

# Printed Circuit Board Terminals and Disconnects

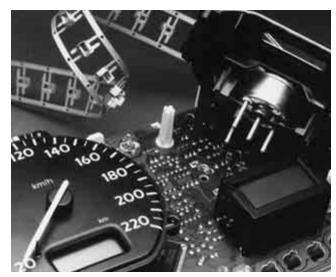






Disclaimer

### Table of Contents



**Printed Circuit Board PCB Pin Receptacles** 

#### **Need more information?**

Call Technical Support at the numbers listed below.

Technical Support is staffed with specialists well versed in all Tyco Electronics products. They can provide you with:

- Technical Support
- Catalogs
- Technical Documents
- **Product Samples**
- Tyco Electronics Authorized Distributor Locations

#### Restriction on the use of Hazardous Substances (RoHS)

At Tyco Electronics, we're ready to support your RoHS requirements. We've assessed more than 1.5 million end items/components for RoHS compliance, and issued new part numbers where any change was required to eliminate the restricted materials. Part numbers in this catalog are identified as:

**RoHS Compliant** — Part numbers in this catalog are RoHS Compliant, unless marked otherwise. These products comply with European Union Directive 2002/95/EC as amended 1 January 2006 that restricts the use of lead, mercury, cadmium, hexavalent chromium, PBB, and PBDE in certain electrical and electronic products sold into the EU as of 1 July 2006.

NOTE: For purposes of this Catalog, included within the definition of RoHS Compliant are products that are clearly "Out of Scope" of the RoHS Directive such as hand tools and other non-electrical accessories.

NOTE: Information regarding RoHS compliance is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information provided by our suppliers. This information is subject to change. For latest compliance status, refer to our website referenced at right.

Our comprehensive on-line RoHS Customer Support Center provides a forum to answer your questions and support your RoHS needs. A RoHS FAQ (Frequently Asked Questions) is available with links to more detailed information. You can also submit RoHS questions and receive a response within 24 hours during a normal work week. The Support Center also provides:

**Getting the Information You Need** 

- Cross-Reference from Non-compliant to Compliant Products
- Ability to browse RoHS Compliant Products in our on-line catalog
- Downloadable Technical Data Customer Information Presentation
- More detailed information regarding the definitions used above
- So whatever your questions when it comes to RoHS, we have the answers at www.tycoelectronics.com/leadfree

#### Tyco Electronics reserves the right to make any adjustments to the information contained herein at any time without notice. Tyco Electronics expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. Tyco Electronics only obligations are those in the Tyco Electronics Standard Terms and Conditions of Sale, and in no case will Tyco Electronics be responsible for any

While Tyco Electronics Corporation

("Tyco Electronics") have made every reasonable effort to ensure the accuracy

and its affiliates referenced herein

of the information in this catalog, Tyco Electronics does not guarantee that it is error-free, nor does Tyco Electronics make any other representation, warranty or guarantee that the information is

accurate, correct, reliable or current.

incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of its products. Users should independently evaluate the suitability of, and test each product for, their application.

The dimensions, specifications, designs, construction, materials and processes in this catalog are for reference purposes only and are subject to change without notice. Please consult Tyco Electronics for the most current product information

The export of certain Tyco Electronics products is restricted by the Arms Export Control Act (Title 22, U.S.C. Sec 2751, et seq.) or the Export Administration Act of 1979, as amended (Title 50, U.S.C., App. 2401 et seq.). Orders may be subject to export approval by the U.S. Government. Buyer must comply with all applicable export laws of all applicable jurisdictions. © Copyright 2007, 1997, 1994, 1993, 1989 and 1986 by Tyco Electronics Corporation. All International Rights Reserved.

AMP, ACTION PIN, AMP-BARREL, AMP EDGE, AMP-IN, AMP MONO-SHAPE, AMP-O-LECTRIC, AMPOMATOR, Comp-U-Sertor, FASTON, MAG-MATE. QUADRA-MATE, TE LOGO and TYCO ELECTRONICS are trademarks of Tyco Electronics Corporation.

Other products, logos, and company names mentioned herein may be trademarks of their respective owners. See inside back cover for Global Contacts and phone numbers.

