18.29]	.640 [16.26]	.500 [12.70]	5-103361-4	5-102203-3	5-102523-4
7	.820 [20.83]	.740 [18.80]	.600 [15.24]	5-103361-5	5-102203-4	5-102523-5
8	.920 [23.37]	.840 [21.34]	.700 [17.78]	5-103361-6	5-102203-5	5-102523-6
9	1.020 [25.91]	.940 [23.88]	.800 [20.32]	5-103361-7	-	-
10	1.120 [28.45]	1.040 [26.42]	.900 [22.86]	5-103361-8	5-102203-7	5-102523-8
11	1.220 [30.99]	1.140 [28.96]	1.000 [25.40]	-	5-102203-8	-
12	1.320 [33.53]	1.240 [31.50]	1.100 [27.94]	6-103361-0	5-102203-9	6-102523-0
13	1.420 [36.07]	1.340 [34.04]	1.200 [30.48]	-	6-102203-0	-
14	1.520 [38.61]	1.440 [36.58]	1.300 [33.02]	6-103361-2	6-102203-1	6-102523-2
15	1.620 [41.15]	1.540 [39.12]	1.400 [35.56]	-	6-102203-2	-
16	1.720 [43.69]	1.640 [41.66]	1.500 [38.10]	6-103361-4	6-102203-3	6-102523-4
20	2.120 [53.85]	2.040 [51.82]	1.900 [48.26]	6-103361-8	6-102203-7	-
24	2.520 [64.01]	2.440 [61.98]	2.300 [58.42]	7-103361-2	-	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS - SHROUDED, WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

**Mateable Connectors** - AMPMODU Board Mount - Page 86

**AMPMODU Wire-Applied Receptacles** - Page 64

**AMPMODU MTE Receptacles** - Page 154

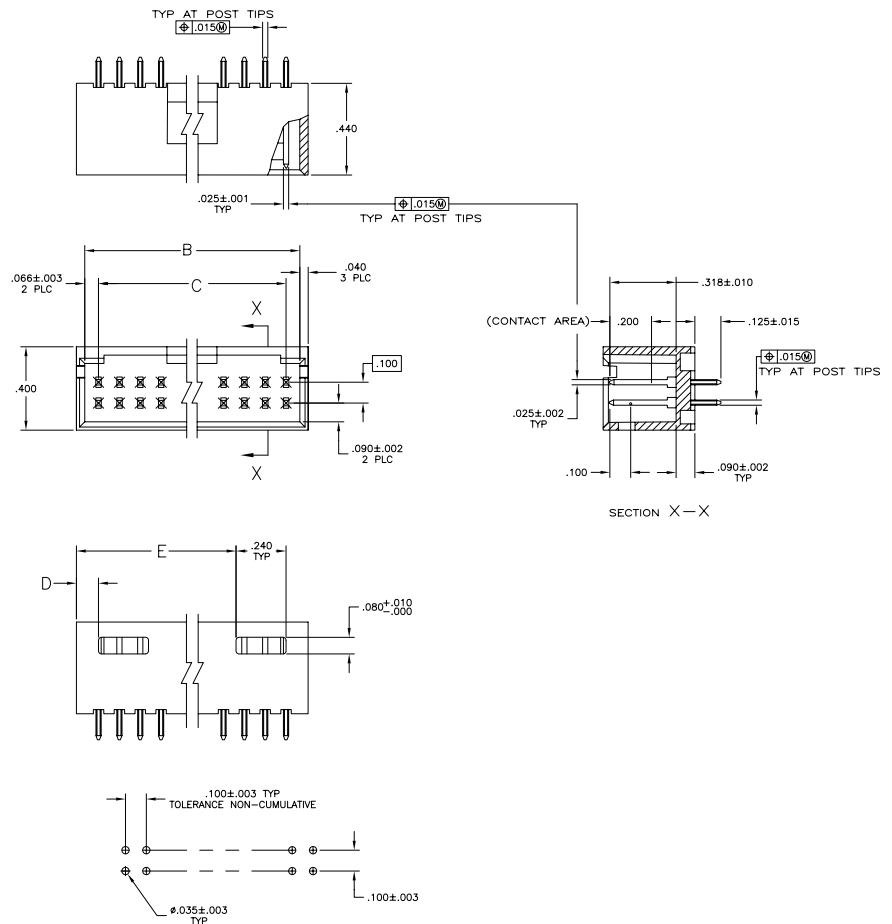
**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

#### ACCESSORIES

**Barrier Insert** - page 126

**Technical Documents** - Page 195, See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\* $\pm .003$  [ $\pm 0.08$ ] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

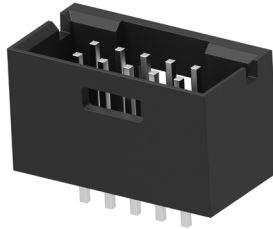
No. of Pos.	Dimensions					Post Plating/Part Nos.		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	.106 [2.69]	-	5-103168-1	5-102618-1	8-87589-6
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	.106 [2.69]	-	5-103168-2	5-102618-2	8-87589-5
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	.206 [5.23]	-	5-103168-3	5-102618-3	5-87589-1
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	.206 [5.23]	-	5-103168-4	5-102618-4	5-87589-2
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	.306 [7.77]	-	5-103168-5	5-102618-5	5-87589-3
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	.306 [7.77]	-	5-103168-6	5-102618-6	5-87589-4
18	1.012 [25.70]	.932 [23.67]	.800 [20.32]	.406 [10.31]	-	5-103168-7	5-102618-7	5-87589-5
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	.106 [2.69]	.806 [20.47]	5-103168-8	5-102618-8	5-87589-6
22	1.212 [30.78]	1.132 [28.75]	1.000 [25.40]	.106 [2.69]	.906 [23.01]	5-103168-9	5-102618-9	-
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	.106 [2.69]	1.006 [25.55]	6-103168-0	6-102618-0	5-87589-8
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	.106 [2.69]	1.106 [28.09]	6-103168-1	6-102618-1	5-87589-9
28	1.512 [38.40]	1.432 [36.37]	1.300 [33.02]	.106 [2.69]	1.206 [30.63]	6-103168-2	6-102618-2	-
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	.106 [2.69]	1.306 [33.17]	6-103168-3	6-102618-3	6-87589-1
32	1.712 [43.48]	1.632 [41.45]	1.500 [38.10]	.106 [2.69]	1.406 [35.71]	6-103168-4	-	-
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	.106 [2.69]	1.506 [38.25]	6-103168-5	6-102618-5	6-87589-3
36	1.912 [48.56]	1.832 [46.53]	1.700 [43.18]	.106 [2.69]	1.606 [40.79]	6-103168-6	-	6-87589-4
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	.106 [2.69]	1.806 [45.87]	6-103168-8	6-102618-8	6-87589-6
44	2.312 [58.72]	2.232 [56.69]	2.100 [53.34]	.106 [2.69]	2.006 [50.95]	7-103168-0	-	-
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	.106 [2.69]	2.306 [58.57]	7-103168-3	7-102618-3	7-87589-1
60	3.112 [79.04]	3.032 [77.01]	2.900 [73.66]	.106 [2.69]	2.806 [71.27]	7-103168-8	7-102618-8	-

Note: All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

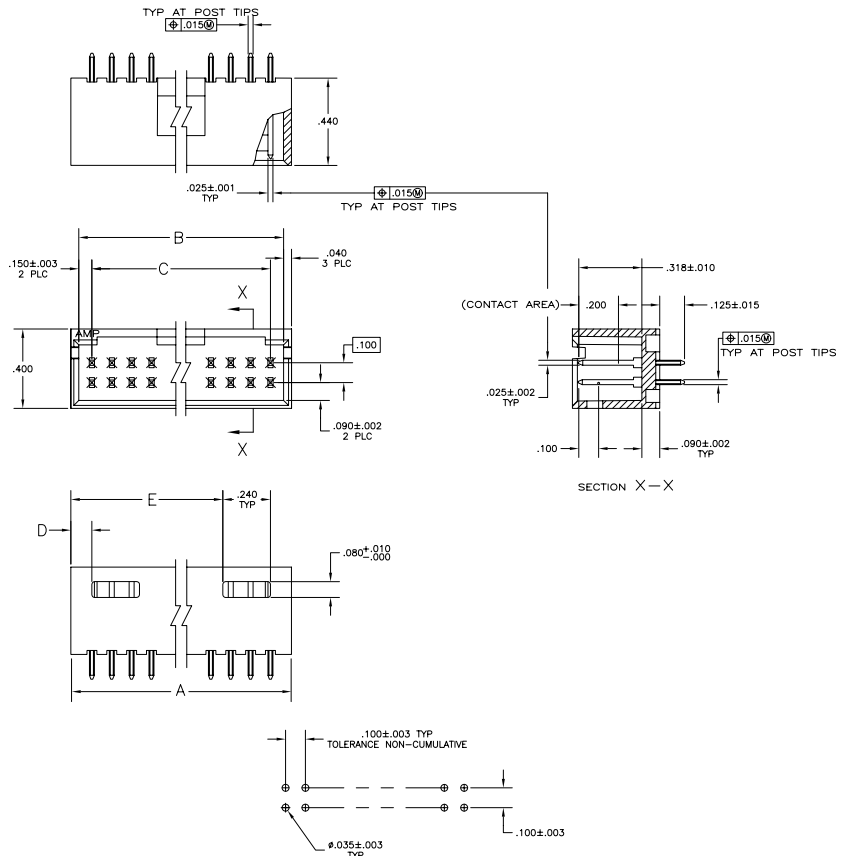
**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\* $\pm .003$  [ $\pm 0.08$ ] tolerances not to accumulate within one connector pattern.



### PRODUCT INFORMATION

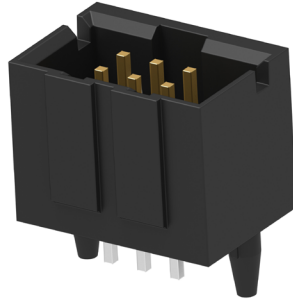
No. of Pos.	Dimensions					Post Plating/Part Nos.		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.580 [14.73]	.500 [12.70]	.200 [5.08]	.190 [4.83]	-	5-103169-1	5-102619-1	-
8	.680 [17.27]	.600 [15.24]	.300 [7.62]	.190 [4.83]	-	5-103169-2	5-102619-2	-
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	.290 [7.37]	-	5-103169-3	5-102619-3	5-87587-1
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	.290 [7.37]	-	5-103169-4	5-102619-4	-
14	.980 [24.89]	.900 [22.86]	.600 [15.24]	.390 [9.91]	-	5-103169-5	5-102619-5	-
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	.390 [9.91]	-	5-103169-6	5-102619-6	-
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	.490 [12.45]	-	5-103169-7	-	-
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	.190 [4.83]	.890 [22.61]	5-103169-8	5-102619-8	5-87587-6
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	.190 [4.83]	1.090 [27.69]	6-103169-0	6-102619-0	-
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	.190 [4.83]	1.190 [30.23]	-	6-102619-1	-
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	.190 [4.83]	1.390 [35.31]	-	6-102619-3	-
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	.190 [4.83]	1.490 [37.85]	6-103169-4	-	-
34	1.980 [50.29]	1.900 [48.26]	1.600 [40.64]	.190 [4.83]	1.590 [40.39]	-	6-102619-5	-
36	2.080 [52.83]	2.000 [50.80]	1.700 [43.18]	.190 [4.83]	1.690 [42.93]	6-103169-6	-	-
38	2.180 [55.37]	2.100 [53.34]	1.800 [45.72]	.190 [4.83]	1.790 [45.47]	6-103169-7	-	-
40	2.280 [57.91]	2.200 [55.88]	1.900 [48.26]	.190 [4.83]	1.890 [48.01]	-	6-102619-8	-
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	.190 [4.83]	2.390 [60.71]	7-103169-3	7-102619-3	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH PLASTIC HOLDDOWNS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**POSTS** - Phosphor bronze, duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

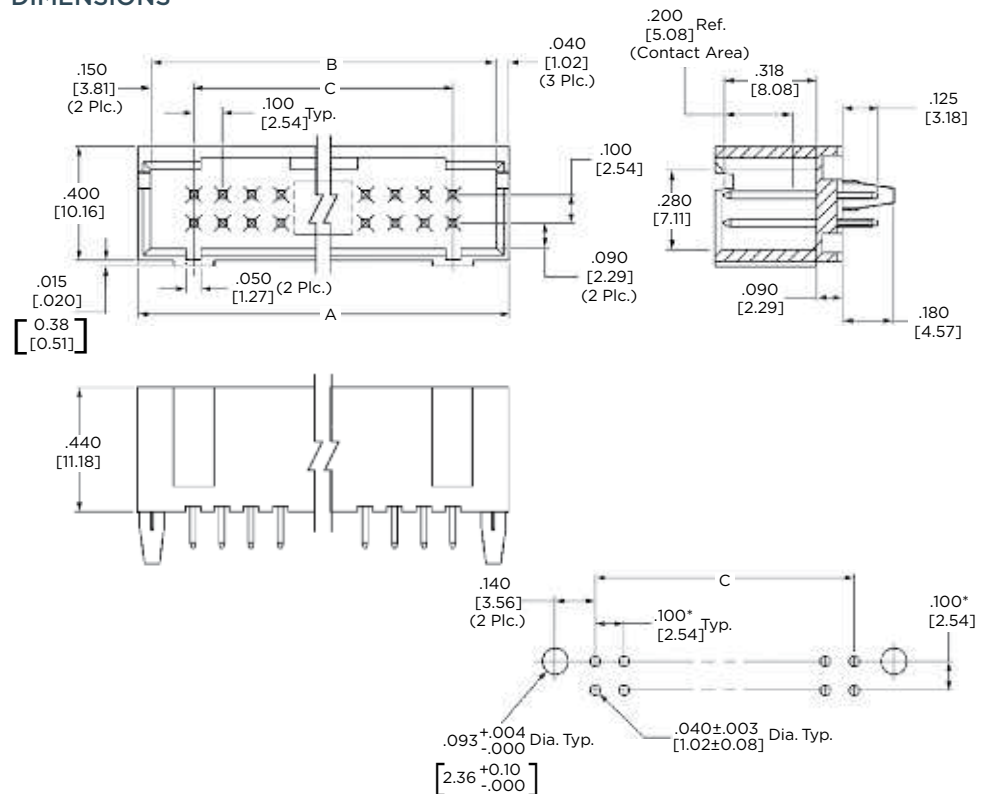
**Mateable Connectors**  
AMPMODU MTE Receptacles - Page 154  
AMPMODU Wire-Applied Receptacles - Page 64

#### ACCESSORIES

**Barrier Insert** - page 126

**Technical Documents** - Page 195,  
See mating connector for applicable product and **application specifications**.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

### PRODUCT INFORMATION

No. of Pos.	Dimensions			Part Nos. Plating A
	A	B	C	
6	.580 [14.73]	.500 [12.70]	.200 [5.08]	5-104317-1
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	5-104317-2
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	5-104317-3
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	6-104317-6
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	5-104317-5
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	5-104317-6
22	1.380 [35.05]	1.300 [33.02]	1.000 [25.40]	5-104317-7
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	5-104317-9
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	6-104317-0
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	6-104317-1
42	2.380 [60.45]	2.300 [58.42]	2.000 [50.80]	6-104317-5

**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

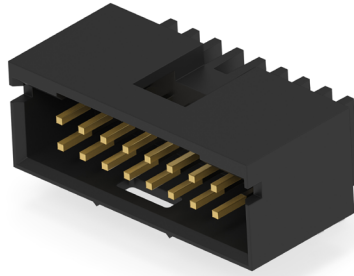
No. of Pos.	Dimensions					Post Plating/Part Nos.		
	A	B	C	D	E	Plating A	Plating B	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	.106 [2.69]	-	5-103166-1	5-102617-1	8-87579-5
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	.106 [2.69]	-	5-103166-2	5-102617-2	5-87579-1
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	.206 [5.23]	-	5-103166-3	5-102617-3	5-87579-2
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	.206 [5.23]	-	5-103166-4	5-102617-4	5-87579-3
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	.306 [7.77]	-	5-103166-5	5-102617-5	5-87579-4
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	.306 [7.77]	-	5-103166-6	5-102617-6	5-87579-5
18	1.012 [25.70]	.932 [23.67]	.800 [20.32]	.406 [10.31]	-	5-103166-7	5-102617-7	5-87579-6
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	.106 [2.69]	.806 [20.47]	5-103166-8	5-102617-8	5-87579-7
22	1.212 [30.78]	1.132 [28.75]	1.000 [25.40]	.106 [2.69]	.906 [23.01]	-	-	5-87579-8
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	.106 [2.69]	1.006 [25.55]	6-103166-0	6-102617-0	5-87579-9
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	.106 [2.69]	1.106 [28.09]	6-103166-1	-	6-87579-0
28	1.512 [38.40]	1.432 [36.37]	1.300 [33.02]	.106 [2.69]	1.206 [30.63]	6-103166-2	-	-
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	.106 [2.69]	1.306 [33.17]	6-103166-3	6-102617-3	6-87579-2
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	.106 [2.69]	1.506 [38.25]	6-103166-5	6-102617-5	-
36	1.912 [48.56]	1.832 [46.53]	1.700 [43.18]	.106 [2.69]	1.606 [40.79]	6-103166-6	-	-
38	2.012 [51.10]	1.932 [49.07]	1.800 [45.72]	.106 [2.69]	1.706 [43.33]	-	-	-
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	.106 [2.69]	1.806 [45.87]	6-103166-8	6-102617-8	6-87579-7
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	.106 [2.69]	2.306 [58.57]	7-103166-3	-	7-87579-2
60	3.112 [79.04]	3.032 [77.01]	2.900 [73.66]	.106 [2.69]	2.806 [71.27]	-	7-102617-8	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE RIGHT-ANGLE POST (WITH DETENT WINDOWS)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-.0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel Plating

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-.0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-.0.00508] tin over .000050 [0.00127] nickel on entire post

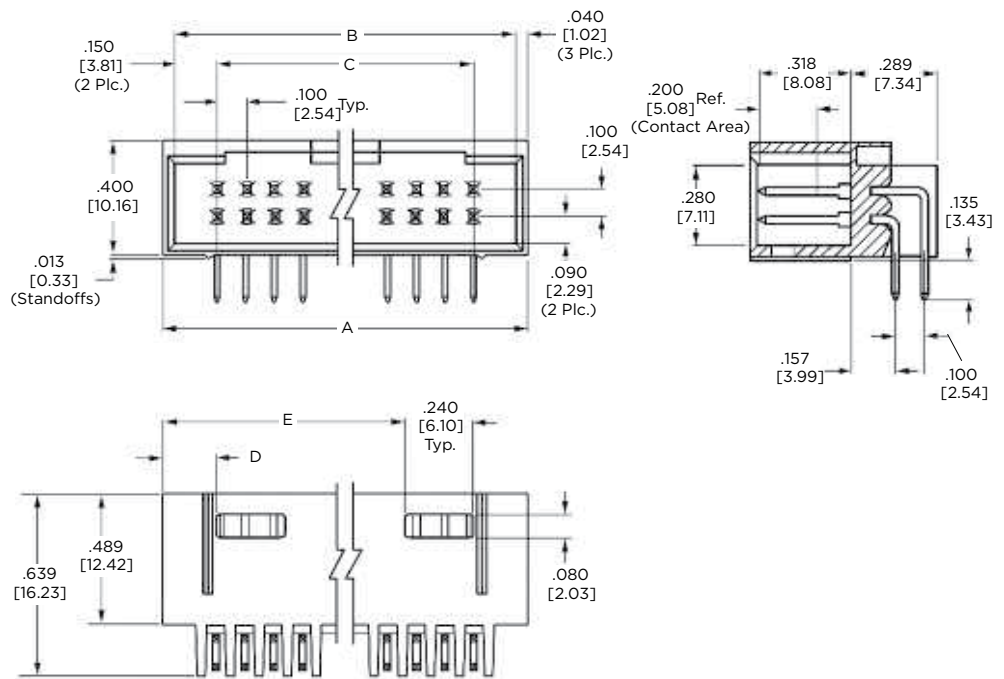
#### RELATED PRODUCT DATA

**Mateable Connectors**  
**AMPMODU MTE Receptacles**  
- Page 154

**AMPMODU Wire-Applied Receptacles** - Page 64

**Technical Documents** - Page 195,  
See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

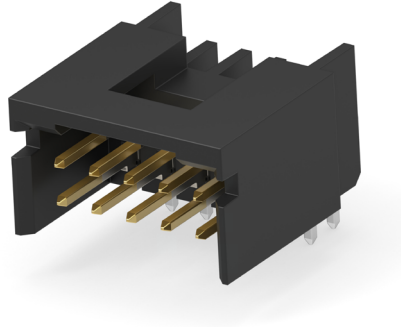
No. of Pos.	Dimensions					Post Plating/Part Nos.		
	A	B	C	D	E	Plating A	Plating B	Plating A
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	.290 [7.37]	-	5-103167-2	5-102570-3	-
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	.290 [7.37]	-	5-103167-3	5-102570-4	-
14	.980 [24.89]	.900 [22.86]	.600 [15.24]	.390 [9.91]	-	5-103167-4	5-102570-5	5-87577-4
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	.390 [9.91]	-	5-103167-5	5-102570-6	-
18	1.180 [29.97]	1.100 [27.94]	.800 [20.32]	.490 [12.45]	-	5-103167-6	-	-
20	1.280 [32.51]	1.200 [30.48]	.900 [22.86]	.190 [4.83]	.890 [22.61]	5-103167-7	5-102570-8	-
22	1.380 [35.05]	1.300 [33.02]	1.000 [25.40]	.190 [4.83]	.990 [25.15]	5-103167-8	5-102570-9	-
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	.190 [4.83]	1.090 [27.69]	5-103167-9	-	-
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	.190 [4.83]	1.190 [30.23]	6-103167-0	6-102570-1	-
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	.190 [4.83]	1.390 [35.31]	6-103167-2	-	-
32	1.880 [47.75]	1.800 [45.72]	1.500 [38.10]	.190 [4.83]	1.490 [37.85]	-	6-102570-4	-
34	1.980 [50.29]	1.900 [48.26]	1.600 [40.64]	.190 [4.83]	1.590 [40.39]	6-103167-4	6-102570-5	-
40	2.280 [57.91]	2.200 [55.88]	1.900 [48.26]	.190 [4.83]	1.890 [48.01]	6-103167-7	5-102570-1	-
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	.190 [4.83]	2.390 [60.71]	-	7-102570-2	-
60	3.280 [83.31]	3.200 [81.28]	2.900 [73.66]	.190 [4.83]	2.890 [73.41]	7-103167-7	-	-
68	3.680 [93.47]	3.600 [91.44]	3.300 [83.82]	.190 [4.83]	3.290 [83.57]	8-103167-1	-	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE RIGHT-ANGLE POST (WITH PIN PROTECTION ON 3 SIDES)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

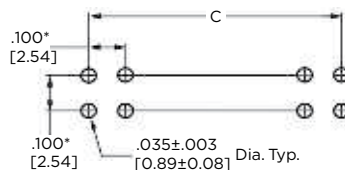
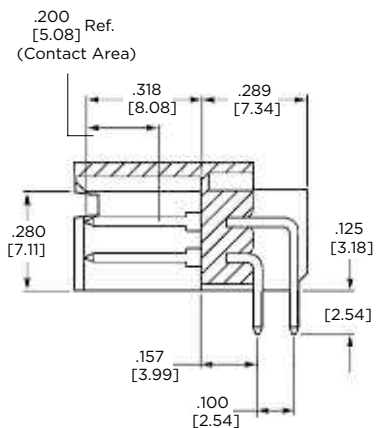
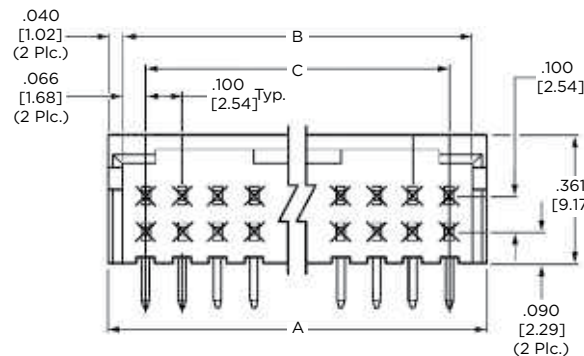
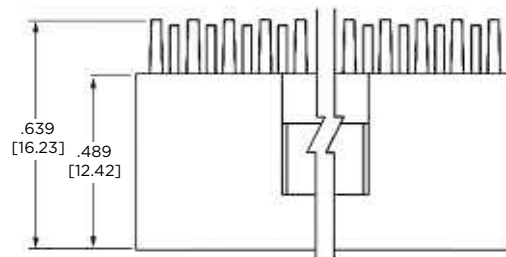
#### RELATED PRODUCT DATA

**Mateable Connectors**  
**AMPMODU MTE Receptacles** - Page 154

**AMPMODU Wire-Applied Receptacles** - Page 64

**Technical Documents** - Page 195,  
See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.



### PRODUCT INFORMATION

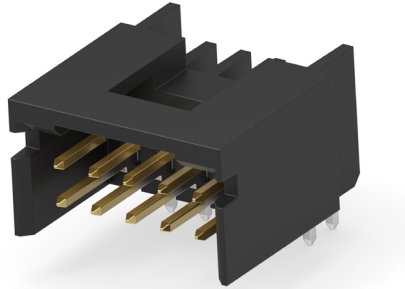
No. of Pos.	Dimensions			Post Plating/Part Nos.
	A	B	C	Plating A
6	.412 [10.46]	.332 [8.43]	.200 [5.08]	5-103164-1
8	.512 [13.00]	.432 [10.97]	.300 [7.62]	5-103164-2
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	5-103164-3
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	5-103164-4
14	.812 [20.62]	.732 [18.59]	.600 [15.24]	5-103164-5
16	.912 [23.16]	.832 [21.13]	.700 [17.78]	5-103164-6
18	1.012 [25.70]	.932 [23.67]	.800 [20.32]	5-103164-7
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	-
24	1.312 [33.32]	1.232 [31.29]	1.100 [27.94]	-
26	1.412 [35.86]	1.332 [33.83]	1.200 [30.48]	6-103164-1
30	1.612 [40.94]	1.532 [38.91]	1.400 [35.56]	-
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	6-103164-5

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### .025 [0.64] SQUARE RIGHT-ANGLE POST (WITH PIN PROTECTION ON 3 SIDES)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

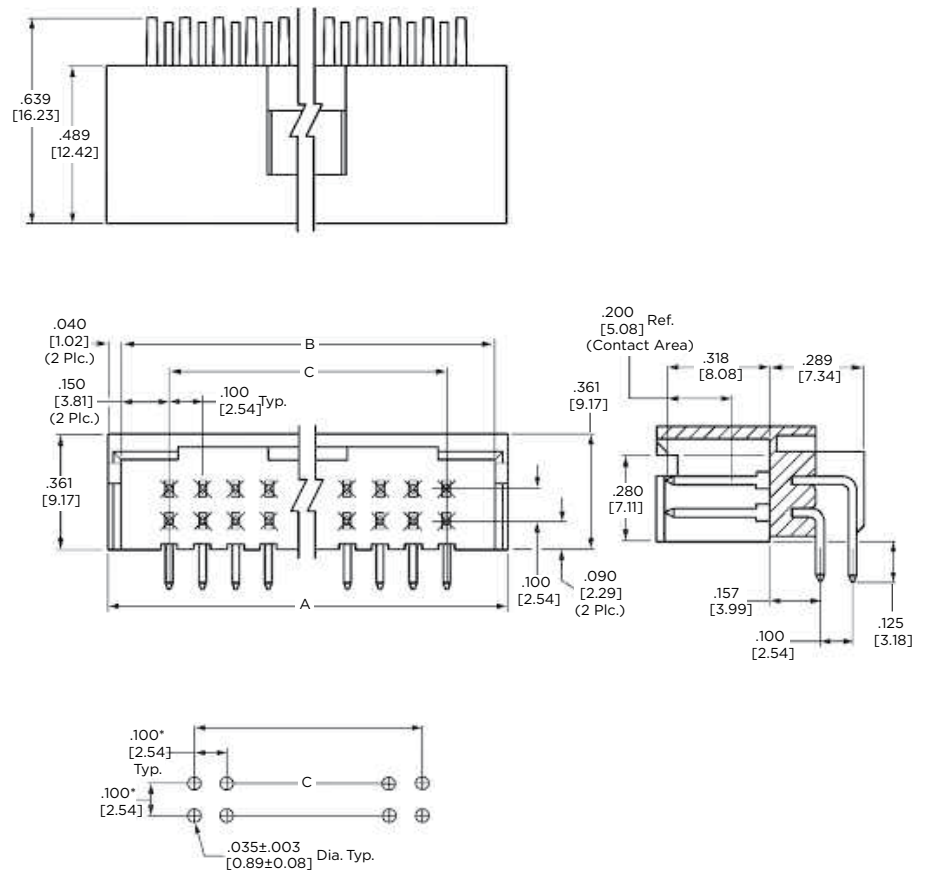
**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

**Mateable Connectors**  
**AMPMODU Wire-Applied**  
**Receptacles** - Page 64

**Technical Documents** - Page 195  
See mating connector for applicable product and application specifications.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

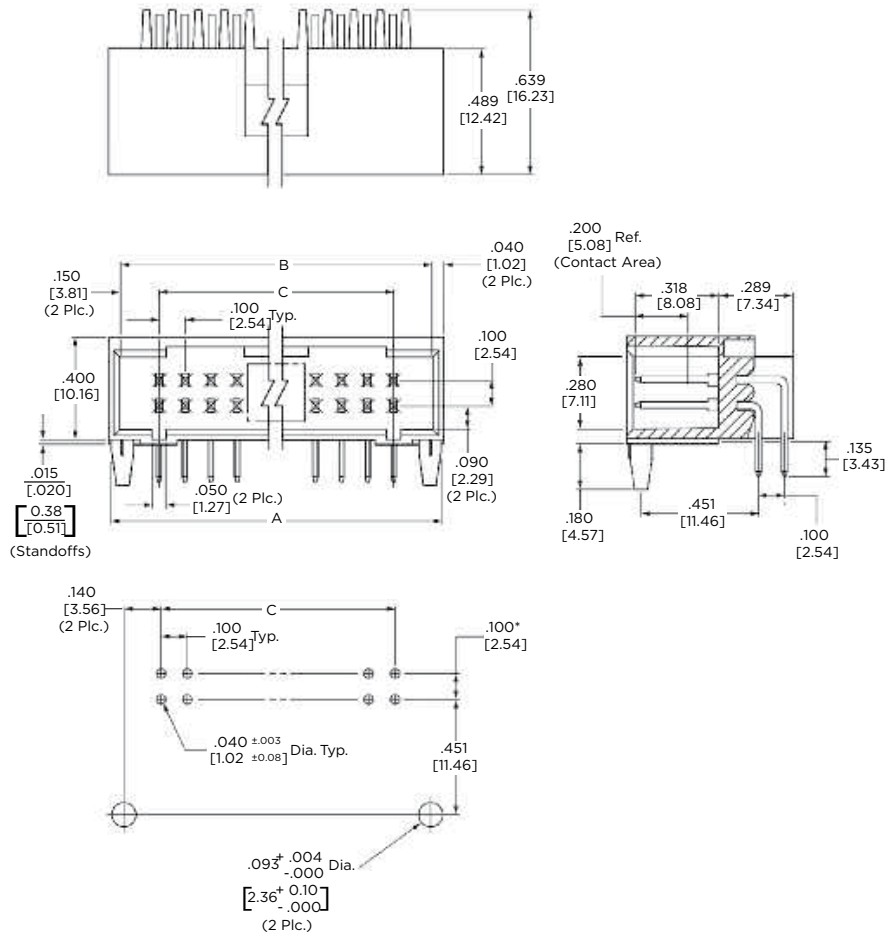
## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED, WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

.025 [0.64] SQUARE  
RIGHT-ANGLE POST (WITH  
PLASTIC HOLDDOWNS)



#### DIMENSIONS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic,  
94V-0 rated

**Posts** - Phosphor bronze, duplex plated  
.000015 [0.00038] gold on contact area,  
.000100-.000200 [0.00254-0.00508]  
tin on solder area, with entire post  
underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

**Mateable Connectors**  
AMPMODU MTE Receptacles - Page  
154  
AMPMODU Wire-Applied  
Receptacles - Page 64

**Technical Documents** - Page 195  
See mating connector for applicable  
product and application specifications.

#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

### PRODUCT INFORMATION

No. of Pos.	Dimensions			Part Nos.
	A	B	C	
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	5-104319-7
12	.880 [22.35]	.800 [20.32]	.500 [12.70]	5-104319-8
16	1.080 [27.43]	1.000 [25.40]	.700 [17.78]	5-104319-1
20	1.280 [32.51]	1.200 [30.48]	.900 [20.86]	5-104319-2
30	1.780 [45.21]	1.700 [43.18]	1.400 [35.56]	5-104319-3

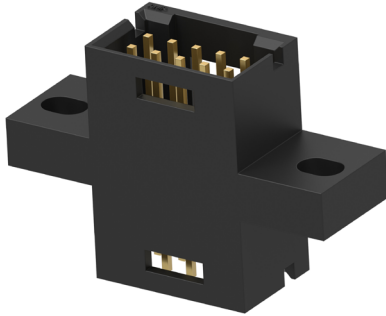
**Note:** All part numbers are RoHS compliant.



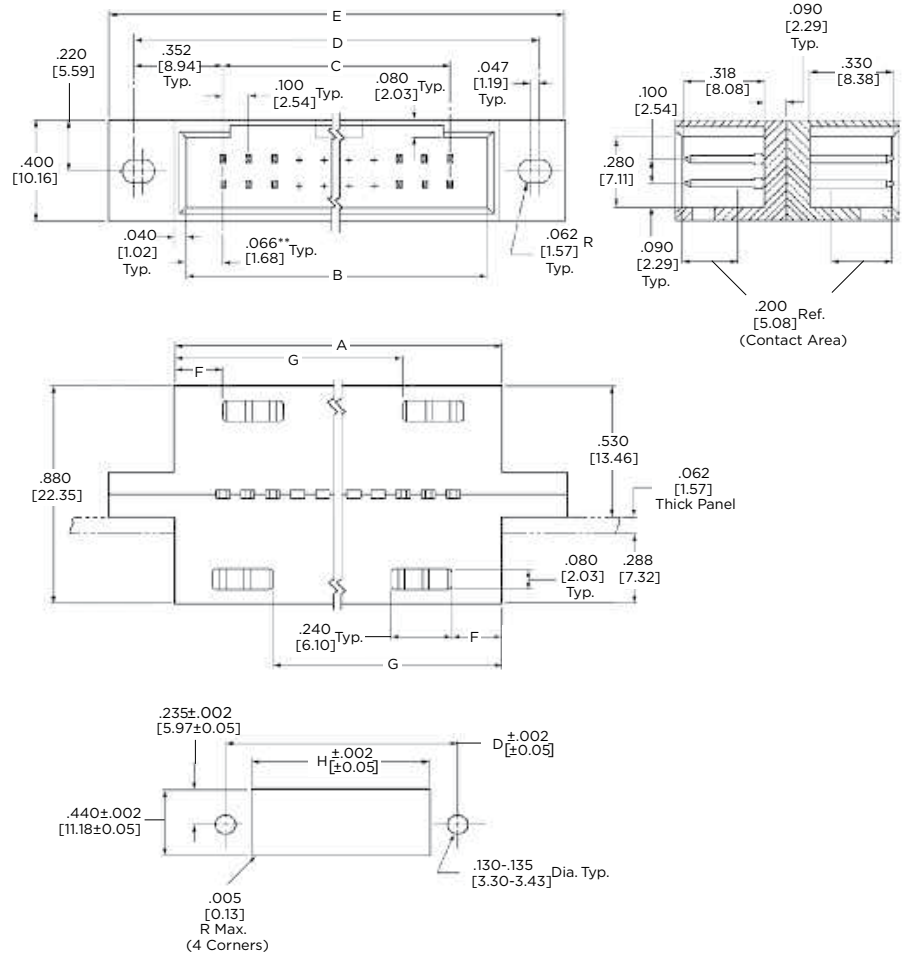
## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .066 [1.68] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)



#### DIMENSIONS



#### Recommended Panel Cutout

\*\*Both mating faces have same end dimension.

#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

**Mateable Connectors**  
**AMPMODU Board Mount**  
**Receptacles** - Page 136

**AMPMODU MTE Receptacles** - Page 154

**AMPMODU Wire-Applied**  
**Receptacles** - Page 64

**AMPMODU MT Receptacles** - Page 154

#### ACCESSORIES

**Barrier Insert** - page 126

**Technical Documents** - Page 195  
 See mating connector for applicable product and application specifications.

## PRODUCT INFORMATION

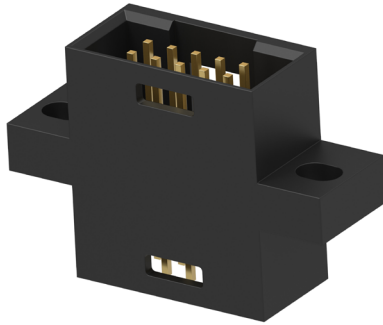
No. of Pos.	Dimensions								Part Nos.
	A	B	C	D	E	F	G	H	
10	.612 [15.54]	.532 [13.51]	.400 [10.16]	1.104 [28.04]	1.304 [33.12]	.206 [5.23]	-	.632 [16.05]	87608-1
12	.712 [18.08]	.632 [16.05]	.500 [12.70]	1.204 [30.58]	1.404 [35.66]	.206 [5.23]	-	.732 [18.59]	87608-2
20	1.112 [28.24]	1.032 [26.21]	.900 [22.86]	1.604 [40.74]	1.804 [45.82]	.106 [2.69]	.806 [20.47]	1.132 [28.75]	87608-6
34	1.812 [46.02]	1.732 [43.99]	1.600 [40.64]	2.304 [58.52]	2.504 [63.60]	.106 [2.69]	1.506 [38.25]	1.832 [46.53]	1-87608-3
40	2.112 [53.64]	2.032 [51.61]	1.900 [48.26]	2.604 [66.14]	2.804 [71.22]	.106 [2.69]	1.806 [45.87]	2.132 [54.15]	1-87608-6
50	2.612 [66.34]	2.532 [64.31]	2.400 [60.96]	3.104 [78.84]	3.304 [83.92]	.106 [2.69]	2.306 [58.57]	2.632 [66.85]	2-87608-1

**Note:** All part numbers are RoHS compliant.

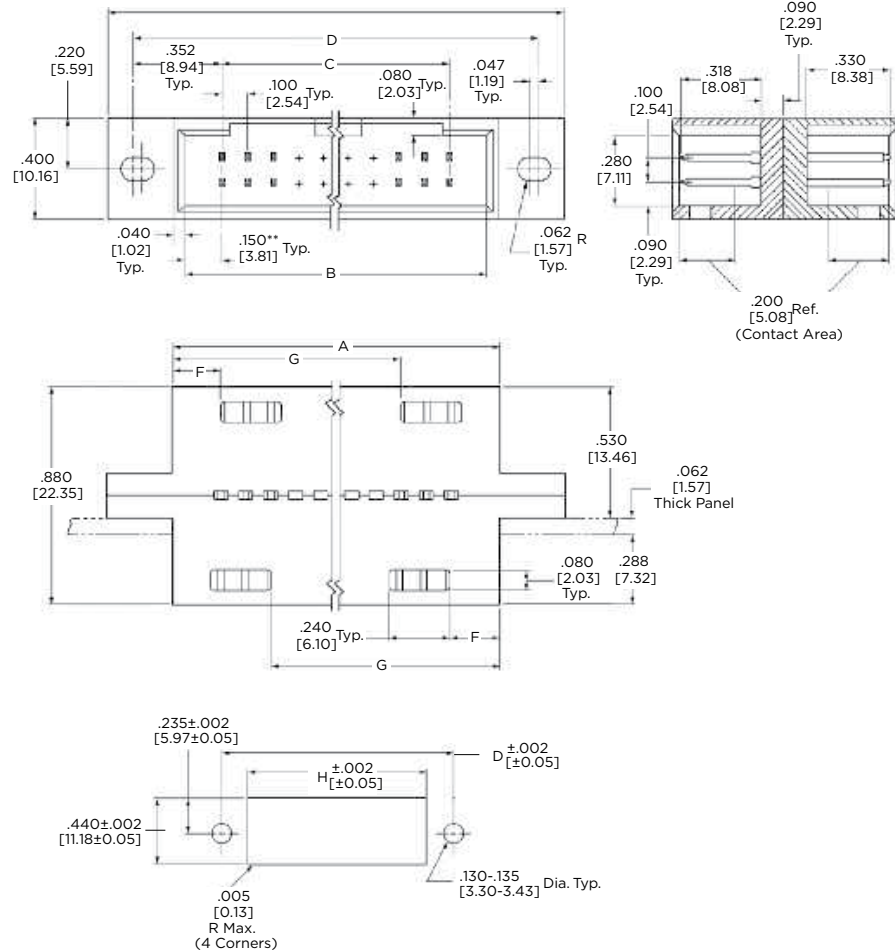
## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .150 [3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)



#### DIMENSIONS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

**Mateable Connectors**  
**AMPMODU MTE Receptacles**  
 - Page 154

**AMPMODU Wire-Applied Receptacles** - Page 64

#### ACCESSORIES

**Barrier Insert** - page 126

**Technical Documents** - Page 195  
 See mating connector for applicable product and application specifications.

#### Recommended Panel Cutout

\*\*Both mating faces have same end dimension.

## PRODUCT INFORMATION

No. of Pos.	Dimensions								Part Nos.
	A	B	C	D	E	F	G	H	
10	.780 [19.81]	.700 [17.78]	.400 [10.16]	1.104 [28.04]	1.304 [33.12]	.290 [7.37]	-	.800 [20.32]	87605-1
26	1.580 [40.13]	1.500 [38.10]	1.200 [30.48]	1.904 [48.36]	2.104 [53.44]	.190 [4.83]	1.190 [30.23]	1.600 [40.64]	87605-9
50	2.780 [70.61]	2.700 [68.58]	2.400 [60.96]	3.104 [78.84]	3.304 [83.92]	.190 [4.83]	2.390 [60.71]	2.800 [71.12]	2-87605-1

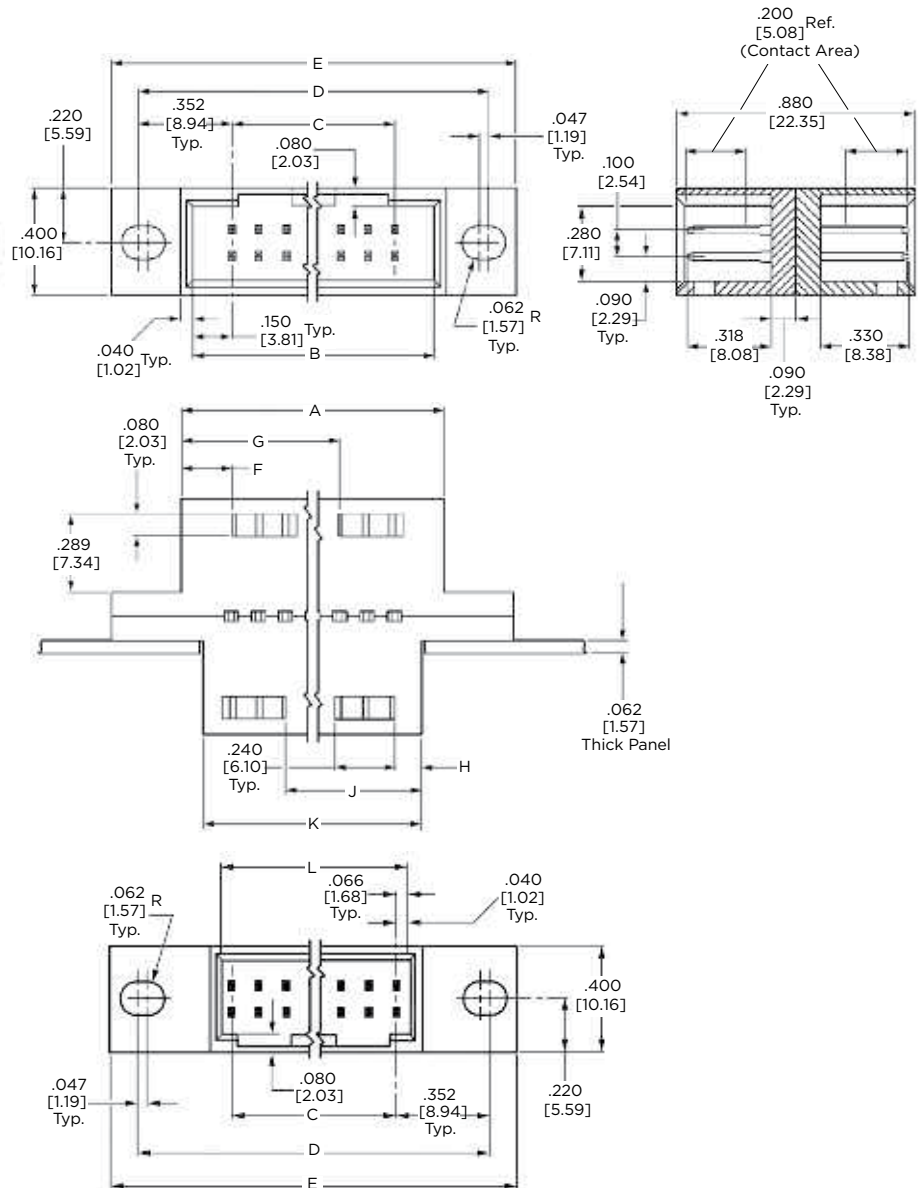
**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### STANDARD PROFILE HEADERS-SHROUDED BULKHEAD TYPE; WITH .066/.150 [1.68/3.81] END DIMENSION, DOUBLE-ROW, .100 X .100 [2.54 X 2.45] CENTERLINE

.025 [0.64] SQUARE STRAIGHT POST (WITH DETENT WINDOWS AND MOUNTING EARS)

#### DIMENSIONS



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Copper alloy, plated .000030 [0.00076] gold over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

Mateable Connectors with .066 [1.68] End Dimension  
AMPMODU Board Mount  
Receptacles - Page 136

AMPMODU MTE Receptacles -  
Page 154

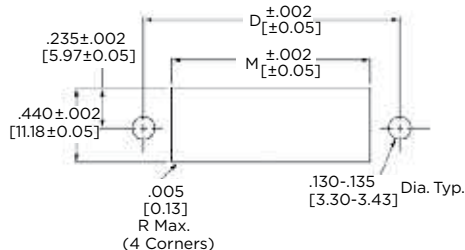
AMPMODU Wire-Applied  
Receptacles - Page 64

Mateable Connectors with .150 [3.81]  
End Dimension - AMPMODU MTE  
Receptacles - Page 154 (used with  
coupling shroud)

#### ACCESSORIES

Barrier Insert - page 126

Technical Documents - Page 195,  
See mating connector for applicable  
product and application  
specifications.