Revised 12-07

www.tycoelectronics.com

RoHS

Customer



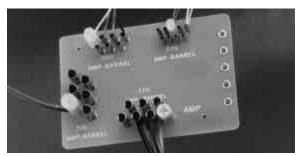
# Table of Contents (Continued)



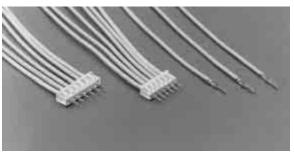
Printed Circuit Board (PCB) Receptacles



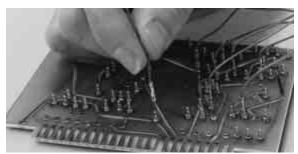
Miniature AMP-IN Terminals



**AMP-BARREL Terminals** 



Low Profile Miniature AMP-IN Connectors



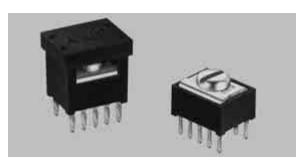
**Printed Circuit Board Disconnects** 



Test Probe Receptacles



AMP-IN and AMP EDGE Terminals



Power Taps

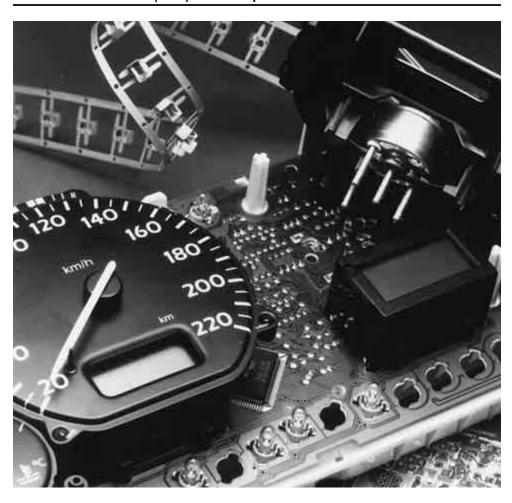


# Printed Circuit Board (PCB) Pin Receptacles

#### **Product Facts**

- Components with pin contact can be easily inserted into the printed circuit board after the pin receptacles are flow soldered
- The receptacles hold the pins from the components without the necessity of soldering
- Components can be easily removed from the printed circuit board for replacement or repair
- Components with pin contacts may be mated and unmated 10 times
- The receptacle contacts are securely clinched to the printed circuit board prior to soldering
- The receptacles are machine applied by semiautomatic and automatic insertion equipment
- Components may be inserted from either side of the printed circuit board

Technical Documents
Product Specification
108-1411
Application Specification
114-2127



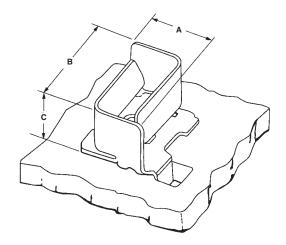
The Printed Circuit Board Pin Receptacle provides a reliable and cost effective means of attaching components with pin contacts to a printed circuit board. Components are held in place without solder allowing for their easy removal from the printed circuit board for replacement or repair. Receptacle contacts are inserted and securely clinched to the printed circuit board by means of semiautomatic or automatic machines.



# Printed Circuit Board (PCB) Pin Receptacles (Continued)

# **Material and Finish**

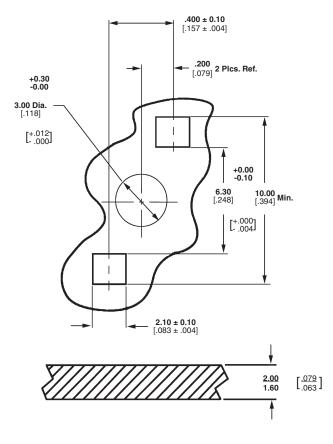
Tin plated phosphor bronze



Mating	PCB		Dimensions		Receptacle	Insertion	
Pin Dia.	Thickness	Α	В	С	Part No.	Head <sup>1</sup>	
<b>.088093</b> 2.24-2.36	<b>.063079</b> 1.60-2.01	<b>.236</b> 5.99	<b>.276</b> 7.01	<b>.181</b> 4.60	63566-1	904608-1	
<b>.098</b> 2.49	<b>.063079</b> 1.60-2.01	<b>.236</b> 5.99	<b>.276</b> 7.01	<b>.181</b> 4.60	63572-1	853439-3	

¹For use with either AMP FHIS Bench Machine 464300-1 or AMP Comp-U-Sertor II Machine 122300-1. **Note:** Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

#### **Recommended PCB Layout**





# **Printed Circuit Board (PCB) Receptacles**

#### **Product Facts**

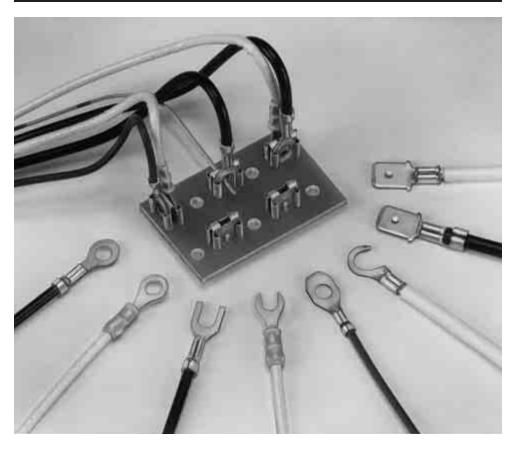
- Receptacles accept all .250 x .016 [6.35 x 0.41] thick terminal configurations
- Receptacles available for .250 x .032 [6.35 x 0.81] thick FASTON tab terminals
- Receptacles available for prepless termination of 24-22 AWG [0.2 - 0.4 mm²] solid wire using displacement crimp technique
- Available in tin-plated brass
- No tooling needed to insert or remove terminals
- Continuous strip contacts allow high-speed application with single or multiple-head insertion machines
- An economical means of retrofitting and field replacing wire-to-board connections