#### Recommended Panel Cutout

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

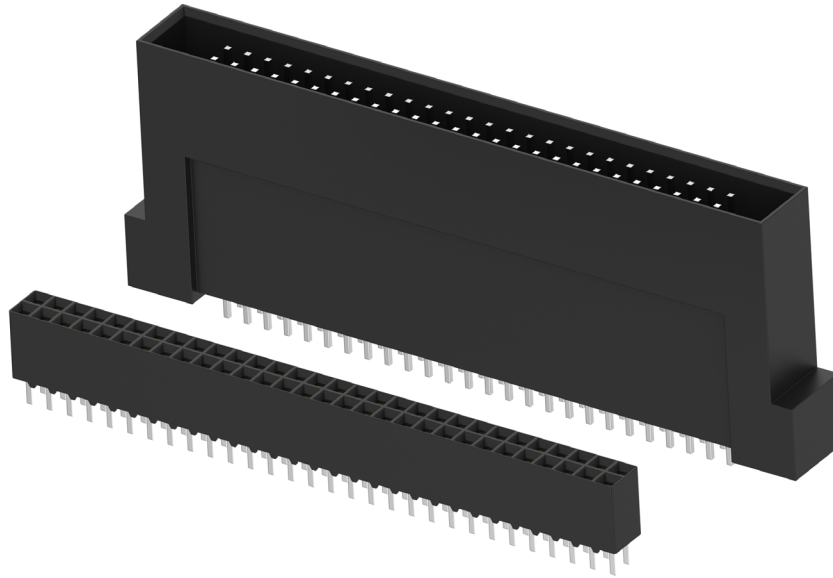
No. of Pos.	Dimensions						Part Nos.
	A	B	C	D	E	F	
24	1.480 [37.59]	1.400 [35.56]	1.100 [27.94]	1.804 [45.82]	2.004 [50.90]	.190 [4.83]	87496-9

No. of Pos.	Dimensions						Part Nos.
	G	H	J	K	L	M	
24	1.090 [27.69]	.106 [2.69]	1.006 [25.55]	1.312 [33.32]	1.232 [31.29]	1.332 [33.83]	87496-9

**Note:** All part numbers are RoHS compliant.



### AMPMODU STACKING CONNECTORS-SHROUDED, .025 X .025 [0.64 X 0.64] POSTS



## INTRODUCTION

AMPMODU stacking connectors are a two-piece interconnection system designed for parallel stacking printed circuit boards, without the use of mother boards.

Vertical mount headers and receptacle assemblies feature duplex plated posts and receptacle contacts on a double-row, .100 x .100 [2.54 x 2.54] grid. The .025 [0.64] sq. header posts are more protected, and the top-entry receptacle contacts utilize the proven AMPMODU receptacle contact design; dual cantilever beams with builtin overstress protection. Headers are available in two heights: .785 [19.94] and 1.200 [30.48]. This allows the customer to use the height of the header to keep wire-to-board connections up and away from other board components, particularly if the components are densely packaged around the header.

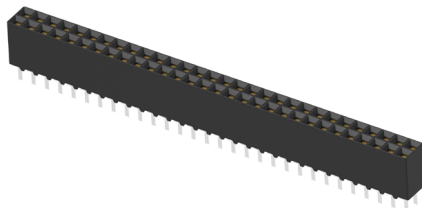
## PRODUCT FACTS

- Parallel PC board stacking without use of mother boards
- Provides space between boards for interference-free routing of wire-to-board connections
- Two header heights available: .785 [19.94] and 1.200 [30.48]
- Vertical mount headers are fully shrouded
- Receptacle contacts have dual cantilever beams with built-in overstress protection
- .025 [0.64] sq. posts and receptacle contacts on double-row, .100 x .100 [2.54 x 2.54] centers
- Header posts and receptacle contacts are phosphor bronze, duplex plated
- Housings are made of flame retardant, glass-filled thermoplastic

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### RECEPTACLE ASSEMBLIES, DOUBLE-ROW BOARD MOUNTED

VERTICAL MOUNT, TOP ENTRY, HIGH PROFILE, SELECTIVELY LOADED (WITH STANDOFFS)

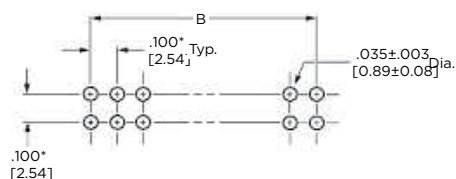
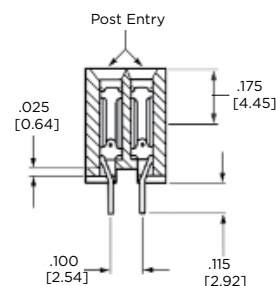
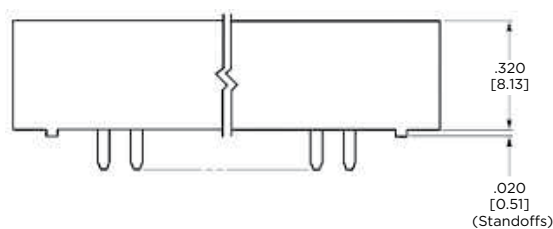
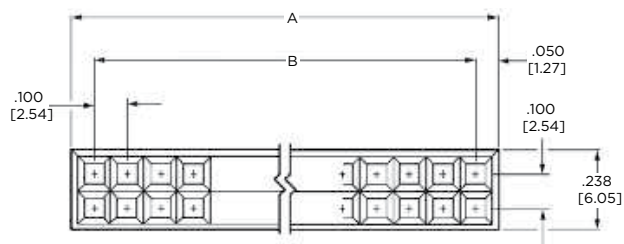


#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated .000010 [0.000254] min. gold on mating area, .000150-.000300 [0.00381- 0.00762] matte tin on solder area, with entire contact underplated .000050- .000100 [0.00127-0.00254] nickel

#### DIMENSIONS



#### Recommended PC Board Hole Layout

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

## PRODUCT INFORMATION

No. of Pos.	Dimensions		Receptacle Assembly Part No.
	A	B	
60* (52 Active)	3.000 [76.2]	2.900 [73.66]	5-102766-4

\*In addition to the active positions, each receptacle has four cavities on each end that are not loaded with contacts. These empty cavities aid in aligning the receptacle with header posts during mating.

#### Notes:

- Part no. and date code stamped on Housing where size permits.
- These receptacle assemblies mate with headers of the same size as the active positions listed above. Refer to pages 134 and 136.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### .025 [0.64] SQUARE POSTS

#### BANDOLIER POSTS (UNINSULATED)

##### MATERIAL AND FINISH

**Bandolier** - Brass

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000050 [0.00127] nickel on entire post

##### RELATED PRODUCT DATA

###### Mateable Connectors

Refer to the Mating Post Selection Guide - Page 10

##### ACCESSORIES

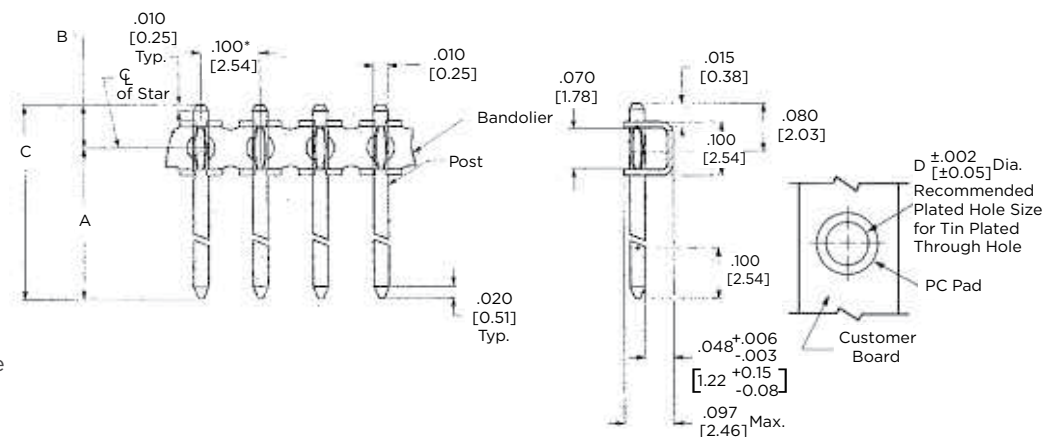
**End Shrouds** - page 125

**Technical Documents** - Page 195

See mating connector for applicable product and application specifications.



##### DIMENSIONS



### PRODUCT INFORMATION

Dimensions				Post Plating/Part Nos.		
A	B	C	D	Plating A	Plating B	Plating C
.353 [8.97]	.071 [1.80]	.424 [10.77]	.034 [0.86]	5-103577-1	-	-
.318 [8.08]	.071 [1.80]	.389 [9.88]	.034 [0.86]	5-103577-3	6-103577-5	-
.270 [6.86]	.071 [1.80]	.341 [8.66]	.034 [0.86]	-	6-103577-7	6-103577-1

##### Note:

1. Posts can be applied using Hand Tool 91419-1.
2. Approximate posts per reel-30,000.
3. The Bandolier Insertion head can be used on the Comp-U-Sertor II machine or the Modular Insertion System Bench machine (see page 153).
4. For PCB finishes other than tin, contact TE.

\*Point of measurement for plating thickness.

### .025 [0.64] SQUARE POSTS

#### STRIP FORM POSTS (UNINSULATED)



#### MATERIAL AND FINISH

**Posts** — Phosphor bronze,  
plated as follows:

**Plating A** — Duplex  
plated .000030

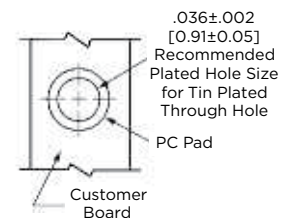
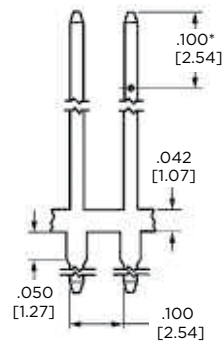
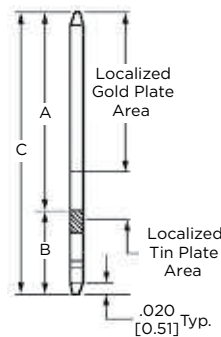
[0.00076] gold on contact area,  
.000100- .000200 [0.00254-  
0.00508] tin on solder area,  
with entire post underplated  
.000050 [0.00127] nickel

**Plating B** — Duplex plated .000015  
[0.00038] gold on contact area,  
.000100- .000200 [0.00254-  
0.00508] tin on solder area,  
with entire post underplated  
.000050 [0.00127] nickel

**Plating C** — .000030 [0.00076]  
gold over .000050 [0.00127]  
nickel on entire post

**Plating D** — .000100-.000200  
[0.00254- 0.00508] tin  
over .000050 [0.00127]  
nickel on entire post

#### DIMENSIONS



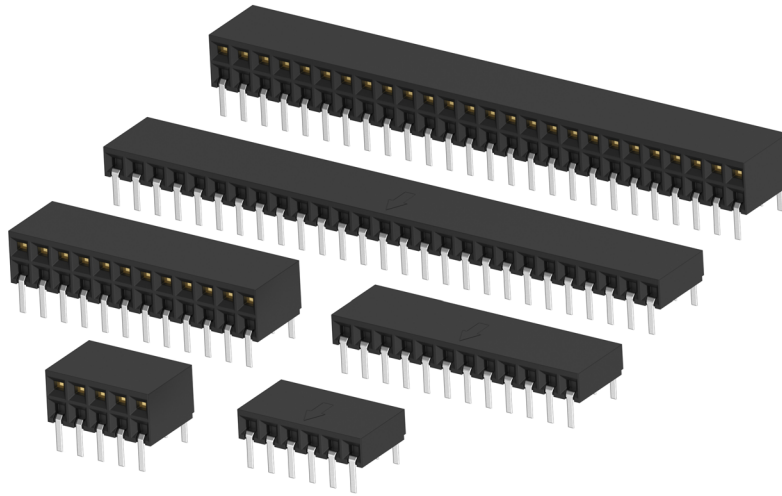
### PRODUCT INFORMATION

Dimensions			Post Plating/Part Nos.	
A	B	C	Plating C	Plating D
.278 [7.06]	.165 [4.19]	.443 [11.25]	1-87022-1	1-87022-0
.318 [8.08]	.165 [4.19]	.483 [14.27]	4-87022-1	-

#### Note:

1. Approximate Posts per reel-20,000
2. Other post lengths are available, consult TE
3. The Post/Tab Insertion Head can be used on the Comp-U-Sertor II machine or the Modular Insertion System Bench machine (see page 144)
4. For PCB finishes other than tin, contact TE.

### RECEPTACLE ASSEMBLIES, HORIZONTAL MOUNT



Horizontal Mount receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry, generally for applications using the mother/daughter board arrangement. This product line is offered in both single and double row configurations. The .100 [2.54] centerline assemblies are available in a wide range of position sizes.

They have end stacking capability which gives the added advantage of flexibility.

The **Housings** are made of high temperature, surface mount compatible thermoplastic Material that is 94V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design with a fully enclosed, one-piece "box" to protect the contact area. In addition, the receptacle contact has dual cantilever beams with a built-in anti-overstress feature. Standard solder tails accommodate a board thickness of .062 [1.57].

#### PRODUCT FACTS

- All receptacle assemblies are end stackable
- Contact design employs dual cantilever beams with built-in anti-overstress feature
- Closed entry Housings help prevent post stubbing
- Wide range of sizes available
- Other versions available upon request
- Housings made of high temperature, surface mount compatible thermoplastic Material, 94V-0 rated
- Duplex gold and matte tin plated contacts have full nickel underplate
- Housings feature PC board standoffs
- Solder tails accommodate a PC board thickness of .062 [1.57]
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

##### MECHANICAL CHARACTERISTICS

**Mating Force** - 6.0 oz. [1.67N] per contact (max.)

**Unmating Force** - .75 oz. [0.21N] per contact (min.) during third mating cycle

**Durability** - 200 cycles

##### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature** - -65°C to +125°C

##### ELECTRICAL CHARACTERISTICS

**Current Rating** - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

**Contact Resistance** - 12 milliohms (max.)

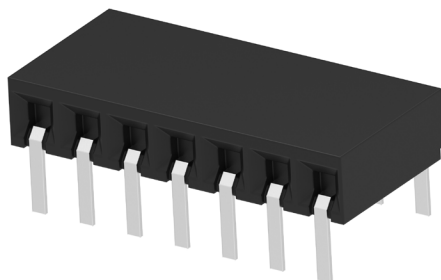
**Insulation Resistance** - 5000 megohms (min.) between adjacent contacts

**Dielectric Withstanding Voltage (at sea level)** - 750 V rms

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



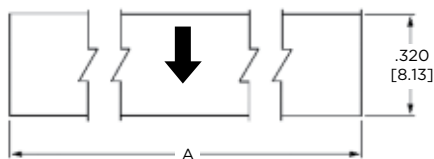
#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-.0.00762] matte tin on solder area all over .000050 [0.00127] nickel

#### DIMENSIONS



#### RELATED PRODUCT DATA

**Mateable Headers** Refer to the Mating Post Selection Guide - Page 10

#### PERFORMANCE CHARACTERISTICS

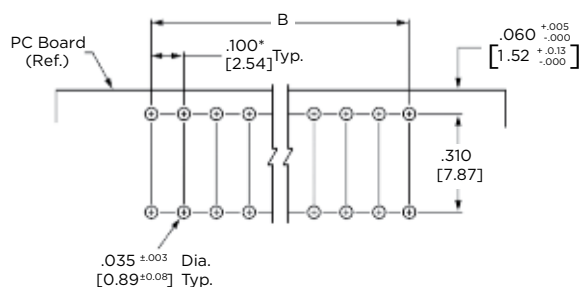
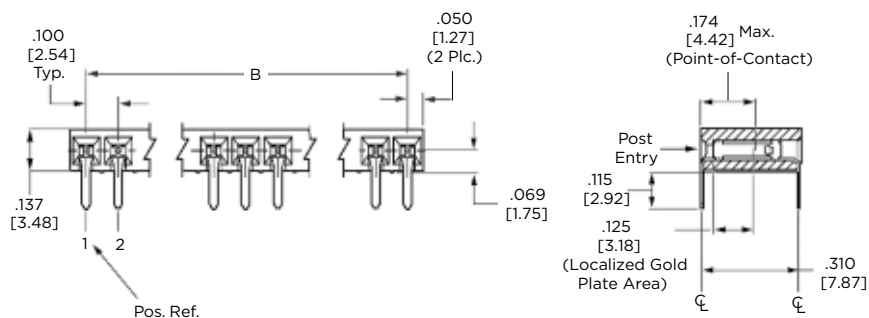
- page 74

**Technical Documents** - Page 195

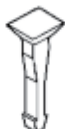
**Product Specification** - 108-25026

**Application Specification** - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.



#### KEYING PLUG



#### Recommended PC Board Hole Layout (for .062 [1.57] thick PC board)

\*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

#### Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

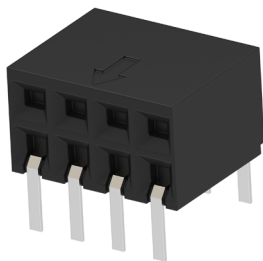
### PRODUCT INFORMATION

No. of Pos.			Contact Plating/Part Nos.
	A	B	Plating A
3	.300 [7.62]	.200 [5.08]	5535676-2
4	.400 [10.16]	.300 [7.62]	5535676-3
5	.500 [12.70]	.400 [10.16]	5535676-4
6	.600 [15.24]	.500 [12.70]	5535676-5
8	.800 [20.32]	.700 [17.78]	5535676-7
10	1.000 [25.40]	.900 [22.86]	5535676-9
14	1.400 [35.56]	1.300 [33.02]	1-5535676-3

**Note 1:** TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.

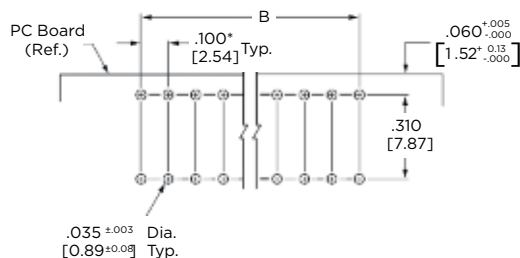
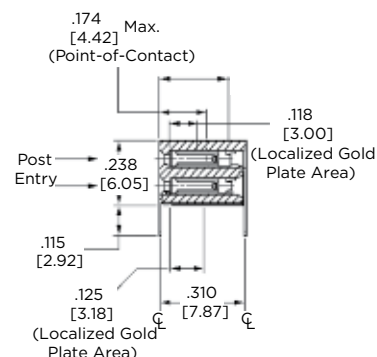
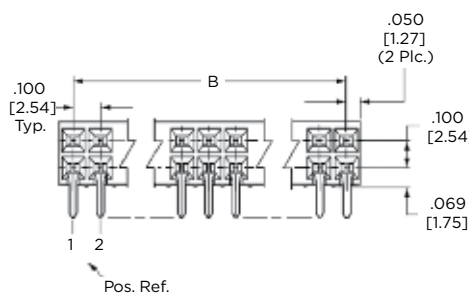
**Note:** All part numbers are RoHS compliant.

**CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS**



Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

A schematic diagram of a three-span continuous beam. The beam is represented by a horizontal line with three rectangular spans. A large downward-pointing arrow is centered in the middle span, representing a point load. The total length of the beam is labeled 'A' with a dimension line below it. The height of the beam is labeled '.320 [8.13]' on the right side.



\* $\pm 0.003$  [ $\pm 0.08$ ] tolerances not to accumulate within one connector pattern.



### PRODUCT INFORMATION

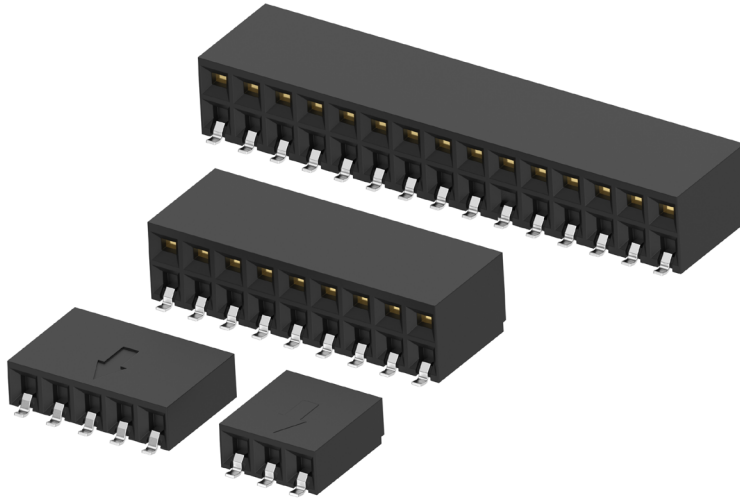
No. of Pos.	Dimensions		Contact Plating/Part Nos.	
	A	B	Plating A	Plating B
4	.200 [5.08]	.100 [2.54]	6-5535512-1	-
6	.300 [7.62]	.200 [5.08]	6-5535512-2	-
8	.400 [10.16]	.300 [7.62]	6-5535512-3	5146140-3
10	.500 [12.70]	.400 [10.16]	6-5535512-4	5146140-4
12	.600 [15.24]	.500 [12.70]	5535512-1	5146140-5
14	.700 [17.78]	.600 [15.24]	1-5535512-7	-
16	.800 [20.32]	.700 [17.78]	1-5535512-8	-
18	.900 [22.86]	.800 [20.32]	1-5535512-6	5146140-8
20	1.000 [25.40]	.900 [22.86]	5535512-2	5146140-9
24	1.200 [30.48]	1.100 [27.94]	5535512-3	1-5146140-1
26	1.300 [33.02]	1.200 [30.48]	2-5535512-0	1-5146140-2
30	1.500 [38.10]	1.400 [35.56]	2-5535512-2	1-5146140-4
32	1.600 [40.64]	1.500 [38.10]	2-5535512-3	-

**Note 1:**

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. .256 [6.50] minimum positive pin stop to prevent shorting between row.

**Note:** All part numbers are RoHS compliant.

### MOD II SURFACE MOUNT HORIZONTAL RECEPTACLE ASSEMBLIES, .100 X .100 [2.54 X 2.54] CENTERLINE



Horizontal surface mount receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry as process technologies evolve from wave soldering to surface mount processing.

This broad product line is offered in both single and double row configurations. The .100 [2.54] centerline assemblies are available in 2-40 (single row) positions and 4-80 (double row) positions. Housings are end stackable, which gives the advantage of added flexibility.

The Housings are made of high temperature Material that is 94V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design, with a fully enclosed one-piece "box" to protect the contact beams with built-in anti-overstress feature.

#### PRODUCT FACTS

- Surface mount leads
- All receptacle assemblies are end stackable
- Contact design employs dual cantilever beams with built-in anti-overstress feature
- Closed entry Housings help prevent post stubbing
- Housings made of high temperature, surface mount compatible thermoplastic Material, 94 V-0 rated
- Duplex gold and matte tin plated contacts have full nickel underplate
- Housings feature PC board standoffs
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

##### MECHANICAL CHARACTERISTICS

**Mating Force** - 6.0 oz. [1.67N] per contact (max.)

**Unmating Force** - .75 oz. [0.21N] per contact (min.) during third mating cycle

**Durability** - 200 cycles

##### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature** - -65°C to +125°C

##### ELECTRICAL CHARACTERISTICS

**Current Rating** - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

**Contact Resistance** - 12 milliohms (max.)

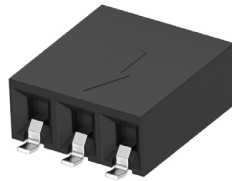
**Insulation Resistance** - 5000 megohms (min.) between adjacent contacts

**Dielectric Withstanding Voltage (at sea level)** - 750 V rms

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT .100 [2.54] CENTERLINE

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 73

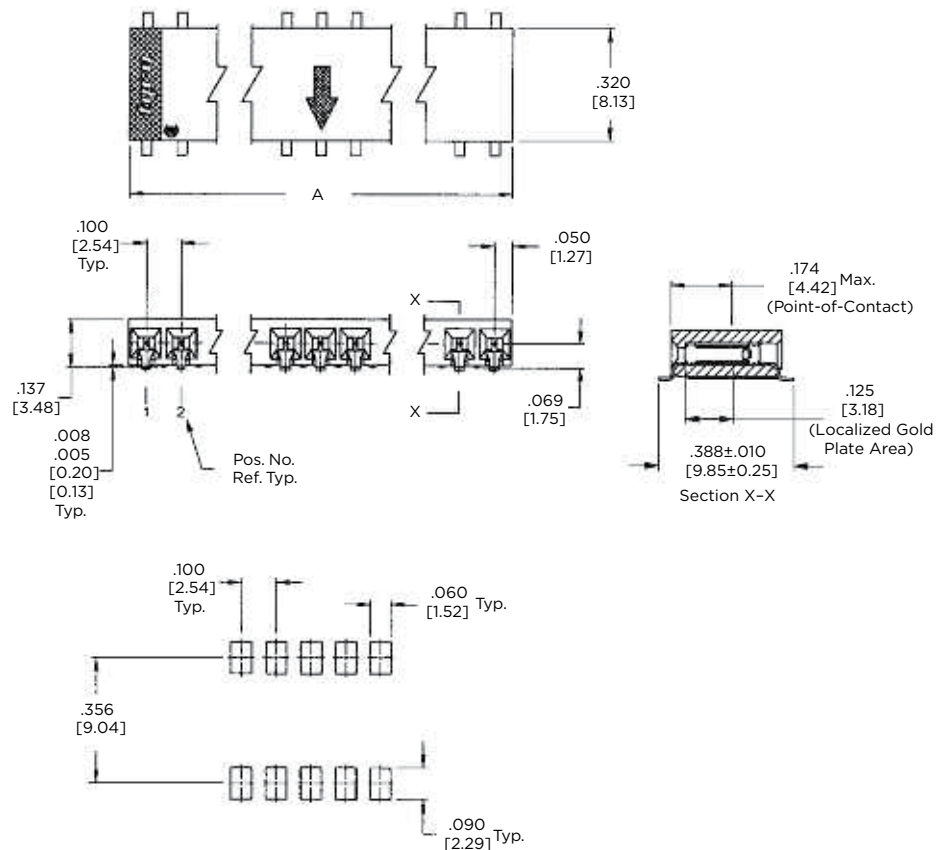
Technical Documents - Page 195

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### KEYING PLUG



Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

**Recommended Etched Circuit Layout**  
(for .040 [1.02] min. thick PC Board;  
.008 [0.20] thick stencil)

PRODUCT INFORMATION

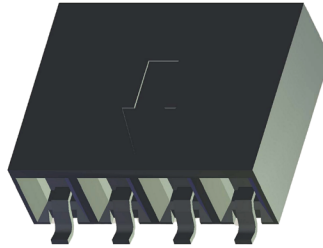
No. of Pos.	Dimensions	Contact Plating/Part Nos.	
	A	Plating A	Plating C
3	.300 [7.62]	5147721-2	-
4	.400 [10.16]	-	5147733-3
5	.500 [12.70]	-	5147733-4

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD II RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINES

CLOSED ENTRY, END STACKABLE, SHORT POINT-OF-CONTACT, WITH STANDOFFS



#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 73

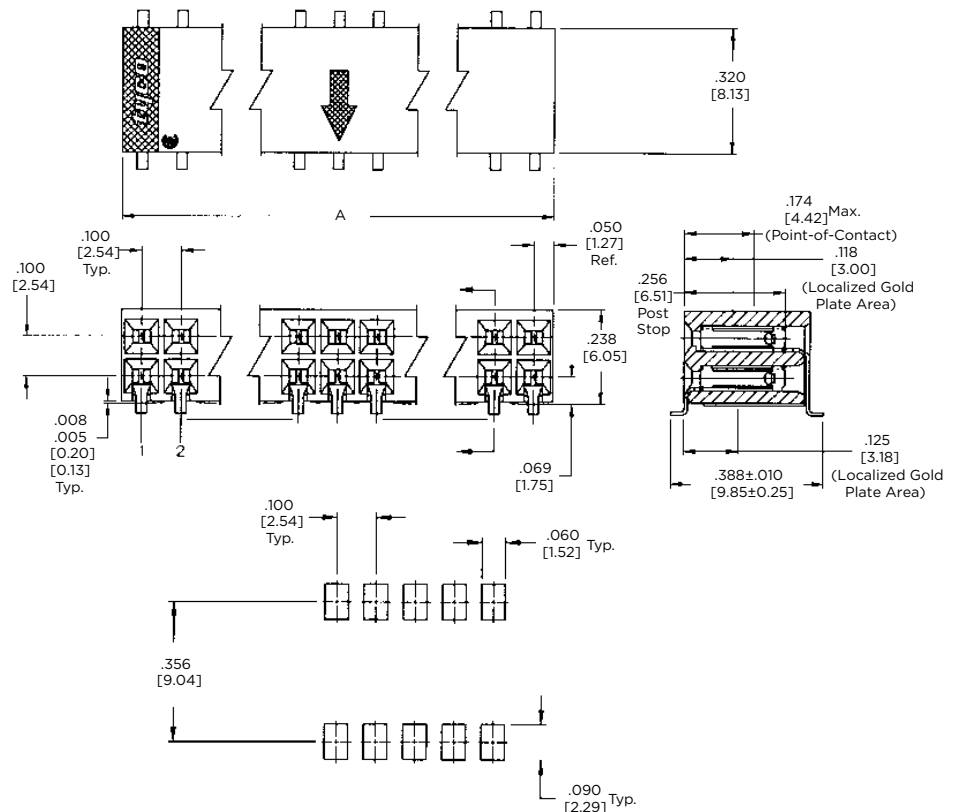
Technical Documents - Page 195

Product Specification - 108-25026

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



**Recommended Etched Circuit Layout**  
(for .040 [1.02] min. thick PC Board;  
.008 [0.20] thick stencil)

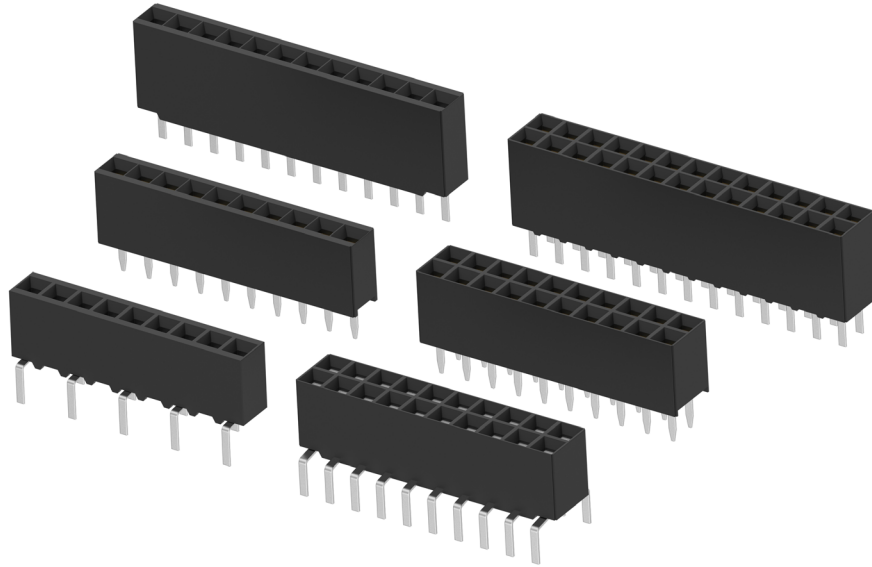
**Note:** All part numbers are RoHS compliant.

### PRODUCT INFORMATION

No. of Pos.	Dimensions	Contact Plating/Part Nos.	
	A	Plating A	Plating C
4	.200 [5.08]	-	5147733-3
8	.400 [10.16]	5147722-3	-
14	.700 [17.78]	5147722-6	-
18	.900 [22.86]	5147722-8	-

**Note:** All part numbers are RoHS compliant.

### RECEPTACLE ASSEMBLIES, VERTICAL MOUNT



Vertical receptacle assemblies are designed to reliably and economically meet the packaging and interconnection requirements of today's electronics industry. This broad product line offers a wide variety of assembly styles and features. They are available in dual entry style, in both single and double row configurations. The .100 [2.54] centerline assemblies are available in 3-40 (single row) positions and 2-80 (double row) positions.

Standard and low profile Housings which are end stackable also enhance the product line giving the advantage of added flexibility. The Housings are made of flame retardant Material that is 94 V-0 rated. Contacts are phosphor bronze, fully underplated with nickel to help prevent corrosion and are available in three plating options.

The receptacle contact is an established proven design, with a fully enclosed one-piece "box" to protect the contact beams. These assemblies are offered in .265 [6.73] (Mod IV) and .340[8.64] (Mod II) high profiles. Standard solder tails accommodate board thickness of .062 [1.57]. Product styles include single and dual tine variations. Outrigger tine styles are also available for bottom entry parallel board stacking applications.

#### PRODUCT FACTS

- Dual-cantilever beam contact with box design
- Single-row assemblies have .100 [2.54] centerline contact spacing; double-row assemblies have .100 x .100 [2.54 x 2.54] centerline contact spacing
- 3 through 40 positions in single-row assemblies; 2 through 80 positions in double-row assemblies
- Mod II Standard .340 [8.64] and Mod IV low .265 [6.73] profiles
- Mod II and Mod IV profiles available in dual entry
- Duplex gold and matte tin plated contacts have full nickel underplate
- Thermoplastic Housings, 94V-0 rated
- Standoffs for easy flux cleaning
- All through hole assemblies are end stackable
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

##### MECHANICAL CHARACTERISTICS

**Mating Force** - 9.0 oz. [2.5N] per contact (max.)

**Unmating Force** - .15 oz. [0.42N] per contact (min.)

**Durability** - 200 cycles

##### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature** - -65°C to +125°C

##### ELECTRICAL CHARACTERISTICS

**Current Rating** - 3.0 amperes (max.) for single contact; 2.0 amperes (max.) per contact when connector is fully energized

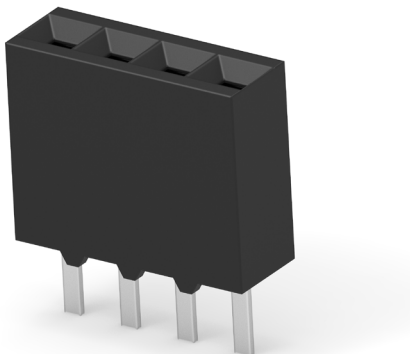
**Contact Resistance** - 12 milliohms (max.)

**Insulation Resistance** - 5000 megohms (min.) between adjacent contacts

**Dielectric Withstanding Voltage (at sea level)** - 750 V rms

## MOD II RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

Closed Top Entry, End Stackable, with Single Tine Contacts



### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating B** - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

### RELATED PRODUCT DATA

#### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 73

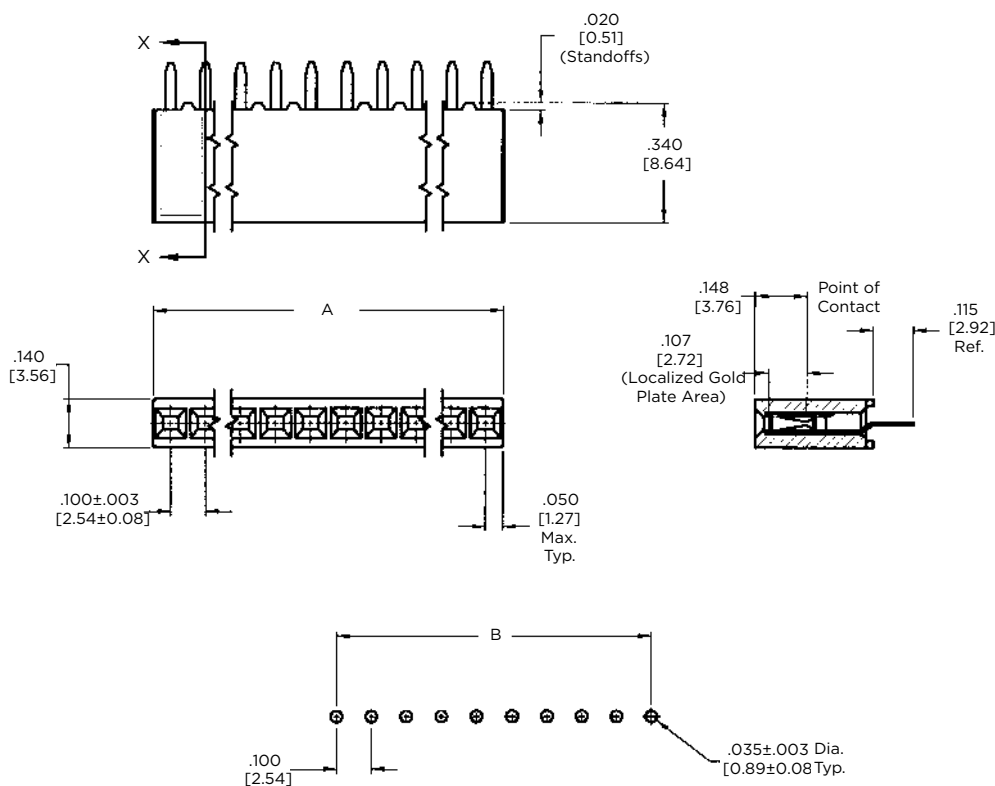
Technical Documents - Page 195

Product Specification - 108-25022

Application Specification - 114-25018

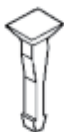
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

### DIMENSIONS



### Recommended PC Board Hole Layout

### KEYING PLUG



#### Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-534237-1	5-146386-1	5-146763-5
4	.400 [10.16]	.300 [7.62]	5-534237-2	6-146386-9	5-146763-6
5	.500 [12.70]	.400 [10.16]	5-534237-3	5-146386-2	5-146763-7
6	.600 [15.24]	.500 [12.70]	5-534237-4	5-146386-3	5-146763-8
7	.700 [17.78]	.600 [15.24]	5-534237-5	5-146386-4	5-146763-1
8	.800 [20.32]	.700 [17.78]	5-534237-6	5-146386-5	5-146763-2
9	.900 [22.86]	.800 [20.32]	5-534237-7	5-146386-6	5-146763-9
10	1.000 [25.40]	.900 [22.86]	5-534237-8	5-146386-7	5-146763-3
11	1.100 [27.94]	1.000 [25.40]	5-534237-9	5-146386-8	6-146763-0
12	1.200 [30.48]	1.100 [27.94]	6-534237-0	5-146386-9	6-146763-1
13	1.300 [33.02]	1.200 [30.48]	6-534237-1	6-146386-0	6-146763-2
14	1.400 [35.56]	1.300 [33.02]	6-534237-2	6-146386-1	6-146763-3
15	1.500 [38.10]	1.400 [35.56]	6-534237-3	7-146386-0	6-146763-4
16	1.600 [40.64]	1.500 [38.10]	6-534237-4	7-146386-1	6-146763-5
17	1.700 [43.18]	1.600 [40.64]	6-534237-5	7-146386-2	6-146763-6
18	1.800 [45.72]	1.700 [43.18]	6-534237-6	7-146386-3	6-146763-7
19	1.900 [48.26]	1.800 [45.72]	6-534237-7	7-146386-4	6-146763-8
20	2.000 [50.80]	1.900 [48.26]	6-534237-8	6-146386-2	6-146763-9
30	3.000 [76.20]	2.900 [73.66]	7-534237-8	6-146386-8	7-146763-8
40	4.000 [101.60]	3.900 [99.06]	8-534237-8	8-146386-8	8-146763-8

#### Notes:

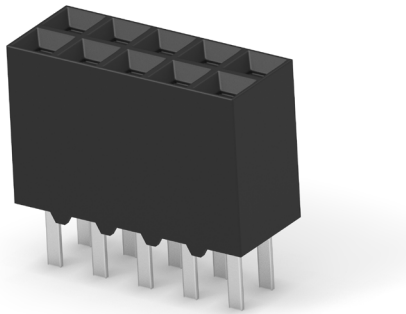
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD II RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

CLOSED TOP ENTRY, SIDE AND END STACKABLE .100 X .100 [2.54 X 2.54] CENTERLINE, .100 [2.54] TINE SPACING



#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating B** - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

**Mateable Headers** - Refer to the Mating Post Selection Guide - Page 10

**Performance Characteristics** - Page 73

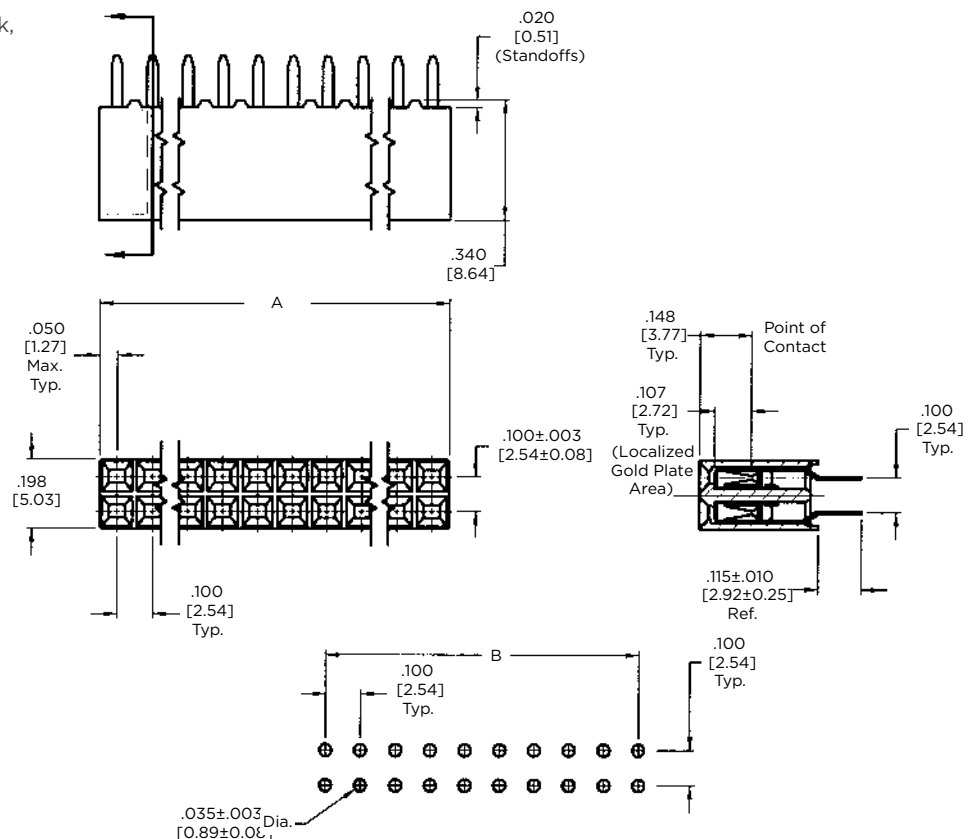
**Technical Documents** - Page 195

**Product Specification** - 108-25022

**Application Specification** - 114-25018

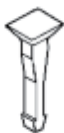
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



**Recommended PC Board Hole Layout  
(for .062 [1.57] thick PC board)**

#### KEYING PLUG



**Part No. 86286-1**

(Plugs into receptacle contact)

Material - Natural color nylon

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
2	.100 [2.54]	-	5-534206-1	-	-
4	.200 [5.08]	.100 [2.54]	5-534206-2	5-147424-2	5-146762-9
6	.300 [7.62]	.200 [5.08]	5-534206-3	5-147424-3	6-146762-0
8	.400 [10.16]	.300 [7.62]	5-534206-4	5-147424-4	5-146762-1
10	.500 [12.70]	.400 [10.16]	5-534206-5	5-147424-5	5-146762-2
12	.600 [15.24]	.500 [12.70]	5-534206-6	5-147424-6	6-146762-1
14	.700 [17.78]	.600 [15.24]	5-534206-7	5-147424-7	6-146762-2
16	.800 [20.32]	.700 [17.78]	5-534206-8	5-147424-8	6-146762-3
18	.900 [22.86]	.800 [20.32]	5-534206-9	5-147424-9	5-146762-3
20	1.000 [25.40]	.900 [22.86]	6-534206-0	6-147424-0	5-146762-7
22	1.100 [27.94]	1.000 [25.40]	6-534206-1	6-147424-1	6-146762-4
24	1.200 [30.48]	1.100 [27.94]	6-534206-2	6-147424-2	6-146762-5
26	1.300 [33.02]	1.200 [30.48]	6-534206-3	6-147424-3	6-146762-6
28	1.400 [35.56]	1.300 [33.02]	6-534206-4	6-147424-4	6-146762-7
30	1.500 [38.10]	1.400 [35.56]	6-534206-5	6-147424-5	5-146762-4
32	1.600 [40.64]	1.500 [38.10]	6-534206-6	6-147424-6	6-146762-8
34	1.700 [43.18]	1.600 [40.64]	6-534206-7	6-147424-7	6-146762-9
36	1.800 [45.72]	1.700 [43.18]	6-534206-8	6-147424-8	7-146762-0
38	1.900 [48.26]	1.800 [45.72]	6-534206-9	6-147424-9	7-146762-1
40	2.000 [50.80]	1.900 [48.26]	7-534206-0	7-147424-0	5-146762-5

#### Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

#### DUAL ENTRY, END STACKABLE, LOW PROFILE WITH DUAL TINE CONTACTS



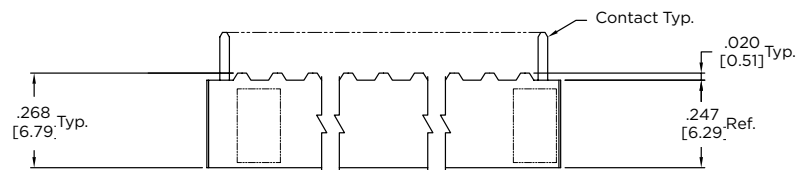
#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

#### DIMENSIONS



#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

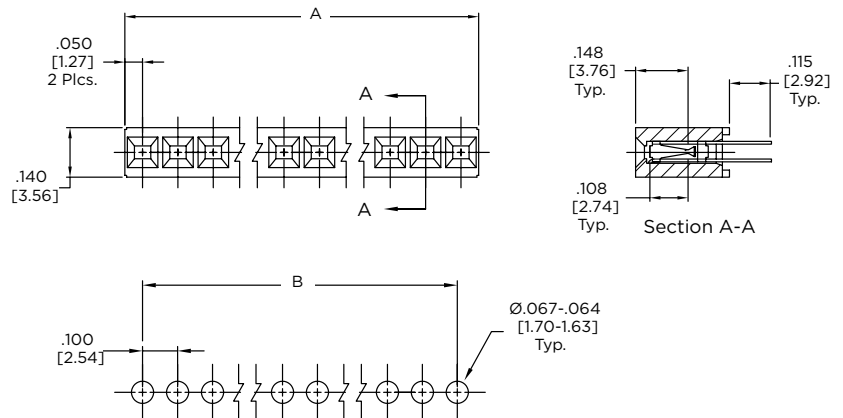
Performance Characteristics - Page 73

Technical Documents - Page 195

Product Specification - 108-25022

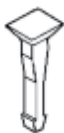
Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.