# Technical Documents Product Specification

108-2005 Receptacle, Spade, PCB

#### **Application Specifications**

114-2001 Receptacle, PCB 114-2037 Receptacle, PCB, Clinchable



The Printed Circuit Board Receptacle is used in wireto-printed circuit board terminations. Wires may be terminated with terminals having tongue widths and thicknesses of .250 x .016 [6.35 x 0.41] and FASTON tab terminals of .250 x .032 [6.35 x 0.81]. These terminated wires are plugged into the receptacle and may be removed and replugged as required. An added feature is the ability of one receptacle to accept a 24-22 AWG [0.2-0.4 mm<sup>2</sup>] unterminated solid wire as well as a terminated wire.

The receptacle has applications in all industries requiring wire-to-pc board applications both in new equipment and existing equipment. The purpose

of its design is to allow field replacement without costly retrofitting. In new equipment, the pc board receptacle can be used to give flexibility in selection of wire termination, including tongue, fork, open barrel, and FASTON tabs. This receptacle also has the ability to replace screw and nut arrangements. In existing equipment, the receptacle is just as versatile and can be used for field replacement where the original wire termination remains the same, but the board layout changes. In essence, it allows you to plug the previously terminated wires into the new model without costly changes to wire termination tooling.

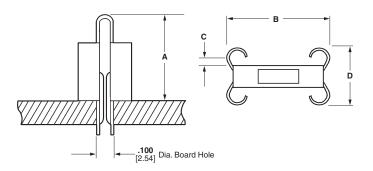
The pc board receptacle is a cost saving design that gives you a wide selection of wire termination alternatives. It is used in new equipment which provides versatility of connection and in old equipment to allow field replacements of units without costly retrofitting. In all cases installation of wire-to-board termination is accomplished without tools. For additional savings, the receptacle is designed to be inserted into your board by high-speed application equipment, then wave soldered giving you the lowest applied cost.



# Printed Circuit Board (PCB) Receptacles (Continued)

# **Material and Finish**

Tin plated brass



		Dimer	nsions		Strip	Form	Loose Piece	
Accepts	A Max.	В	С	D Max.	Receptacle	Inserter Applicator <sup>2</sup>	Receptacle	
.250 x .016	000	200	040	400	62745-1	_		
6.35 x 0.41	<b>.290</b> 7.37	<b>.292</b> 7.42	<b>.012</b> 0.30	. <b>190</b> 4.83	62111-2	467322-1	62806-1	
Terminals	7.07	7.12	0.00	1.00	62751-1 <sup>3</sup>	467322-2		
250 x .016 6.35 x 0.41 24-22 AWG Solid Wire	<b>.290</b> 7.37	<b>.292</b> 7.42	<b>.012</b> 0.30	<b>.190</b> 4.83	62199-2	467322-1	_	
.250 x .032 6.35 x 0.81 FASTON Tab Terminals	<b>.390</b> 9.91	<b>.318</b> 8.08	<b>.025</b> 0.64	<b>.275</b> 6.99	62172-21	_	_	

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

<sup>&</sup>lt;sup>1</sup>For .123±.002 [3.12±0.05] board hole only. <sup>2</sup>For use with AMP "U" Frame Machine 691679-1.

<sup>&</sup>lt;sup>3</sup>With clinchable pcb tabs.



# **FASTON Printed Circuit Board Tabs and Receptacles**

#### **Product Facts**

- Full line of PCB tabs and receptacles
- Straight and right-angle tabs available in .250, .187 and .110 series
- Receptacles produced in .250/.205 x .032 or .025.
   Standard or low insertion force receptacles available
- Strip product for automatic insertion
- Compatible with industry insertion equipment or full line of equipment available from Tyco Electronics



Tyco Electronics now offers a complete line of Printed Circuit Board tabs and receptacles. Tyco Electronics PCB product can be found in switches and on control boards around the world. Our product offering includes .250, .187 and .110 series vertical tabs, .250 and .187 right-angle tabs and .250/.205 vertical receptacles. Product is available in loose piece and strip form. In a short time, our product offering has grown from a handful of part numbers to dozens of parts. We continue to add to our product family as design changes, innovation and customers' requirements expand.