#### Recommended PC Board Hole Layout

#### KEYING PLUG



##### Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.
	A	B	Plating A
3	.300 [7.62]	.200 [5.08]	8-87879-7

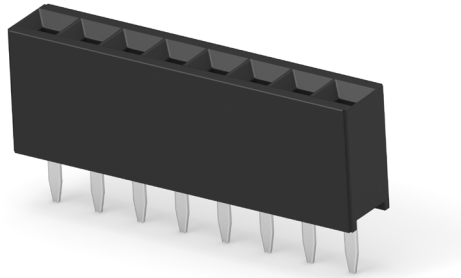
- Notes:**
- 1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
  - 2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 for recommended board thickness.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, .100 [2.54] CENTERLINE

#### CLOSED TOP ENTRY, END STACKABLE, LOW PROFILE WITH SINGLE TINE CONTACTS



#### MATERIAL AND FINISH

**Housing** - Glass-filled thermoplastic, black, 94V-0 rated  
**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating B** - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 83

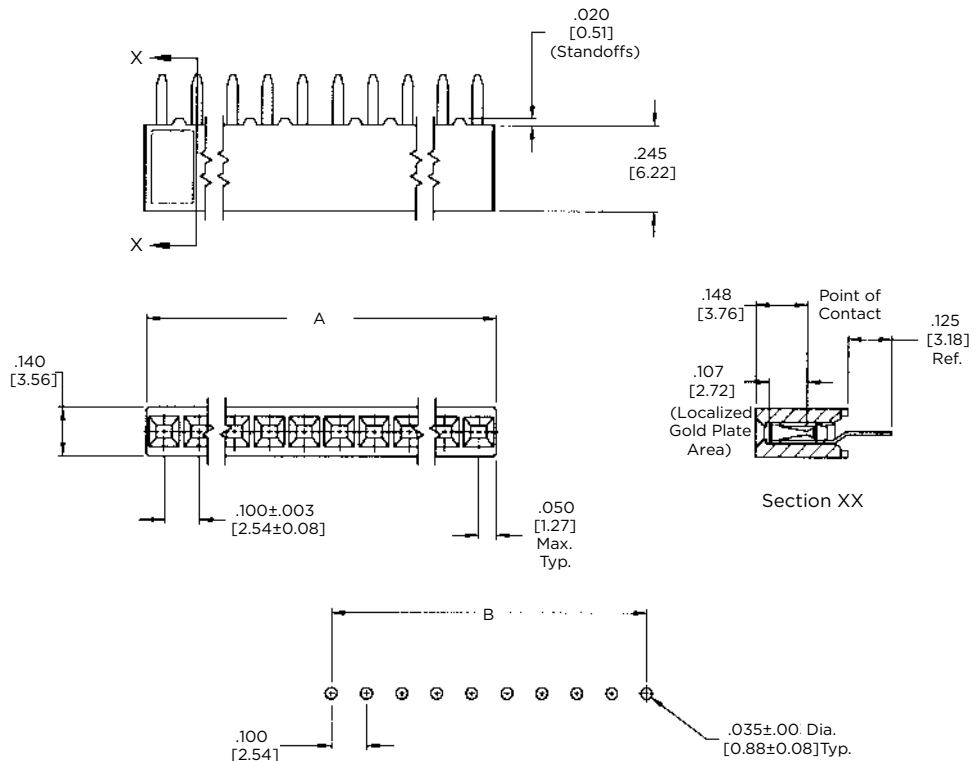
Technical Documents - Page 195

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .062 [1.57] thick PC board)

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

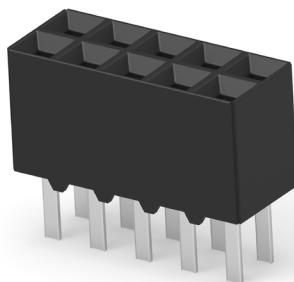
No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-535541-1	5-146138-1	5-535584-3
4	.400 [10.16]	.300 [7.62]	5-535541-2	5-146138-2	5-535584-4
5	.500 [12.70]	.400 [10.16]	5-535541-3	5-146138-3	5-535584-5
6	.600 [15.24]	.500 [12.70]	5-535541-4	5-146138-4	5-535584-1
7	.700 [17.78]	.600 [15.24]	5-535541-5	5-146138-5	5-535584-6
8	.800 [20.32]	.700 [17.78]	5-535541-6	5-146138-6	5-535584-7
9	.900 [22.86]	.800 [20.32]	5-535541-7	5-146138-7	5-535584-8
10	1.000 [25.40]	.900 [22.86]	5-535541-8	5-146138-8	5-535584-9
11	1.100 [27.94]	1.000 [25.40]	5-535541-9	5-146138-9	6-535584-0
12	1.200 [30.48]	1.100 [27.94]	6-535541-0	6-146138-0	6-535584-1
13	1.300 [33.02]	1.200 [30.48]	6-535541-1	6-146138-1	6-535584-2
14	1.400 [35.56]	1.300 [33.02]	6-535541-2	6-146138-2	6-535584-3
15	1.500 [38.10]	1.400 [35.56]	6-535541-3	6-146138-3	6-535584-4
16	1.600 [40.64]	1.500 [38.10]	6-535541-4	6-146138-4	6-535584-5
17	1.700 [43.18]	1.600 [40.64]	6-535541-5	6-146138-5	6-535584-6
18	1.800 [45.72]	1.700 [43.18]	6-535541-6	6-146138-6	5-535584-2
19	1.900 [48.26]	1.800 [45.72]	6-535541-7	6-146138-7	6-535584-7
20	2.000 [50.80]	1.900 [48.26]	6-535541-8	6-146138-8	6-535584-8
30	3.000 [76.20]	2.900 [73.66]	7-535541-9	7-146138-9	6-535584-9
40	4.000 [101.60]	3.900 [99.06]	-	-	7-535584-0

#### Notes:

1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

**Note:** All part numbers are RoHS compliant.

**CLOSED TOP ENTRY, END AND SIDE STACKABLE, LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .100 [2.54] TINE SPACING**



**Housing** - Glass-filled thermoplastic, black, 94V-0 rated  
**Contacts** - Phosphor bronze, plated as follows:

**Plating A - Duplex .000030**  
[.000076] gold on contact area,  
.000150-.000300 [.00381-.00762]  
matte tin on solder area all over  
.000050 [.00127] nickel

**Plating B - Duplex .000010**  
[.000254] gold on contact area,  
.000150-.000300 [.00381-.00762]  
matte tin on solder area all over  
.000050 [.00127] nickel

**Plating C** - .000150-.000300  
[0.00381-0.00762] matte tin on solder  
leads, all over .000050 [0.00127]  
nickel

**Mateable Headers** Refer to the Mating Post Selection Guide - Page 10

Performance Characteristics - Page 83

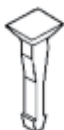
Technical Documents - Page 195

## Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

## Keying Plug



Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

## Recommended PC Board Hole Layout



### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
2	.100 [2.54]	-	5-534998-1	-	5-535585-3
4	.200 [5.08]	.100 [2.54]	5-534998-2	5-535598-3	5-535585-4
6	.300 [7.62]	.200 [5.08]	5-534998-3	5-535598-4	5-535585-5
8	.400 [10.16]	.300 [7.62]	5-534998-4	5-535598-5	5-535585-6
10	.500 [12.70]	.400 [10.16]	5-534998-5	5-535598-6	5-535585-1
12	.600 [15.24]	.500 [12.70]	5-534998-6	5-535598-7	5-535585-2
14	.700 [17.78]	.600 [15.24]	5-534998-7	5-535598-1	5-535585-7
16	.800 [20.32]	.700 [17.78]	5-534998-8	5-535598-8	5-535585-8
18	.900 [22.86]	.800 [20.32]	5-534998-9	5-535598-9	5-535585-9
20	1.000 [25.40]	.900 [22.86]	6-534998-0	6-535598-0	6-535585-0
22	1.100 [27.94]	1.000 [25.40]	6-534998-1	6-535598-1	6-535585-1
24	1.200 [30.48]	1.100 [27.94]	6-534998-2	6-535598-2	6-535585-2
26	1.300 [33.02]	1.200 [30.48]	6-534998-3	6-535598-3	6-535585-3
28	1.400 [35.56]	1.300 [33.02]	6-534998-4	6-535598-4	6-535585-4
30	1.500 [38.10]	1.400 [35.56]	6-534998-5	6-535598-5	6-535585-5
32	1.600 [40.64]	1.500 [38.10]	6-534998-6	6-535598-6	6-535585-6
34	1.700 [43.18]	1.600 [40.64]	6-534998-7	6-535598-7	6-535585-7
36	1.800 [45.72]	1.700 [43.18]	6-534998-8	6-535598-8	6-535585-8
38	1.900 [48.26]	1.800 [45.72]	6-534998-9	6-535598-9	6-535585-9
40	2.000 [50.80]	1.900 [48.26]	7-534998-0	7-535598-0	7-535585-0

#### Notes:

1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
42	2.100 [53.34]	2.000 [50.80]	7-534998-1	7-535598-4	7-535585-4
44	2.200 [55.88]	2.100 [53.34]	7-534998-2	7-535598-5	7-535585-5
46	2.300 [58.42]	2.200 [55.88]	7-534998-3	7-535598-6	7-535585-6
48	2.400 [60.96]	2.300 [58.42]	7-534998-4	7-535598-7	7-535585-7
50	2.500 [63.50]	2.400 [60.96]	7-534998-5	7-535598-1	7-535585-1
52	2.600 [66.04]	2.500 [63.50]	7-534998-6	7-535598-8	7-535585-8
54	2.700 [68.58]	2.600 [66.04]	7-534998-7	7-535598-9	7-535585-9
56	2.800 [71.12]	2.700 [68.58]	7-534998-8	8-535598-0	8-535585-0
58	2.900 [73.66]	2.800 [71.12]	7-534998-9	8-535598-1	8-535585-1
60	3.000 [76.20]	2.900 [73.66]	8-534998-0	7-535598-2	7-535585-2
62	3.100 [78.74]	3.000 [76.20]	8-534998-1	8-535598-2	8-535585-2
64	3.200 [81.28]	3.100 [78.74]	8-534998-2	8-535598-3	8-535585-3
66	3.300 [83.82]	3.200 [81.28]	8-534998-3	-	8-535585-4
68	3.400 [86.36]	3.300 [83.82]	8-534998-4	8-535598-5	8-535585-5
70	3.500 [88.90]	3.400 [86.36]	8-534998-5	8-535598-6	8-535585-6
72	3.600 [91.44]	3.500 [88.90]	8-534998-6	-	8-535585-7
74	3.700 [93.98]	3.600 [91.44]	8-534998-7	8-535598-8	8-535585-8
76	3.800 [96.52]	3.700 [93.98]	8-534998-8	8-535598-9	8-535585-9
78	3.900 [99.06]	3.800 [96.52]	8-534998-9	9-535598-0	9-535585-0
80	4.000 [101.60]	3.900 [99.06]	9-534998-0	7-535598-3	7-535585-3

#### Notes:

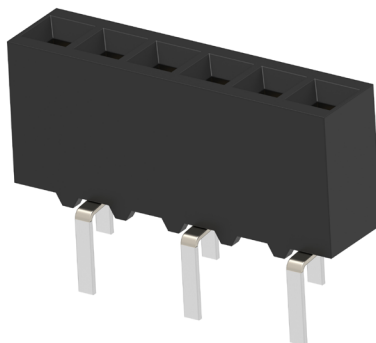
1. TE recommends mating gold or duplex plated headers with select gold plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, OUTRIGGER DESIGN .100 X .100 [2.54 X 2.54] CENTERLINE, END TO END STACKABLE

DUAL ENTRY, END STACKABLE, LOW PROFILE, .100 X .100 [2.54 X 2.54] CENTERLINE, .200 [5.08] TINE SPACING



#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating B** - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

**Performance Characteristics** - Page 83

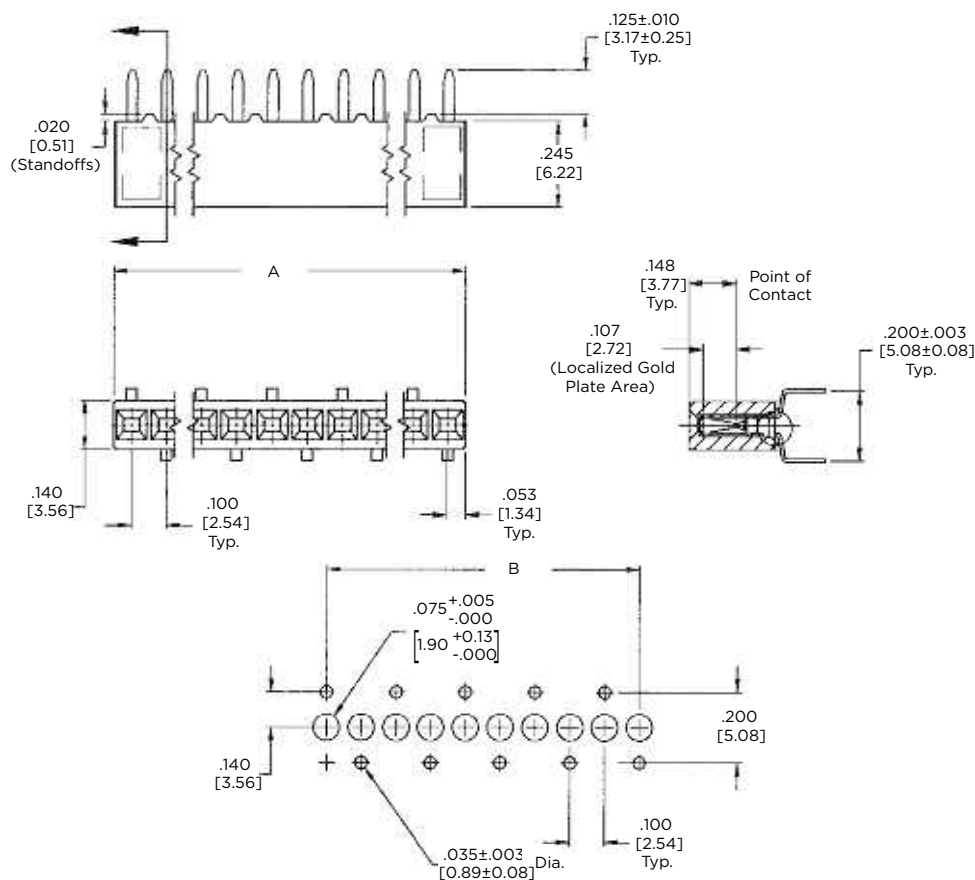
**Technical Documents** - Page 195

**Product Specification** - 108-25022

**Application Specification** - 114-25018

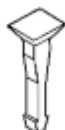
Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### Recommended PC Board Hole Layout

#### KEYING PLUG



#### Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.	
	A	B	Plating B	Plating C
7	.700 [17.78]	.600 [15.24]	5-147726-6	-
9	.900 [22.86]	.800 [20.32]	-	5-147727-8
10	1.000 [25.40]	.900 [22.86]	5-147726-9	-
16	1.600 [40.64]	1.500 [38.10]	6-147726-5	-

#### Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

**Note:** All part numbers are RoHS compliant.



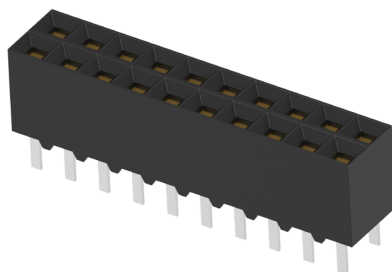
### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.		
	A	B	Plating A	Plating B	Plating C
4	.200 [5.08]	.100 [2.54]	6-534267-7	-	9-147100-0
6	.300 [7.62]	.200 [5.08]	6-534267-4	5-147099-3	5-147100-1
8	.400 [10.16]	.300 [7.62]	5-534267-5	-	5-147100-2
14	.700 [17.78]	.600 [15.24]	5-534267-1	-	5-147100-5
18	.900 [22.86]	.800 [20.32]	6-534267-0	5-147099-9	5-147100-7
20	1.000 [25.40]	.900 [22.86]	5-534267-2	-	5-147100-8
24	1.200 [30.48]	1.100 [27.94]	5-534267-9	-	6-147100-0
30	1.500 [38.10]	1.400 [35.56]	6-534267-2	-	6-147100-3
36	1.800 [45.72]	1.700 [43.18]	6-534267-5	-	6-147100-6
40	2.000 [50.80]	1.900 [48.26]	5-534267-7	-	6-147100-8
48	2.400 [60.96]	2.300 [58.42]	6-534267-1	-	7-147100-2
50	2.500 [63.50]	2.400 [60.96]	6-534267-8	-	7-147100-3
60	3.000 [76.20]	2.900 [73.66]	5-534267-8	-	7-147100-8
76	3.800 [96.52]	3.700 [93.98]	6-534267-6	-	8-147100-6
80	4.000 [101.60]	3.900 [99.06]	5-534267-4	-	8-147100-8

#### Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

**Note:** All part numbers are RoHS compliant.



**Plating A** - Duplex .000030 [0.00076]  
gold on contact area, .000150-.000300  
[0.00381-0.00762] matte tin on solder  
area all over .000050 [0.00127] nickel

**Mateable Headers** Refer to the Mating Post Selection Guide - Page 10

**Performance Characteristics** - Page 83

**Technical Documents** - Page 195

**Product Specification** - 108-25022

**Application Specification** - 114-25018

Technical drawings of a recommended PC connector showing side, end, and detail views with dimensions in inches and millimeters.

**Side View (Top):**

- Overall length:  $.245$  [6.22] Typ.
- Standoff height:  $.020$  [0.51] Typ. (Standoffs)

**Side View (Bottom):**

- Overall length:  $A$
- Pin pitch:  $.050$  [1.27] Max. Typ.
- Pin diameter:  $.075$  [1.9]
- Pin length:  $.198$  [5.03]
- Pin diameter:  $.100$  [2.54]
- Pin diameter:  $.100 \pm .003$  [2.54 ± 0.08]

**End View (Bottom):**

- Overall width:  $B$
- Pin pitch:  $.100^*$  [2.54] Typ.
- Pin diameter:  $.075$  [1.9]
- Pin diameter:  $.100$  [2.54] Typ.
- Pin diameter:  $.100 \pm .003$  [0.89 ± 0.08] Dia. Typ.
- Pin diameter:  $.150$  [3.81] Typ.

**Detail View (Right):**

- Point of Contact
- Pin diameter:  $.148$  [3.77] Typ.
- Pin diameter:  $.107$  [2.72] Typ. (Localized Gold Plate Area)
- Pin diameter:  $.130 \pm .010$  [3.30 ± 0.25] Typ.
- Pin diameter:  $.150$  [3.81] Typ.

**Recommended PC**

**Recommended PC Board Hole Layout for Bottom Entry or Pass Through Applications**  
 \*±.003 [±0.08] tolerances not to accumulate within one connector pattern.

### Recommended PC Board Hole Layout for Top Entry

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Contact Plating/Part Nos.
	A	B	Plating A
2	.100 [2.54]	-	5-535542-1
4	.200 [5.08]	.100 [2.54]	5-535542-2
6	.300 [7.62]	.200 [5.08]	5-535542-3
8	.400 [10.16]	.300 [7.62]	5-535542-4
10	.500 [12.70]	.400 [10.16]	5-535542-5
12	.600 [15.24]	.500 [12.70]	5-535542-6
14	.700 [17.78]	.600 [15.24]	5-535542-7
16	.800 [20.32]	.700 [17.78]	5-535542-8
18	.900 [22.86]	.800 [20.32]	5-535542-9
20	1.000 [25.40]	.900 [22.86]	6-535542-0
22	1.100 [27.94]	1.000 [25.40]	6-535542-1
24	1.200 [30.48]	1.100 [27.94]	6-535542-2
26	1.300 [33.02]	1.200 [30.48]	6-535542-3
28	1.400 [35.56]	1.300 [33.02]	6-535542-4
30	1.500 [38.10]	1.400 [35.56]	6-535542-5
32	1.600 [40.64]	1.500 [38.10]	6-535542-6
34	1.700 [43.18]	1.600 [40.64]	6-535542-7
36	1.800 [45.72]	1.700 [43.18]	6-535542-8
38	1.900 [48.26]	1.800 [45.72]	6-535542-9
40	2.000 [50.80]	1.900 [48.26]	7-535542-0

#### Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

**Note:** All part numbers are RoHS compliant.



### PRODUCT INFORMATION (Continued)

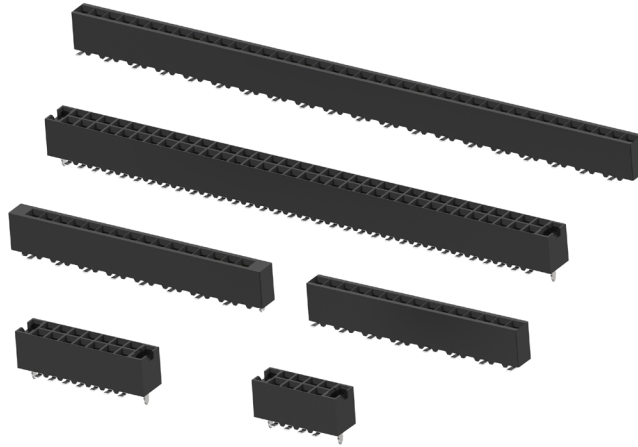
No. of Pos.	Dimensions		Contact Plating/Part Nos.
	A	B	Plating A
42	2.100 [53.34]	2.000 [50.80]	7-535542-1
44	2.200 [55.88]	2.100 [53.34]	7-535542-2
46	2.300 [58.42]	2.200 [55.88]	7-535542-3
48	2.400 [60.96]	2.300 [58.42]	7-535542-4
50	2.500 [63.50]	2.400 [60.96]	7-535542-5
52	2.600 [66.04]	2.500 [63.50]	7-535542-6
54	2.700 [68.58]	2.600 [66.04]	7-535542-7
56	2.800 [71.12]	2.700 [68.58]	7-535542-8
58	2.900 [73.66]	2.800 [71.12]	7-535542-9
60	3.000 [76.20]	2.900 [73.66]	8-535542-0
62	3.100 [78.74]	3.000 [76.20]	8-535542-1
64	3.200 [81.28]	3.100 [78.74]	8-535542-2
66	3.300 [83.82]	3.200 [81.28]	8-535542-3
68	3.400 [86.36]	3.300 [83.82]	8-535542-4
70	3.500 [88.90]	3.400 [86.36]	8-535542-5
72	3.600 [91.44]	3.500 [88.90]	8-535542-6
74	3.700 [93.98]	3.600 [91.44]	8-535542-7
76	3.800 [96.52]	3.700 [93.98]	8-535542-8
78	3.900 [99.06]	3.800 [96.52]	8-535542-9
80	4.000 [101.60]	3.900 [99.06]	9-535542-0

#### Notes:

1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and add .062 [1.57] for recommended board thickness if used in bottom entry application.

**Note:** All part numbers are RoHS compliant.

### MOD IV SURFACE MOUNT VERTICAL RECEPTACLE ASSEMBLIES, .100 X .100 [2.54 X 2.54] CENTERLINE



The AMPMODU 0.025 [0.64] square interconnection system is an industry standard that has provided level III and IV thru-hole interconnections to almost every industry and marketplace for years. As technology advances, so has the AMPMODU product line. Surface mount vertical receptacle assemblies are available to meet your level II packaging needs as process technologies evolve from wave soldering to surface mount reflow (infrared and vapor-phase) processes. AMPMODU surface mount receptacle assemblies are offered in vertical dual entry configurations. These receptacles are available in single-row and double-row configurations with a contact centerline spacing of .100 x .100 [2.54 x 2.54].

AMPMODU surface mount vertical receptacle assemblies continue to provide the proven features and benefits of their thru-hole counterparts in the AMPMODU product family. Closed-entry style Housing design provides a lead-in ramp for positive mating of contacts, virtually eliminating the possibility of stubbing. The dual-beam receptacle contact design, coupled with gold plating in the contact area, provides a reliable interface. Tin plating on the solder tails also enhances solderability. The incorporation of compliant metallic hold downs on receptacle assemblies offers multiple benefits. The hold downs provide for proper lead-to-pad registration and provide retention to the PC board prior to and during processing.

Used with a plated thru-hole, the hold downs are soldered during the reflow process and serve as a strain relief for the solder joints during mating/unmating. The design of the hold downs results in an excellent ratio of insertion/extraction forces (into the PC board); 20 lb. [89 N] maximum insertion force per pair and 10 lb. [44.5 N] minimum extraction force per pair (unsoldered). No tools are required for insertion.

#### PRODUCT FACTS

- Surface Mount Leads
- Contact Material: phosphor bronze
- High temperature, black thermoplastic Housings, 94V-0 rated, capable of withstanding IR or vaporphase reflow
- Gold/tin duplex plating for reliable mating interconnection and solder interface
- Metallic hold downs provide retention in the PC board prior to and during the reflow process ... and strain relief after soldering
- Hold downs provide for proper lead-to-pad registration
- Closed-entry receptacle Housings provide lead-in ramp for positive mating
- Receptacle contacts employ dual cantilever beams for reliable connections
- Recognized under the Component Program of Underwriters Laboratories Inc. File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE SPECIFICATIONS

**Voltage Rating:** 250 VAC

**Current Rating:** 3.0 amperes (max.) for single contact;  
2.0 amperes (max.) per contact when connector is fully energized

**Operating Temperature Range (Receptacle Assemblies):** -65°C to +125°C

**Operating Temperature Range (Headers):** -65°C to +105°C

**Dielectric Withstanding Voltage:** 750 VAC

**Termination Resistance:** 12 milliohms (max.)

**Insulation Resistance:** 5000 megohms (min.)

**Mating Force (Receptacle Assemblies):** 9.0 oz. [2.50N] (max.) per contact

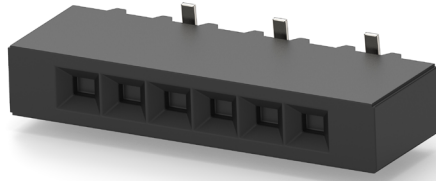
**Unmating Force (Receptacle Assemblies):** 1.5 oz. [0.42N] (min.) per contact

**Durability:** Tested to 200 cycles (min.) for .000030 [0.00076] gold plated contacts

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT, .100 [2.54] CENTERLINE WITH COMPLIANT PIN HOLD DOWNS

#### SURFACE MOUNT, SINGLE-ROW, DUAL ENTRY WITH COMPLIANT PIN HOLDDOWNS



#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating C** - .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

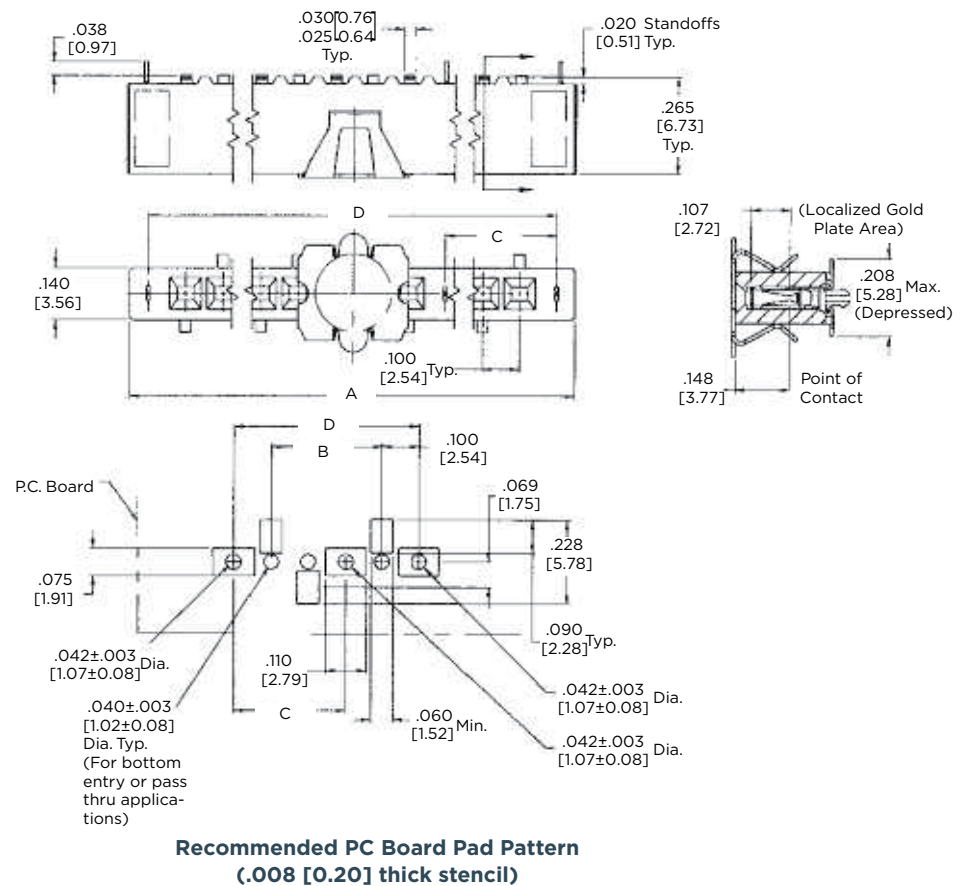
#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Specifications- page 103

#### DIMENSIONS



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions				Packaged in Tape & Reel	
					Contact Plating/ Part Nos.	
	A	B	C	D	Plating A	Plating C
3	.500 [12.70]	.200 [5.08]	See note 3	.400 [10.16]	5-147724-1	5-147731-1
4	.600 [15.24]	.300 [7.62]	See note 3	.500 [12.70]	5-147724-2	-
5	.700 [17.78]	.400 [10.16]	See note 3	.600 [15.24]	5-147724-3	-
6	.800 [20.32]	.500 [12.70]	See note 3	.700 [17.78]	5-147724-4	-
7	.900 [22.86]	.600 [15.24]	See note 3	.800 [20.32]	5-147724-5	-
8	1.000 [25.40]	.700 [17.78]	See note 3	.900 [22.86]	5-147724-6	-
9	1.100 [27.94]	.800 [20.32]	See note 3	1.000 [25.40]	5-147724-7	-
10	1.200 [30.48]	.900 [22.86]	See note 3	1.100 [27.94]	5-147724-8	-
11	1.300 [33.02]	1.000 [25.40]	See note 3	1.200 [30.48]	5-147724-9	-
12	1.400 [35.56]	1.100 [27.94]	See note 3	1.300 [33.02]	6-147724-0	-
13	1.500 [38.10]	1.200 [30.48]	See note 3	1.400 [35.56]	6-147724-1	-
14	1.600 [40.64]	1.300 [33.02]	See note 3	1.500 [38.10]	6-147724-2	-
15	1.700 [43.18]	1.400 [35.56]	See note 3	1.600 [40.64]	6-147724-3	-
16	1.800 [45.72]	1.500 [38.10]	See note 3	1.700 [43.18]	6-147724-4	-
17	1.900 [48.26]	1.600 [40.64]	See note 3	1.800 [45.72]	6-147724-5	-
18	2.000 [50.80]	1.700 [43.18]	See note 3	1.900 [48.26]	6-147724-6	-
19	2.100 [53.34]	1.800 [45.72]	See note 3	2.000 [50.80]	6-147724-7	-
20	2.200 [55.88]	1.900 [48.26]	See note 3	2.100 [53.34]	6-147724-8	-
30	3.200 [81.28]	2.900 [73.66]	See note 3	3.100 [78.74]	7-147724-8	-

#### Notes:

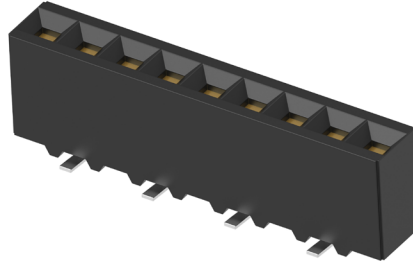
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension, and .062 [1.57] for recommended board thickness if used in bottom entry application.
3. No center hold down.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV RECEPTACLE ASSEMBLIES, SINGLE-ROW, SURFACE MOUNT, .100 [2.54] X .100 [2.54] CENTERLINE END TO END STACKABLE WITHOUT COMPLIANT PIN HOLDDOWNS

#### SURFACE MOUNT, SINGLE-ROW, DUAL ENTRY, END TO END STACKABLE



#### MATERIAL AND FINISH

**Housing** - Glass-filled thermoplastic, black, 94V-0 rated  
**Contacts** - Phosphor bronze, plated as follows:

**Plating A-** Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating B-** Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

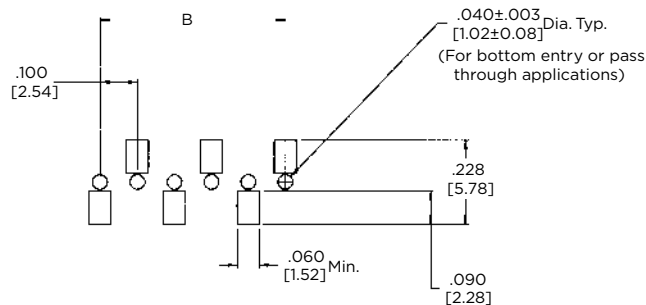
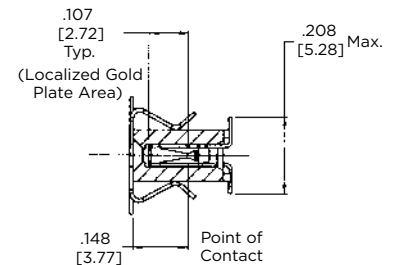
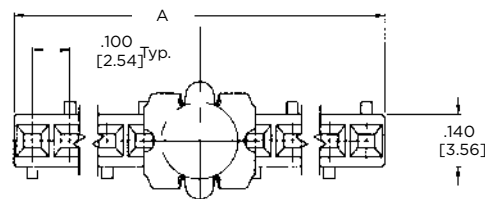
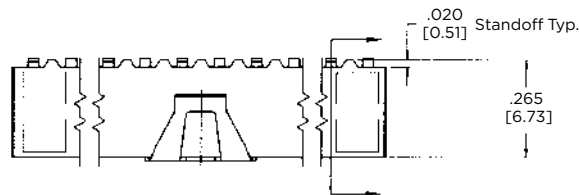
**Plating C-** .000150-.000300 [0.00381-0.00762] matte tin on solder leads, all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

**Performance Specifications** -  
Page 102



**Recommended PC Board Pad Pattern  
(.008 [0.20] thick stencil)**

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Packaged in Tape & Reel		
			Contact Plating/ Part Nos.		
	A	B	Plating A	Plating B	Plating C
3	.300 [7.62]	.200 [5.08]	5-147723-2	5-147728-2	5-147729-2
4	.400 [10.16]	.300 [7.62]	5-147723-3	5-147728-3	5-147729-3
5	.500 [12.70]	.400 [10.16]	5-147723-4	5-147728-4	5-147729-4
6	.600 [15.24]	.500 [12.70]	5-147723-5	5-147728-5	5-147729-5
7	.700 [17.78]	.600 [15.24]	5-147723-6	5-147728-6	5-147729-6
8	.800 [20.32]	.700 [17.78]	5-147723-7	5-147728-7	5-147729-7
9	.900 [22.86]]	.800 [20.32]	5-147723-8	5-147728-8	5-147729-8
10	1.000 [25.40]	.900 [22.86]	5-147723-9	5-147728-9	5-147729-9
11	1.100 [27.94]	1.000 [25.40]	6-147723-0	6-147728-0	6-147729-0
12	1.200 [30.48]	1.100 [27.94]	6-147723-1	6-147728-1	6-147729-1
13	1.300 [33.02]	1.200 [30.48]	6-147723-2	6-147728-2	6-147729-2
14	1.400 [35.56]	1.300 [33.02]	6-147723-3	6-147728-3	6-147729-3
15	1.500 [38.10]	1.400 [35.56]	6-147723-4	6-147728-4	6-147729-4
16	1.600 [40.64]	1.500 [38.10]	6-147723-5	6-147728-5	6-147729-5
17	1.700 [43.18]	1.600 [40.64]	6-147723-6	6-147728-6	6-147729-6
18	1.800 [45.72]	1.700 [43.18]	6-147723-7	6-147728-7	6-147729-7
19	1.900 [48.26]	1.800 [45.72]	6-147723-8	6-147728-8	6-147729-8
20	2.000 [50.80]	1.900 [48.26]	6-147723-9	6-147728-9	6-147729-9
30	3.000 [76.20]	2.900 [73.66]	7-147723-9	7-147728-9	7-147729-9
40	4.000 [101.60]	3.900 [99.06]	8-147723-9	8-147728-9	8-147729-9

#### Notes:

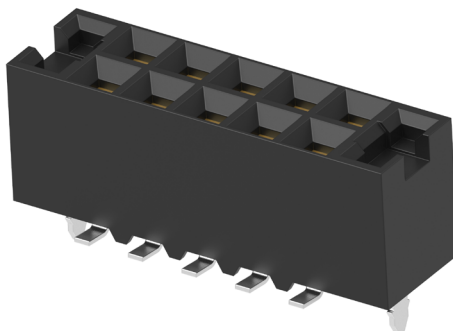
1. TE recommends mating gold or duplex plated headers with duplex plated receptacle assemblies.
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension, and .062 [1.57] for recommended board thickness if used in bottom entry application.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV SURFACE MOUNT RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERS

#### SURFACE MOUNT, DOUBLE ROW, DUAL ENTRY WITH HOLDDOWNS



#### MATERIAL AND FINISH

**Housing** - Glass-filled thermoplastic, black, 94V-0 rated  
**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

**Performance Specifications** - Page 102

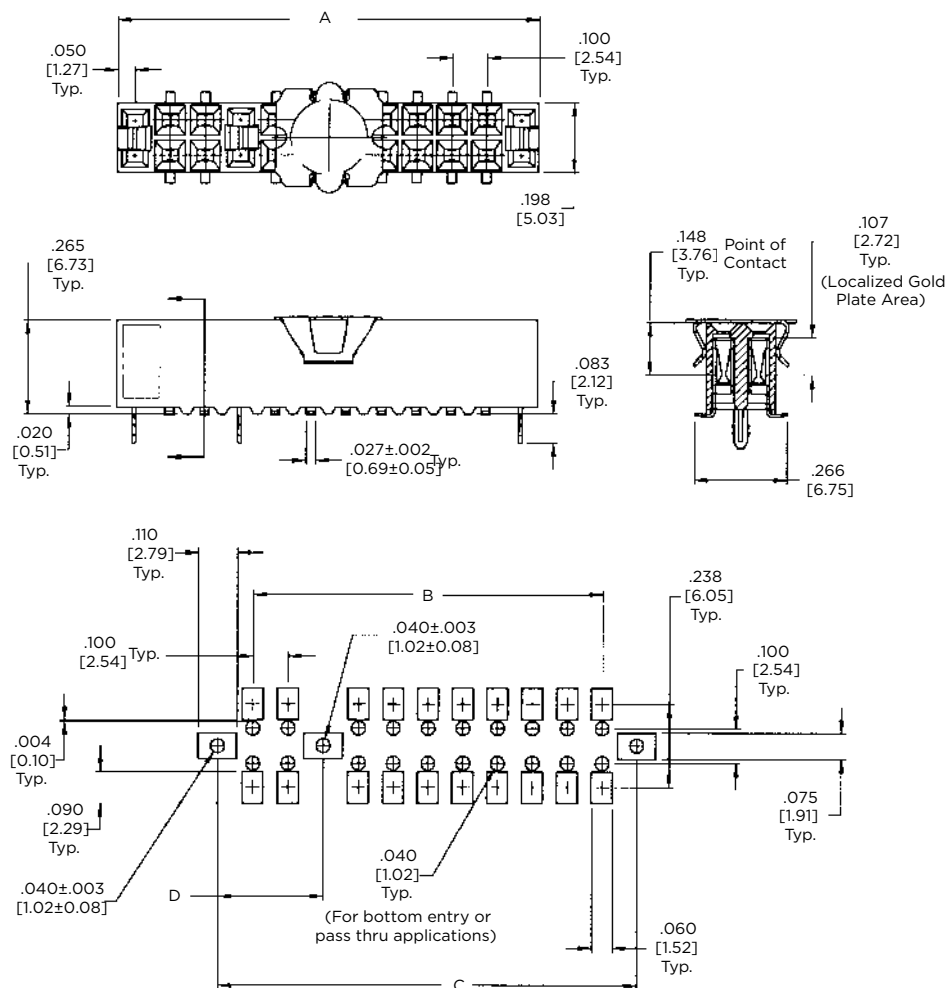
**Technical Documents** - Page 195

**Product Specification** - 108-25022

**Application Specification** - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### KEYING PLUG



**Part No. 86286-1**

(Plugs into receptacle contact)

Material - Natural color nylon

**Recommended PC Board Pad Pattern  
(.008 [0.20] thick stencil)**

### PRODUCT INFORMATION

No. of Pos.	Dimensions				Packaged in Tubes	Packaged in Tape & Reel
					Contact Plating/ Part Nos.	Contact Plating/ Part Nos.
	A	B	C	D	Plating A	Plating A
10	.700 [17.78]	.400 [10.16]	.600 [15.24]	See Note 1	5-147102-5	5-147747-5
14	.900 [22.86]	.600 [15.24]	.800 [20.32]	See Note 1	5-147102-7	5-147747-7
20	1.200 [30.48]	.900 [22.86]	1.100 [27.94]	See Note 1	6-147102-0	6-147747-0
22	1.300 [33.02]	1.000 [25.40]	1.200 [30.48]	See Note 1	6-147102-1	6-147747-1
26	1.500 [38.10]	1.200 [30.48]	1.400 [35.56]	See Note 1	6-147102-3	6-147747-3
30	1.700 [43.18]	1.400 [35.56]	1.600 [40.64]	See Note 1	6-147102-5	6-147747-5
34	1.900 [48.26]	1.600 [40.64]	1.800 [45.72]	See Note 1	6-147102-7	6-147747-7
36	2.000 [50.08]	1.700 [43.18]	1.900 [48.26]	See Note 1	6-147102-8	6-147747-8
40	2.200 [55.88]	1.900 [48.26]	2.100 [53.34]	See Note 1	7-147102-0	7-147747-0
46	2.500 [63.50]	2.200 [55.88]	2.400 [60.96]	See Note 1	7-147102-3	7-147747-3
50	2.700 [68.58]	2.400 [60.96]	2.600 [66.04]	See Note 1	7-147102-5	7-147747-5
62	3.300 [83.82]	3.000 [76.20]	3.200 [81.28]	See Note 1	8-147102-1	8-147747-1
64	3.400 [86.36]	3.100 [78.74]	3.300 [83.82]	See Note 1	8-147102-2	8-147747-2
66	3.500 [88.90]	3.200 [81.28]	3.400 [86.36]	See Note 1	8-147102-3	8-147747-3
70	3.700 [95.98]	3.400 [86.36]	3.600 [91.44]	See Note 1	8-147102-5	8-147747-5
80	4.300 [109.22]	3.900 [99.06]	4.200 [106.68]	2.100 [53.34]	9-147102-0	9-147747-0

#### Notes:

1. No center holddown
2. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 [1.57] for recommended board thickness in bottom entry applications.