Insertion equipment is available for our entire strip product. The semiautomatic. air-powered Modular Insertion System (MIS) Bench machine is available for customers with moderate insertion requirements. The compact, fully automatic Comp-U-Sertor II machine is available for applications where larger volumes will be inserted and where programmable, microprocessor controlled equipment is desired. Insertion heads for both pieces of equipment are interchangeable, requiring less equipment investment. Tyco Electronics will also custom build a complete "pass through" system for high-end customer applications.

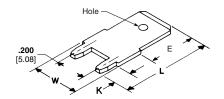
The Tyco Electronics product has been designed to be compatible with industry insertion equipment. In many cases, this product will work as a "drop in" replacement for existing product. In some cases, slight modifications or minor tooling changes are necessary. Please consult Technical Support or the Global Application Tooling Group for more details.

Tyco Electronics is one of the only companies that offers printed circuit board tabs and receptacles as well as the crimp to wire receptacles and tabs that offer a complete solution for your packaging needs.



#### **250 Series Printed Circuit Board Tabs**

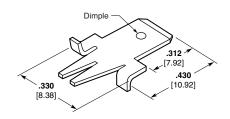
**Stock Thickness** — .032 [0.81] Board Hole Size - $.055 \pm .002 [1.40 \pm 0.05]$  Dia.



	Dimer	nsions		Material	81	<b></b>	Terminal	Part No.
W	L	K	E	and Finish	. <b>51</b> 1	<b>⊕</b> ∘	Strip <sup>2</sup>	Loose Piece1
	<b>.502</b> 12.75	<b>.125</b> 3.18	<b>.312</b> 7.92	Tin Plated Brass	Х	Х	63839-1 <sup>3</sup>	_
<b>.312</b> 7.92	<b>.547</b> 13.89	<b>.157</b> 3.99	<b>.312</b> 7.92	Tin Plated Brass	Х	Х	63986-1	_
	<b>.552</b> 14.02	<b>.150</b> 3.81	<b>.312</b> 7.92	Tin Plated Brass	_	_	1217566-1	_
.295	.622	.125	.312	Tin Plated Brass	Х	Х	_	62409-1 <sup>3</sup>
7.49	15.80	3.18	7.92	Tiri Plated Brass	_	_	_	1217056-1
	<b>.487</b> 12.37	<b>.125</b> 3.18	<b>.312</b> 7.92	Tin Plated Brass	Х	Х	62650-13	_
<b>.280</b> 7.11	<b>.532</b> 13.51	<b>.175</b> 4.45	<b>.312</b> 7.92	Tin Plated Brass	Х	Х	63650-1 <sup>3</sup>	_
	.622	.125	.452	Tin Plated Brass	Х	Х	_	63900-1
	15.80	3.18	11.48	TIII FIAIEU BIASS		_	63755-13	_

<sup>&</sup>lt;sup>1</sup> Board Hole Size:.060/.053 [1.52/1.35] Dia.

**Stock Thickness** — .032 [0.81] Board Hole Size -.100 ± .002 [2.54 ± 0.05] Dia.



Material	8/	<u> </u>	Termi	inal Part No.
and Finish	° <b>7</b> 4	Œ.	Strip <sup>1</sup>	Loose Piece
Tin Plated Brass	Х	X	63066-1	63067-1

<sup>&</sup>lt;sup>1</sup> Insertion equipment available.

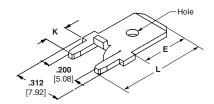
<sup>&</sup>lt;sup>2</sup> Insertion equipment available.

<sup>&</sup>lt;sup>3</sup> Dimple.



# 250 Series Printed Circuit Board Tabs (Continued)

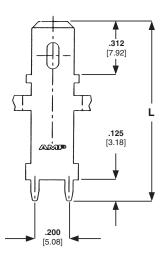
Stock Thickness — .032 [0.81] Board Hole Size — .055  $\pm$  .002 [1.40  $\pm$  0.05] Dia.



	Dimensions	3	Material		<u> </u>	Termin	al Part No.
L	K	Е	and Finish	<i>.</i> 91	<b>⊕</b> ∘	Strip <sup>1</sup>	Loose Piece
.552	.150	.312	Tin Plated Brass	Х	Х	63862-12	1742188-12
14.02	3.81	7.92	TIII Flateu Diass	X	Х	63824-1	63849-1
.582	.180	.312	Tin Plated Brass	Х	Х	1217136-1	_
14.78	4.57	7.92	Tin Flatou Blaco	X	Х	_	1217421-1
<b>.650</b> 16.51	<b>.150</b> 3.81	<b>.410</b> 10.41	Tin Plated Brass	Х	Х	1217126-12	_
<b>.710</b> 18.03	<b>.150</b> 3.81	<b>.470</b> 11.94	Tin Plated Brass	Х	Х	1217125-1	1217169-1
.780	.150	.540	Tin Plated Brass	Х	Х	1217127-1	_
26.18	3.81	13.72		X	Х	_	1217167-1

<sup>&</sup>lt;sup>1</sup> Insertion equipment available.