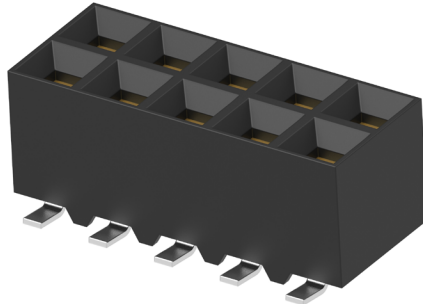
**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV SURFACE MOUNT RECEPTACLE ASSEMBLIES, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

SURFACE MOUNT, DOUBLE ROW, DUAL ENTRY END TO END STACKABLE



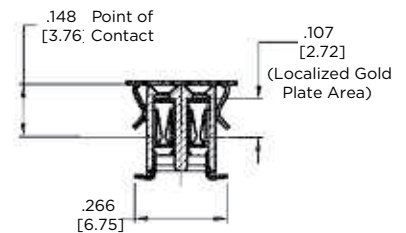
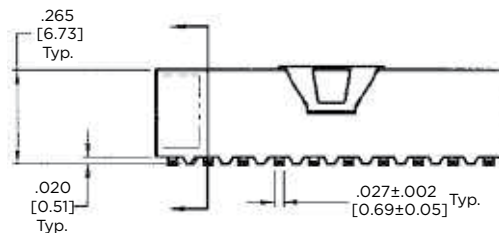
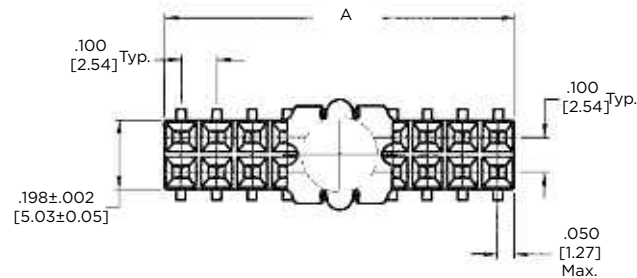
#### MATERIAL AND FINISH

**Housing** - Glass-filled thermoplastic, black, 94V-0 rated  
**Contacts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex .000030 [0.00076] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

**Plating B** - Duplex .000010 [0.000254] gold on contact area, .000150-.000300 [0.00381-0.00762] matte tin on solder area all over .000050 [0.00127] nickel

#### DIMENSIONS



#### RELATED PRODUCT DATA

##### Mateable Headers

Refer to the Mating Post Selection Guide - Page 10

Performance Specifications - Page 102

Technical Documents - Page 195

Product Specification - 108-25022

Application Specification - 114-25018

Additional receptacle assembly sizes are available; minimum order quantities may apply. Consult TE.

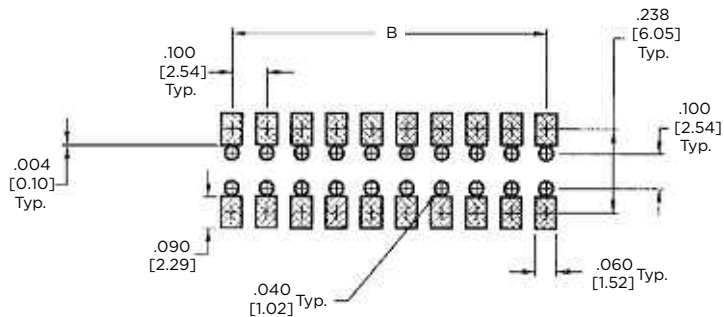
#### KEYING PLUG



Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon



**Recommended PC Board Pad Layout  
(.008 [0.20] thick stencil)  
(for Bottom Entry and Pass Through applications)**

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

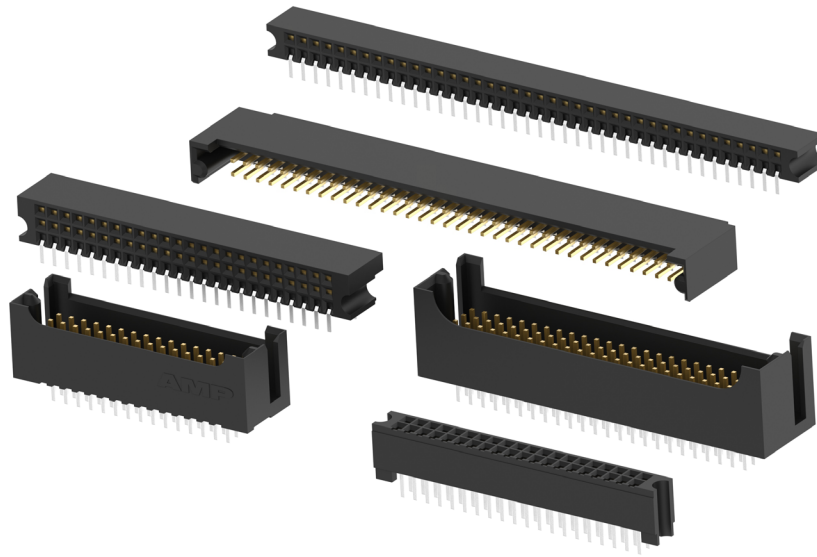
No. of Pos.	Dimensions		Packaged in Tubes			Packaged in Tape & Reel	
			Contact Plating/ Part Nos.			Contact Plating/ Part Nos.	
	A	B	Plating A	Plating B	Plating C	Plating A	Plating B
10	.500 [12.70]	.400 [10.16]	5-147741-5	5-147740-5	5-147739-5	5-147105-5	-
14	.700 [17.78]	.600 [15.24]	5-147741-7	5-147740-7	5-147739-7	5-147105-7	-
20	1.000 [25.40]	.900 [22.86]	6-147741-0	6-147740-0	6-147739-0	6-147105-0	6-147104-0
22	1.100 [27.94]	1.000 [25.40]	6-147741-1	6-147740-1	6-147739-1	6-147105-1	-
26	1.300 [33.02]	1.200 [30.48]	6-147741-3	6-147740-3	6-147739-3	6-147105-3	-
30	1.500 [38.10]	1.400 [35.56]	6-147741-5	6-147740-5	6-147739-5	6-147105-5	-
34	1.700 [43.18]	1.600 [40.64]	6-147741-7	6-147740-7	6-147739-7	6-147105-7	-
36	1.800 [45.72]	1.700 [43.18]	6-147741-8	6-147740-8	6-147739-8	6-147105-8	-
40	2.000 [50.80]	1.900 [48.26]	7-147741-0	7-147740-0	7-147739-0	7-147105-0	-
46	2.300 [58.42]	2.200 [55.88]	7-147741-3	7-147740-3	7-147739-3	7-147105-3	-
50	2.500 [63.50]	2.400 [60.96]	7-147741-5	7-147740-5	7-147739-5	7-147105-5	-
62	3.100 [78.74]	3.000 [76.20]	8-147741-1	8-147740-1	8-147739-1	8-147105-1	-
64	3.200 [81.28]	3.100 [78.74]	8-147741-2	8-147740-2	8-147739-2	8-147105-2	-
66	3.300 [83.82]	3.200 [81.28]	8-147741-3	8-147740-3	8-147739-3	8-147105-3	-
70	3.500 [88.90]	3.400 [86.36]	8-147741-5	8-147740-5	8-147739-5	8-147105-5	-
80	4.000 [101.60]	3.900 [99.06]	9-147741-0	9-147740-0	9-147739-0	9-147105-0	-

#### Notes:

1. To obtain the minimum mating post length, add .020 [0.51] (not including the post lead in chamfer) to the maximum point-of-contact dimension and .062 [1.57] for recommended board thickness in bottom entry applications.

**Note:** All part numbers are RoHS compliant.

### TWO-PIECE PRINTED CIRCUIT BOARD CONNECTORS



AMPMODU Two-Piece Printed Circuit Board connectors are designed to reliably and economically meet the packaging and interconnection requirements of today's sophisticated electronics. The double row system is produced in 10 thru 200 positions in the vertical headers and horizontal receptacles, and 10 thru 160 positions in the right angle headers and vertical receptacles.

The AMPMODU three-row connector system is produced in 30 through 300 positions (straight post headers and mating horizontal receptacles). Both two- and three-row vertical headers are available with press-fit ACTION PIN posts or standard .025 [0.64] square solder posts. There is a simple seating tool for headers with ACTION PIN posts.

A board retention feature is offered in the two-row horizontal receptacles, two-row right angle headers and two- and three-row vertical headers. Built-in guides assure accurate header and receptacle alignment before contact engagement. Closed entry receptacle **Housings** provide a lead-in ramp for positive mating of contacts.

#### PRODUCT FACTS

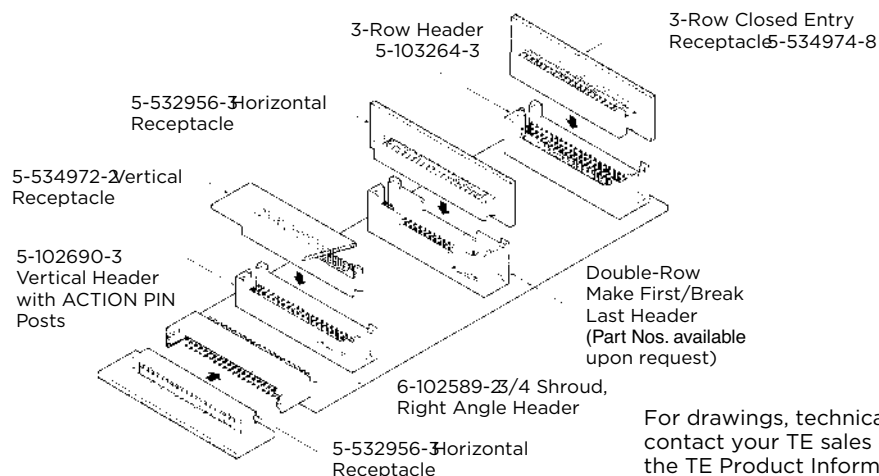
- Two-Piece reliability
- Two- and three-row systems available
- Short signal path for VLSI applications
- Receptacles employ dual cantilever beams and built-in anti-overstress to provide reliable connections
- Built-in guides provide alignment before contact engagement
- Closed entry receptacle Housings provide lead-in ramp for positive mating of contacts
- Shrouded headers provide full pin protection
- Polarized headers
- Vertical headers available with ACTION PIN posts or .025 [0.64] square solder posts
- Repairable ACTION PIN posts
- Simple seating tooling for headers with ACTION PIN posts
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189



ACTION PIN Posts    Solder Posts



Receptacle Contact  
(Double Beam with Anti-Overstress)  
Board Retention Feature Available



For drawings, technical data or samples, contact your TE sales engineer or call the TE Product Information Center: 1-800-522-6752

### PERFORMANCE CHARACTERISTICS

**Current Rating** - 3 amperes max. for single contact;  
2 amperes max. per contact for fully energized connector

**Voltage Rating** - 250 VAC

**Dielectric Rating** - 750 VAC rms between contacts for one minute

**Termination Resistance** - 12 milliohms max. at 100 milliamperes test current, and 50 millivolts open circuit voltage

**Insulation Resistance** - 1000 megohms after temperature/humidity cycling

**Temperature Rating** - Headers and Receptacles - -65°C to +125°C (black thermoplastic Housings, 94V-0 rated)

**Durability (Tested to)** - 200 cycles for .000030 [0.00076] gold plating; 75 cycles for .000015 [0.00038] gold plating

**Mating Force** - 8 oz. [2.22N] maximum per contact

**Unmating Force** - .75 oz. [0.2N] minimum per contact during third mating cycle



### PRODUCT INFORMATION

No. of Pos.	Dimensions		Receptacle Assembly Part Nos. with .115 [2.92] Solder Tail Lengths				Receptacle Assembly Part Nos. with .145 [3.68] Solder Tail Lengths
			Standard Solder Tails		Board Retention Tails		Standard Solder Tails
	A	B	Plating A	Plating B	Plating A	Plating B	Plating A
12	.858 [21.79]	.500 [12.70]	5-532956-1	5-532955-1	5-534204-2	5-534975-5	-
16	1.058 [26.87]	.700 [17.78]	5-532956-2	-	-	6-534975-5	-
20	1.258 [31.95]	.900 [22.86]	5-532956-3	5-532955-3	5-534204-9	-	-
24	1.458 [37.03]	1.100 [27.94]	5-532956-4	5-532955-4	6-534204-1	5-534975-7	-
30	1.758 [44.65]	1.400 [35.56]	5-532956-5	5-532955-5	5-534204-4	5-534975-8	-
36	2.058 [52.27]	1.700 [43.18]	5-532956-6	5-532955-6	-	-	-
40	2.258 [57.35]	1.900 [48.26]	5-532956-7	5-532955-7	-	-	-
50	2.758 [70.05]	2.400 [60.96]	5-532956-8	5-532955-8	5-534204-1	6-534975-1	5-533009-8
70	3.758 [95.45]	3.400 [86.36]	-	6-532955-0	-	6-534975-3	-
80	4.258 [108.15]	3.900 [99.06]	6-532956-2	6-532955-2	5-534204-8	-	-
110	5.758 [146.25]	5.400 [137.16]	6-532956-7	6-532955-7	6-534204-6	-	-
120	6.258 [158.95]	5.900 [149.86]	-	-	-	5-534975-2	-

#### Notes:

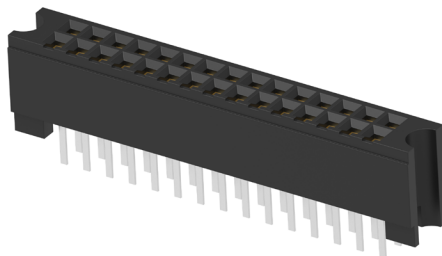
1. .115 [2.92] tail length is for use with .062 [1.57] PC boards; .145 [3.68] tail length is for use with .093 [2.36] PC boards.
2. Receptacle assemblies with low force contacts are available, consult TE
3. .256 [6.50] minimum positive pin stop to prevent shorting between rows

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### RECEPTACLE ASSEMBLIES, BOARD MOUNT, DOUBLE-ROW, CLOSED ENTRY, .100 X .100 [2.54 X 2.54] CENTERLINE

#### VERTICAL MOUNT (WITH GUIDE PIN SLOTS AND STANDOFFS)

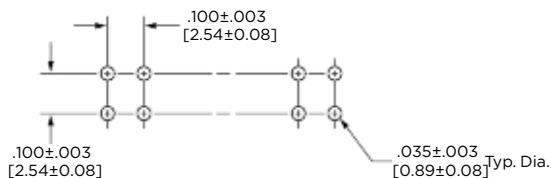
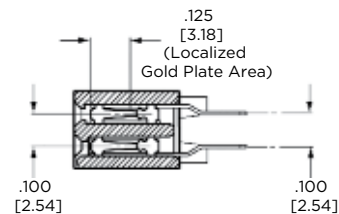
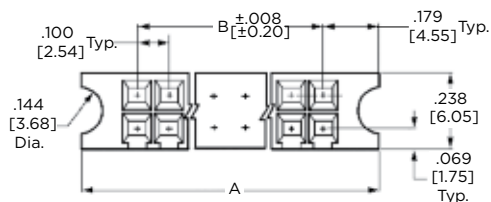
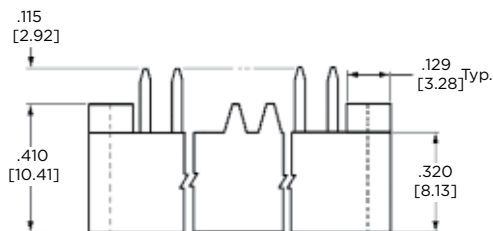


#### MATERIAL AND FINISH

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

**Contacts** - Phosphor bronze, duplex plated .000030 [0.00076] gold on contact area, .000050-.000100 [0.00127-0.00254] matte tin on solder area, with entire contact underplated .000050 [0.00127] nickel

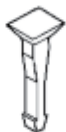
#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

Tolerances not to accumulate within one connector pattern.

#### KEYING PLUG



#### Part No. 86286-1

(Plugs into receptacle contact)

Material - Natural color nylon

**Note:** All part numbers are RoHS compliant.

PRODUCT INFORMATION

No. of Pos.	Dimensions		Receptacle Assembly Part Nos.
	A	B	
40	2.258 [57.35]	1.900 [48.26]	5-534972-2
50	2.758 [70.05]	2.400 [60.96]	5-534972-3

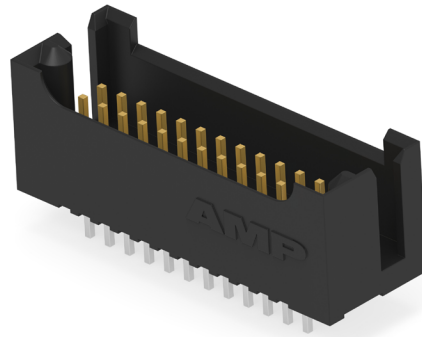
**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### HEADERS, STRAIGHT POST, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### SOLDER POSTS AND ACTION PIN POSTS (WITH PIN PROTECTION AND GUIDE PINS)



#### MATERIAL AND FINISH

**Housing** - Glass-filled thermoplastic, black, 94V-O rated

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

Mateable Receptacles - Page 115

ACTION PIN Posts - pages 88, 89

Application Tooling -Page 192

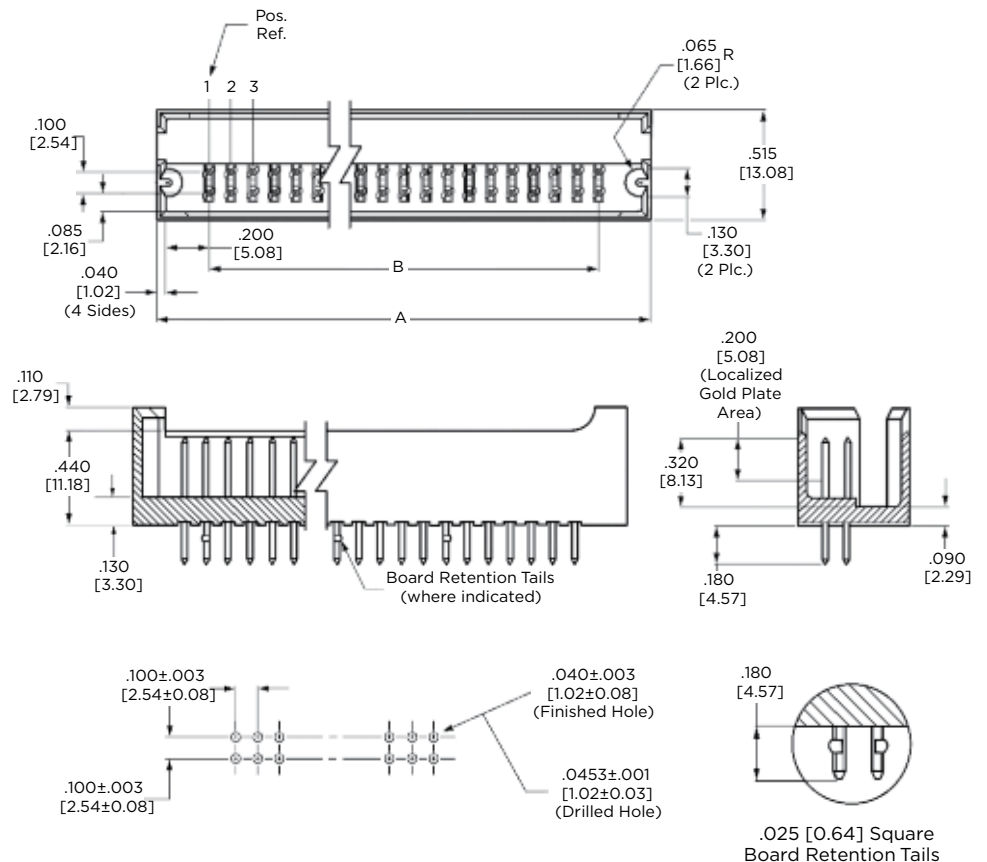
Technical Documents - Page 195

Product Specification 108-25017

Application Specification 114-9009

Additional receptacle assembly sizes and solder tail lengths are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

tolerances not to accumulate within  
one connector pattern.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Header Part Nos. with .180 [4.57] Tail Length		
			Standard Solder Tails		Board Retention Tails
	A	B	Plating A	Plating B	Plating A
12	.980 [24.89]	.500 [12.70]	5-102692-1	5-102567-1	-
14	1.080 [27.43]	.600 [15.24]	-	7-102567-3	-
16	1.180 [29.97]	.700 [17.78]	6-102692-5	-	-
20	1.380 [35.05]	.900 [22.86]	6-102692-6	6-102567-1	5-534978-3
24	1.580 [40.13]	1.100 [27.94]	5-102692-2	5-102567-2	5-534978-4
30	1.880 [47.75]	1.400 [35.56]	6-102692-7	6-102567-3	5-534978-5
36	2.180 [55.37]	1.700 [43.18]	5-102692-3	5-102567-3	-
40	2.380 [60.45]	1.900 [48.26]	6-102692-3	6-102567-2	-
50	2.880 [73.15]	2.400 [60.96]	5-102692-4	5-102567-6	-
60	3.380 [85.85]	2.900 [73.66]	5-102692-5	5-102567-4	-
70	3.880 [98.55]	3.400 [86.36]	-	6-102567-0	-
72	3.980 [101.09]	3.500 [88.90]	6-102692-8	-	-
80	4.380 [111.25]	3.900 [99.06]	-	5-102567-8	6-534978-1
100	5.380 [136.65]	4.900 [124.46]	5-102692-8	-	-
110	5.880 [149.35]	5.400 [137.16]	6-102692-0	6-102567-5	-

#### Notes:

1. .115 [2.92] tail length is for use with .062 [1.57] PC boards; .145 [3.68] tail length is for use with .093 [2.36] PC boards.
2. Receptacle assemblies with low force contacts are available, consult TE
3. .256 [6.50] minimum positive pin stop to prevent shorting between rows



No. of Pos.	Dimensions		Header Part Nos. with ACTION PIN Posts
			.250 [6.35] Tail Length
	A	B	Plating A
12	.980 [24.89]	.500 [12.70]	5-102690-1
80	4.380 [111.25]	3.900 [99.06]	5-102690-6

#### Notes:

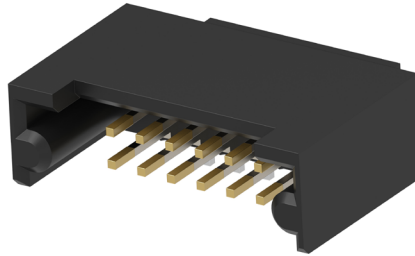
1. Other header sizes can be made available upon request Headers with ACTION PIN posts are for use with .093 [2.36] nominal or thicker PC boards
2. Application tooling for installing headers with ACTION PIN posts
3. Headers with .250 [6.35] tail length can be made available with make first/break last contacts, consult TE
4. Plated through holes to be prepared per recommendations found on page 92

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### HEADERS, RIGHT-ANGLE POST, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### CARD EXTENDER (WITH PIN PROTECTION AND GUIDE PINS)



#### MATERIAL AND FINISH

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

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

Mateable Receptacles - Page 115

Performance Specifications - Page 102

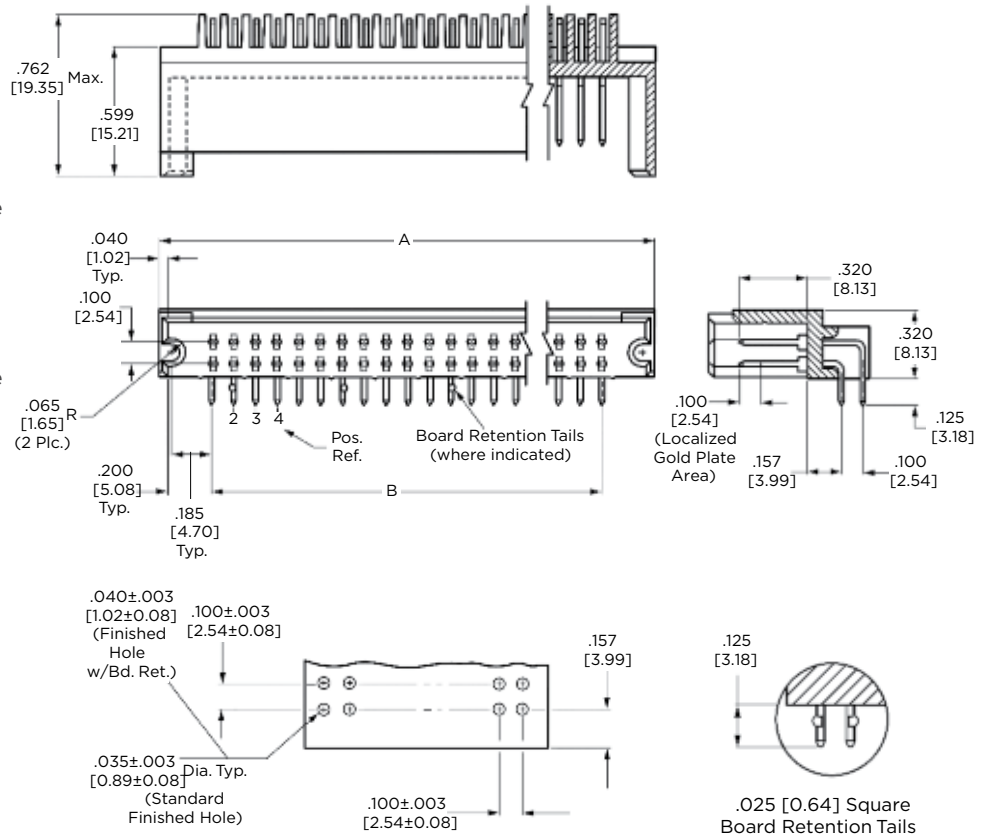
Technical Documents - Page 195

Product Specification 108-25017

Application Specification 114-9009

Additional header sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

tolerances not to accumulate within  
one connector pattern.

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Header Part Nos. with .125 [3.18] Tail Length		
			Standard Solder Tails		Board Retention Tails
	A	B	Plating A	Plating B	Plating A
12	.980 [24.89]	.500 [12.70]	-	5-102589-8	-
16	1.180 [29.97]	.700 [17.78]	6-102802-4	-	-
20	1.380 [35.05]	.900 [22.86]	6-102802-5	6-102589-2	5-534245-6
24	1.580 [40.13]	1.100 [27.94]	-	5-102589-6	-
30	1.880 [47.75]	1.400 [35.56]	6-102802-6	5-102589-4	5-534245-2
36	2.180 [55.37]	1.700 [43.18]	-	5-102589-2	-
40	2.380 [60.45]	1.900 [48.26]	5-102802-8	6-102589-3	-
50	2.880 [73.15]	2.400 [60.96]	5-102802-4	5-102589-5	

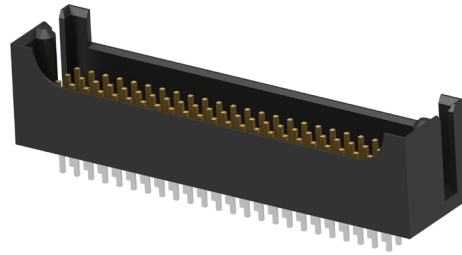
#### Notes:

1. Headers with make first/break last posts can be made available, consult TE

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### HEADERS, STRAIGHT POST, TRIPLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE SOLDER POSTS (WITH PIN PROTECTION AND GUIDE PINS)



#### MATERIAL AND FINISH

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

**Posts** - Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

Mateable Receptacles - Page 115

Performance Specifications - Page 102

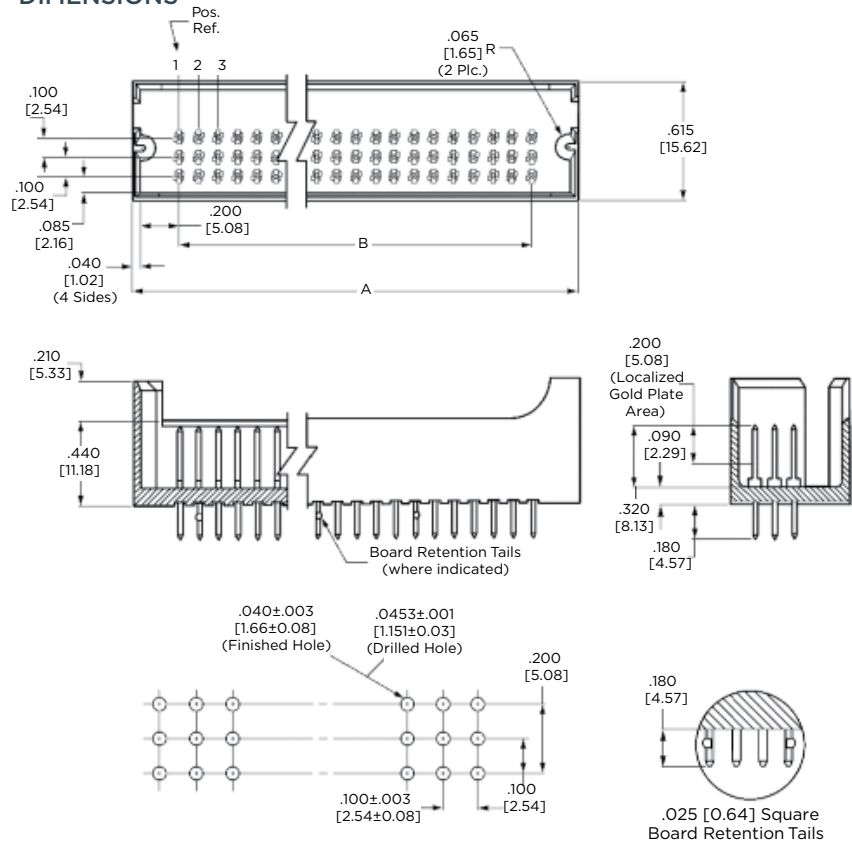
Technical Documents - Page 195

Product Specification 108-25017

Application Specification 114-9009

Additional header sizes are available; minimum order quantities may apply. Consult TE.

#### DIMENSIONS



#### Recommended PC Board Hole Layout (for .055 [1.40] min. thick PC board)

tolerances not to accumulate within one connector pattern.

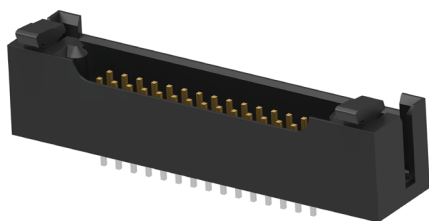
## PRODUCT INFORMATION

No. of Pos.	Dimensions		Header Part Nos. with .125 [3.18] Tail Length
	A	B	Standard Solder Tails Plating A
150	5.380 [136.65]	4.900 [124.46]	5-103264-3

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### HEADERS, VRM (VOLTAGE REGULATOR MODULE), .100 X .100 [2.54 X 2.54] CENTERLINE SOLDER POSTS AND ACTION PIN POSTS (WITH PIN PROTECTION, GUIDE RIBS, AND LATCHING)



#### MATERIAL AND FINISH

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

**Posts** - Copper alloy, duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] matte tin on termination end, with entire post underplated .000050 [0.00127] nickel

#### RELATED PRODUCT DATA

Performance Specifications - Page 102

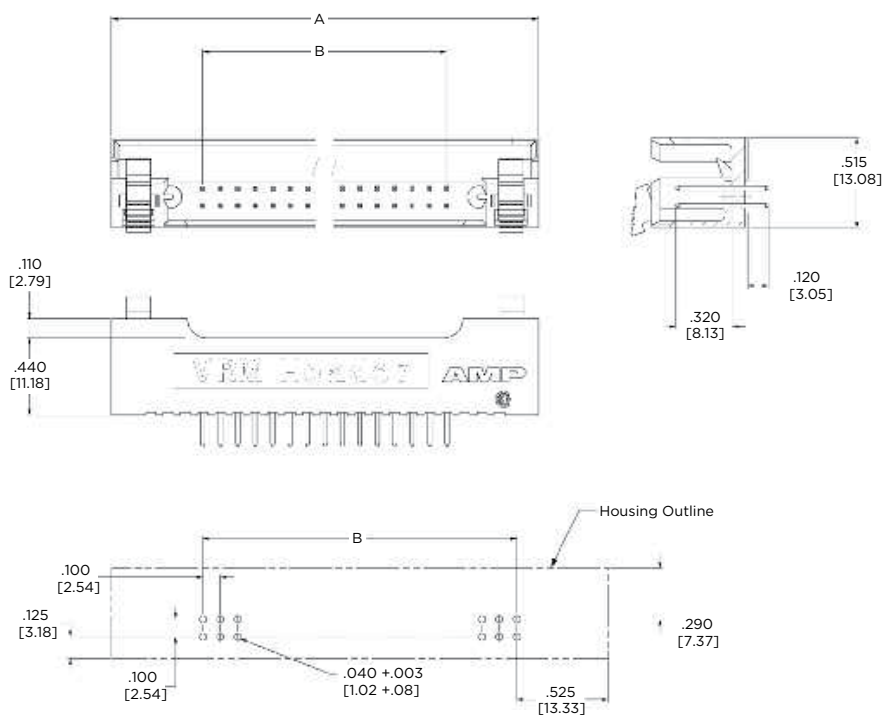
Application Tooling - Page 192

Technical Documents - Page 195

Product Specification 108-25017

Application Specification 114-9009

#### DIMENSIONS



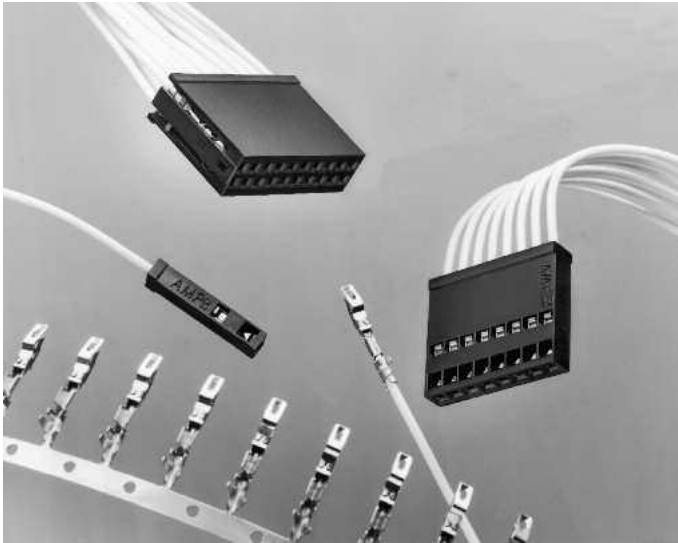
#### Recommended PC Board Hole Layout

## PRODUCT INFORMATION

No. of Pos.	Dimensions		Header Part No.
	A	B	Standard Solder Tails
30	2.450 [62.23]	1.400 [35.56]	5-146205-1
40	3.100 [78.74]	1.900 [48.26]	5-146315-1

**Note:** All part numbers are RoHS compliant.

### LOCKING CLIP CONTACTS AND HOUSINGS



#### PRODUCT FACTS

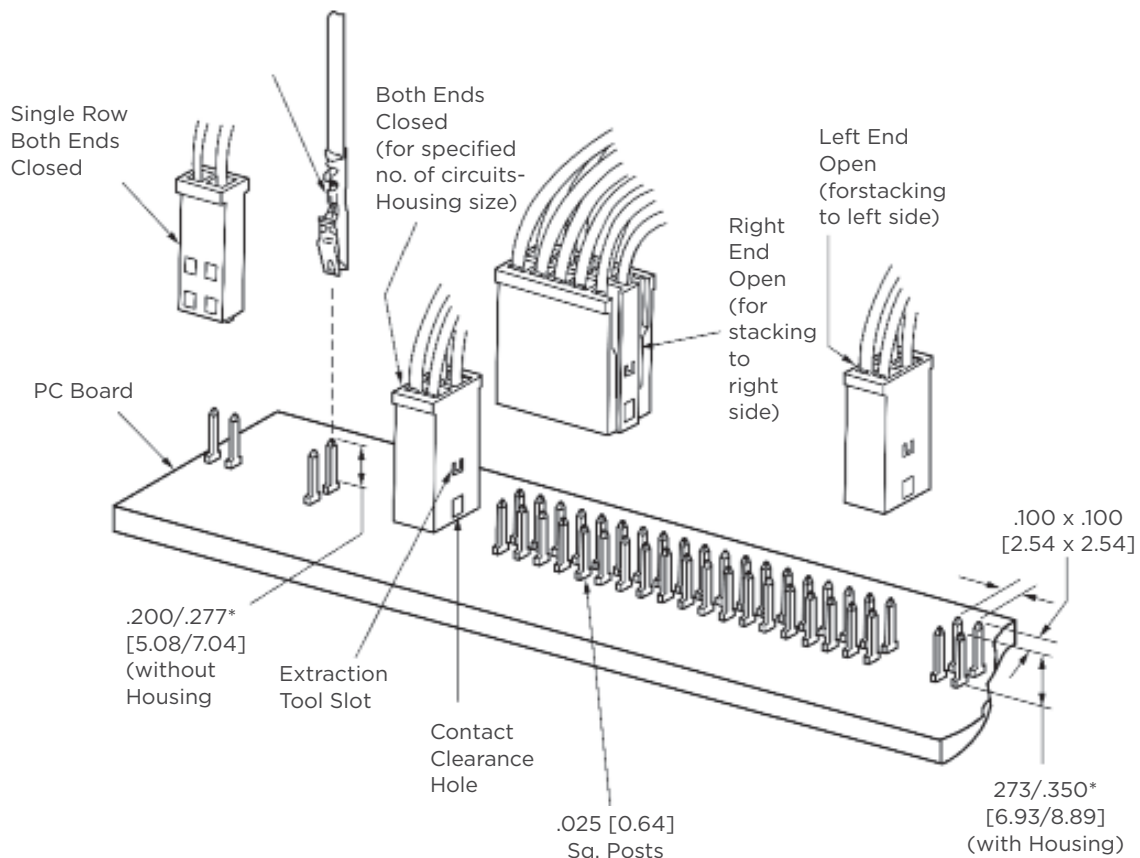
- Self-retaining contacts provide permanent connection with quick connect and disconnect
- Fast, easy installation with no additional locking hardware required
- Mates with .025 [0.64] square posts in a variety of configurations
- Single- and double-row configurations in up to 20 positions on .100 [2.54] centers
- Modular design permits end-to-end stacking (double-row only) for circuit grouping
- Choice of tin or select gold plating
- Housings made of 94V-0 rated glass-filled polyester
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

#### PERFORMANCE CHARACTERISTICS

**Contact Current Rating** - 3 amperes

**Termination Resistance** - 12 milliohms (max.)- Gold plated contacts 16 milliohms (max.)- Tin plated contacts

**Durability** - Ref. Product Specification 108-36028 and 108-36028-1



\*If post is longer than maximum specified, post tip may butt against wire ends.

Dimension defines .025 x .025 [0.64 x 0.64] portion of post.

## LOCKING CLIP CONTACTS

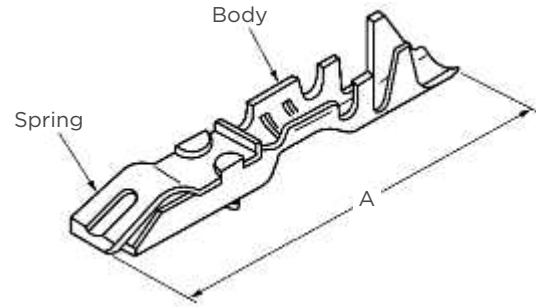
### MATERIAL AND FINISH

**Contact Spring** - Stainless steel

**Plating A** - Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating B** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating C** - .000100-.000200 [0.00254-0.00508] bright tin over .000050 [0.00127] nickel on entire contact



Wire Size Range		Ins. Dia. Range	Dimension A	Finish	Part Nos.		Ocean Applicator PN*		Hand Tool PN
					Strip Form	Loose Piece	Strip Form	Loose Piece	
30-28	0.05-0.09	.029-.039 [0.74-0.99]	.550 [13.97]	Plating B	87190-1	87191-1	2837095-1, 2837095-2		-
				Plating C	-	5-87191-2		2837095-1, 2837095-2	-
26-22	0.12-0.4	.038-.062 [0.97-1.57]	.584 [14.83]	Plating A	87124-3	87165-3	2151639-1,2151639-2,5-2151639-2 2266021-1,2266021-2,5-2266021-2		91533-1
				Plating B	87124-1	87165-1			
				Plating C	5-87124-2	5-87165-2			
20	0.5-0.6	.038-.062 [0.97-1.57]	.584 [14.83]	Plating B	867052-2	-	2151639-1, 2151639-2, 5-2151639-2	-	1901798-1
				Plating C	5-867052-1	-		-	

\* For more info please click to view: [document 1](#) and [document 2](#)

### Notes:

1. These contacts must be crimped in accordance with TE Specification No. 114 25006 in order to function properly in a connector Housing.
2. Extraction Tool No. 91084-1 is used for removing individual contacts from connector Housings and for detaching contacts from mating posts.

### WIRE HARNESSING

If necessary, wires can be grouped with cable ties and secured to a panel with fixed clamps. However, locking clip contacts must be free to float within the connector Housings to allow proper extraction. Therefore, harnessing hardware or the use of multiple terminations per contact must not restrict the free-floating action of contacts in the Housing.

For more information request Insulation and Bundling Products Catalog 124132.

### RELATED PRODUCT DATA

Housings Used With - Page 125

Application Tooling - Page 192

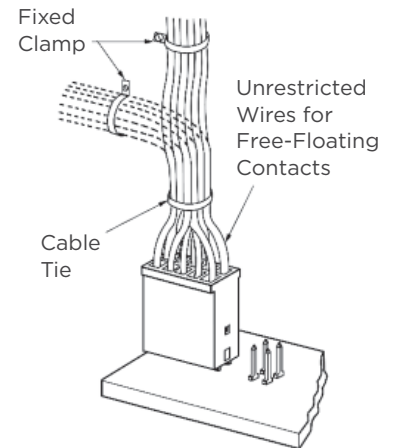
Technical Documents - Page 195

Product Specification - 108-36028, 108-36028-1

Application Specification - 114-25006



Extraction Tool  
No. 2459141-1

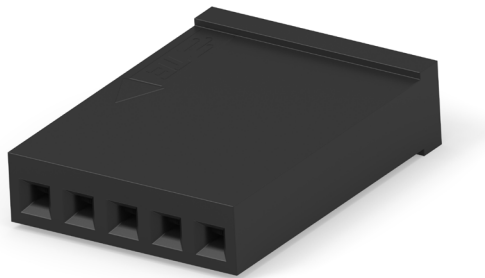


**Note:** All part numbers are RoHS compliant.



### WIRE-APPLIED HOUSINGS FOR LOCKING CLIP CONTACTS, SINGLE-ROW, .100 [2.54] CENTERLINE

#### SINGLE-ROW



#### MATERIAL

Glass-filled polyester, 94V-0 rated

#### RELATED PRODUCT DATA

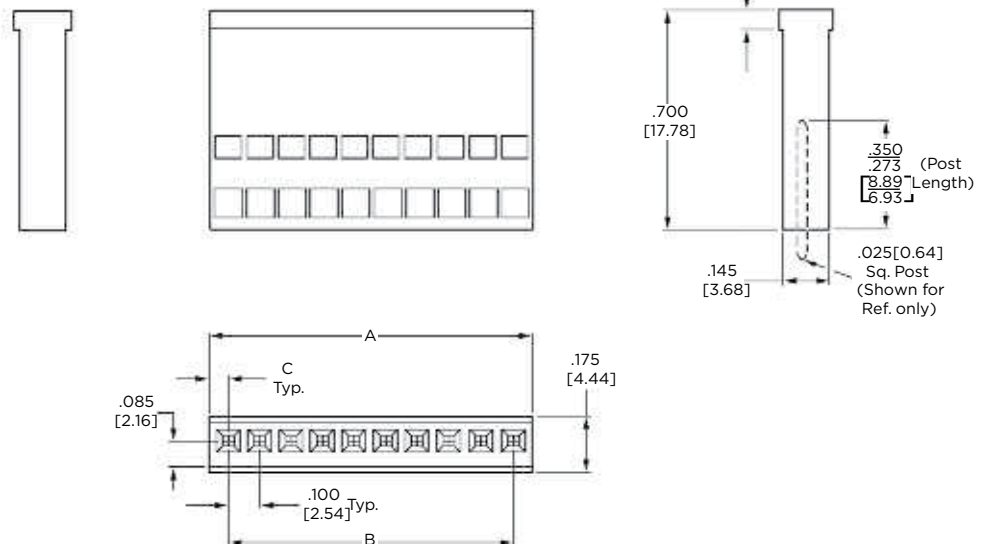
**Contacts** - Page 130

**Mateable Headers and Posts** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195  
**Product Specification** 108-36028, 108-36028-1

**Application Specification** 114-25006  
.125 [3.18] centerline single-row, 2 and 3 position Housings are available, Base Part No. 104905. They are designed to be stackable end-to-end and side-by-side. Consult TE.

#### DIMENSIONS



#### KEYING PLUG



#### Part No. 87179-1

(Plugs directly into Housings for .025 [0.64] square post contacts) Material - Yellow, nylon

### PRODUCT INFORMATION

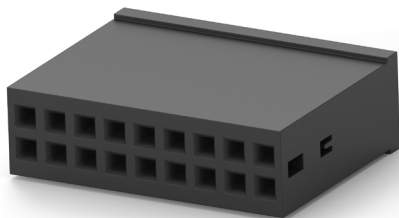
No. of Pos.	Dimensions			Housing Part No.	
	A	B	C	Unstamped	Stamped
1	.108 [2.74]	-	.054 [1.37]	87175-2	-
2	.216 [5.49]	.100 [2.54]	.058 [1.47]	87175-6	-
3	.316 [8.03]	.200 [5.08]	.058 [1.47]	87175-8	-
4	.416 [10.57]	.300 [7.62]	.058 [1.47]	1-87175-0	-
5	.516 [13.11]	.400 [10.16]	.058 [1.47]	1-87175-2	-
6	.616 [15.65]	.500 [12.70]	.058 [1.47]	1-87175-4	1-87175-3
7	.716 [18.19]	.600 [15.24]	.058 [1.47]	1-87175-6	1-87175-5
8	.816 [20.73]	.700 [17.78]	.058 [1.47]	1-87175-8	1-87175-7
9	.916 [23.27]	.800 [20.32]	.058 [1.47]	2-87175-0	1-87175-9
10	1.016 [25.81]	.900 [22.86]	.058 [1.47]	2-87175-2	2-87175-1
11	1.116 [28.35]	1.000 [25.40]	.058 [1.47]	2-87175-4	2-87175-3
12	1.216 [30.89]	1.100 [27.94]	.058 [1.47]	2-87175-6	2-87175-5
13	1.316 [33.43]	1.200 [30.48]	.058 [1.47]	2-87175-8	2-87175-7
14	1.416 [35.97]	1.300 [33.02]	.058 [1.47]	3-87175-0	2-87175-9
15	1.516 [38.51]	1.400 [35.56]	.058 [1.47]	87175-4	87175-3

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### WIRE-APPLIED HOUSINGS FOR LOCKING CLIP CONTACTS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### DOUBLE-ROW



#### MATERIAL

Glass-filled polyester, 94V-0 rated

#### RELATED PRODUCT DATA

Contacts - page 175

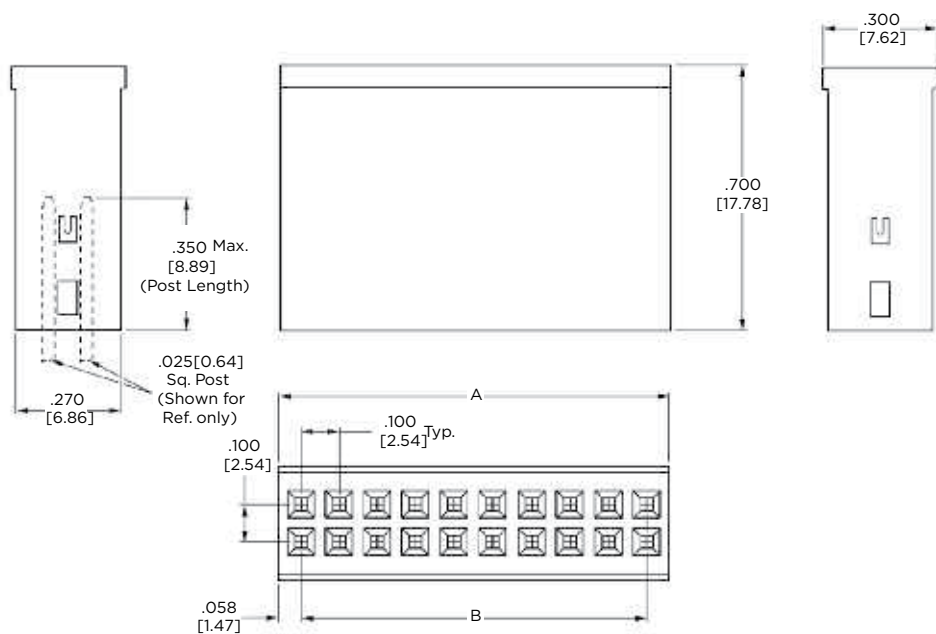
**Mateable Headers and Posts** - Refer to the Mating Post Selection Guide - Page 10

**Technical Documents** - Page 195

**Product Specification** - 108-36028, 108-36028-1

**Application Specification** - 114-25006

#### DIMENSIONS



Note: Housing illustrated above is the "Both Ends Closed" version.

#### KEYING PLUG



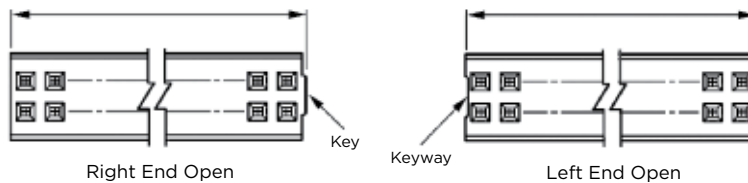
#### Part No. 87179-1

(Plugs directly into **Housings** for .025 [0.64] square post contacts)

Material - Yellow, nylon



Both Ends Closed



Right End Open

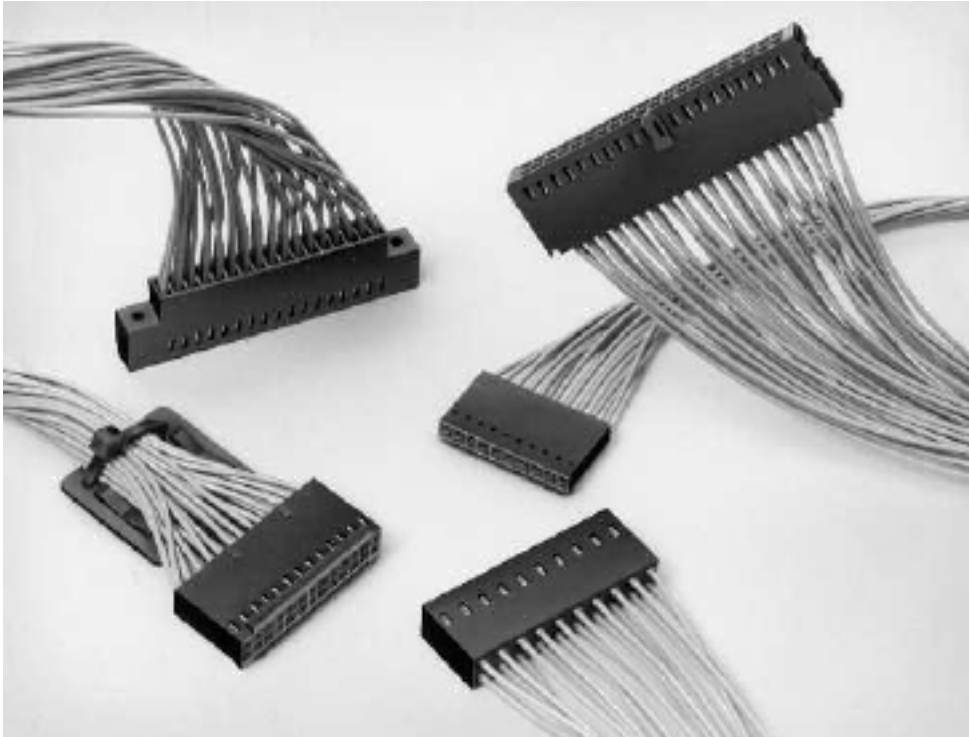
Left End Open

### PRODUCT INFORMATION

Housing Configuration	No. of Pos.	Dimensions		Housing Part No.	
		A	B	Unstamped	Stamped
Both Ends Closed	2	.116 [2.95]	-	87176-2	-
	4	.216 [5.49]	.100 [2.54]	87133-1	-
	6	.316 [8.03]	.200 [5.08]	87133-7	87133-8
	8	.416 [10.57]	.300 [7.62]	87133-9	1-87133-0
	10	.516 [13.11]	.400 [10.16]	87133-2	87133-5
	12	.616 [15.65]	.500 [12.70]	1-87133-1	1-87133-2
	16	.816 [20.73]	.700 [17.78]	1-87133-3	1-87133-4
	18	.916 [23.27]	.800 [20.32]	1-87133-5	1-87133-6
	20	1.016 [25.81]	.900 [22.86]	87133-3	87133-6

**Note:** All part numbers are RoHS compliant.

### MOD IV WIRE-APPLIED CONTACTS AND HOUSINGS



#### PRODUCT FACTS

- Terminates 32-20 AWG [0.03-0.6mm<sup>2</sup>] discrete wire
- Contacts have insulation support
- Choice of three contact mating pressures
- Available in a variety of gold and tin platings
- Receptacles mate with .025 [0.64] square or round posts
- Dual cantilever contact beam with built-in anti-overstress feature for reliable matings
- Housings accept a variety of receptacle and pin contacts
- Housing sizes range up to 100 positions
- Housing configurations include single- and doublerows on .100 [2.54] centerlines
- Housing options include detent latching, polarization and bonded strain relief/ pull tabs
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR 7189

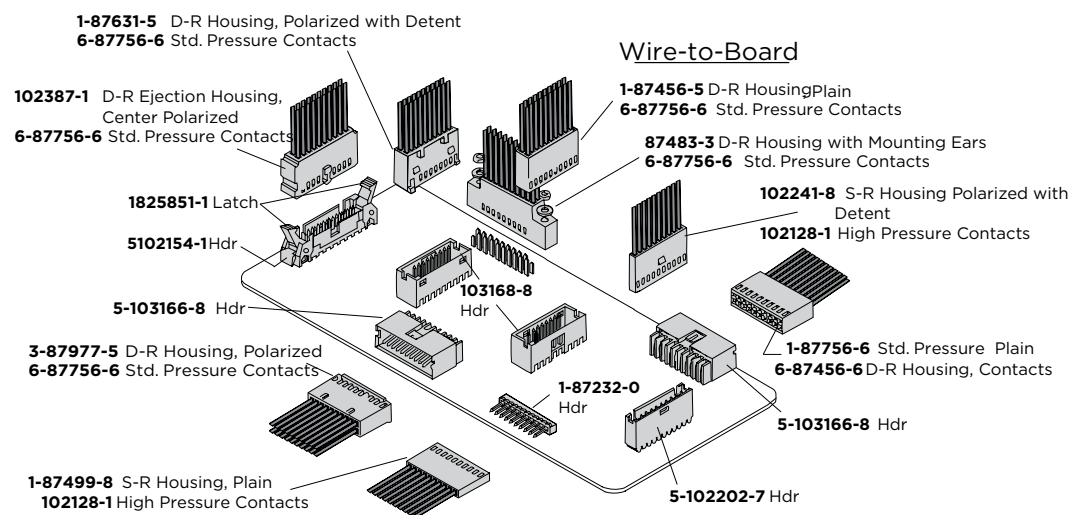
#### PERFORMANCE CHARACTERISTICS

**Contact Current Rating - 3 amperes**

Termination Resistance - 12 milliohms (max.) - Beryllium copper contacts

**20 milliohms (max.)**  
- Copper-tinphosphor bronze contacts

**Durability - Ref. Product Specification 108-25020**



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV PIN AND RECEPTACLE CONTACTS

#### CRIMP SNAP-IN (NO-STRIP) RECEPTACLES AND CRIMP SNAP-IN PINS WITH INSULATION SUPPORT (STANDARD PRESSURE)

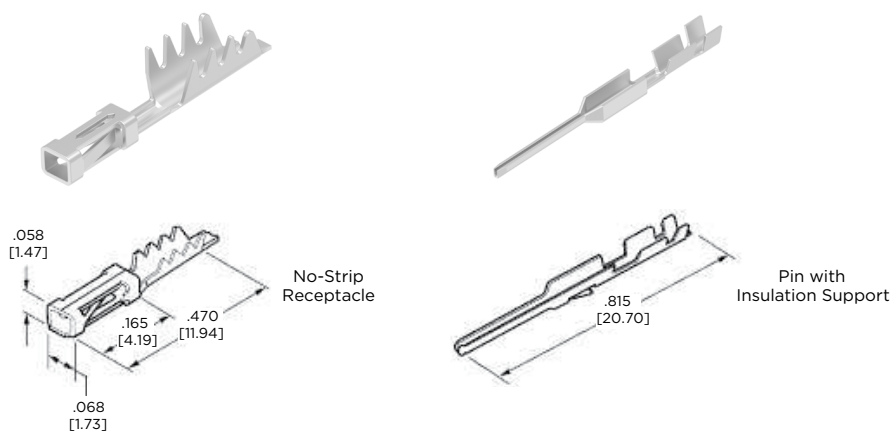
##### MATERIAL AND FINISH

Beryllium copper, phosphor bronze, or copper-tin-phosphor bronze (see charts), plated as follows:

**Plating A** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating B** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating C** - .000100-.000200 [0.00254-0.00508] tin over .000030 [0.00076] nickel on entire contact



##### RELATED PRODUCT DATA

Housings Used With - Page 136

Performance Characteristics - Page 83

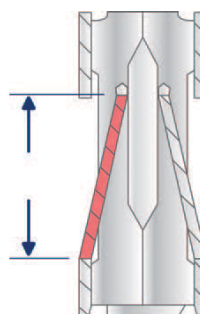
Application Tooling - Page 192

Technical Documents - Page 195

Product Specification 108-25007, 108-25019, 108-25020, 108-25021

Application Specification 114-25003, 114-25016

Additional header sizes are available; minimum order quantities may apply. Consult TE.



#### CRIMP SNAP-IN (NO-STRIP) RECEPTACLES

Ins. Dia. Range	Finish	Part Nos.		Ocean applicator	Hand Tool Part No.
		Strip Form	Loose Piece		
.040-.055 [1.02-1.40]	Plating A	87107-5	102348-2	2837176-1, 2837176-2, 7-2837176-7	-
	Plating C	87107-6	102348-3		

#### CRIMP SNAP-IN PINS WITH INSULATION SUPPORT

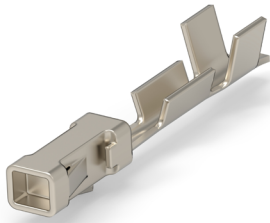
Wire Size Range		Ins. Dia. Range	Finish	Part Nos.		Ocean Applicator*	Hand Tool	
				Strip Form	Loose Piece		Premium	Commercial
26-22	0.12-0.4	.061 [1.55]	Plating A	102095-3	102107-2	2836488-2	91517-1	58641-1
			Plating B	102095-2	102107-1			
			Plating C	5-102095-4	5-102107-3			

\* For more info please click to view: [document 1](#) and [document 2](#)

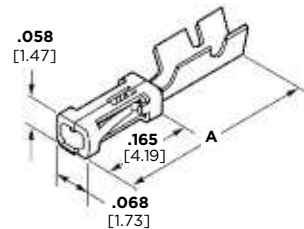
**Note:** All part numbers are RoHS compliant.

## MOD IV RECEPTACLE CONTACTS

### CRIMP SNAP-IN RECEPTACLES WITH INSULATION SUPPORT (STANDARD, INTERMEDIATE AND HIGH PRESSURE)



#### DIMENSIONS



#### MATERIAL AND FINISH

Beryllium copper, phosphor bronze or copper-tin-phosphor bronze (see charts, on following page), plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100-.000200 [0.00254-0.00508] tin on crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating D** - Selectively plated .000050 [0.00127] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating E** - Selectively plated .000030 [0.00076] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating F** - Selectively plated .000015 [0.00038] gold on contact area, with gold flash over .000050 [0.00127] nickel on entire contact

**Plating G** - .000100-.000200 [0.00254-0.00508] tin over .000030 [0.00076] nickel on entire contact

#### RELATED PRODUCT DATA

Housings Used With - Page 136

Performance Characteristics - Page 83

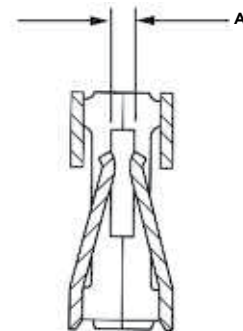
Application Tooling - Page 192

Technical Documents - Page 195

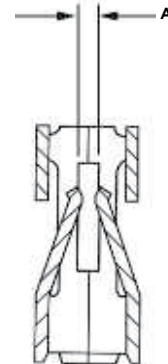
Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification 114-25003, 114-25016

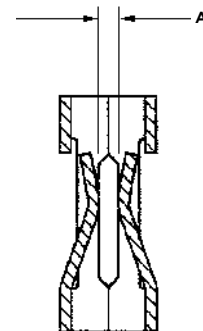
#### Standard Pressure



#### Intermediate Pressure



#### High Pressure



	Mating Force	Unmating Force	A-Gap Dimension
Standard Pressure	9 oz. Max.	1.5 oz. Min.	.008/.014
Intermediate Pressure	16 oz. Max.	2 oz. Min.	.008/.014
High Pressure	20 oz. Max.	3 oz. Min.	.013±.002

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

#### STANDARD PRESSURE (MOD IV)

Wire Size Range		Ins. Dia. (Max.)	Dimension A	Material	Finish	Part Nos.		Ocean Applicator PN*		Hand Tool PN
						Strip Form	Loose Piece	Strip Form	Loose Piece	
AWG	[mm <sup>2</sup> ]									
32-27	0.03-0.1	.040 [1.02]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-102316-8	6-102316-4	2836135-2	2836135-2	91541-1
				Cu-Sn-Ph Bz	Plating B	5-102316-6	6-102316-3	2836135-2	2836135-2	
				Be Cu	Plating E	102917-1	102917-2			
				Be Cu	Plating F	102917-5	102917-6			
				Cu-Sn-Ph Bz	Plating G	102316-5	1-102316-2	2836135-2	2836135-2	
26-22	0.12-0.4	.061 [1.55]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	6-87756-7	6-87756-8	2151307-2	2151307-2	91517-1, 58641-1
				Cu-Sn-Ph Bz	Plating B	6-87756-2	6-87756-6			
				Cu-Sn-Ph Br	Plating G	87756-6	87756-7			
				Be Cu	Plating D	-	87667-5			
				Be Cu	Plating E	87666-2	87667-2			
				Be Cu	Plating F	87666-5	87667-5		NA	
				Be Cu	Plating G	87666-3	87667-3		2151307-2	
24-20	0.2-0.6	.069 [1.75]	.470 [11.94]	Cu-Sn-Ph Bz	Plating A	6-87523-8	6-87523-9	2266308-2 2151020-2		91516-1
				Cu-Sn-Ph Bz	Plating B	2-87523-3	2-87523-4			
				Be Cu	Plating E	85969-8	86016-2	2151020-2	2266308-1	
				Be Cu	Plating F	85969-6	86016-5	2266308-2 2151020-2	2266308-1	
				Cu-Sn-Ph Br	Plating G	87523-5	87523-6	2266308-2 2151020-2	2266308-2 2151020-2	
				Be Cu	Plating G	85969-9	86016-3	2151020-2	2266308-1	

#### INTERMEDIATE PRESSURE (MOD IV.V)

Wire Size Range		Ins. Dia. (Max.)	Dimension A	Material	Finish	Part Nos.		Ocean Applicator PN		Hand Tool PN
						Strip Form	Loose Piece	Strip Form	Loose Piece	
AWG	[mm <sup>2</sup> ]									
32-27	0.03-0.1	.040 [1.02]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-102920-1	5-102920-2	-	-	91541-1
				Be Cu	Plating E	102918-1	102918-2		-	
26-22	0.12-0.4	.061 [1.55]	.445 [11.30]	Cu-Sn-Ph Bz	Plating A	5-103171-4	5-103171-5	2151307-1		91517-1, 58641-1
				Cu-Sn-Ph Bz	Plating B	5-103171-1	-			
				Be Cu	Plating E	102548-5	102548-6			
				Be Cu	Plating F	102548-1	102548-3			
24-20	0.2-0.6	.069 [1.75]	.470 [11.94]	Cu-Sn-Ph Bz	Plating A	2-87195-3	2-87195-6	2151020-2 2151020-2		91516-1
				Cu-Sn-Ph Bz	Plating B	2-87195-4	2-87195-5			
				Be Cu	Plating E	86492-6	87046-3	2151020-2	2151020-2	
				Be Cu	Plating F	86492-2	87046-1	2266308-2 2151020-2	2266308-2 2151020-2	
				Be Cu	Plating G	86492-9	87046-4	2151020-2	2151020-2	



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

#### HIGH PRESSURE (MOD V)\*\*

Wire Size Range		Ins. Dia. (Max.)	Dimension A	Material	Finish	Part Nos.		Ocean Applicator PN		Hand Tool PN
						Strip Form	Loose Piece	Strip Form	Loose Piece	
32-27	0.03-0.1	0.03-0.1	.445 [11.30]	Ph Bz	Plating E	103455-1	103455-2			91541-1
26-22	0.12-0.4	0.12-0.4	.445 [11.30]	Ph Bz	Plating E	87809-1	102128-1	2151307-2		91517-1
				Ph Bz	Plating G	87809-2	102128-2			
24-20	0.2-0.6	0.2-0.6	.470 [11.94]	Ph Bz	Plating E	87309-9	1-87309-4	2266308-2		91516-1
				Ph Bz	Plating G	87309-8	1-87309-3			

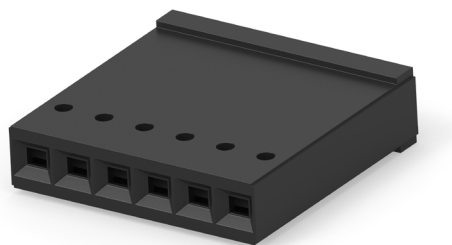
\* For more info please click to view: [document 1](#) and [document 2](#)

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, SINGLE-ROW, .100 [2.54] CENTERLINE

#### NON-POLARIZED



#### MATERIAL

Black thermoplastic, flame retardant

#### RELATED PRODUCT DATA

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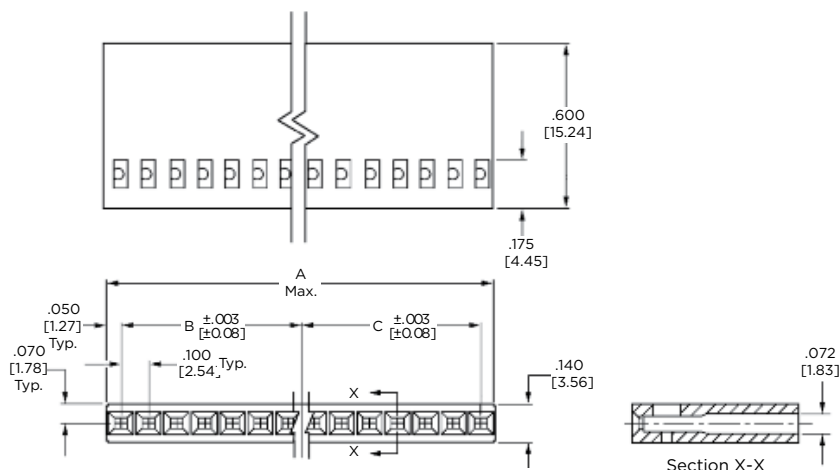
Mateable Headers and Posts - Page 14

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Product Specification - 108-25007, 108-25019, 108-25020, 108-25021

Application Specification - 114-25003, 114-25016

#### DIMENSIONS



### PRODUCT INFORMATION

No. of Pos.	Dimensions			Part No.	
	A	B	C	Stamped*	Unstamped**
1	.105 [2.67]	-	-	-	7-87499-2
2	.205 [5.21]	.100 [2.54]	-	87499-3	87499-4
3	.305 [7.75]	.100 [2.54]	.100 [2.54]	87499-5	87499-6
4	.405 [10.29]	.200 [5.08]	.100 [2.54]	87499-7	87499-8
5	.505 [12.83]	.200 [5.08]	.200 [5.08]	87499-9	1-87499-0
6	.605 [15.37]	.300 [7.62]	.200 [5.08]	1-87499-1	1-87499-2
7	.705 [17.91]	.300 [7.62]	.300 [7.62]	87499-1	87499-2
8	.805 [20.45]	.400 [10.16]	.300 [7.62]	1-87499-3	1-87499-4
9	.905 [22.99]	.400 [10.16]	.400 [10.16]	1-87499-5	1-87499-6
10	1.005 [25.53]	.500 [12.70]	.400 [10.16]	1-87499-7	1-87499-8
11	1.105 [28.01]	.500 [12.70]	.500 [12.70]	1-87499-9	2-87499-0
12	1.205 [30.61]	.600 [15.24]	.500 [12.70]	2-87499-1	2-87499-2
13	1.305 [33.15]	.600 [15.24]	.600 [15.24]	2-87499-3	2-87499-4
14	1.405 [35.69]	.700 [17.78]	.600 [15.24]	2-87499-5	2-87499-6
15	1.505 [38.23]	.700 [17.78]	.700 [17.78]	-	2-87499-8
16	1.605 [40.77]	.800 [20.32]	.700 [17.78]	2-87499-9	3-87499-0
17	1.700 [43.18]	.800 [20.32]	.800 [20.32]	-	3-87499-2
18	1.805 [45.85]	.900 [22.86]	.800 [20.32]	-	3-87499-4
19	1.900 [48.26]	.900 [22.86]	.900 [22.86]	-	3-87499-6
20	2.005 [50.93]	1.000 [25.40]	.900 [22.86]	3-87499-7	3-87499-8

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions			Part No.	
	A	B	C	Stamped*	Unstamped**
21	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	-	4-87499-0
22	2.205 [56.01]	1.100 [27.94]	1.000 [25.40]	-	4-87499-2
23	2.300 [58.42]	1.100 [27.94]	1.100 [27.94]	-	4-87499-4
24	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	-	4-87499-6
25	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	-	4-87499-8
26	2.605 [66.17]	1.300 [33.02]	1.200 [30.48]	-	5-87499-0
27	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	-	5-87499-2
28	2.800 [71.12]	1.400 [35.56]	1.300 [33.02]	-	5-87499-4
29	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	-	5-87499-6
30	3.005 [76.33]	1.500 [38.10]	1.400 [35.56]	-	5-87499-8

\*\*Cavity identification, part number and date code stamped on **Housing** where size permits.

\*\*No marking on **Housing**.

#### Notes:

1. Strain reliefs are available and may be purchased separately. Consult TE.
2. Contact Extraction/Lance Reset Tool No. 843996-3.

### KEYING PLUGS



#### Part No. 86286-1

(Plugs into standard or intermediate pressure receptacle contact)

#### Material

Natural color nylon



#### Part No. 87077-2

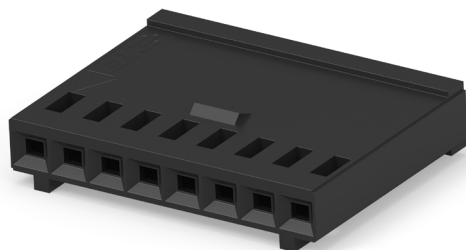
(Plugs directly into **Housing**)

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, SINGLE-ROW, .100 [2.54] CENTERLINE

#### POLARIZED (WITH DETENT LATCHING)



#### MATERIAL

Black thermoplastic, flame retardant

#### RELATED PRODUCT DATA

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**Mateable Headers and Posts** - Page 48

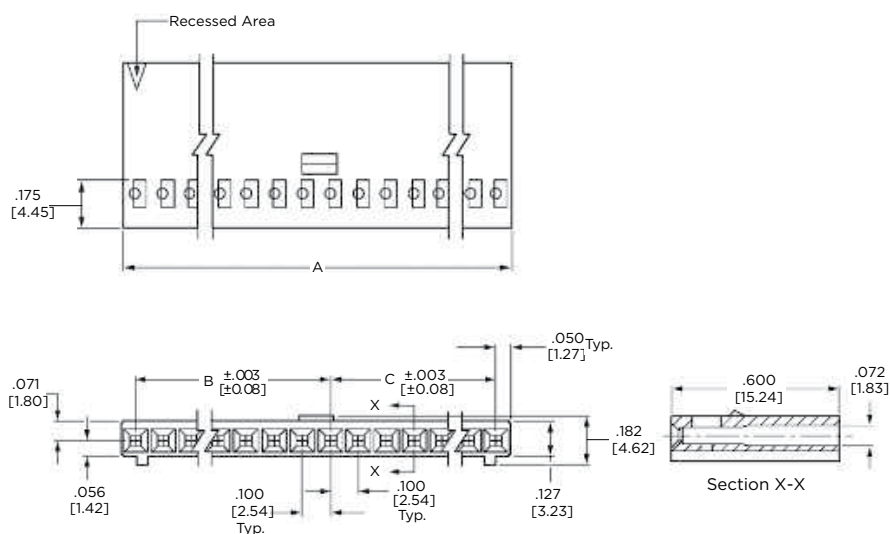
Flexible Film Connectors, Single-Row Pin Assemblies - Catalog 82007

**Technical Documents** - Page 195

**Product Specification** - 108-25007, 108-25019, 108-25020, 108-25021

**Application Specification** - 114-25003, 114-25016

#### DIMENSIONS



## PRODUCT INFORMATION

No. of Pos.	Dimensions			Part No.
	A	B	C	Unstamped*
3	.300 [7.62]	.100 [2.54]	.100 [2.54]	102241-1
4	.400 [10.16]	.200 [5.08]	.100 [2.54]	102241-2
5	.500 [12.70]	.200 [5.08]	.200 [5.08]	102241-3
6	.600 [15.24]	.300 [7.62]	.200 [5.08]	102241-4
7	.700 [17.78]	.300 [7.62]	.300 [7.62]	102241-5
8	.800 [20.32]	.400 [10.16]	.300 [7.62]	102241-6
9	.900 [22.86]	.400 [10.16]	.400 [10.16]	102241-7
10	1.000 [25.40]	.500 [12.70]	.400 [10.16]	102241-8
11	1.100 [27.94]	.500 [12.70]	.500 [12.70]	102241-9
12	1.200 [30.48]	.600 [15.24]	.500 [12.70]	1-102241-0
13	1.300 [33.02]	.600 [15.24]	.600 [15.24]	1-102241-1
14	1.400 [35.56]	.700 [17.78]	.600 [15.24]	1-102241-2
15	1.500 [38.10]	.700 [17.78]	.700 [17.78]	1-102241-3
16	1.600 [40.64]	.800 [20.32]	.700 [17.78]	1-102241-4
17	1.700 [43.18]	.800 [20.32]	.800 [20.32]	1-102241-5
18	1.800 [45.72]	.900 [22.86]	.800 [20.32]	1-102241-6
19	1.900 [48.26]	.900 [22.86]	.900 [22.86]	1-102241-7
20	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	1-102241-8

**Note:** All part numbers are RoHS compliant.

PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions			Part No.
	A	B	C	Unstamped**
21	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	1-102241-9

\*No marking on Housing

**Notes:**  
Contact Extraction/Lance Reset Tool No. 843996-3.

KEYING PLUGS



**Part No. 86286-1**  
(Plugs into standard or intermediate pressure receptacle contact)

**Material**  
Natural color nylon



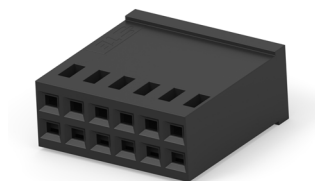
**Part No. 87077-2**  
(Plugs directly into Housing)

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### NON-POLARIZED



#### MATERIAL

Black thermoplastic, flame retardant

#### RELATED PRODUCT DATA

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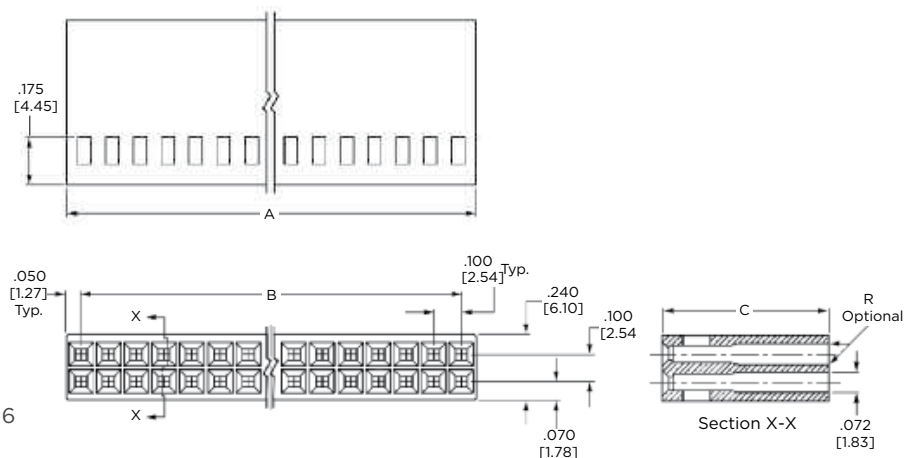
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Product Specification - 108-25007, 108-25019,  
108-25020, 108-25021

Application Specification - 114-25003, 114-25016

#### DIMENSIONS



## PRODUCT INFORMATION

No. of Pos.	Dimensions		Part NoS.		
			C = .600 [15.24]		C = .645 [16.38]
	A	B	Stamped*	Unstamped**	Unstamped**
2	.100 [2.54]	-	-	5-87456-3	-
4	.200 [5.08]	.100 [2.54]	5-87456-0	4-87456-9	-
6	.300 [7.62]	.200 [5.08]	87456-2	87456-1	1-86177-8
8	.400 [10.16]	.300 [7.62]	87456-4	87456-3	-
10	.500 [12.70]	.400 [10.16]	87456-6	87456-5	1-86177-2
12	.600 [15.24]	.500 [12.70]	87456-8	87456-7	1-86177-3
14	.700 [17.78]	.600 [15.24]	1-87456-0	87456-9	1-86177-4
16	.800 [20.32]	.700 [17.78]	1-87456-2	1-87456-1	1-86177-5
18	.900 [22.86]	.800 [20.32]	1-87456-4	1-87456-3	-
20	1.000 [25.40]	.900 [22.86]	1-87456-6	1-87456-5	86177-1
22	1.100 [27.94]	1.000 [25.40]	-	1-87456-7	-
24	1.200 [30.48]	1.100 [27.94]	2-87456-0	1-87456-9	-
26	1.300 [33.02]	1.200 [30.48]	2-87456-2	2-87456-1	86177-4
28	1.400 [35.56]	1.300 [33.02]	2-87456-4	2-87456-3	-
30	1.500 [38.10]	1.400 [35.56]	2-87456-6	2-87456-5	-
32	1.600 [40.64]	1.500 [38.10]	-	2-87456-7	-
34	1.700 [43.18]	1.600 [40.64]	3-87456-0	2-87456-9	-
36	1.800 [45.72]	1.700 [43.18]	-	3-87456-1	-
38	1.900 [48.26]	1.800 [45.72]	-	3-87456-3	-
40	2.000 [50.80]	1.900 [48.26]	3-87456-6	3-87456-5	-

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions		Part NoS.		
			C = .600 [15.24]		C = .645 [16.38]
	A	B	Stamped*	Unstamped**	Unstamped**
42	2.100 [53.34]	2.000 [50.80]	-	4-87456-3	-
44	2.200 [55.88]	2.100 [53.34]	3-87456-8	3-87456-7	-
48	2.400 [60.96]	2.300 [58.42]	-	5-87456-9	-
50	2.500 [63.50]	2.400 [60.96]	4-87456-0	3-87456-9	-
52	2.600 [66.04]	2.500 [63.50]	-	4-87456-1	1-86177-9
54	2.700 [68.58]	2.600 [66.04]	-	4-87456-5	-
56	2.800 [71.12]	2.700 [68.58]	-	6-87456-1	-
58	2.900 [73.66]	2.800 [71.12]	-	6-87456-3	-
60	3.000 [76.20]	2.900 [73.66]	5-87456-2	5-87456-1	-
64	3.200 [81.28]	3.100 [78.74]	-	6-87456-5	-
72	3.600 [91.44]	3.500 [88.90]	4-87456-8	4-87456-7	-

\*\*Cavity identification, part number and date code stamped on **Housing** where size permits

\*\*No marking on **Housing**

#### Notes:

1. Strain reliefs are available and may be purchased separately. Consult TE
2. Contact Extraction/Lance Reset Tool No. 843996-3

### KEYING PLUGS



#### Part No. 86286-1

(Plugs into standard or intermediate pressure receptacle contact)

#### Material

Natural color nylon



#### Part No. 87077-1

(for .645 high **Housings**)

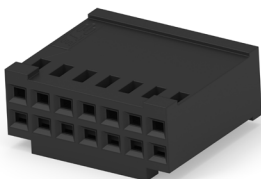
#### Part No. 87077-2

(Plugs directly into **Housing**)

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE POLARIZED



#### MATERIAL

Black thermoplastic, flame retardant

#### RELATED PRODUCT DATA

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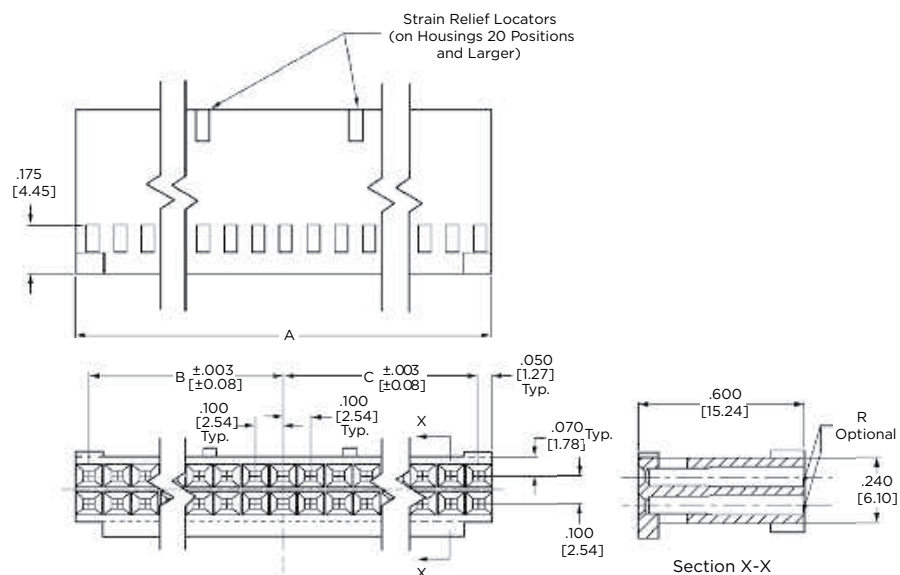
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pages Page 10

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Product Specification - 108-25007, 108-25019,  
108-25020, 108-25021

Application Specification - 114-25003, 114-25016

#### DIMENSIONS



### PRODUCT INFORMATION

No. of Pos.	Dimensions			Part No.	
	A	B	C	Stamped*	Unstamped**
6	.300 [7.62]	.100 [2.54]	.100 [2.54]	87977-1	2-87977-8
8	.400 [10.16]	.200 [5.08]	.100 [2.54]	87977-2	2-87977-9
10	.500 [12.70]	.200 [5.08]	.200 [5.08]	87977-3	3-87977-0
12	.600 [15.24]	.300 [7.62]	.200 [5.08]	87977-4	3-87977-1
14	.700 [17.78]	.300 [7.62]	.300 [7.62]	87977-5	3-87977-2
16	.800 [20.32]	.400 [10.16]	.300 [7.62]	87977-6	3-87977-3
18	.900 [22.86]	.400 [10.16]	.400 [10.16]	-	3-87977-4
20	1.000 [25.40]	.500 [12.70]	.400 [10.16]	87977-8	3-87977-5
22	1.100 [27.94]	.500 [12.70]	.500 [12.70]	-	3-87977-6
24	1.200 [30.48]	.600 [15.24]	.500 [12.70]	1-87977-0	3-87977-7
26	1.300 [33.02]	.600 [15.24]	.600 [15.24]	1-87977-1	3-87977-8
28	1.400 [35.56]	.700 [17.78]	.600 [15.24]	-	3-87977-9
30	1.500 [38.10]	.700 [17.78]	.700 [17.78]	-	4-87977-0
32	1.600 [40.64]	.800 [20.32]	.700 [17.78]	-	4-87977-1
34	1.700 [43.18]	.800 [20.32]	.800 [20.32]	-	4-87977-2
36	1.800 [45.72]	.900 [22.86]	.800 [20.32]	-	4-87977-3
38	1.900 [48.26]	.900 [22.86]	.900 [22.86]	-	4-87977-4
40	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	1-87977-8	4-87977-5

**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions			Part No.	
	A	B	C	Stamped*	Unstamped**
42	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	-	4-87977-6
44	2.200 [55.88]	1.100 [27.94]	1.000 [25.40]	-	4-87977-7
48	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	-	5-87977-6
50	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	2-87977-1	4-87977-8
52	2.600 [66.04]	1.300 [33.02]	1.200 [30.48]	-	4-87977-9
54	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	-	5-87977-0
56	2.800 [71.12]	1.400 [35.56]	1.300 [33.02]	-	5-87977-8
58	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	-	6-87977-0
60	3.000 [76.20]	1.500 [38.10]	1.400 [35.56]	2-87977-4	5-87977-1
64	3.200 [81.28]	1.600 [40.64]	1.500 [38.10]	-	-
66	3.300 [83.82]	1.600 [40.64]	1.600 [40.64]	-	5-87977-2
70	3.500 [88.90]	1.700 [43.18]	1.700 [43.18]	-	5-87977-3
72	3.600 [91.44]	1.800 [45.72]	1.700 [43.18]	-	5-87977-4

\*Cavity identification, part number and date code stamped on **Housing** where size permits

\*\*No marking on **Housing** or strain relief

#### Notes:

1. Strain reliefs are available and may be purchased separately. Consult TE
2. Contact Extraction/Lance Reset Tool No. 843996-3

### KEYING PLUGS



#### Part No. 86286-1

(Plugs into standard or intermediate pressure receptacle contact)

#### Material

Natural color nylon



#### Part No. 87077-2

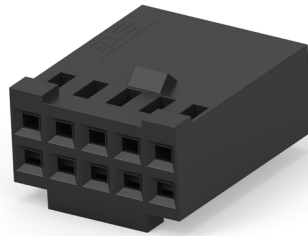
(Plugs directly into **Housing**)

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

POLARIZED (WITH DETENT LATCHING, WITH AND WITHOUT STRAIN RELIEF/PULL TAB)



#### MATERIAL

Black thermoplastic, flame retardant

#### DIMENSIONS

#### RELATED PRODUCT DATA

**Contacts** - Page 130

**Mateable Headers and Posts** -  
Page 10

**Technical Documents** - Page 195

**Product Specification** - 108-25007,  
108-25019, 108-25020, 108-25021

**Application Specification** - 114-  
25003, 114-25016

#### KEYING PLUGS



#### Part No. 86286-1

(Plugs into standard or intermediate  
pressure receptacle contact)

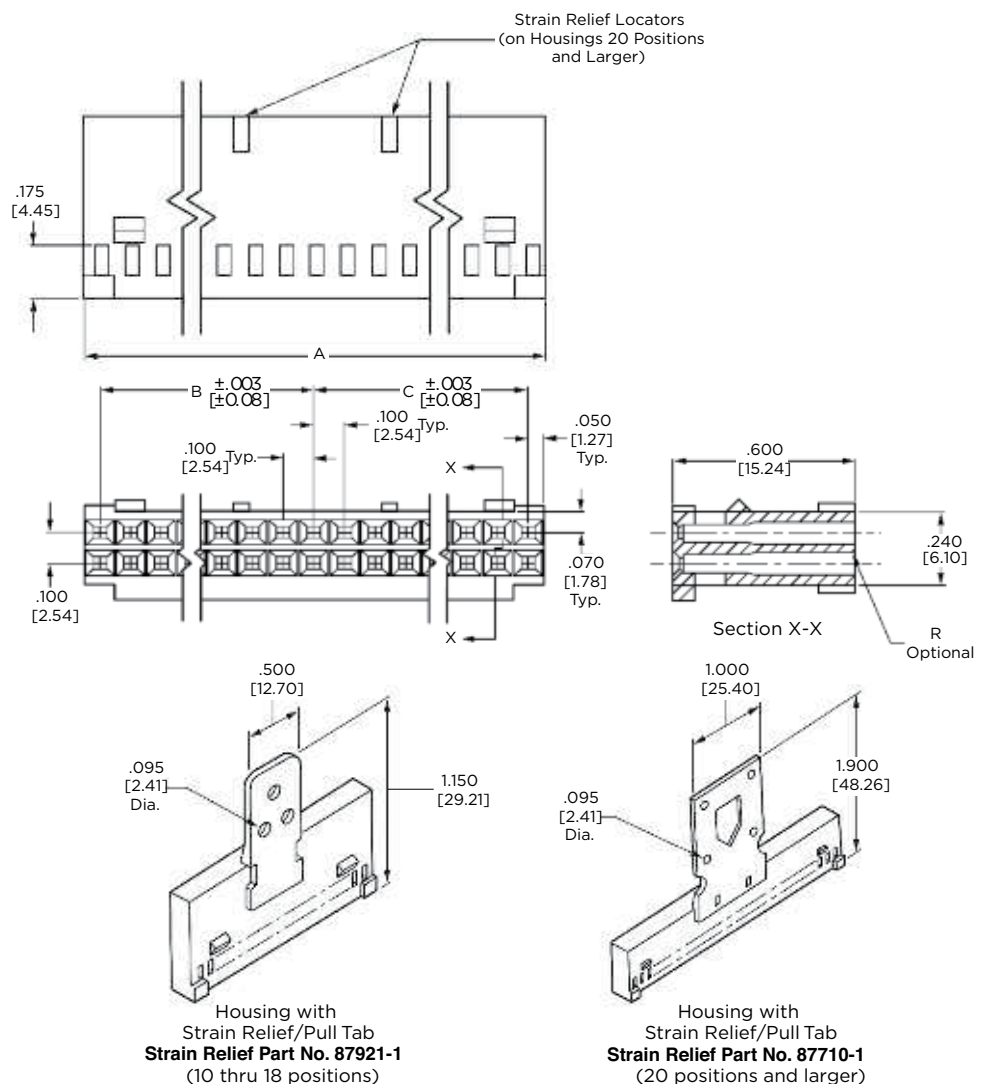
#### MATERIAL

Natural color nylon



#### Part No. 87077-2

(Plugs directly into Housing)