 $\begin{array}{l} \textbf{Stock Thickness} -- .032 \ [0.81] \\ \textbf{Board Hole Size} -- \\ .055 \pm .002 \ [1.40 \pm 0.05] \ Dia. \\ \end{array}$ 



Dimension L	Material and Finish	. <b>7.</b> 1	∰∘	Terminal Part No.
<b>1.062</b> 26.97	Tin Plated Brass	Χ	Х	63949-1
<b>1.207</b> 30.66	Tin Plated Brass	Х	Х	63950-1

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

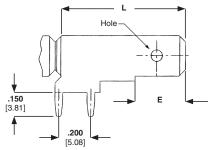
<sup>&</sup>lt;sup>2</sup> Dimple.



# 250 Series Printed Circuit Board Tabs (Continued)

#### Right-Angle Printed Circuit Board Tabs

**Stock Thickness** — .032 [0.81] **Board Hole Size** — .055  $\pm$  .002 [1.40  $\pm$  0.05] Dia.

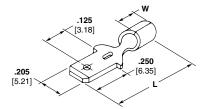


Dime	nsions	Material	81	<u> </u>	Terminal Part No.	
Е	L	and Finish	. <b>FL</b>	<b>⊕</b> ∘	Strip1	Loose Piece
<b>.312</b> 7.92	<b>.800</b> 20.32	Tin Plated Brass	Х	Х	63951-1	1217754-1
<b>.358</b> 9.09	<b>.630</b> 16.00	Tin Plated Brass	_	_	_	928814-1
<b>.738</b> 18.74	<b>1.00</b> 25.40	Tin Plated Brass	_	_	63952-1	_

<sup>&</sup>lt;sup>1</sup> Insertion equipment available.

# 205 Series Printed Circuit Board Only

**Stock Thickness** — .020 [0.51] **Board Hole Size** — .100 – .095 [2.54 – 2.41] Dia.

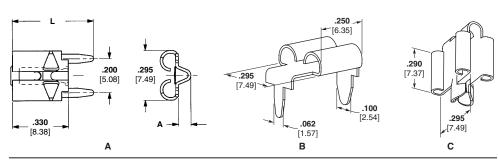


Dimer	nsions	Material		<b>@</b> .	Terminal
L	W	and Finish	.91	<b>⊕</b> ∘	Part No.
<b>.525</b> 13.34	<b>.070</b> 1.78	Tin Plated Brass	Х	Х	62411-11
<b>.545</b> 13.84	<b>.160</b> 4.06	Tin Plated Brass	Х	Х	60284-21

<sup>&</sup>lt;sup>1</sup> Loose piece only.

# .250/.205 Printed Circuit Board Receptacles

**Stock Thickness** — .016 [0.41]



A 2	Chulo	Fits			Dimension	Material	<i>.</i> R.	A.	Par	t No.
.032     .075     .480     Tin Plated Brass     —     63969-1     1217080-1       A     .025     .015     .075     .480     Tin Plated Brass     —     63994-1     —       .025     .075     .510     Tin Plated Brass     —     1217137-12     —       .064     1.91     .91     .480     —     1217137-12     —	Style	Tab	Style	Α	A L	and Finish	۰۳۳	Œ.	Strip	Loose Piece
A   1.91   12.19   11n Plated Brass   -   63909-1   1217080-1   12		.032 0.81 (LIF)					_	_	63968-1	_
.025 .075 1.91 12.19 Tin Plated Brass — 63994-1 — 12.17137-12 — 12.95 Tin Plated Brass — 12.17137-12 — 12.171							_	_	63969-1	1217080-1
.025 .075 12.95 In Plated Brass — 1217137-12 —	Α	.025 0.64 (LIF)	Α				_	_	63994-1	_
0.64 1.91 .480 Tip District Di		.025	.075			_	_	1217137-12	_	
12.19 In Plated Brass — — 121/180-1 —		0.64		1.91			_	_	1217180-1	_
B 0.020 — Tin Plated — 1217107-11 — Phos Bronze	В		В	_			_	_	1217107-1 <sup>1</sup>	_
.250 x .016         C       6.35 x 0.41       —       —       Tin Plated Brass       —       62751-1       62806-1         Spade       —       —       62751-1       62806-1	С	6.35 x 0.41	С	_		Tin Plated Brass	_	_	62751-1	62806-1

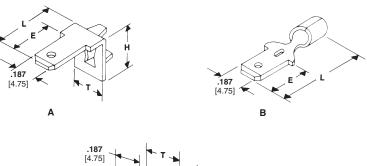
<sup>&</sup>lt;sup>1</sup> Horizontal mount.