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions			No. of Detents	Part No.		
					Without Strain Relief		With Strain Relief
	A	B	C		Stamped*	Unstamped**	Stamped*
6	.300 [7.62]	.100 [2.54]	.100 [2.54]	1	87631-2	87631-1	-
8	.400 [10.16]	.200 [5.08]	.100 [2.54]	1	87631-4	87631-3	-
10	.500 [12.70]	.200 [5.08]	.200 [5.08]	1	87631-6	87631-5	87922-1
12	.600 [15.24]	.300 [7.62]	.200 [5.08]	1	87631-8	87631-7	87922-2
14	.700 [17.78]	.300 [7.62]	.300 [7.62]	1	1-87631-0	87631-9	87922-3
16	.800 [20.32]	.400 [10.16]	.300 [7.62]	1	1-87631-2	1-87631-1	87922-4
18	.900 [22.86]	.400 [10.16]	.400 [10.16]	1	1-87631-4	1-87631-3	87922-5
20	1.000 [25.40]	.500 [12.70]	.400 [10.16]	2	1-87631-6	1-87631-5	-
22	1.100 [27.94]	.500 [12.70]	.500 [12.70]	2	1-87631-8	1-87631-7	-
24	1.200 [30.48]	.600 [15.24]	.500 [12.70]	2	2-87631-0	1-87631-9	-
26	1.300 [33.02]	.600 [15.24]	.600 [15.24]	2	2-87631-2	2-87631-1	-
28	1.400 [35.56]	.700 [17.78]	.600 [15.24]	2	2-87631-4	2-87631-3	-
30	1.500 [38.10]	.700 [17.78]	.700 [17.78]	2	2-87631-6	2-87631-5	-
32	1.600 [40.64]	.800 [20.32]	.700 [17.78]	2	2-87631-8	2-87631-7	-
34	1.700 [43.18]	.800 [20.32]	.800 [20.32]	2	3-87631-0	2-87631-9	-
36	1.800 [45.72]	.900 [22.86]	.800 [20.32]	2	3-87631-2	3-87631-1	-
38	1.900 [48.26]	.900 [22.86]	.900 [22.86]	2	-	3-87631-3	-
40	2.000 [50.80]	1.000 [25.40]	.900 [22.86]	2	3-87631-6	3-87631-5	-
42	2.100 [53.34]	1.000 [25.40]	1.000 [25.40]	2	3-87631-8	3-87631-7	-
44	2.200 [55.88]	1.100 [27.94]	1.000 [25.40]	2	4-87631-0	3-87631-9	-
48	2.400 [60.96]	1.200 [30.48]	1.100 [27.94]	2	-	5-87631-9	-
50	2.500 [63.50]	1.200 [30.48]	1.200 [30.48]	2	4-87631-2	4-87631-1	-
52	2.600 [66.04]	1.300 [33.02]	1.200 [30.48]	2	-	4-87631-3	-
54	2.700 [68.58]	1.300 [33.02]	1.300 [33.02]	2	4-87631-6	4-87631-5	-
58	2.900 [73.66]	1.400 [35.56]	1.400 [35.56]	2	-	6-87631-3	-
60	3.000 [76.20]	1.500 [38.10]	1.400 [35.56]	2	5-87631-2	5-87631-1	-
64	3.200 [81.28]	1.600 [40.64]	1.500 [38.10]	2	6-87631-6	6-87631-5	-
66	3.300 [83.82]	1.600 [40.64]	1.600 [40.64]	2	-	5-87631-3	-
70	3.500 [88.90]	1.700 [43.18]	1.700 [43.18]	2	-	5-87631-5	-
72	3.800 [96.52]	1.800 [45.72]	1.700 [43.18]	2	5-87631-8	5-87631-7	-

\*Cavity identification, part number and date code stamped on Housing where size permits

\*\*No marking on Housing or strain relief

#### Notes:

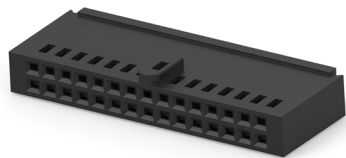
1. The Strain Relief/Pull Tab can be bonded to any thermoplastic connector Housing
2. Strain reliefs may be purchased separately
3. Contact Extraction/Lance Reset Tool No. 843996-3

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MOD IV WIRE-APPLIED HOUSINGS, DOUBLE-ROW, .100 X .100 [2.54 X 2.54] CENTERLINE

#### CENTER POLARIZED



#### MATERIAL

Black thermoplastic, flame retardant

#### RELATED PRODUCT DATA`

Contacts - Page 130

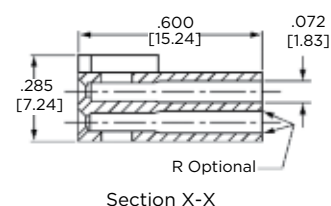
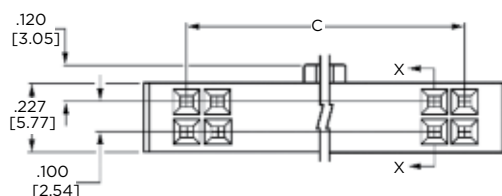
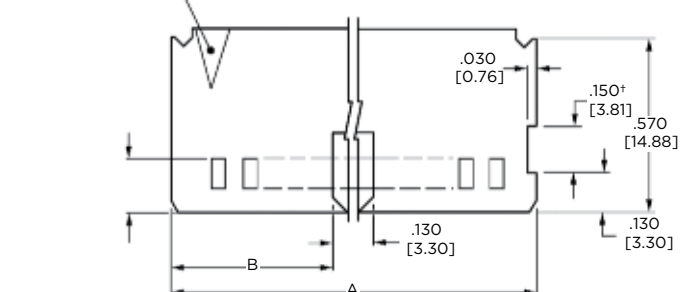
Technical Documents - Page 195

Product Specification - 108-25007,  
108-25019, 108-25020, 108-25021

Application Specification - 114-  
25003, 114-25016

#### DIMENSIONS

Position No. 1 Indicator



### PRODUCT INFORMATION

No. of Pos.	Dimensions			Part No. (Stamped*)
	A	B	C	
8	.580 [14.73]	.225 [5.72]	.300 [7.62]	1-102387-4
10	.680 [17.27]	.275 [6.98]	.400 [10.16]	102387-1
14	.880 [22.35]	.375 [9.53]	.600 [15.24]	102387-2
16	.980 [24.89]	.425 [10.80]	.700 [17.78]	102387-3
20	1.180 [29.97]	.525 [13.34]	.900 [22.86]	102387-4
22	1.280 [32.51]	.575 [14.61]	1.000 [25.40]	1-102387-5
24	1.380 [35.05]	.625 [15.88]	1.100 [27.94]	102387-5
26	1.480 [37.59]	.675 [17.15]	1.200 [30.48]	102387-6
30	1.680 [42.67]	.775 [19.69]	1.400 [35.56]	102387-7
34	1.880 [47.75]	.875 [22.23]	1.600 [40.64]	102387-8
40	2.180 [55.37]	1.025 [26.04]	1.900 [48.26]	102387-9
44	2.380 [60.45]	1.125 [28.58]	2.100 [53.34]	1-102387-3
50	2.680 [68.07]	1.275 [32.39]	2.400 [60.96]	1-102387-0
60	3.180 [80.77]	1.525 [38.74]	2.900 [73.66]	1-102387-1
64	3.380 [85.85]	1.625 [41.28]	3.100 [78.74]	1-102387-2

\*Cavity identification, part number and date code stamped on **Housing** where size permits

†Non-functional slot is used for gating purposes during injection molding process. This gating feature is not inherent in all production molds. Therefore, the depicted slot will only be present on **Housings** produced on mold tooling requiring this gating feature. Note: Contact Extraction/Lance Reset Tool No. 843996-3

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

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### KEYING PLUGS



**Part No. 86286-1**

(Plugs into standard or intermediate pressure receptacle contact)

**MATERIAL**

Natural color nylon



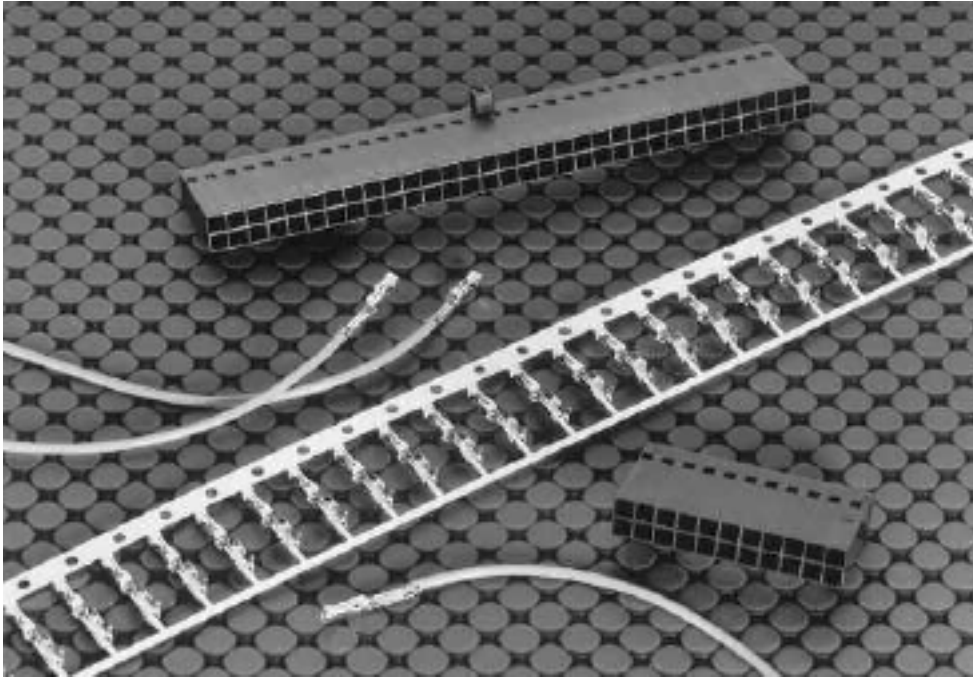
**Part No. 87077-1**

(for .645 high Housings)

**Part No. 87077-2**

(Plugs directly into Housing)

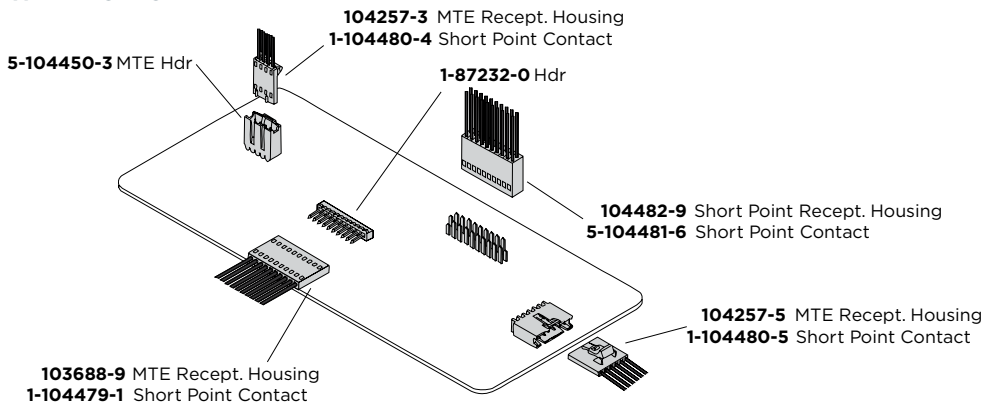
### SHORT POINT, CRIMP SNAP-IN WIRE-APPLIED CONTACTS AND HOUSINGS



#### PRODUCT FACTS

- Short point of contact mates with .169 [4.29] to .259 [6.58] long post
- Double-row **Housings** are end-to-end and side-to-side stackable
- Terminates 32-20 AWG [0.03-0.6 mm<sup>2</sup>] discrete wire
- Contacts have insulation support to accept a maximum insulation diameter of .060 [1.52]
- Available with .000015 [0.00038] or .000030 [0.00076] gold duplex, or tin plating
- Mates with .025 [0.64] square posts
- Dual cantilever contact beams for reliable matings
- Locking retention latch provides approximately 3 lb [13.34 N] of retention force
- Unique locking latch design helps prevent latch from protruding through latch window
- Contacts snap into AMPMODU MTE single-row **Housings**
- Double-row **Housing** configurations include .100 [2.54] centerline, plain and polarized
- **Housing** sizes range from 4 to 52 positions
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189
- Produced under a Quality Management System certified to ISO 9001

#### WIRE-TO-BOARD



AMPMODU Short Point receptacle contacts are designed to mate with .025 [0.64] square posts. They will mate with posts as short as .169 [4.29]. Short Point double-row **Housings** are end-to-end and side-to-side stackable on .100 [2.54] centers. Contacts also can be used in single-row AMPMODU MTE **Housings** to provide a complete wire-crimp system, or to serve as replacement contacts.

#### PERFORMANCE CHARACTERISTICS

Contact Current Rating - 3 amperes

Termination Resistance - 12 milliohms (max.)

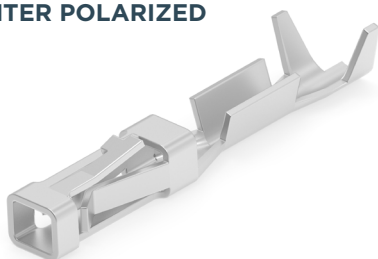
Durability - Ref. Product Specification 108-1472

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### SHORT POINT CRIMP SNAP-IN RECEPTACLE CONTACTS

#### CENTER POLARIZED

#### DIMENSIONS



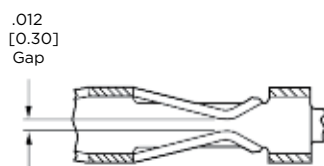
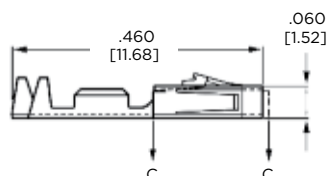
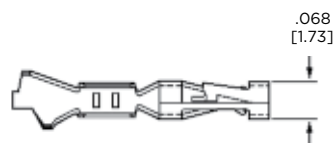
#### MATERIAL AND FINISH

Copper alloy C7025, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating B** - Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating C** - .000100 [0.00254] min. tin over .000050 [0.00127] min. nickel on entire contact



Section C - C

#### RELATED PRODUCT DATA

Performance Characteristics - Page 83

Housings used in - Short Point - Page 148

AMPMODU MTE Unloaded Housings - Page 154

Application Tooling - Page 192

Technical Documents - Page 195

Product Specification - 108-1472

Application Specification - 114-25038



Keying Plug  
Part No. 104072-1

Ten plugs are supplied per strip.  
Order quantity reflects the number of strips required.



Extraction/Lance Reset  
Tool No. 843477-1

### PRODUCT INFORMATION

Wire Size Range		Ins. Dia. Range	Finish	Contact Part No. (Standard Pressure)		Ocean Applicator PN		Hand Tool PN
AWG	[mm <sup>2</sup> ]			Strip Form	Loose Piece	Strip Form	Loose Piece	
32-28	0.03-0.08	.025-.060 [0.64-1.52]	Plating A	1-104481-1	1-104481-3	2836129-2		91518-1
			Plating B	1-104481-0	1-104481-2			
			Plating C	5-104481-2	5-104481-6			
26-22	0.13-0.3	.025-.060 [0.64-1.52]	Plating A	1-104480-3	1-104480-6	2234095-2		91601-1
			Plating B	1-104480-2	1-104480-5			
			Plating C	1-104480-7	1-104480-4			
24-20	0.2-0.5	.025-.060 [0.64-1.52]	Plating A	1-104479-0	1-104479-3	2266323-1, 2266323-2	-	91601-1
			Plating B	104479-9	1-104479-2			
			Plating C	104479-8	1-104479-1			

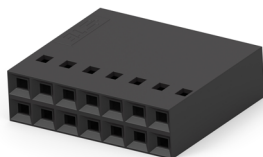
\* For more info please click to view: [document 1](#) and [document 2](#).

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### SHORT POINT WIRE-APPLIED HOUSINGS, DOUBLE-ROW, NON-POLARIZED, .100 X .100 [2.54 X 2.54] CENTERLINE

#### CENTER POLARIZED



#### MATERIAL AND FINISH

Black thermoplastic, flame retardant,  
94V-0 rated

#### RELATED PRODUCT DATA

Performance Characteristics -  
Page 83

Contacts - Page 130

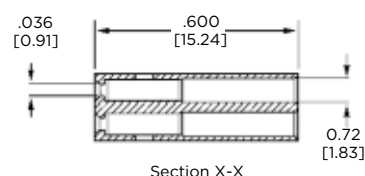
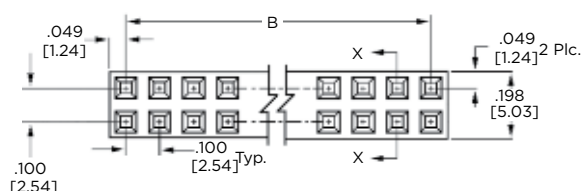
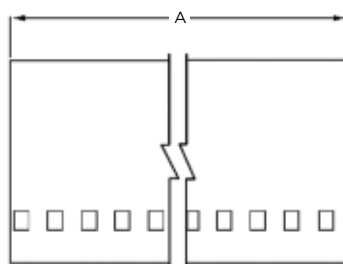
Mateable Headers - Page 10

Technical Documents - Page 195

Product Specification - 108-1472

Application Specification - 114-25038

#### DIMENSIONS



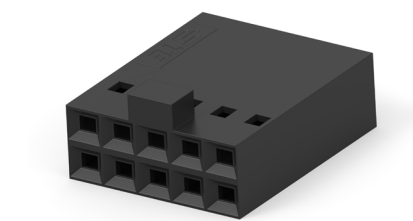
## PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Part No.
	A	B	
4	.198 [5.03]	.100 [2.54]	104482-1
6	.298 [7.57]	.200 [5.08]	104482-2
8	.398 [10.11]	.300 [7.62]	104482-3
10	.498 [12.65]	.400 [10.16]	104482-4
12	.598 [15.19]	.500 [12.70]	104482-5
14	.698 [17.73]	.600 [15.24]	104482-6
16	.798 [20.27]	.700 [17.78]	104482-7
18	.898 [22.81]	.800 [20.32]	104482-8
20	.998 [25.35]	.900 [22.86]	104482-9
22	1.098 [27.89]	1.000 [25.40]	1-104482-0
26	1.298 [32.97]	1.200 [30.48]	1-104482-1
28	1.398 [35.51]	1.300 [33.02]	1-104482-2
30	1.498 [38.05]	1.400 [35.56]	1-104482-3
32	1.598 [40.59]	1.500 [38.10]	1-104482-4
34	1.698 [43.13]	1.600 [40.64]	1-104482-5
36	1.798 [45.67]	1.700 [43.18]	1-104482-6
38	1.898 [48.21]	1.800 [45.72]	1-104482-7
40	1.998 [50.75]	1.900 [48.26]	1-104482-8
44	2.198 [55.83]	2.100 [53.34]	1-104482-9
52	2.598 [65.99]	2.500 [63.50]	2-104482-0

**Note:** All part numbers are RoHS compliant.



SHORT POINT WIRE-APPLIED HOUSINGS, DOUBLE-ROW, POLARIZED, .100 X .100 [2.54 X 2.54] CENTERLINE



MATERIAL

Black thermoplastic, flame retardant, 94V-0 rated

RELATED PRODUCT DATA

Performance Characteristics - Page 83

Contacts - Page 130

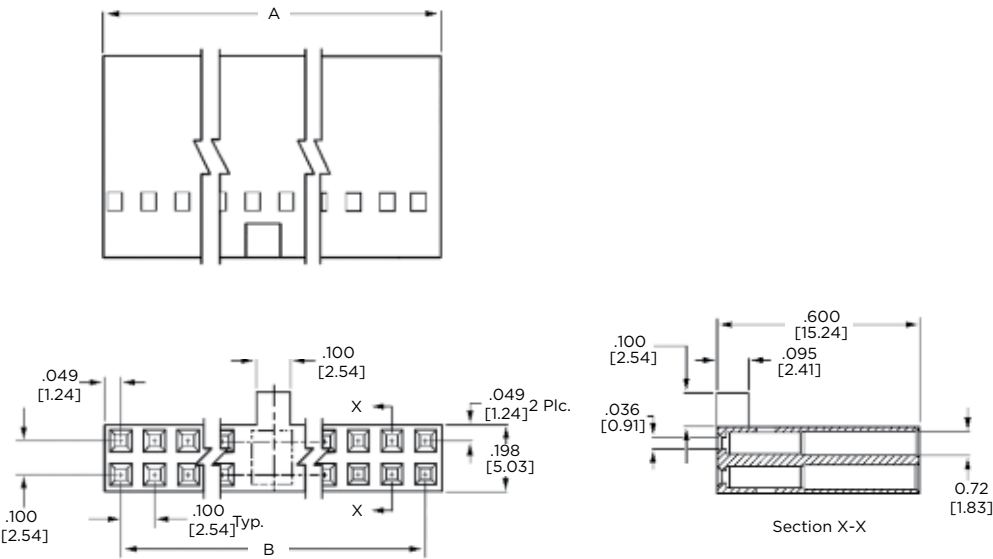
Mateable Headers - Page 10

Technical Documents - Page 195

Product Specification - 108-1472

Application Specification - 114-25038

DIMENSIONS

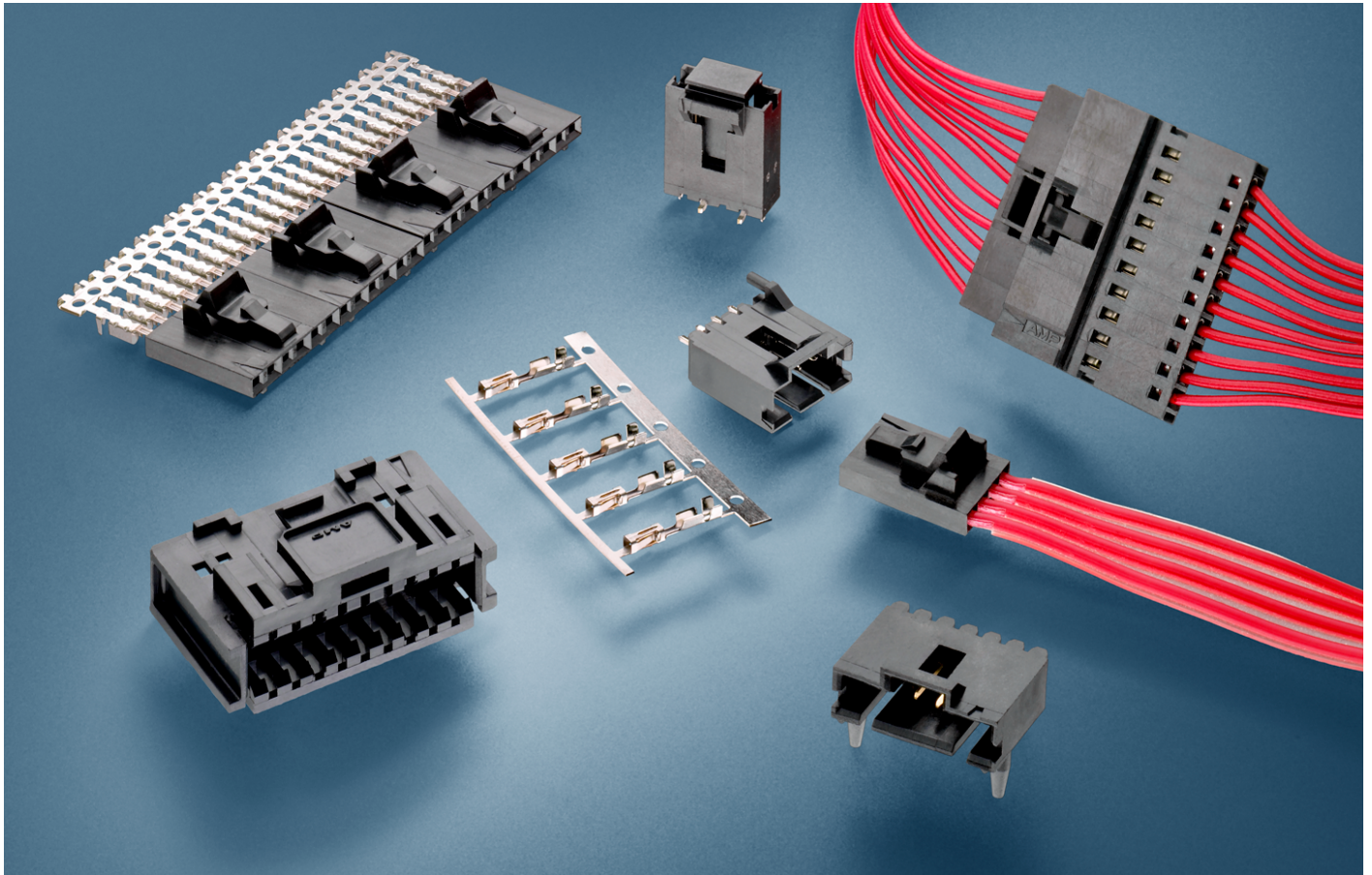


PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Part No.
	A	B	
8	.398 [10.11]	.300 [7.62]	104483-1
10	.498 [12.65]	.400 [10.16]	1-104483-1
12	.598 [15.19]	.500 [12.70]	1-104483-2
14	.698 [17.73]	.600 [15.24]	104483-9
18	.898 [22.81]	.800 [20.32]	104483-2
20	.998 [25.35]	.900 [22.86]	104483-3
26	1.298 [32.97]	1.200 [30.48]	104483-4
30	1.498 [38.05]	1.400 [35.56]	104483-5
38	1.898 [48.21]	1.800 [45.72]	104483-6
50	2.498 [63.45]	2.400 [60.96]	1-104483-3
52	2.598 [65.99]	2.500 [63.50]	1-104483-0
54	2.698 [68.53]	2.600 [66.04]	104483-7
64	3.198 [81.23]	3.100 [78.74]	104483-8

**Note:** All part numbers are RoHS compliant.

### MTE INTERCONNECTION SYSTEM



The AMPMODU MTE Interconnection System offers both wire-to-board and wire-to-wire connectors using .025 [0.64] sq. post technology.

The AMPMODU MTE Interconnection System consists of single-row Housings with contact preloaded on .100 [2.54] centers. Housings are furnished with contacts partially inserted, leaving the termination areas exposed. Final contact insertion can be accomplished automatically with Tyco Electronics application equipment, and manually when terminated with the Tyco Electronics pistol grip hand tool.

The heart of the system is the insulation displacement contact design, featured in both pin and receptacle contacts. The receptacle contact, available in either standard or high-pressure, features dual cantilever beams in an enclosed "box." The post stop helps prevent a mating post from disturbing the wire termination and also limits the mating depth of a long post to protect a wrap-type termination at the base of the post. The forward contact stop helps prevent contact overinsertion prior to termination. All contacts are furnished on carrier strips which are interlocked for stability and positive location during termination.

Single-row Housings are available in sizes 2 through 25 positions. Included are three styles of receptacle Housings—plain, polarized/latching and ribbed and two styles of pin Housings, shrouded with polarizing/latching feature and ribbed.

### MTE INTERCONNECTION SYSTEM

#### FEATURES

- Receptacle assemblies mate with .025 [0.64] sq. posts; mating post length is .200 [5.08] min., .250 [6.35] max.
- Proven AMPMODU receptacle contact design; dual cantilever beams, built-in anti-overstress, completely enclosed “box” design, standard or high-pressure
- Insulation displacement technology
- Two contact sizes for terminating 30-22 AWG [0.05- 0.3 mm<sup>2</sup>] wire range; .054 [1.37] max. insulation diameter with an insulation wall thickness of .015 [0.38] max.
- Choice of gold duplex or tinplated contacts
- Interchangeable crimp snap-in pin and receptacle contacts available
- **Housing** sizes 2 through 25 positions, single-row .100 [2.54] centers
- Plain **Housings** are end-to-end and/or back-to-back stackable for open pin field applications
- Optional header with “swaged tail” feature helps prevent movement prior to flow soldering
- Integral latch provides positive retention between header and receptacle **Housing**
- Coupling shrouds permit ganging of smaller connectors with guide ribs to form larger single- or double-row latching connectors
- Mass terminating tooling provides lowest applied cost for most production needs
- SMT and SMT compatible, high-temp headers available
- Recognized under the Component Program of Underwriters Laboratories Inc., File No. E28476
- Certified by Canadian Standards Association, File No. LR7189

#### APPLICATIONS

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

#### PERFORMANCE SPECIFICATIONS

##### ELECTRICAL CHARACTERISTICS

- **Contact Current Rating:** 3 amperes for single contact in free air (Amperage could vary due to ambient temperature, wire size and duty cycles.)

##### CONTACT TERMINATION

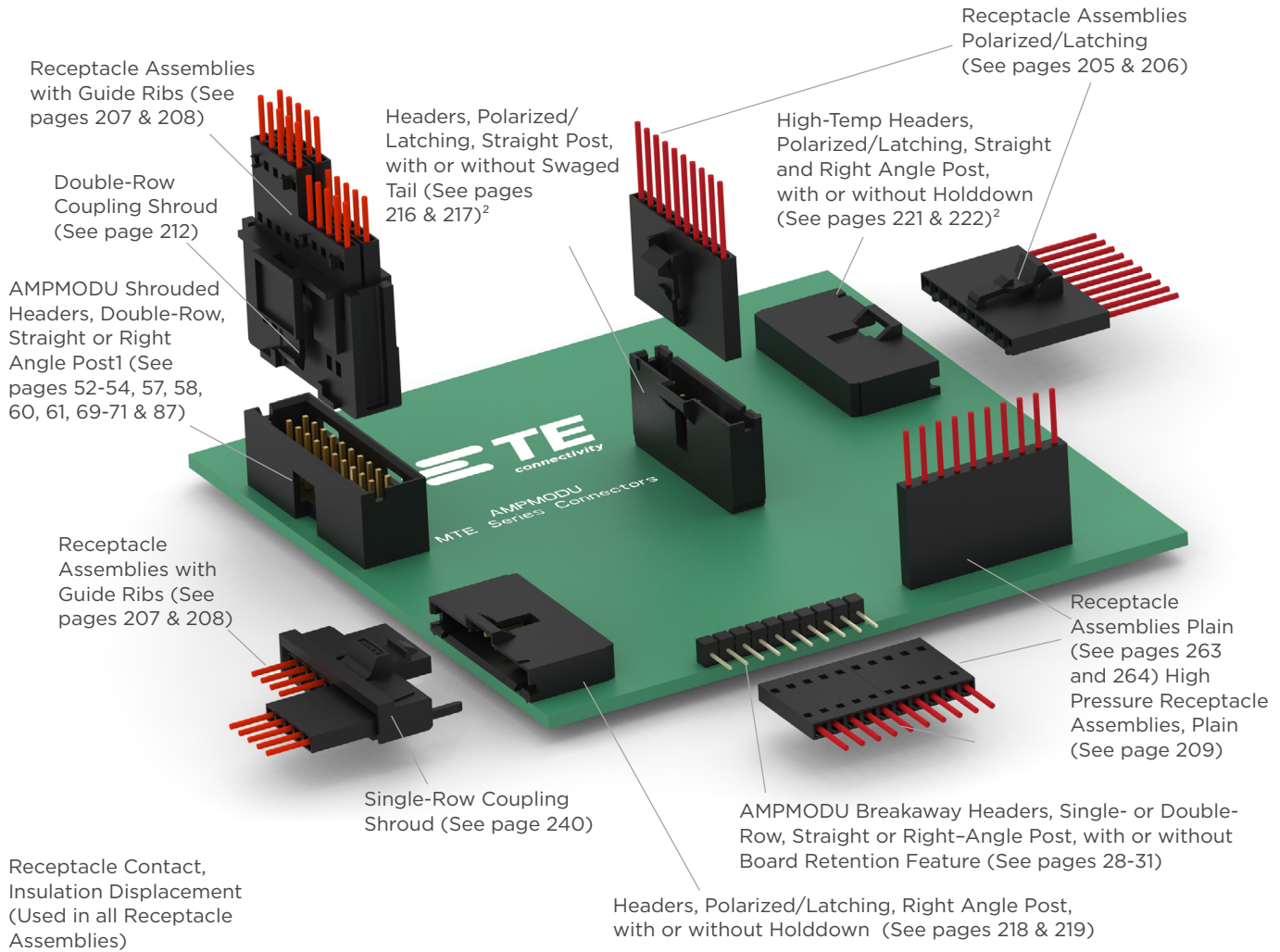
- **Resistance:** 15 milliohms (max.)
- **Dielectric Withstanding Voltage :** @ Sea Level-600 VAC, rms  
@ 70,000 Ft. [21 336 m]-225 VAC, rms
- **Insulation Resistance :** 5,000 megohms (min.)

##### ENVIRONMENTAL CHARACTERISTICS

**Operating Temperature :** -65°C to +105°C  
**Vibration :** 15 G's (gold), 10 G's (tin)  
**Physical Shock :** 50 G's  
**Industrial Mixed Flow Gasing :** Class 1 (20 days) (gold)  
**Product Specification :** 108-25034  
**Application Specification :** 114-25026

### MTE INTERCONNECTION SYSTEM

#### WIRE-TO-BOARD

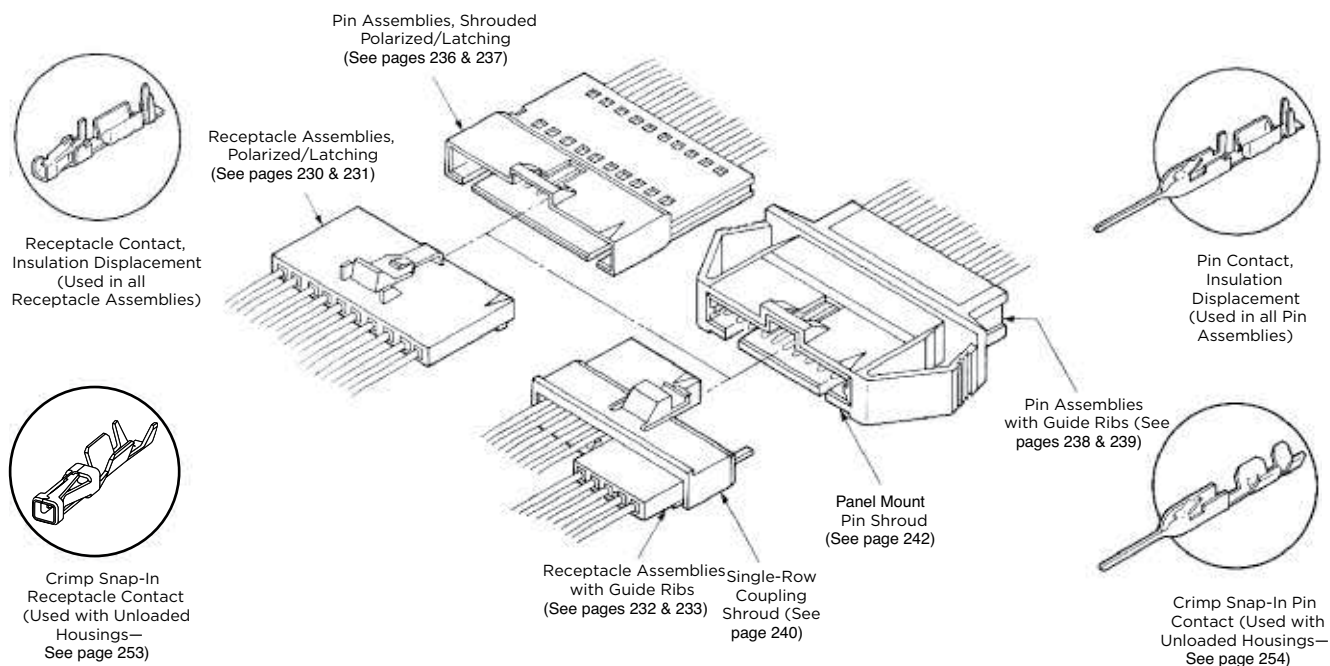


1. Mating AMPMODU Double-Row Shrouded Header Assemblies must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last 1post to inside of end shroud wall.
2. Surface Mount Right-Angle and Vertical Headers are also available (see pages 223 and 224)



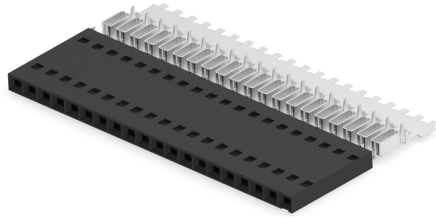
### MTE INTERCONNECTION SYSTEM

#### WIRE-TO-WIRE



**Note:** For wire-to-wire applications shown above, all pin and receptacle assembly combinations are intermateable.

### MTE RECEPTACLE ASSEMBLIES—PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

#### MATERIAL AND FINISH

**Housing** : Black thermoplastic, 94V-0 rated

**Contacts** : Phosphor Bronze, plated as follows:

**Plating A** : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

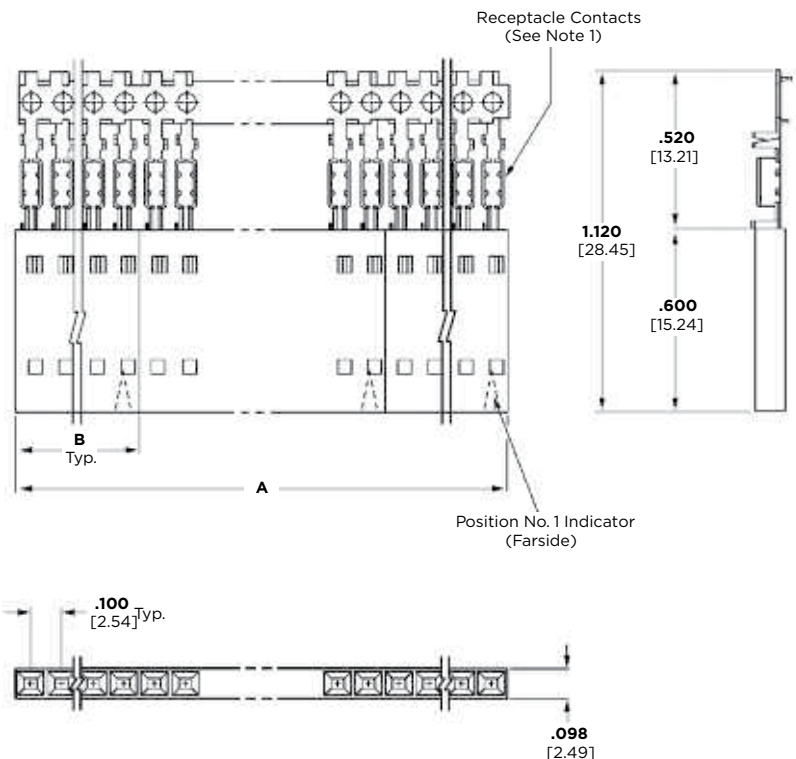
**Plating B** : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

#### Note:

Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded Housings is .200 [5.08] min., .250 [6.35] max.

#### DIMENSIONS



#### RELATED PRODUCT DATA

**Mateable AMPMODU Products Breakaway Headers** : Page 26 (with .230 mating length)

**Reeled Breakaway Headers**:  
Page 36 (with .230 mating length)

**Machine Applied Bandolier Posts** : Page 72  
Single-Row Shrouded Headers with .066 [1.68] End Dimension - Page 48

**Interchangeable Crimp Contacts (Short Point)** : Page 185

**Application Tooling** : Page 192

**Performance Specifications** : Page 102

**Technical Documents** : Page 195

**Product Specification** : 108-25034

**Application Specification** : 114-25026

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103976-1	5-103975-1	5-103974-1	103688-1
3	2.400 [60.96]	.298 [7.57]	8	-	-	-	103688-2
4	1.990 [50.55]	.398 [10.11]	5	5-103976-3	-	5-103974-3	103688-3
5	1.990 [50.55]	.498 [12.65]	4	5-103976-4	5-103975-4	5-103974-4	103688-4
6	2.390 [60.71]	.598 [15.19]	4	5-103976-5	-	-	103688-5
7	1.400 [35.56]	.698 [17.73]	2	-	-	-	103688-6
8	1.600 [40.64]	.798 [20.27]	2	-	-	5-103974-7	103688-7
9	1.800 [45.72]	.898 [22.81]	2	-	-	-	103688-8
10	2.000 [50.80]	.998 [23.35]	2	-	5-103975-9	-	103688-9
11	2.200 [55.88]	1.098 [27.89]	2	-	-	-	1-103688-0

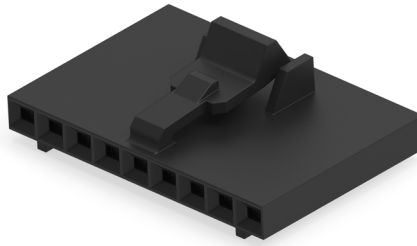
### MTE RECEPTACLE ASSEMBLIES-INDIVIDUAL FORM PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions B	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire	Unloaded Housings
		Plating C	
13	1.298 [32.96]		1-103688-2
16	1.598 [40.59]	6-103687-5	1-103688-5

#### Notes:

1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into “preload” windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
3. Keying plugs are available, see page 225.

### MTE RECEPTACLE ASSEMBLIES - POLARIZED/ LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE



**Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.**

#### MATERIAL AND FINISH

**Housing :** Black thermoplastic, 94V-0 rated

**Contacts :** Phosphor Bronze, plated as follows

**Plating A :** Duplex plated .000030 [0.00076]  
gold on contact area, .000050 [0.00127]  
min. tin in crimp area, with entire contact  
underplated .000050 [0.00127] nickel

**Plating B :** Duplex plated .000015 [0.00038]  
gold on contact area, .000050 [0.00127]  
min. tin in crimp area, with entire contact  
underplated .000050 [0.00127] nickel

**Plating C :** .000100 [0.00254] tin over  
.000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded **Housings** is .200 [5.08] min., .250 [6.35] max.

#### RELATED PRODUCT DATA

Mateable AMPMODU Products

Pin Assemblies (Polarized/Latching) - Page 162

Pin Assemblies with Guide Ribs (installed in  
Panel Mount Pin Shroud) - Page 164

Headers (Polarized/Latching) - Page 170

Interchangeable Crimp Contacts  
(Short Point) - Page 185

Application Tooling - Page 192

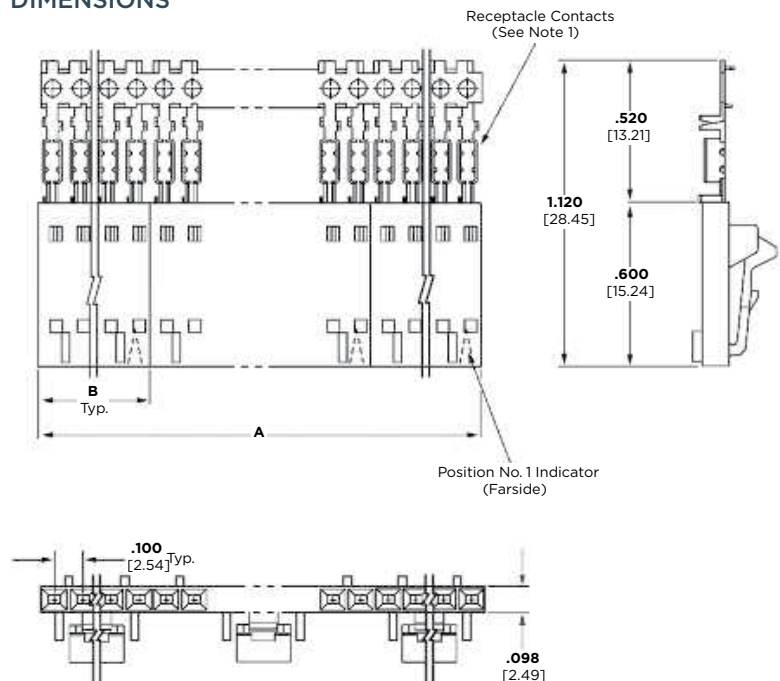
Performance Specifications - Page 102

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-25026

#### DIMENSIONS





## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	5-103961-1	5-103960-1	5-103959-1	5-103958-1	5-103957-1	5-103956-1	104257-1
3	2.400 [60.96]	.298 [7.57]	8	5-103961-2	5-103960-2	5-103959-2	5-103958-2	5-103957-2	5-103956-2	104257-2
4	1.990 [50.55]	.398 [10.11]	5	5-103961-3	5-103960-3	5-103959-3	5-103958-3	5-103957-3	5-103956-3	104257-3
5	1.990 [50.55]	.498 [12.65]	4	5-103961-4	5-103960-4	5-103959-4	5-103958-4	5-103957-4	5-103956-4	104257-4
6	2.390 [60.71]	.598 [15.19]	4	5-103961-5	5-103960-5	-	5-103958-5	5-103957-5	5-103956-5	104257-5
7	1.400 [35.56]	.698 [17.73]	2	5-103961-6	5-103960-6	-	5-103958-6	5-103957-6	5-103956-6	104257-6
8	1.600 [40.64]	.798 [20.27]	2	5-103961-7	5-103960-7	5-103959-7	5-103958-7	5-103957-7	5-103956-7	104257-7
9	1.800 [45.72]	.898 [22.81]	2	5-103961-8	-	-	5-103958-8	5-103957-8	5-103956-8	104257-8
10	2.000 [50.80]	.998 [23.35]	2	5-103961-9	5-103960-9	-	5-103958-9	5-103957-9	5-103956-9	104257-9
11	2.200 [55.88]	1.098 [27.89]	2	-	-	-	6-103958-0	-	6-103956-0	1-104257-0
12	2.400 [60.96]	1.198 [30.43]	2	-	-	-	6-103958-1	6-103957-1	6-103956-1	1-104257-1

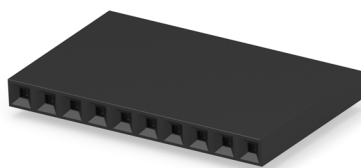
### MTE RECEPTACLE ASSEMBLIES - INDIVIDUAL FORM POLARIZED/LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions B	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
		Plating A	Plating B	Plating C	
13	1.298 [32.96]	-	-	-	1-104257-2
14	1.398 [35.51]	6-103734-3	6-103644-3	6-103645-3	1-104257-3
15	1.498 [38.05]	-	-	-	1-104257-4
16	1.598 [40.59]	6-103734-5	6-103644-5	-	1-104257-5
17	1.698 [43.13]	-	-	-	1-104257-6
18	1.798 [45.67]	6-103734-7	6-103644-7	-	1-104257-7
19	1.898 [48.20]	-	-	-	1-104257-8
20	1.998 [50.75]	-	6-103644-9	-	1-104257-9
21	2.098 [53.29]	-	7-103644-0	-	2-104257-0
22	2.198 [55.83]	-	-	-	2-104257-1
23	2.298 [58.37]	-	-	-	2-104257-2
24	2.398 [60.91]	-	-	-	2-104257-3
25	2.498 [63.45]	-	-	-	2-104257-4

#### Notes:

1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into “preload” windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
3. Keying plugs are available, see page 225.

### MTE RECEPTACLE ASSEMBLIES - GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

#### MATERIAL AND FINISH

**Housing** : Black thermoplastic, 94V-0 rated

**Contacts** : Phosphor Bronze, plated as follows:

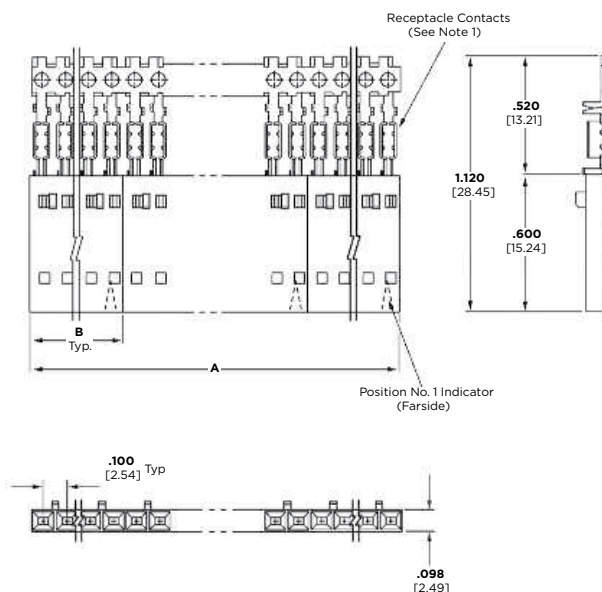
**Plating A** : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded Housings is .200 [5.08] min., .250 [6.35] max.

#### DIMENSIONS



#### RELATED PRODUCT DATA

**Coupling Shrouds used with -**

- Single-Row - Page 166
- Double-Row - Page 166

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds)**

**Pin Assemblies (Polarized/ Latching) - Page 162**

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud) - Page 164**

**Headers (Polarized/Latching) - Page 170**

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds)**

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension) - Page 64**

**Interchangeable Crimp Contacts - (Short Point) - Page 185**

**Application Tooling - Page 192**

**Performance Specifications - Page 102**

**Technical Documents - Page 195**

**Product Specification - 108-25034**

**Application Specification - 114-25026**

## PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire		Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating A	Plating B	Plating C	
2	2.000 [50.80]	.198 [5.03]	10	-	-	5-103970-1	5-103969-1	-	103648-1
3	2.400 [60.96]	.298 [7.57]	8	-	-	-	5-103969-2	5-103968-2	103648-2
4	1.990 [50.55]	.398 [10.11]	5	-	5-103972-3	-	5-103969-3	5-103968-3	103648-3
5	1.990 [50.55]	.498 [12.65]	4	-	-	-	5-103969-4	-	103648-4
6	2.390 [60.71]	.598 [15.19]	4	-	-	-	5-103969-5	5-103968-5	103648-5
8	1.600 [40.64]	.798 [20.27]	2	-	-	-	-	-	103648-7
9	1.800 [45.72]	.898 [22.81]	2	-	-	-	-	-	103648-8
10	2.000 [50.80]	.998 [23.35]	2	5-103973-9	-	-	-	-	103648-9

## MTE RECEPTACLE ASSEMBLIES-INDIVIDUAL FORM WITH GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE

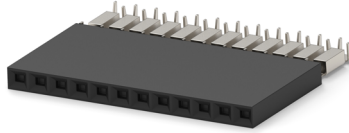
No. of Pos.	Dimensions B	Unloaded Housings
16	1.598 [40.59]	1-103648-5
18	1.798 [45.67]	1-103648-7
21	2.098 [53.29]	2-103648-0
22	2.198 [55.83]	2-103648-1
23	2.298 [58.37]	2-103648-2
24	2.398 [60.91]	2-103648-3
25	2.498 [63.45]	2-103648-4

### Notes:

- Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into “preload” windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
- Use Extraction/Lance Reset Tool No. 843477-1 to remove receptacle contacts.
- Keying plugs are available, see page 213.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MTE HIGH PRESSURE RECEPTACLE ASSEMBLIES - PLAIN, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

#### MATERIAL AND FINISH

**Housing** : Black thermoplastic, 94V-0 rated

**Contacts** : Phosphor Bronze, duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Note:** Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max. Mating post length for preloaded **Housings** is .200 [5.08] min., .250 [6.35] max.

#### RELATED PRODUCT DATA

**Coupling Shrouds used with -Single-Row** - page 201

**Double-Row** - page 202

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Single-Row Coupling Shrouds)**

**Pin Assemblies (Polarized/ Latching)** - Page 162

**Pin Assemblies with Guide Ribs (installed in Panel Mount Pin Shroud)** - Page 164

**Headers (Polarized/Latching)** - Page 170

**Mateable AMPMODU Products (with Receptacle Assemblies Installed in Double-Row Coupling Shrouds)**

**Headers, Shrouded, Double-Row (.318 [8.08] mating post length, .150 [3.81] end dimension)** - Page 64

**Interchangeable Crimp Contacts - (Short Point)** - Page 185

**Application Tooling** - Page 192

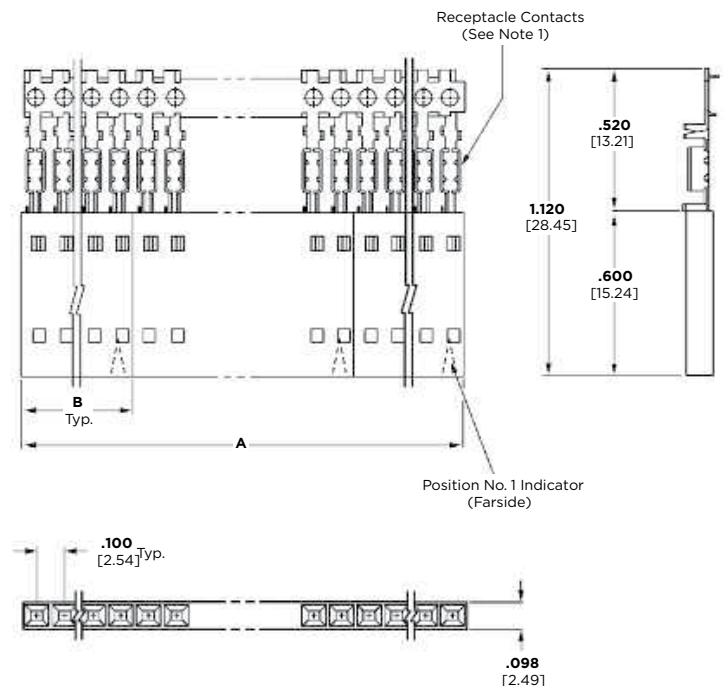
**Performance Specifications** - Page 83

**Technical Documents** - Page 195

**Product Specification** - 108-25034

**Application Specification** - 114-25026

#### DIMENSIONS



### PRODUCT INFORMATION

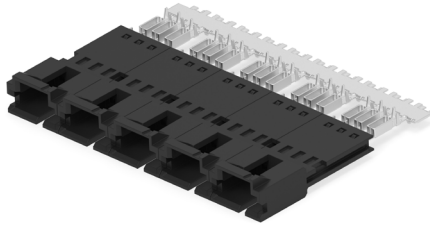
No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire
	A	B		
2	1.980 [50.29]	.198 [5.03]	10	5-104439-1
6	2.390 [60.71]	.598 [15.19]	4	5-104439-5

#### Notes:

1. Receptacle assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into "preload" windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
2. High pressure receptacle contacts can be made available in other **Housing** styles and position sizes. Contact your Tyco Electronics sales representative.

**Note:** All part numbers are RoHS compliant.

### MTE PIN ASSEMBLIES, SHROUDED-POLARIZED/LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE



Preassembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

#### MATERIAL AND FINISH

**Housing** : Black thermoplastic, 94V-0 rated

**Contacts** : Phosphor Bronze, plated as follows:

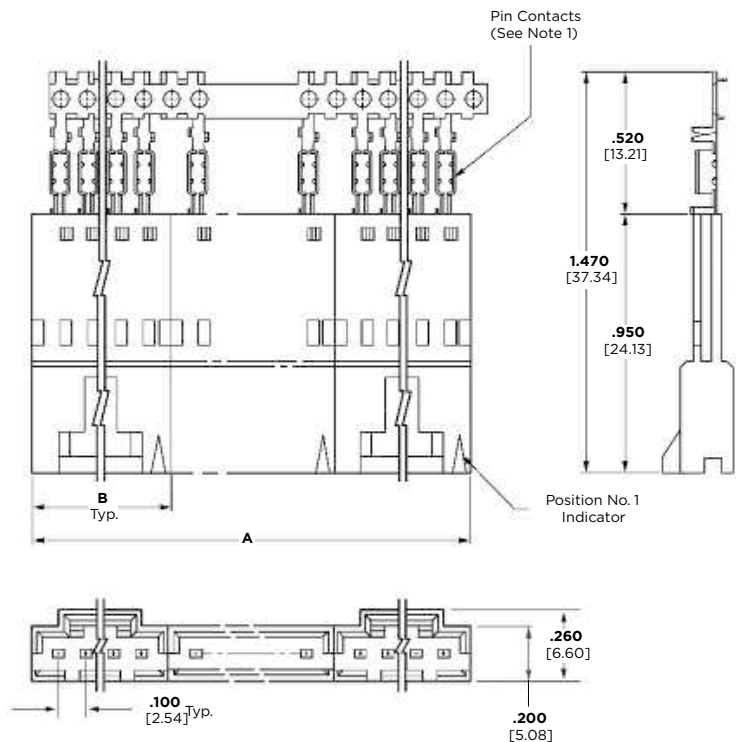
**Plating A** : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** : .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76]min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

#### DIMENSIONS



#### RELATED PRODUCT DATA

Mateable AMPMODU Products - Receptacle Assemblies (Polarized/Latching) - Page 156

Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

Interchangeable Crimp Contacts - Page 185

Application Tooling - Page 192

Performance Specifications - Page 102

Technical Documents - Page 195

Product Specification 108-25034

Application Specification 114-25026

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 30-26 AWG [0.05-0.15mm <sup>2</sup> ] Wire			Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire			Unloaded Housings
	A	B		Plating A	Plating B	Plating C	Plating A	Plating B	Plating C	
2	2.360 [59.94]	.295 [7.49]	8	5-103949-1	5-103948-1	5-103947-1	5-103946-1	5-103945-1	5-103944-1	103653-1
3	1.980 [50.29]	.395 [10.03]	5	5-103949-2	5-103948-2	5-103947-2	5-103946-2	5-103945-2	5-103944-2	103653-2
4	1.980 [50.29]	.495 [12.57]	4	5-103949-3	5-103948-3	5-103947-3	5-103946-3	5-103945-3	5-103944-3	103653-3
5	2.380 [60.45]	.595 [15.11]	4	5-103949-4	5-103948-4	-	5-103946-4	5-103945-4	5-103944-4	103653-4
6	1.390 [35.31]	.695 [17.65]	2	5-103949-5	5-103948-5	-	5-103946-5	5-103945-5	-	103653-5
7	2.390 [60.71]	.795 [20.19]	3	5-103949-6	-	-	5-103946-6	5-103945-6	5-103944-6	103653-6
8	1.790 [45.47]	.895 [22.73]	2	-	5-103948-7	-	5-103946-7	5-103945-7	-	103653-7
9	1.990 [50.57]	.995 [25.27]	2	5-103949-8	-	-	5-103946-8	5-103945-8	-	103653-8
10	2.190 [55.63]	1.095 [27.81]	2	5-103949-9	-	-	5-103946-9	5-103945-9	-	103653-9
11	2.390 [60.71]	1.195 [30.35]	2	-	-	-	-	6-103945-0	-	1-103653-0
12	2.590 [65.79]	1.295 [32.89]	2	-	-	-	-	-	-	1-103653-1

### MTE PIN ASSEMBLIES, SHROUDED-INDIVIDUAL FORM POLARIZED/LATCHING, SINGLE-ROW, .100 [2.54] CENTERLINE

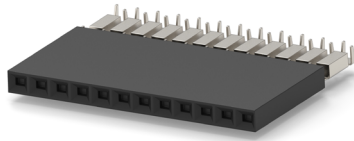
No. of Pos.	Dimensions B	Unloaded Housings
13	1.395 [35.43]	1-103653-2
14	1.495 [37.97]	1-103653-3
15	1.595 [40.51]	1-103653-4
16	1.695 [43.05]	1-103653-5
17	1.795 [45.59]	1-103653-6
18	1.895 [48.13]	1-103653-7
19	1.995 [50.67]	1-103653-8
20	2.095 [53.21]	1-103653-9
21	2.195 [55.75]	2-103653-0
22	2.295 [58.29]	2-103653-1
23	2.395 [60.83]	2-103653-2
24	2.495 [63.37]	2-103653-3
25	2.595 [65.91]	2-103653-4

#### Notes:

- Pin assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into “preload” windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
- Use Extraction/Lance Reset Tool No. 843477-1 to remove pin contacts.

**Note:** All part numbers are RoHS compliant.

### MTE PIN ASSEMBLIES-GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE



Preamsembled Housings in strip form are available in positions 2 thru 12. For ease of handling, positions 2 thru 5 are recommended when using the Tyco Electronics Manual Pistol Grip Tool.

#### MATERIAL AND FINISH

**Housing** : Black thermoplastic, 94V-0 rated

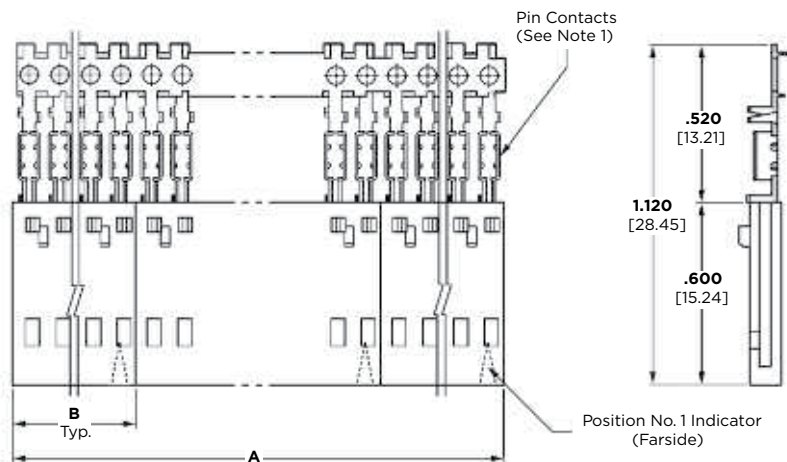
**Contacts** : Phosphor Bronze, plated as follows:

**Plating A** : Duplex plated .000030 [0.00076] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** : Duplex plated .000015 [0.00038] gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

Note: Insulation displacement contacts accept an insulation diameter of .030 [0.76] min. to .054 [1.37] max. with an insulation wall thickness of .015 [0.38] max.

#### DIMENSIONS



#### RELATED PRODUCT DATA

Mateable AMPMODU MTE Products (with Pin Assembly Installed in Panel Mount Pin Shroud) - Page 169

Receptacle Assemblies (Polarized/Latching) - Page 156

Receptacle Assemblies with Guide Ribs (installed in Single Row Coupling Shroud) - Page 158

Interchangeable Crimp Contacts - Page 185

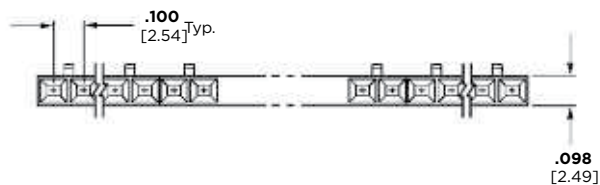
Application Tooling - Page 192

Performance Specifications - Page 185

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-25026





## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Housing Quantities Per Strip Segment	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire		Unloaded Housings
	A	B		Plating A	Plating B	
2	1.980 [50.29]	0.198 [5.03]	10	-	5-103951-1	104503-1
3	1.490 [37.85]	0.298 [7.57]	5	5-103952-2	5-103951-2	104503-2
4	1.990 [50.55]	0.398 [10.11]	5	-	5-103951-3	104503-3
5	1.990 [50.55]	0.498 [12.65]	4	-	5-103951-4	104503-4
7	1.400 [35.56]	0.698 [17.73]	2	-	-	104503-6
8	1.600 [40.64]	0.798 [20.27]	2	-	-	104503-7
10	2.000 [50.80]	0.998 [25.35]	2	-	-	104503-9
12	2.400 [60.96]	1.198 [30.43]	2	-	-	1-104503-1

### MTE PIN ASSEMBLIES-INDIVIDUAL FORM WITH GUIDE RIBS, SINGLE-ROW, .100 [2.54] CENTERLINE

No. of Pos.	Dimensions B	Strip Form Receptacle Assembly 26-22 AWG [0.12-0.3mm <sup>2</sup> ] Wire
		Plating A
13	1.398 [35.51]	6-103895-2
19	1.998 [50.75]	6-103895-8

#### Notes:

- Pin assemblies are furnished with strip contacts partially inserted into **Housing**-contacts latched into “preload” windows. Contacts are fully inserted into **Housings** automatically when terminated with Tyco Electronics application machines, or manually when terminated with Tyco Electronics pistol grip hand tool.
- Use Extraction/Lance Reset Tool No. 843477-1 to remove pin contacts.

**Note:** All part numbers are RoHS compliant.

COUPLING SHROUDS FOR MTE RECEPTACLE ASSEMBLIES WITH GUIDE RIBS

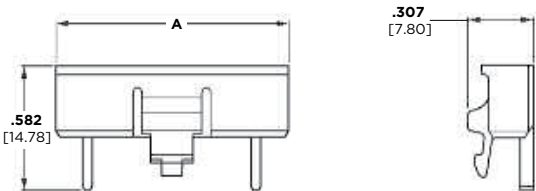
SINGLE-ROW



MATERIAL

Black thermoplastic, 94V-0 rated  
Technical Documents - Page 195  
Product Specification - 108-25034  
Application Specification - 114-25026

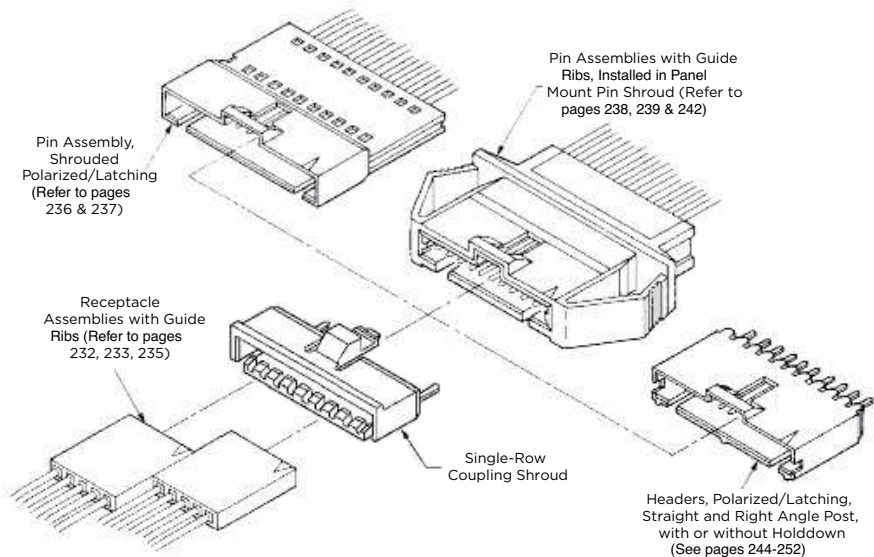
DIMENSIONS



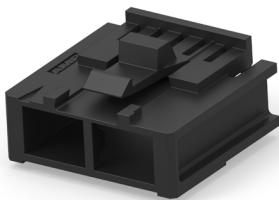
PRODUCT INFORMATION

No. of Pos.	Dimensions A	Single-Row Coupling Shroud
4	.485 [12.32]	103680-1
7	.785 [19.94]	103680-4
8	.885 [22.48]	103680-5
9	.985 [25.02]	103680-6
11	1.185 [30.10]	103680-8
14	1.485 [37.72]	1-103680-1
17	1.785 [45.34]	1-103680-4
18	1.885 [47.88]	1-103680-5
21	2.185 [55.50]	1-103680-8
22	2.285 [58.04]	1-103680-9
23	2.385 [60.58]	2-103680-0

TYPICAL APPLICATION OF SINGLE-ROW COUPLING SHROUD AND MATING AMPMODU MTE PRODUCTS



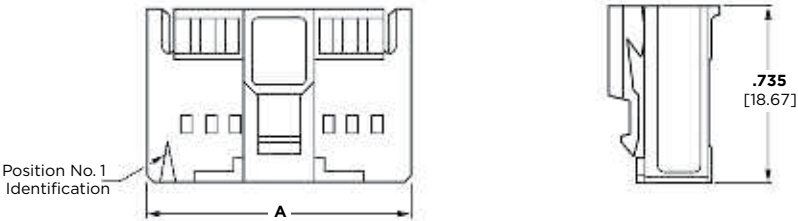
COUPLING SHROUDS FOR MTE RECEPTACLE ASSEMBLIES WITH GUIDE RIBS (Continued)  
DOUBLE-ROW



MATERIAL

Black thermoplastic, 94V-0 rated  
Technical Documents - Page 195  
Product Specification - 108-25034  
Application Specification - 114-25026

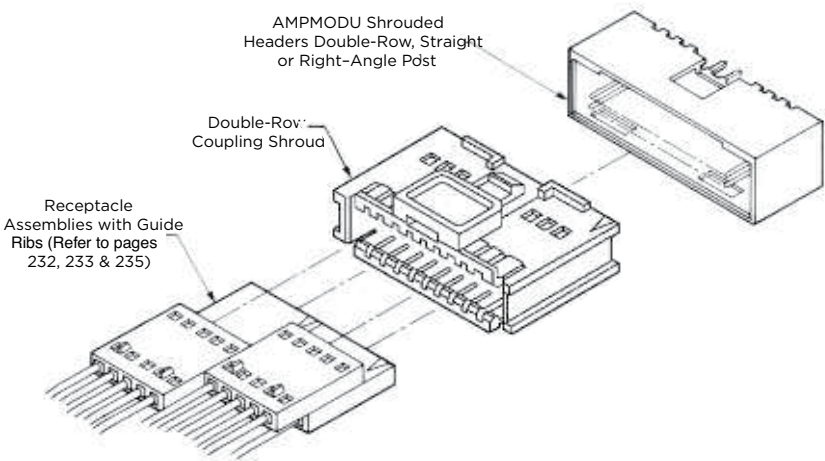
DIMENSIONS



PRODUCT INFORMATION

No. of Pos.	Dimensions A	Single-Row Coupling Shroud
10	.685 [17.40]	103681-2
12	.785 [19.94]	103681-3
16	.985 [25.02]	103681-5
20	1.185 [30.10]	104500-2
32	1.785 [45.34]	104500-8
50	2.685 [68.20]	1-104500-1

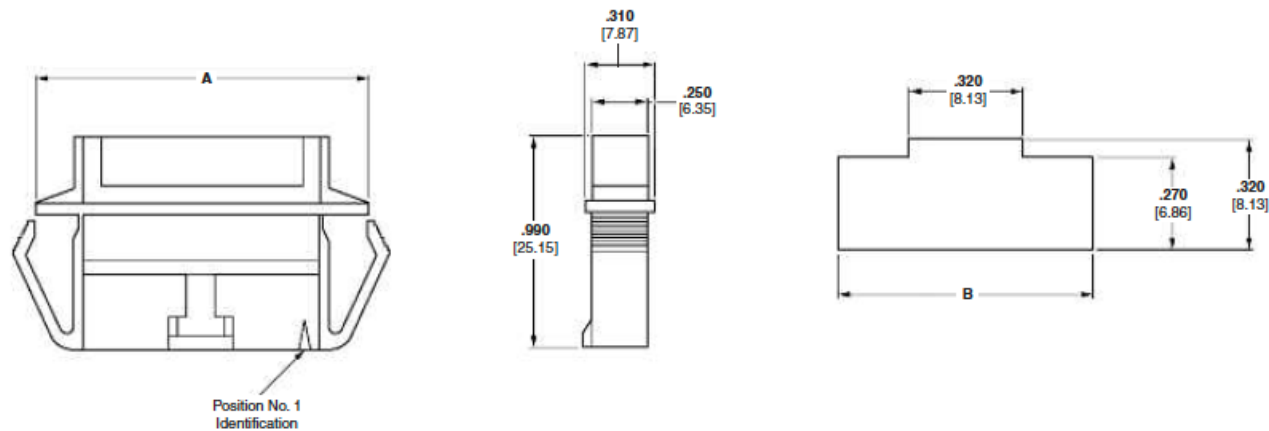
TYPICAL APPLICATION OF DOUBLE-ROW COUPLING SHROUD AND MATING AMPMODU PRODUCTS



**Note:** All part numbers are RoHS compliant.

1. Mating AMPMODU Double-Row Shrouded Headers must have .318 [8.08] mating post length and .150 [3.81] dimension from centerline of last post to inside of end shroud wall.

PANEL MOUNT PIN SHROUDS FOR MTE PIN ASSEMBLIES WITH GUIDE RIBS, SINGLE-ROW



MATERIAL

Black thermoplastic, 94V-0 rated

Technical Documents - Page 195

Product Specification - 108-25034

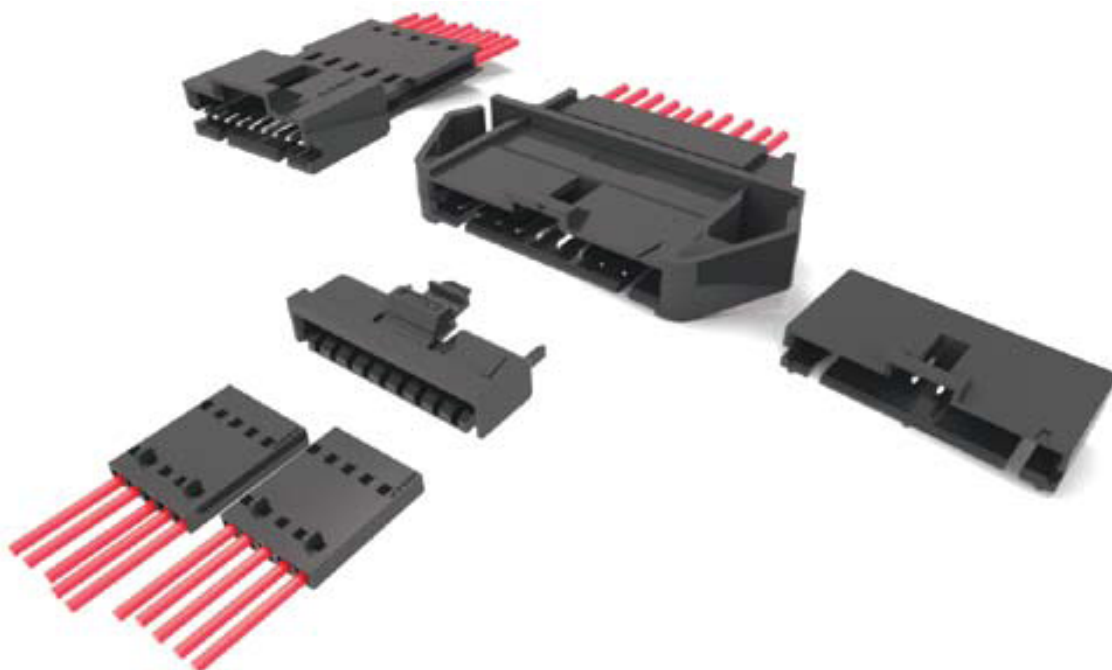
Application Specification - 114-25026

PRODUCT INFORMATION

No. of Pos.	Dimensions		Panel Mount Pin Shroud
	A	B	
2	.735 [18.67]	.625 [15.88]	103682-1
3	.835 [21.21]	.725 [18.42]	103682-2
4	.935 [23.75]	.825 [20.96]	103682-3
5	1.035 [26.29]	.925 [23.50]	103682-4
6	1.135 [28.83]	1.025 [26.04]	103682-5
7	1.235 [31.37]	1.125 [28.58]	103682-6
9	1.435 [36.45]	1.325 [33.66]	103682-8
10	1.535 [38.99]	1.425 [36.20]	103682-9
14	1.935 [49.15]	1.825 [46.36]	1-103682-3
16	2.135 [54.23]	2.025 [51.44]	1-103682-5

**Note:** All part numbers are RoHS compliant.

### PANEL MOUNT PIN SHROUDS FOR MTE PIN ASSEMBLIES WITH GUIDE RIBS, SINGLE-ROW



TYPICAL APPLICATION OF PANEL MOUNT PIN SHROUD AND MATING AMPMODU PRODUCTS

#### MATERIAL

Black thermoplastic, 94V-0 rated

**Technical Documents** - pages 208-210

**Product Specification** - 108-25034

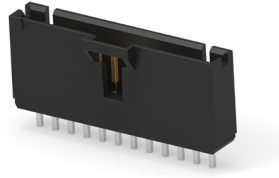
**Application Specification** - 114-25026

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MTE HEADERS, SHROUDED POLARIZED/LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH OR WITHOUT SWAGED TAIL)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts** - Brass, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C** - .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

Mateable AMPMODU MTE

Products - Receptacle Assemblies (Polarized/Latching) - Page 156

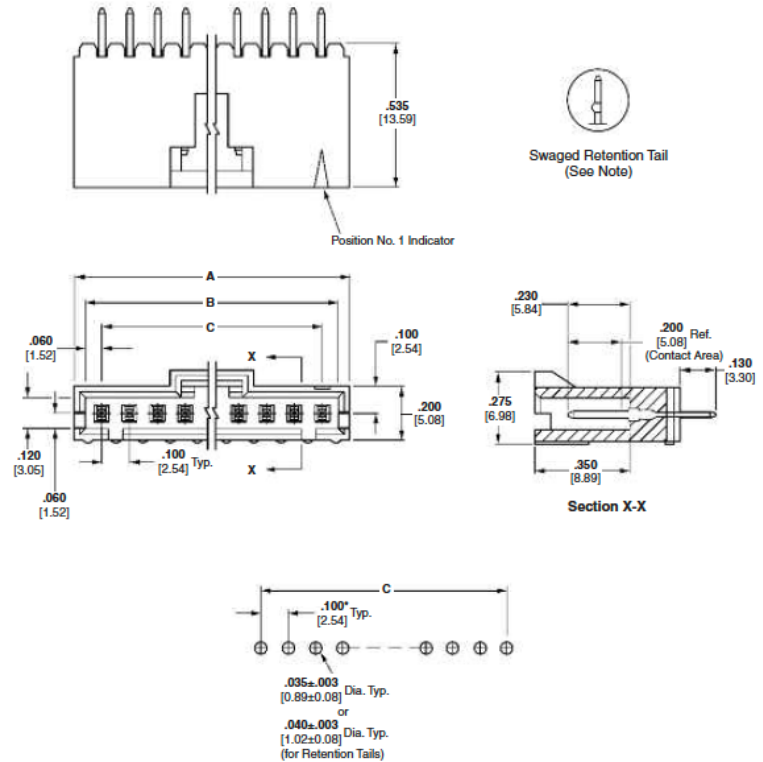
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-250266

#### DIMENSIONS



#### Recommended PC Board Hole Layout

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

Note: Swaged retention tails are provided in a minimum of two locations per header.

## PRODUCT INFORMATION

No. of Pos.	Dimensions			Polarized/Latching Header With Swage			Polarized/Latching Header Without Swage		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103908-1	5-104362-1	5-103669-1	5-103735-1	5-104363-1	5-103639-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103908-2	5-104362-2	5-103669-2	5-103735-2	5-104363-2	5-103639-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103908-3	5-104362-3	5-103669-3	5-103735-3	5-104363-3	5-103639-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103908-4	5-104362-4	5-103669-4	5-103735-4	5-104363-4	5-103639-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103908-5	5-104362-5	5-103669-5	5-103735-5	5-104363-5	5-103639-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103908-6	5-104362-6	5-103669-6	5-103735-6	5-104363-6	5-103639-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103908-7	5-104362-7	5-103669-7	5-103735-7	5-104363-7	5-103639-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103908-8	5-104362-8	5-103669-8	5-103735-8	5-104363-8	5-103639-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103908-9	5-104362-9	5-103669-9	5-103735-9	5-104363-9	5-103639-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	-	-	6-103669-0	6-103735-0	6-104363-0	6-103639-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103908-1	-	-	6-103735-1	6-104363-1	6-103639-1

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions			Polarized/Latching Header With Swage			Polarized/Latching Header Without Swage		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	-	-	6-103669-2	-	6-104910-2	6-103639-2
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103908-3	6-104909-3	6-103669-3	6-103735-3	6-104910-3	6-103639-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	-	6-104909-4	-	6-103735-4	6-104910-4	6-103639-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	6-103908-5	6-104909-5	-	6-103735-5	6-104910-5	6-103639-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	6-103908-6	6-104909-6	-	6-103735-6	6-104910-6	6-103639-6
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	6-103908-7	6-104909-7	-		6-104910-7	6-103639-7
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-103908-9	6-104909-9		6-103735-9	6-104910-9	6-103639-9
22	2.300 [58.42]	2.220 [56.39]	2.100 [53.34]	-	-	-	-	-	7-103639-1
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	-	-	-	-	7-104910-3	-
25	2.600 [66.04]	2.520 [64.01]	2.400 [60.96]	-	7-104909-4	-	7-103735-4	-	-

#### Notes:

1. Selectively loaded headers are available, consult TE.
2. Use Keying Tool No. 91417-1 to remove post for keying.

**Note:** All part numbers are RoHS compliant.

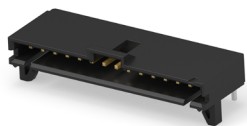
## AMPMODU 2.54MM INTERCONNECT SYSTEM

**MTE HEADERS, SHROUDED LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE**

### .025 [0.64] SQUARE RIGHT-ANGLE POST

## DIMENSIONS

## WITH HOLDDOWN



## MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

Posts - Brass, plated as follows:

**Plating A-** Duplex plated .000030 [0.00076]  
gold on contact area, .000100 [0.00254] min. tin  
on solder area, with entire post underplated  
.000050 [0.00127] nickel

**Plating B-** Duplex plated .000015 [0.00038] gold on contact area, .000100 [0.00254] min. tin on solder area, with entire post underplated .000050 [0.00127] nickel

**Plating C-** .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

## RELATED PRODUCT DATA

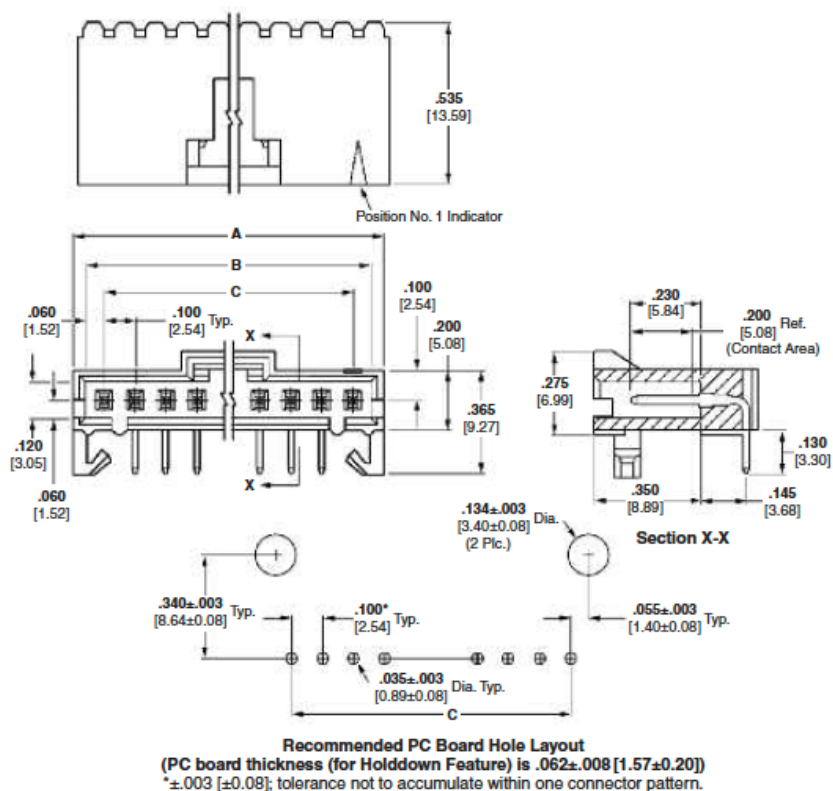
Mateable AMPMODU MTE Products - Receptacle Assemblies (Latching) - Page 156

Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

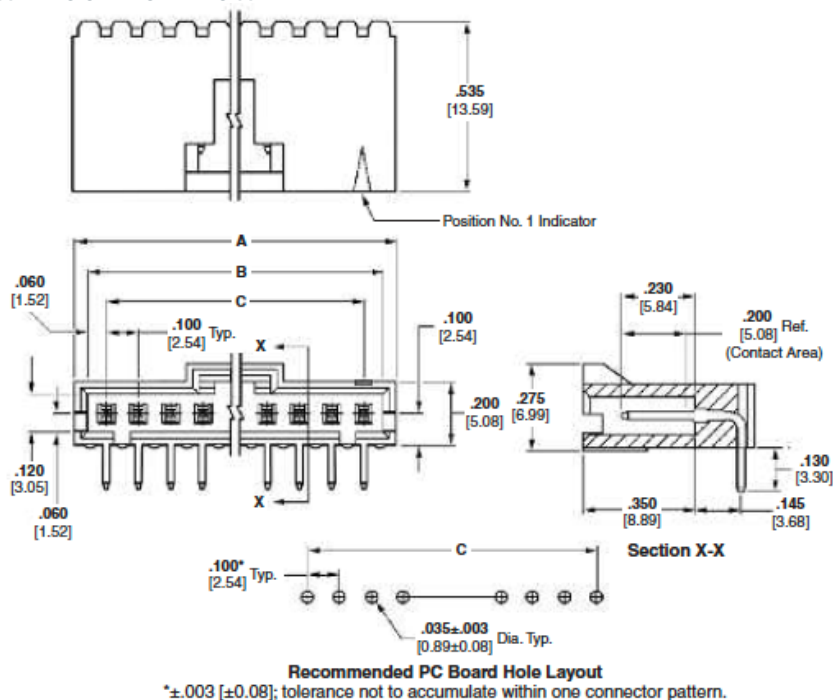
Technical Documents - Page 195

## Product Specification - 108-25034

Application Specification - 114-250266



## WITHOUT HOLDDOWN





## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions			Latching Header With Hold Down			Latching Header Without Hold Down		
	A	B	C	Plating A	Plating B	Plating C	Plating A	Plating B	Plating C
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-103904-1	5-103673-1	5-103672-1	5-104935-5	5-103635-1	5-103634-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-103904-2	5-103673-2	5-103672-2	5-104935-3	5-103635-2	5-103634-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-103904-3	5-103673-3	5-103672-3	5-104935-1	5-103635-3	5-103634-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-103904-4	5-103673-4	5-103672-4	5-104935-6	5-103635-4	5-103634-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-103904-5	5-103673-5	5-103672-5	5-104935-7	5-103635-5	5-103634-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-103904-6	5-103673-6	5-103672-6	5-104935-8	5-103635-6	5-103634-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-103904-7	5-103673-7	5-103672-7	5-104935-2	5-103635-7	5-103634-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-103904-8	5-103673-8	-	5-104935-9	5-103635-8	5-103634-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-103904-9	5-103673-9	5-103672-9	6-104935-0	5-103635-9	5-103634-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	-	6-103673-0	-	6-104935-1	6-103635-0	6-103634-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-103904-1	6-103673-1	6-103672-1	5-104935-4	6-103635-1	6-103634-1
13	1.400 [35.56]	1.320 [33.53]	1.200 [30.48]	-	6-103673-2	-	-	-	-
14	1.500 [38.10]	1.420 [36.07]	1.300 [33.02]	6-103904-3	6-103673-3	-	6-104935-3	6-103635-3	6-103634-3
15	1.600 [40.64]	1.520 [38.61]	1.400 [35.56]	6-103904-4	6-103673-4	-	-	6-103635-4	6-103634-4
16	1.700 [43.18]	1.620 [41.15]	1.500 [38.10]	-	6-103673-5	6-103672-5	-	6-103635-5	6-103634-5
17	1.800 [45.72]	1.720 [43.69]	1.600 [40.64]	-	6-103673-6	-	-	6-103635-6	-
18	1.900 [48.26]	1.820 [46.23]	1.700 [43.18]	-		-	-	6-103635-7	-
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	-	6-103673-9	-	6-104935-9	6-103635-9	6-103634-9
24	2.500 [63.50]	2.420 [61.47]	2.300 [58.42]	-	7-103673-3	-	7-104935-3	7-103635-3	7-103634-3

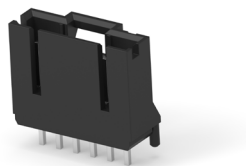
**Note:**

1. Selectively loaded headers are available, consult TE
2. Use Keying Tool No. 91417-1 to remove post for keying

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MTE HEADERS, SHROUDED LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE .025 [0.64] SQUARE STRAIGHT POST (WITH SWAGED TAILS AND PC BOARD ORIENTATION)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts**- Brass, plated .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 156

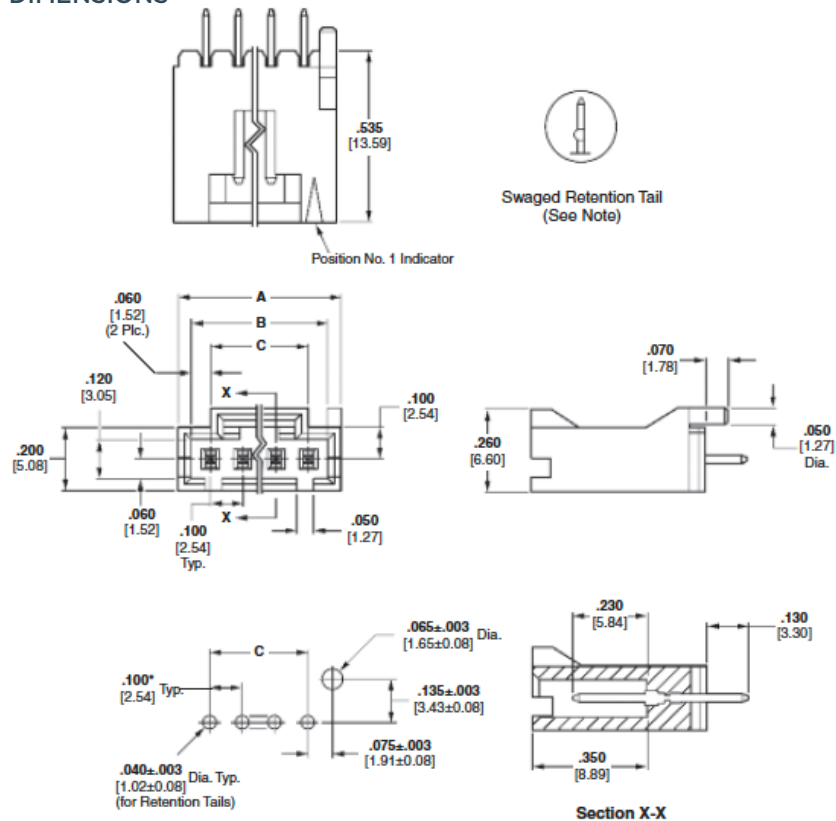
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-25026

#### DIMENSIONS



#### Recommended PC Board Hole Layout

\*±.003 [±0.08]; tolerances not to accumulate within one connector pattern.