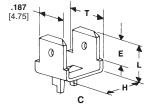
<sup>&</sup>lt;sup>2</sup> .180 [4.57] length — solder legs.



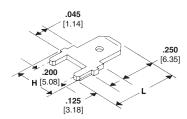
# 187 Series **Printed Circuit Board Tabs**

**Stock Thickness** — .020 [0.51]





Type	Board		Dimen	sions		Material	. <b>F</b> \	<b>⊕</b> ∘	Terminal
Туре	Thickness	Т	L	E	Н	and Finish	® <b>74</b>	€.	Part No.
Α	<b>.055</b> 1.38	<b>.250</b> 6.35	<b>.332</b> 8.43	<b>.250</b> 6.35	<b>.283</b> 7.19	Pre-Tin Brass	Χ	Х	61543-12
^	<b>.062</b> 1.57	<b>.250</b> 6.35	<b>.332</b> 8.43	<b>.250</b> 6.35	<b>.283</b> 7.19	Pre-Tin Brass	Χ	Х	62403-12
В	<b>.062</b> 1.57	_	<b>.545</b> 13.84	<b>.250</b> 6.35	_	Tin Plated Brass	Χ	Х	61907-11
С	<b>.062</b> 1.57	<b>.250</b> 6.35	<b>.332</b> 8.43	<b>.250</b> 6.35	<b>.303</b> 7.70	Pre-Tin Brass	Х	Х	62221-12



Tab	Board	Dimer	nsions	Material		<u> </u>	Termir	nal Part No.
Thickness	Hole Size	L	Н	and Finish	<i>.</i> 74	<b>⊕</b> ∘	Strip <sup>2</sup>	Loose Piece
<b>.032</b> 0.81	<b>.053057</b> 1.35-1.45	<b>.487</b> 12.37	<b>.280</b> 7.11	Tin Plated Brass	Х	Х	63525-11	1217057-11
.020	.050054	<b>.487</b> 12.37	<b>.285</b> 7.24	Tin Plated Brass	Х	Χ	63603-1	1217131-1
0.51	1.27-1.37	<b>.440</b> 11.18	<b>.312</b> 7.92	Tin Plated Brass	Х	Х	63838-1	_

<sup>&</sup>lt;sup>1</sup> Dimple.

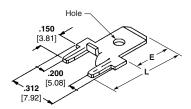
<sup>&</sup>lt;sup>1</sup> Loose piece only.<sup>2</sup> Insertion equipment available.

<sup>&</sup>lt;sup>2</sup> Insertion equipment available.



# 187 Series Printed Circuit Board Tabs

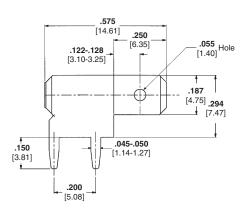
(Continued)



Tab	Dim	ensions	Material		<b>⊕</b> ∘	Terminal Part No.		
Thickness	L	E	and Finish	. <b>A</b> L	Ø₽°	Strip <sup>3</sup>	Loose Piece	
	.490	.250	Tin Plated Brass	Х	Х	63860-11	_	
	12.45	6.35	TIII Flateu Diass	_	_	1742361-1	_	
<b>.032</b> 0.81	<b>.710</b> 18.03	<b>.470</b> 11.94	Tin Plated Brass	Х	Х	1217124-1	_	
	.635 .395 16.13 10.03 Tin Plated Brass	_	_	_	1217332-1 <sup>2</sup>			
<b>.020</b> 0.51	<b>.490</b> 12.45	<b>.250</b> 6.35	Tin Plated Brass	Х	Х	1742362-1	63982-1	

<sup>&</sup>lt;sup>1</sup> Dimple.

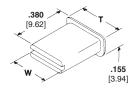
#### Right-Angle Printed Circuit Board Tabs



Stock Thickness	Board Hole Size	Material and Finish	. <b>5/1</b>	<b>⊕</b> ∘	Terminal Part No.
.032	.053057	Tin Plated Brass	X	Χ	1217061-1
0.81	1.35-1.45	Till Flated Blass	_	_	1217756-11
.020	.050054	Tin Plated Brass	Х	Х	1217062-1
0.51	1.27-1.37	TIII Flateu Blass	_	_	1217156-11

<sup>&</sup>lt;sup>1</sup> Loose piece.