**Note:** Swaged retention tails are provided in a minimum of two locations per header.

## PRODUCT INFORMATION

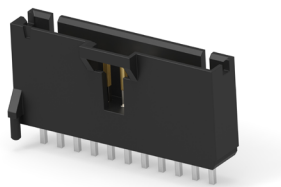
No. of Pos.	Dimensions			Panel Mount Pin Shroud
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104450-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104450-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104450-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104450-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104450-5
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104450-9

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MTE HEADERS, THROUGH-HOLE, SURFACE MOUNT COMPATIBLE, SHROUDED POLARIZED/LATCHING, SINGLE-ROW .100 [2.54] CENTERLINE

#### .025 [0.64] SQUARE STRAIGHT POST (WITH SWAGED TAILS AND PC BOARD ORIENTATION)



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts**- Brass, plated .000100 [0.00254] tin over .000050 [0.00127] nickel on entire post

#### RELATED PRODUCT DATA

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 156

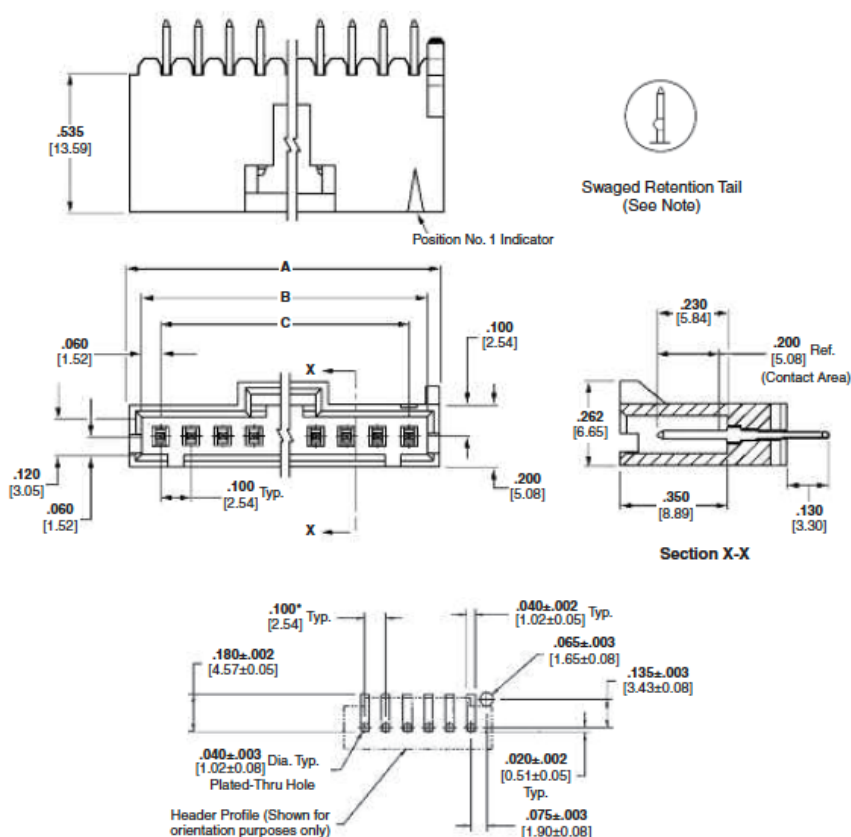
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

Technical Documents - Page 158

Product Specification - 108-25034

Application Specification - 114-25026

#### DIMENSIONS



### PRODUCT INFORMATION

No. of Pos.	Dimensions			Panel Mount Pin Shroud
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104809-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104809-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104809-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104809-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104809-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104809-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104809-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104809-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104809-9
11	1.200 [30.48]	1.120 [28.45]	1.000 [25.40]	6-104809-0
12	1.300 [33.02]	1.220 [30.99]	1.100 [27.94]	6-104809-1

**Note:** All part numbers are RoHS compliant.



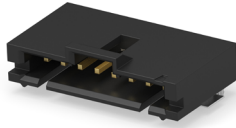
### PRODUCT INFORMATION (Continued)

No. of Pos.	Dimensions			Right-Angle Header with Hold Down
	A	B	C	
2	.300 [7.62]	.220 [5.59]	.100 [2.54]	5-104361-1
3	.400 [10.16]	.320 [8.13]	.200 [5.08]	5-104361-2
4	.500 [12.70]	.420 [10.67]	.300 [7.62]	5-104361-3
5	.600 [15.24]	.520 [13.21]	.400 [10.16]	5-104361-4
6	.700 [17.78]	.620 [15.75]	.500 [12.70]	5-104361-5
7	.800 [20.32]	.720 [18.29]	.600 [15.24]	5-104361-6
8	.900 [22.86]	.820 [20.83]	.700 [17.78]	5-104361-7
9	1.000 [25.40]	.920 [23.37]	.800 [20.32]	5-104361-8
10	1.100 [27.94]	1.020 [25.91]	.900 [22.86]	5-104361-9
20	2.100 [53.34]	2.020 [51.31]	1.900 [48.26]	6-104361-9

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MTE HEADERS, RIGHT-ANGLE, POLARIZED/LATCHING, SURFACE MOUNT



#### MATERIAL AND FINISH

**Housing** - Black thermoplastic, 94V-0 rated

**Posts**- Brass, plated as follows:

**Plating A**- Duplex plated .000030 [.00076] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

**Plating B**- Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

**Plating C**- .000100 [.00254] tin over .000050 [.00127] nickel on entire post

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [.0152] or .008 [.0203] Stencil Thickness)

#### RELATED PRODUCT DATA

Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 156

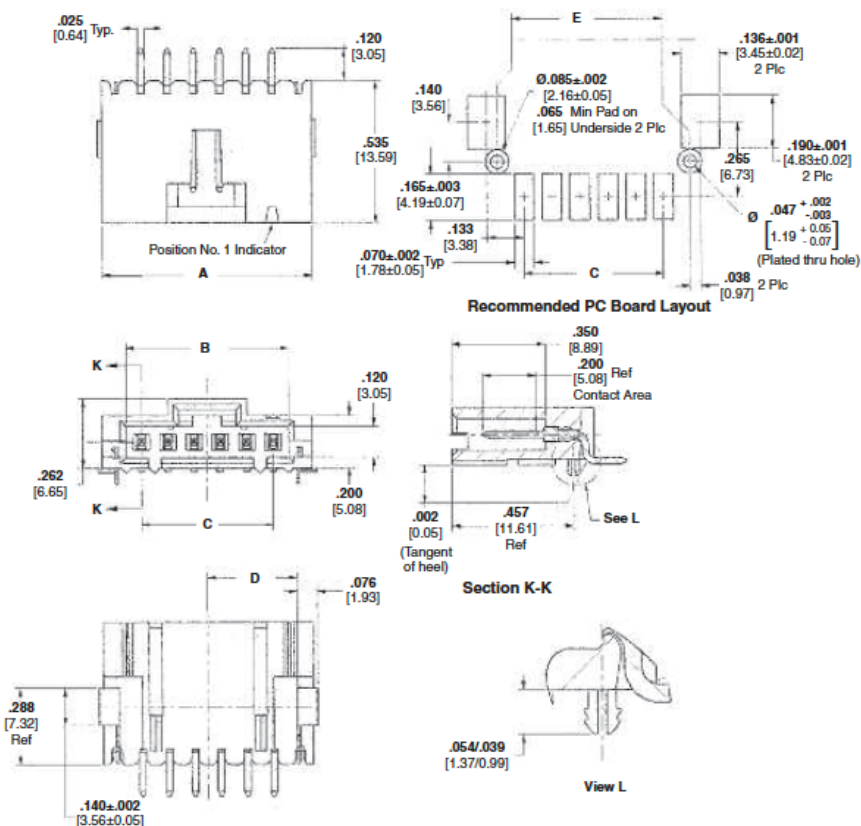
Receptacle Assemblies with Guide Ribs (installed in Single-Row Coupling Shroud) - Page 158

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-25026

#### DIMENSIONS



### PRODUCT INFORMATION

No. of Pos.	Dimensions					Right-Angle Latching SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.400 [10.16]	.220 [5.59]	.100 [2.54]	.140 [3.56]	.290 [7.37]	5-147323-1	5-147278-1	5-147324-1
3	.500 [12.70]	.320 [8.13]	.200 [5.08]	.190 [4.83]	.390 [9.91]	5-147323-2	5-147278-2	5-147324-2
4	.600 [15.24]	.420 [10.67]	.300 [7.62]	.240 [6.10]	.490 [12.45]	5-147323-3	5-147278-3	5-147324-3
5	.700 [17.78]	.520 [13.21]	.400 [10.16]	.290 [7.37]	.590 [14.99]	5-147323-4	5-147278-4	5-147324-4
6	.800 [20.32]	.620 [15.75]	.500 [12.70]	.340 [8.64]	.690 [17.53]	5-147323-5	5-147278-5	-
8	1.000 [25.40]	.820 [20.83]	.700 [17.78]	.440 [11.18]	.890 [22.61]	5-147323-7	5-147278-7	5-147324-7
9	1.100 [27.94]	.920 [23.37]	.800 [20.32]	.490 [12.45]	.990 [25.15]	5-147323-8	5-147278-8	5-147324-8
10	1.200 [30.48]	1.020 [25.91]	.900 [22.86]	.540 [13.72]	1.090 [27.69]	5-147323-9	5-147278-9	-
11	1.300 [33.02]	1.120 [28.45]	1.000 [25.40]	.590 [14.99]	1.190 [30.23]	-	-	6-147324-0
12	1.400 [35.56]	1.220 [30.99]	1.100 [27.94]	.640 [16.26]	1.290 [32.77]	6-147323-1	6-147278-1	6-147324-1
15	1.700 [43.18]	1.520 [38.61]	1.400 [35.56]	.790 [20.07]	1.590 [40.39]	6-147323-4	6-147278-4	-
16	1.800 [45.72]	1.620 [41.15]	1.500 [38.10]	.840 [21.34]	1.690 [42.93]	-	6-147278-5	-



## MTE HEADERS, VERTICAL, POLARIZED/LATCHING, SURFACE MOUNT



Posts- Brass, plated as follows:

**Plating B-** Duplex plated .000015 [.00038] gold on contact area, .000100 [.00254] min. tin on solder area, with entire post underplated .000050 [.00127] nickel

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

**Mateable AMPMODU MTE Products - Receptacle Assemblies (Polarized/Latching) - Page 156**

Receptacle Assemblies with Guide Ribs  
(installed in Single-Row Coupling Shroud)  
- Page 158

Technical Documents - Page 195

## Product Specification - 108-25034

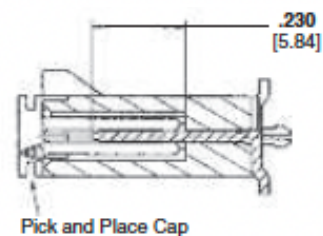
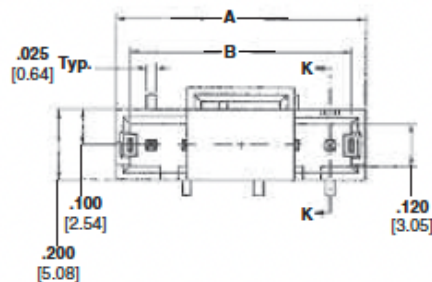
Application Specification - 114-25026

Technical drawing of the front view of a part. The drawing shows a rectangular base with a central raised section. Dimensions are given in inches and millimeters. A position indicator is shown at the bottom right.

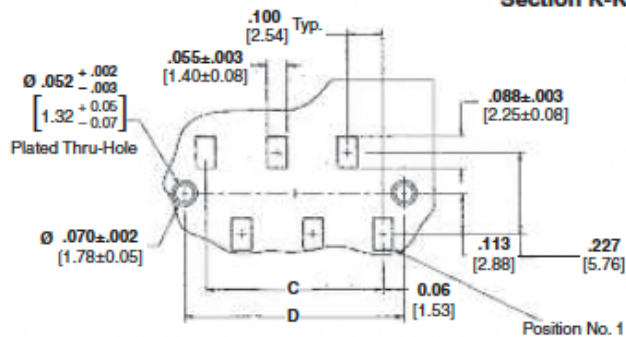
Dimensions:

- Top width:  $E$
- Top left corner:  $.025$  [0.62] Typ.
- Top right corner:  $.075$  [1.90]
- Right side height:  $.535$  [13.59]
- Bottom left corner:  $.313$  [7.62]
- Bottom right corner:  $.063$  [1.52]

Position No. 1 Indicator



Section K-K

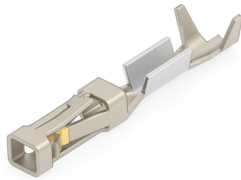


### Recommended PC Board Layout

### PRODUCT INFORMATION

No. of Pos.	Dimensions					Vertical SMT Headers		
	A	B	C	D	E	Plating A	Plating B	Plating C
2	.300[7.62]	.220[5.59]	.100[2.54]	.220[5.60]	.110[2.80]	5-1375583-1	5-1375582-1	5-1375549-1
3	.400[10.16]	.320[8.13]	.200[5.08]	.320[8.14]	.160[4.07]	5-1375583-2	5-1375582-2	5-1375549-2
4	.500[12.70]	.420[10.67]	.300[7.62]	.420[10.68]	.210[5.34]	5-1375583-3	5-1375582-3	5-1375549-3
5	.600[15.24]	.520[13.21]	.400[10.16]	.520[13.22]	.260[6.61]	5-1375583-4	5-1375582-4	5-1375549-4
6	.700[17.78]	.620[15.75]	.500[12.70]	.620[15.76]	.310[7.88]	-	5-1375582-5	-
7	.800[20.32]	.720[18.29]	.600[15.24]	.720[18.30]	.360[9.15]	5-1375583-6	5-1375582-6	5-1375549-6
8	.900[22.86]	.820[20.83]	.700[17.78]	.820[20.84]	.410[10.42]	5-1375583-7	5-1375582-7	5-1375549-7
9	1.000[25.40]	.920[23.37]	.800[20.32]	.920[23.38]	.460[11.69]	5-1375583-8	-	-
10	1.100[27.94]	1.020[25.91]	.900[22.86]	1.020[25.92]	.510[12.96]	5-1375583-9	5-1375582-9	-
11	1.200[30.48]	1.120[28.45]	1.000[25.40]	1.120[28.46]	.560[14.23]	-	-	6-1375549-0

### INTERCHANGEABLE CONTACTS, WIRE CRIMP (SNAP-IN)



#### MATERIAL AND FINISH

Copper alloy C7025, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating B** - Duplex plated .000015 [0.00038] min. gold on contact area, .000050 [0.00127] min. tin in crimp area, with entire contact underplated .000050 [0.00127] min. nickel

**Plating C** - .000100 [0.00254] min. tin over .000050 [0.00127] min. nickel on entire contact

Recommended PC Board Layout (Refer to MTE Application Spec. 114-25026 for Stencil Aperture Layout Using .006 [0.152] or .008 [0.203] Stencil Thickness)

#### RELATED PRODUCT DATA

Performance Characteristics - Page 83

Housings used in - Short Point - Page 148

AMPMODU MTE Unloaded Housings - Page 154

Application Tooling - Page 192

Technical Documents - Page 195

Product Specification - 108-1472, 108-1472-1

Application Specification - 114-25038

#### KEYING PLUG

##### Part No. 104072-1

Ten plugs are supplied per strip. Order quantity reflects the number of strips required.

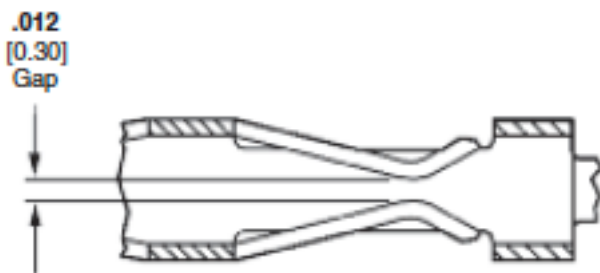
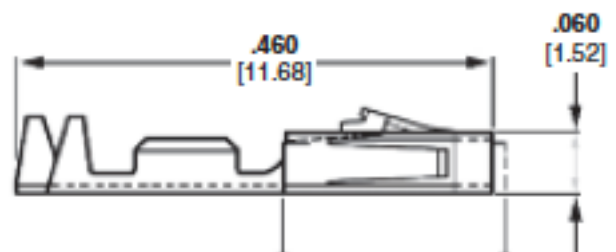
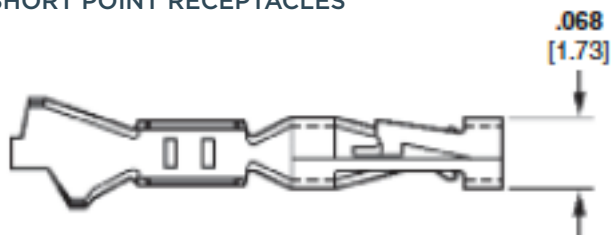


#### EXTRACTION/LANCE RESET

##### Tool No. 843477-1



#### SHORT POINT RECEPTACLES



Section C - C

### PRODUCT INFORMATION

Wire Size Range		Ins. Dia. Range	Finish	Contact Part No. (Standard Pressure)		Ocean Applicator PN		Hand Tool Nos.
AWG	[mm²]			Strip Form	Loose Piece	Strip Form	Loose Piece	
32-28	0.03-0.08	.025-.060 0.64-1.52	Plating A	1-104481-1	1-104481-3	2836129-2		-
			Plating B	1-104481-0	1-104481-2			
			Plating C	5-104481-2	5-104481-6			
26-22	0.13-0.3	.025-.060 0.64-1.52	Plating A	1-104480-3	1-104480-6	2234095-2		91518-1
			Plating B	1-104480-2	1-104480-5			
			Plating C	1-104480-7	1-104480-4			
24-20	0.2-0.5	.025-.060 0.64-1.52	Plating A	1-104479-0	1-104479-3	2266323-1, 2266323-2		91551-1
			Plating B	104479-9	1-104479-2			
			Plating C	104479-8	1-104479-1			

\* For more info please click to view: [document 1](#) and [document 2](#)

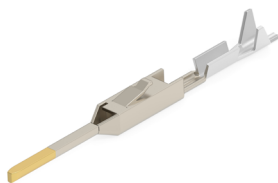
**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### INTERCHANGEABLE CONTACTS, WIRE CRIMP (SNAP-IN)

#### PINS



#### MATERIAL AND FINISH

Phosphor bronze, plated as follows:

**Plating A** - Duplex plated .000030 [0.00076] gold on contact area, .000030 [0.00076] min. tin in crimp area, with entire contact underplated .000050 [0.00127] nickel

**Plating B** - Duplex plated .000015 [0.00038] gold on contact area, .000030 [0.00076] min. tin on solder area, with entire contact underplated .000050 [0.00127] nickel

**Plating C** - .000100 [0.00254] tin over .000050 [0.00127] nickel on entire contact

#### RELATED PRODUCT DATA

Performance Characteristics - Page 83

AMPMODU MTE Unloaded Housings - pages 159

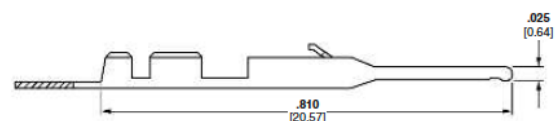
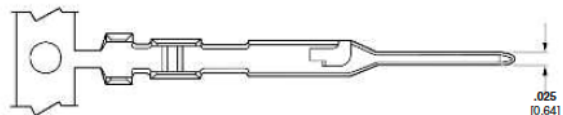
Application Tooling - Page 192

Technical Documents - Page 195

Product Specification - 108-25034

Application Specification - 114-25026

#### DIMENSIONS



#### EXTRACTION/LANCE RESET

Tool No. 843477-1

### PRODUCT INFORMATION

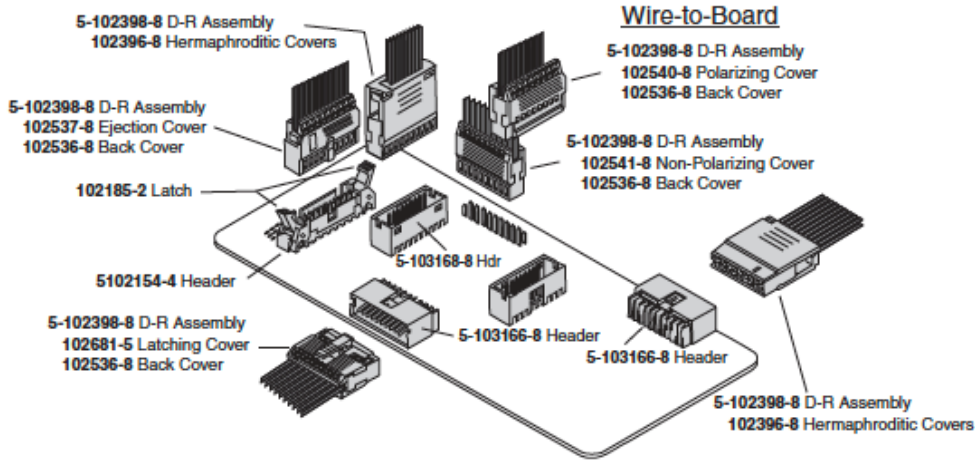
Wire Size Range		Ins. Dia. Range	Finish	Contact Part No. (Standard Pressure)		Ocean Applicator PN	Hand Tool Nos.
AWG	[mm <sup>2</sup> ]			Strip Form	Loose Piece		
32-28	0.03-0.08	.025-.054 0.64-1.37	Plating A	5-104506-6	5-104506-7	2151863-2	-
			Plating B	5-104506-4	5-104506-5		
			Plating C	-	5-104506-3		
26-22	0.14-0.32	.036-.054 0.91-1.37	Plating A	5-104505-6	5-104505-7	2151236-2	91531-1
			Plating B	5-104505-4	5-104505-5		
			Plating C	5-104505-2	5-104505-3		

\* For more info please click to view: [document 1](#) and [document 2](#)

**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

**Note:** All part numbers are RoHS compliant.

### MT AND SHIELDED MT INTERCONNECTION SYSTEM



The AMPMODU MT and Shielded MT Interconnection System offers labor and cost savings through mass termination technology, while maintaining the timeproven 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.

#### 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.

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.

#### 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.

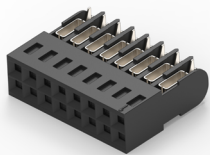
#### PRODUCT FACTS

- 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

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### MT RECEPTACLE ASSEMBLIES, DOUBLE-ROW .100 X .100 [2.54 X 2.54] CENTERLINE

#### HOUSINGS PRE-LOADED WITH STANDARD PRESSURE CONTACTS



**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 - Page 60

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 83

Replacement Contacts - page 201

Connector Covers - Page 190

Application Tooling - Page 192

Technical Documents - Page 195

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

Application Specification - 114-25032

Instruction Sheet - 408-6532

#### KEYING PLUGS

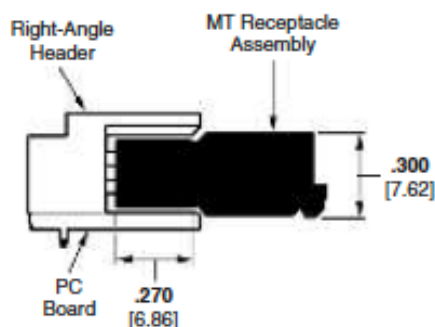
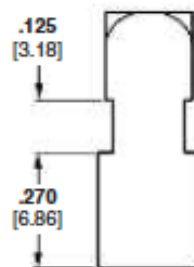
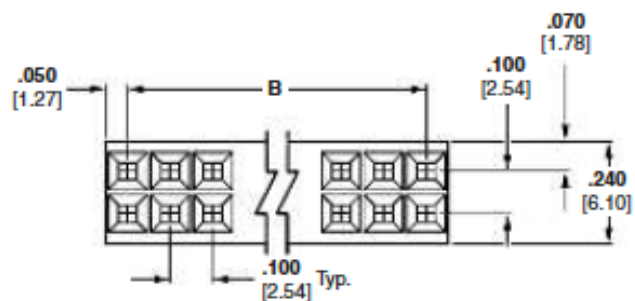
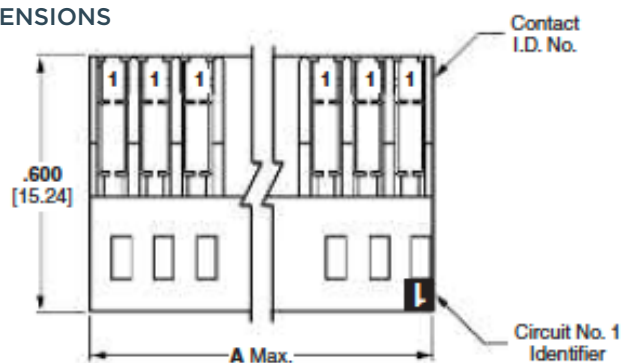


**Part No. 86286-1**  
(Plugs into receptacle contact)



**Part No. 87077-2**  
(Plugs directly into Housing)

#### DIMENSIONS



**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### PRODUCT INFORMATION

No. of Pos.	Dimensions		Part Nos. (Stamped)			Unloaded Housings
			Wire Size Range			
	A	B	30-26 AWG [0.05-0.15 mm²]	26-22 AWG [0.12-0.3 mm²]	22-20 AWG [0.3-0.6 mm²]	
6	.300 [7.62]	.200 [5.08]	5-102393-1	5-102398-1	-	102394-1
8	.400 [10.16]	.300 [7.62]	5-102393-2	5-102398-2	-	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	-	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	-	102394-8
22	1.100 [27.94]	1.000 [25.40]	5-102393-9	-	-	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	-	1-102394-1
28	1.400 [35.56]	1.300 [33.02]	6-102393-2	-	-	1-102394-2
30	1.500 [38.10]	1.400 [35.56]	6-102393-3	6-102398-3	-	1-102394-3
32	1.600 [40.64]	1.500 [38.10]	6-102393-4	-	-	1-102394-4
34	1.700 [43.18]	1.600 [40.64]	6-102393-5	6-102398-5	-	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	-	-
64	3.200 [81.28]	3.100 [78.74]	8-102393-0	-	-	-

**Note:** Contact Extraction/Lance Reset Tool No. 843477-3, see page 245

For use with AMP-O-ELECTRIC Model “K” machines. Call Technical Support Center (1-800-522-6752) for part nos. of applicators for use with the AMP-O-ELECTRIC Model “G” machines (shown on page 255), as well as other bench machines and fully automatic AMPOMATOR lead making machines.

**Note:** These wire crimp contacts can be intermixed with insulation displacement crimp contacts.

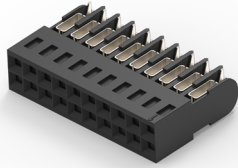
**Note:** All part numbers are RoHS compliant.



## AMPMODU 2.54MM INTERCONNECT SYSTEM

### 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 - Page 10

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 83

Replacement Contacts - page 201

Connector Covers - pages 195, 196

Application Tooling - Page 192

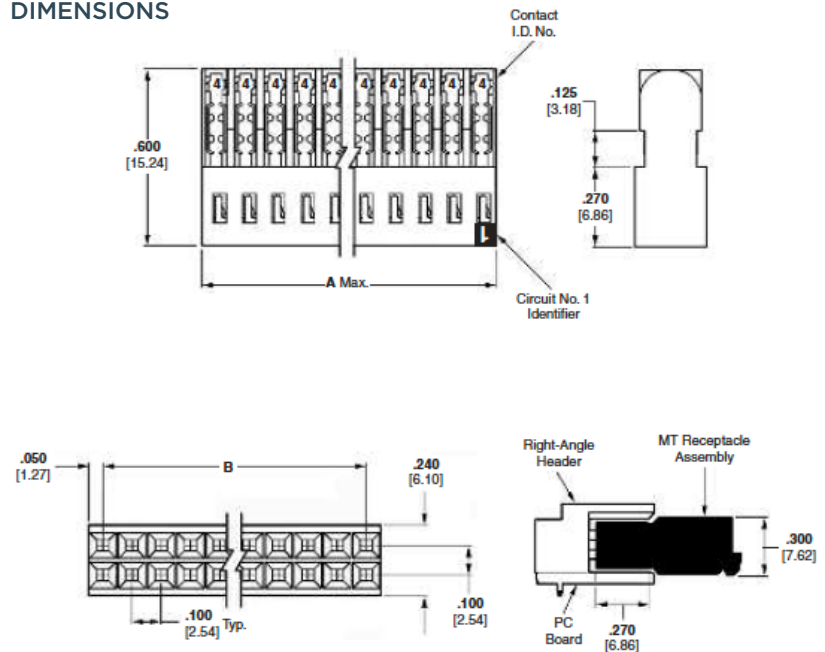
Technical Documents - Page 195

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

Application Specification - 114-25032

Instruction Sheet - 408-6532

#### DIMENSIONS



**Part No. 86286-1**  
(Plugs into receptacle contact)  
Material - Natural color nylon



**Part No. 87077-2**  
(Plugs directly into Housing)

No. of Pos.	Dimensions		Part Nos. (Stamped*)	
			Wire Size Range	
	A	B	30-26 AWG [0.05-0.15 mm <sup>2</sup> ]	26-22 AWG [0.12-0.3 mm <sup>2</sup> ]
6	.300 [7.62]	.200 [5.08]	5-102693-1	5-102694-1
8	.400 [10.16]	.300 [7.62]	5-102693-2	5-102694-2
10	.500 [12.70]	.400 [10.16]	5-102693-3	-
12	.600 [15.24]	.500 [12.70]	5-102693-4	-
14	.700 [17.78]	.600 [15.24]	5-102693-5	-
16	.800 [20.32]	.700 [17.78]	5-102693-6	-
18	.900 [22.86]	.800 [20.32]	5-102693-7	-
20	1.000 [25.40]	.900 [22.86]	5-102693-8	-

\*Cavity identification - first cavity (one side); TE Part No. and date code stamped on **Housing** where size permits.  
Note: Contact Extraction/Lance Reset Tool No. 843477-3, see page 250.

**Note:** All part numbers are RoHS compliant.

### LOW PROFILE COVERS FOR DOUBLE-ROW MT RECEPTACLE ASSEMBLIES

#### FRONT COVERS

##### MATERIAL

Black thermoplastic, flame retardant

##### RELATED PRODUCT DATA

For use on Double-Row MT Receptacle

Assemblies - Page 189

Technical Documents - Page 195

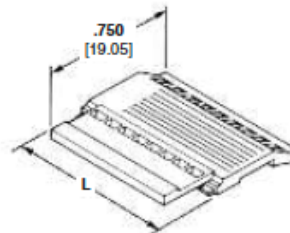
Product Specification - 108-25015,  
108-25018, 108-25030

Application Specification - 114-25032

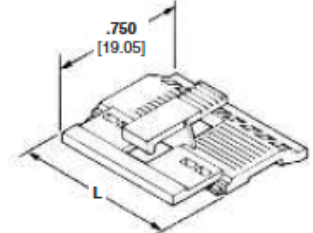
Instruction Sheet - 408-6532

Note: See Page 191 for Low Profile  
Cover Part Nos.

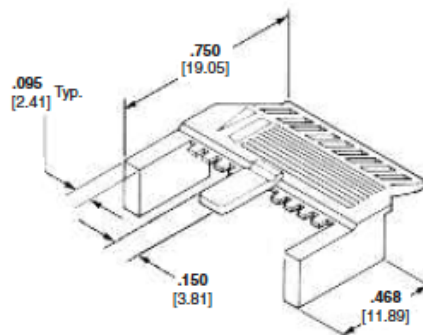
**A - Polarizing Cover**  
(Mates with AMPMODU 4-sided shrouded headers. Refer to pages 117, 122, 126, 130.)



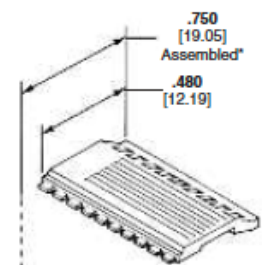
**B - Latching Cover**  
(Mates with AMPMODU 4-sided shrouded headers with extraction slot. Refer to pages 117, 122, 126, 130.)



**C - Ejection Cover**  
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see TE Catalog 82012.)



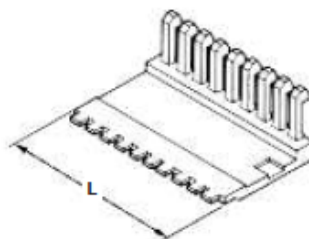
**D - Non-Polarizing Cover**  
(Designed for use with shielded connectors, pages 261 & 262; or for non-polarizing applications.)



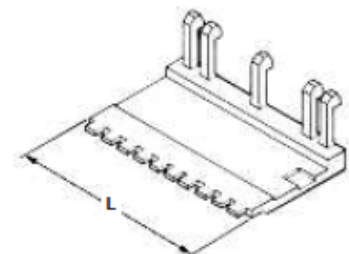
\*Dimension applies to cover when installed on connector housing.

#### Back Covers

**E - For Shielding and Non-Shielding Applications**  
(For use with any low profile cover.)



**F - For Shielding Applications**  
(For use with Non-Polarizing Cover only.)



**Note:** All part numbers are RoHS compliant.

## STANDARD PROFILE COVERS FOR DOUBLE-ROW MT RECEPTACLE ASSEMBLIES

### MATERIAL

Black thermoplastic, flame retardant

### RELATED PRODUCT DATA

For use on Double-Row MT Receptacle Assemblies - Page 189

Technical Documents - Page 195

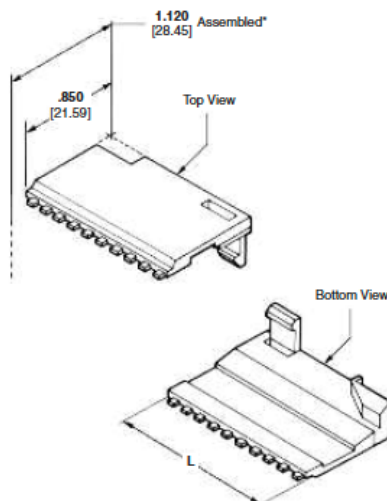
Product Specification - 108-25015, 108-25018, 108-25030

Application Specification - 114-25032

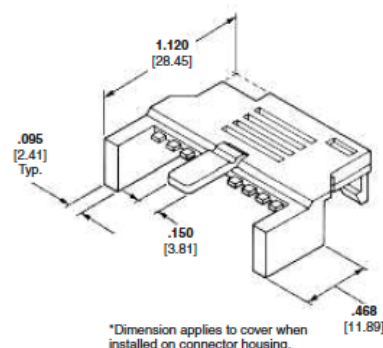
Instruction Sheet - 408-6532

### DIMENSIONS

**G - Hermaphroditic Cover**  
(Two hermaphroditic covers can be used or one hermaphroditic cover can be used with an H Ejection Cover.)



**H - Ejection Cover**  
(Mates with AMP-LATCH universal ejection style pin headers equipped with latching ears, Part No. 102185-2 (with push tabs) or Part No. 102312-2 (without push tabs), see TE Catalog 82012.)



## PRODUCT INFORMATION

No. of Pos.	Dimensions L	Vertical SMT Headers				
		Front Covers				Back Covers
		A Polarizing	B Latching	C Ejection	D Non-Polarizing	E Shielding and Non-Shielding Applications
6	.300 [7.62]	102540-1	-	-	102541-1	102536-1
8	.400 [10.16]	102540-2	-	-	102541-2	102536-2
10	.500 [12.70]	102540-3	-	102537-3	102541-3	102536-3
12	.600 [15.24]	102540-4	102681-1	-	-	102536-4
14	.700 [17.78]	-	102681-2	102537-5	102541-5	102536-5
16	.800 [20.32]	102540-6	102681-3	102537-6	102541-6	102536-6
18	.900 [22.86]	-	102681-4	-	-	102536-7
20	1.000 [25.40]	-	102681-5	102537-8	102541-8	102536-8
24	1.200 [30.48]	-	102681-7	1-102537-0	1-102541-0	1-102536-0
26	1.300 [33.02]	-	102681-8	-	1-102541-1	1-102536-1
30	1.500 [38.10]	-	1-102681-0	-	-	1-102536-3
34	1.700 [43.18]	-	1-102681-2	-	1-102541-5	1-102536-5
40	2.000 [50.80]	-	1-102681-5	1-102537-8	1-102541-8	1-102536-8
50	2.500 [63.50]	-	2-102681-0	2-102537-3	2-102541-3	2-102536-3
60	3.000 [76.20]	-	-	2-102537-8	2-102541-8	2-102536-8

**Note:** All part numbers are RoHS compliant.

## AMPMODU 2.54MM INTERCONNECT SYSTEM

### APPLICATION TOOLING FOR WIRE CRIMP CONTACTS

Tooling shown on this page is designed to terminate wire crimp contacts used in various AMPMODU wire-to-board connectors. Refer to page 5 and 6 to determine the applicable connectors.

#### EDGE, ELECTRONIC APPLICATOR COUNTER

The new versatile EDGE applicator counter tracks wearable tool usage for the most effective maintenance planning. The completely electronic counter with clear LCD display, indicates cycles since installation. By performing maintenance at measured intervals with pre-set limits, operators avoid breakdowns and rejects caused by tool wear or mid-adjustment. For more information, request catalog 1773385.



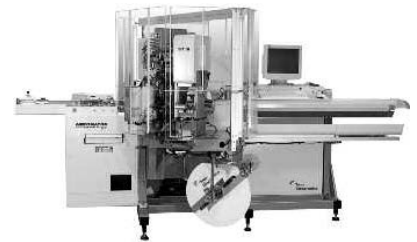
Tooling shown on this page is designed to terminate wire crimp contacts used in various AMPMODU wire-to-board connectors. Refer to page 88 to determine the applicable connectors.

#### AMPOMATOR SYSTEM III LEADMAKER

The AMPOMATOR System III is an automatic machine for the production of terminated wire leads. The machine combines state of the art technology to process single and double wire application utilizing the wire processing industry's best and most friendly subsystems and accessories available to meet the latest market requirements for wire lead production.

The new machine incorporates a servo-driven, software-controlled AMP-O-LECTRIC ST III terminator and the next generation System III Applicator.

See catalog 1654956-5 for more information.



### APPLICATION TOOLING FOR WIRE CRIMP CONTACTS

#### COMMERCIAL PRO-CRIMPER III HAND TOOL

Commercial grade hand tool for crimping various products. Features ratchet control to provide complete crimp cycle. Accepts both pinned- and shouldered style die sets. Locators are provided with pinned-style die sets for proper contact and wire positioning, and to help minimize contact rotation and bending during crimping. Approximate weight 1.3 lb [0.60 kg].

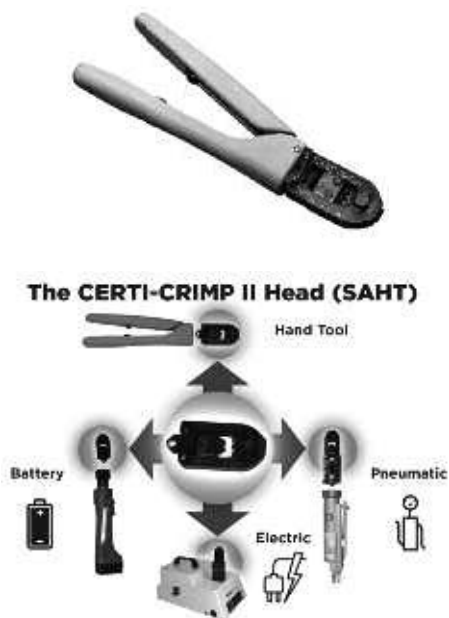


## AMPMODU 2.54MM INTERCONNECT SYSTEM

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### PREMIUM CERTI-CRIMP STRAIGHT ACTION HAND TOOL (SAHT)

TE hand tools are ideal for small production and prototype applications. They feature ratchet control to help eliminate partial crimps, straight-line die closure, terminal locator and support, and insulation crimp adjustment. TE hand tools also can be adapted for use with pneumatic tooling assemblies, providing air operated crimping capabilities. For further details on TE straight action hand tools, request TE Catalog 65780. For more details on TE pneumatic tooling assemblies, call the TE Technical Support Center, 1-800-522-6752.



### APPLICATION TOOLING FOR INSULATION DISPLACEMENT CRIMP (IDC) CONTACTS AND CONNECTORS

Tooling shown on this page is designed to terminate IDC contacts for various AMPMODU wire-to-board connectors. Refer to page 88 to determine the applicable connectors.

#### PISTOL GRIP MANUAL AND AIR POWERED TOOLS

The manual pistol grip tool features an interchangeable modular terminating head which also can be used in the pneumatic version, the Bench Mount Pneumatic Power Assembly and the IDC Electric Power Unit. The head terminates one unstripped wire per cycle and indexes the connector to the next terminating position. The head rotates to permit optimum access to the wiring area. The Bench Mount Pneumatic Power Assembly is air actuated with either a foot or knee switch. This capability frees the operator's hands for optimum positioning.

##### Modular Heads:

58062-1 (for MT connectors)

58336-1 (for MTE connectors)

58395-1 (for Level V IDC connectors)

58540-1 (for MTE connectors, discrete wire or flat ribbon cable)



### TECHNICAL DOCUMENTS FOR BOARD-TO-BOARD PRODUCTS

Various technical documents are available for your use.

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineers.

#### **Receptacle Assemblies and Unshrouded Breakaway Headers, Surface-Mount — Pages 38-40, 107-116**

- 108-25017 AMPMODU Interconnection System, Two-Piece
- 108-25022 AMPMODU Mod. IV Interconnection System, Vertical Assemblies
- 108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header

#### **Two-Piece Printed Circuit Board Connectors — Pages 117-129**

- 108-16 ACTION PIN Contacts
- 108-25017 AMPMODU Interconnection System, Two-Piece
- 108-25027 AMPMODU Mod. II Interconnection System, Short-Point Receptacle Assembly and Header

#### **Receptacle Assemblies, Horizontal and Vertical Board Mount — Pages 78-106**

- 108-25022 AMPMODU Mod. IV Interconnection System, Vertical Assemblies
- 108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header
- 108-25027 AMPMODU Mod. II Interconnection System, Short-Point Receptacle Assembly and Header

#### **.025 [0.64] Square Posts, Headers, Accessories and Tooling — Pages 76-77, 13-24, 130-132, 209-213**

- 108-16 ACTION PIN Contacts
- 108-25026 AMPMODU Mod. II Interconnection System, Standard Pressure Receptacle Assembly and Header

Application Specifications describe requirements for using the product in its intended application, and/or crimping information. They are intended for the Packaging and Design Engineers and the Setup person.

#### **Two-Piece Printed Circuit Board Connectors — Pages 117-129**

- 114-9009 AMPMODU Two-Piece Header Assembly

#### **Receptacle Assemblies, Horizontal and Vertical Board Mount — Pages 78-106**

- 114-25018 AMPMODU Mod. II and IV Receptacle Assembly, PC Board Mounted, Vertical

#### **.025 [0.64] Square Posts, Headers, Accessories and Tooling — Pages 76-77, 13-24, 130-132, 209-213**

- 114-25028 ACTION PIN Contacts with TE Headers, Application
- 114-13011 AMPMODU .025 and .045 Square Continuous Posts

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

#### **Two-Piece Printed Circuit Board Connectors — Pages 117-129**

- 408-2636 ACTION PIN Contact Rear Insertion/Extraction Tool 265871-7
- 408-9054 Seating Tools

#### **Receptacle Assemblies, Horizontal and Vertical Board Mount — Pages 78-106**

- 408-7411 Suggestions for Wave Soldering Vertical AMPMODU Receptacles

#### **.025 [0.64] Square Posts, Headers, Accessories and Tooling — Pages 76-77, 13-24, 130-132, 209-213**

- 408-2636 ACTION PIN Contact Rear Insertion/Extraction Tool 265871-7
- 408-6944 TE Uninsulated Bandolier Post Insertion Tool 91419-1
- 408-7977 AMPMODU Double Row, Straight Posts, End Shrouds .100 x .100 [0.64 x 0.64] Centers
- 408-7878 AMPMODU Header Barrier Inserts
- 408-9054 ACTION PIN Contact Headers Seating Tool, 91170 Series
- 408-9707 Tool Kit 314818-1 for Breakaway Headers

#### **Handbook Guide to Application of ACTION PIN Contact Connectors**

5697

### TECHNICAL DOCUMENTS FOR WIRE-TO-BOARD PRODUCTS

Product Specifications describe technical performance characteristics and verification tests. They are intended for the Design, Component and Quality Engineers.

#### **Locking Clip Contacts and Housings — Pages 133-139**

108-36028 Connector, Locking Clip, .025 [0.64] Square, Gold

108-36028-1 Connector, Locking Clip, .025 [0.64] Square, Tin

#### **Mod. IV Wire-Applied Contacts and Housings — Pages 139-155**

108-25019 AMPMODU Mod. IV Male Connectors

108-25020 AMPMODU Mod. IV Interconnection System, (Standard, Intermediate and High Pressure)

#### **Short-Point Wire-Applied Contacts and Housings — Pages 156-159**

108-1472 Short-Point Contacts and Housings

#### **AMPMODU MTE Interconnection System — Pages 160-195**

108-25034 AMPMODU MTE Connectors

#### **AMPMODU MT and Shielded MT Interconnection System — Pages 196-207**

108-25015 AMPMODU MT Standard Pressure Connectors

108-25018 AMPMODU MT High Pressure Connectors

108-25030 AMPMODU MT Shielding Accessories

Application Specifications describe requirements for using the product in its intended application, and/or crimping information. They are intended for the Packaging and Design Engineers and the Setup person.

#### **Locking Clip Contacts and Housings — Pages 133-139**

114-25006 Contact, Locking Clip, .025 [0.64] Square.

#### **Mod. IV Wire-Applied Contacts and Housings — Pages 139-155**

114-25003 AMPMODU Mod. IV (Standard Pressure), AMPMODU Mod. IV.V (Intermediate Pressure) and AMPMODU Mod. V (High Pressure) Receptacle Contacts.

114-25016 AMPMODU Mod. IV Crimp Pin Contact

#### **Short-Point Wire-Applied Contacts and Housings — Pages 156-159**

114-25038 Short-Point Contacts and Housings

#### **AMPMODU MTE Interconnection System — Pages 160-195**

114-25026 AMPMODU MTE Interconnection System

#### **AMPMODU MT and Shielded MT Interconnection System — Pages 196-207**

114-25032 AMPMODU MT Interconnection System and Shielding Accessories, Application of



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## TECHNICAL DOCUMENTS FOR BOARD-TO-BOARD PRODUCTS

Instruction Sheets provide instructions for assembling or applying the product. They are intended for the Manufacturing Assembler or Operator.

### Locking Clip Contacts and Housings — Pages 133-139

- 408-7604 TE Extraction Tool 91084-1
- 408-7606 TE Locking Clip Contacts and Connectors
- 408-8547 TE Hand Crimp Tool 91533-1, 22-26 AWG Wire
- 408-9388 TE Hand Crimp Tool 90431-1, 20 AWG Wire

### Mod. IV Wire-Applied Contacts and Housings — Pages 139-155

- 408-4379 TE PRO-CRIMPER II Hand Tool
- 408-7935 AMPMODU Receptacle Connectors with Strain Relief/Pull Tabs
- 408-8547 TE Hand Tool 91516-1, 91517-1 and 91541-1
- 408-9451 TE Extraction Tool 843473-1 for AMPMODU Wire-Applied Housings 86308
- 408-9453 TE Extraction Tools 843996 and 843477 for Removing AMPMODU Crimp Snap-In Receptacle Contacts from Wire-Applied Housings

### AMPMODU MTE Interconnection System — Pages 160-195

- 409-5746 TE Electric Power Unit 931800-1
- 409-5832 MTE Ribbon Cable Terminator 856002-1
- 408-6789 TE Pneumatic Pistol Handle 58075-1
- 408-6790 TE Manual Pistol Handle 58074-1
- 408-6919 AMPMODU MTE Connectors
- 408-8547 TE Hand Crimp Tool 91518-1 and 91551-1
- 408-9230 TE Keying Tool 91417-1
- 408-9359 MTE Modular Terminating Head 58336-1
- 408-9393 TE Pneumatic Bench Assy. 58338-1
- 408-9407 TE Hand Crimp Tool 91531-1 and 58342-2
- 408-9453 TE Extraction Tools 843996 and 843477 for Removing AMPMODU Crimp Snap-In Receptacle Contacts from Wire-Applied Housings
- 408-9515 Ribbon Cable Notcher 854449-[]

### AMPMODU MT and Shielded MT Interconnection System — Pages 196-207

- 408-6532 AMPMODU MT Connectors

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