# Tab Caps 187 and 250 Series



Tab Size	Material	UL 941	Color	Dime	Insulator	
I ab Size	Material	OL 34	Coloi	Т	W	Part No.
"187" Series .020 [0.51] Thick	Nylon	V2	Natural	<b>.320</b> 8.13	<b>.260</b> 6.60	360041-1
"250" Series .032 [0.81] Thick	Nylon	V2	Natural	<b>.380</b> 9.65	<b>.320</b> 8.13	360042-1

<sup>&</sup>lt;sup>1</sup> Flammability rating.

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

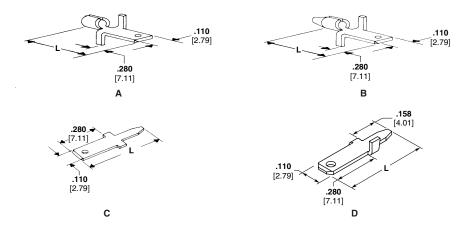
<sup>&</sup>lt;sup>2</sup> No hole or dimple.

<sup>&</sup>lt;sup>3</sup> Insertion equipment available.



# .110 Series Printed Circuit **Board Tabs**

**Stock Thickness** — .020 [0.51]

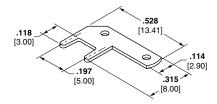


Style	Mating Hole Diameter	Dim. L	Material and Finish	<i>.</i> PU	<b>®</b> ∘	Terminal Part No.
Α	<b>.060055</b> 1.52-1.40	<b>.490</b> 12.45	Tin Plated Brass	Х	Х	61134-31
В	.067063	.485	Tin Plated Brass	Х	Х	61968-12
Ь	1.70-1.60	12.32	TITI Plated Brass	X	Х	62437-11
		<b>.490</b> 12.45	Tin Plated Brass	Х	Х	62395-1 <sup>2</sup>
	.044048	<b>.622</b> 15.80	Tin Plated Brass	Х	Х	63756-12,
С	1.12-1.22	<b>.910</b> 23.11	Tin Plated Brass	_	_	63794-14
		<b>.622</b> 15.80	Tin Plated Brass	_	_	1217514-1
	<b>.067073</b> 1.70-1.85	<b>.490</b> 12.45	Pre-tin/ Pre-copper	Х	Х	62669-12
D	<b>.062068</b> 1.57-1.73	<b>.545</b> 13.84	Tin Plated Brass	_	_	1217577-12

<sup>&</sup>lt;sup>1</sup> Loose piece only.

### **Right-Angle Printed Circuit Board Tabs**

**Tab Width** — .114 [2.90]



Tab Thickness	PCB Hole Dia. +0/01 [+0/03]	Material and Finish	.91	<b>⊕</b> ∘	Terminal Part No.
. <b>032</b> 0.81	<b>.055</b> 1.40	Tin Plated Brass	_	_	725963-2
<b>.020</b> 0.51	<b>.051</b> 1.30	Tin Plated Brass	_	_	725996-2

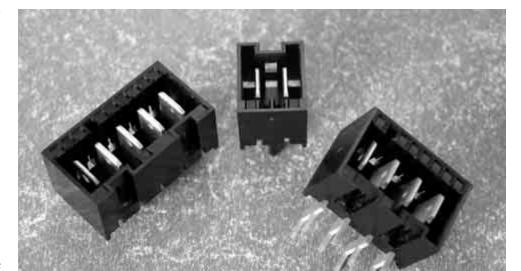
<sup>&</sup>lt;sup>2</sup> Insertion machine available. <sup>3</sup> .032 [0.81] Stock. <sup>4</sup> .060 [1.52] Tab width.



#### FASTON RAST 5 Tab Header Assembly, 250 Series

#### **Product Facts**

- .250 x .032 [6.3 x 0.8]FASTON Tabs built on 5 mm centerlines
- Shrouded Header Assembly that conforms to the European RAST 5 Standard
- Mating Tyco Electronics Connector Families include Positive Lock RAST 5 Connector System, AMP Standard Timer RAST 5, AMP multifitting, AMP multifitting MKII, AMP MONO-SHAPE TAB MKI, and AMP MONO-SHAPE MKII
- Vertical and Right-Angle Versions available in 2 through 8 positions
- Tin Plated Brass Tabs are Standard, Silver Plated Tab Versions are available upon Request
- Lead Free Design is RoHS and ELV Compliant
- UL 94 V-0 Housing meets Glow Wire IEC 60695-1 Section 30.2.3 – 750° NO FLAME
- Component Recognition USR and CSR under File No. E28476
- VDE tested according to DIN EN61984 (VDE0627): 2002-09; EN61984: 2001 VDE Reg. No. B718



The FASTON RAST 5 Tab Header Assembly system is designed to provide a RAST 5 interface to a Printed Circuit Board. The RAST 5 Standard defines and standardizes the connector mating interface. 250 Series Tabs are placed on 5mm center lines with a plastic shroud that has keying, polarization, and locking features that help prevent mismating of the corresponding RAST 5 female receptacle housing. The header assembly is

designed to accept any RAST 5 compliant female receptacle system or individual quick connects.

The most common application for this product is for household appliance controls where OEMs want to minimize the possibility of crossed wires. It is also suited for other applications such as gaming, vending, and exercise equipment controls as well as residential, commercial and industrial HVAC and light industrial equipment. The

system comes fully assembled and is easily press fit into the board for the soldering operation. Preassembly of the tabs into the Header ensures tab perpendicularity to the board. The solder leg PCB layout is based on the Industry Standard for similar systems available on the market. To further enhance correct placement onto the board, the vertical system includes a plastic post which allows Header placement to be polarized.

### Material

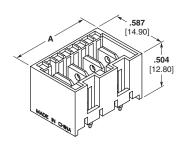
UL 94 V-0, 6/6 Nylon

See Tyco Electronics Catalogs 296599, 889803, 1308197, 1308209 for the complete line of RAST products.

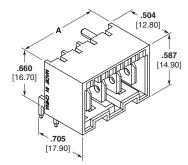


# FASTON RAST 5 Tab Header Assembly, 250 Series

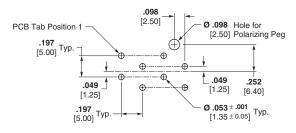
(Continued)



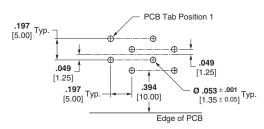
#### **Vertical Orientation**



**Right-Angle Orientation** 



Vertical Orientation PCB Layout (Ref.) from Component Side



Right-Angle Orientation PCB Layout (Ref.) from Component Side

No. of	RAST 5	Dim. A	Part N	umbers
Positions	Configuration	DIM. A	Vertical	Right-Angle
	02-A	.484 [12.30]	521382-2	521384-2
	02-B	.484 [12.30]	1-521382-2	1-521384-2
	02-C	.484 [12.30]	2-521382-2	2-521384-2
2	02-E	.484 [12.30]	3-521382-2	3-521384-2
	02-G	.484 [12.30]	4-521382-2	4-521384-2
	02-1	.484 [12.30]	5-521382-2	5-521384-2
	02-P	.484 [12.30]	6-521382-2	6-521384-2
	03-A	.681 [17.30]	521382-3	521384-3
3	03-B	.681 [17.30]	1-521382-3	1-521384-3
3	03-D	.681 [17.30]	2-521382-3	2-521384-3
		.681 [17.30]	3-521382-3	3-521384-3
	04-A	.878 [22.30]	521382-4	521384-4
	04-B	.878 [22.30]	1-521382-4	1-521384-4
4	04-C	.878 [22.30]	2-521382-4	2-521384-4
4	04-F	.878 [22.30]	3-521382-4	3-521384-4
	04-G	.878 [22.30]	4-521382-4	4-521384-4
		.878 [22.30]	5-521382-4	5-521384-4
	05-B	1.075 [27.30]	521382-5	521384-5
-		1.075 [27.30]	1-521382-5	1-521384-5
5		1.075 [27.30]	2-521382-5	2-521384-5
		1.075 [27.30]	3-521382-5	3-521384-5
	06-A	1.272 [32.30]	521382-6	521384-6
6	06-D	1.272 [32.30]	1-521382-6	1-521384-6
	07-C	1.469 [37.30]	521382-7	521384-7
7		1.469 [37.30]	1-521382-7	1-521384-7
1		1.469 [37.30]	2-521382-7	2-521384-7
	_	1.469 [37.30]	3-521382-7	3-521384-7
	08-D	1.665 [42.30]	521382-8	521384-8
8		1.665 [42.30]	1-521382-8	1-521384-8
	08-C	1.665 [42.30]	2-521382-8	2-521384-8

Refer to the Tyco Electronics Customer Drawing for additional details.

For more information related to the RAST 5 Standard, see Tyco Electronics Literature Distribution no. 1308243.



### AMP-BARREL Terminals

#### **Product Facts**

- **■** Unique insulation displacement technology
- **■** Eliminates wire preparation—no stripping or soldering
- Capable of being wavesoldered to pc board with other components, enabling wires to be terminated at a more conducive time and location
- Anti-solder wicking design
- Accepts a wide range of wire sizes, solid or stranded
- Available in single and two-wire version
- Reusable terminal
- Available in loose-piece or strip version
- Semiautomatic insertion machine for strip version
- Simple, rugged low cost wire insertion tool
- Recognized Under **Component Recognition Program of Underwriters** Laboratories. Inc.

#### — File No. E28456

### **Technical Documents Product Specification**

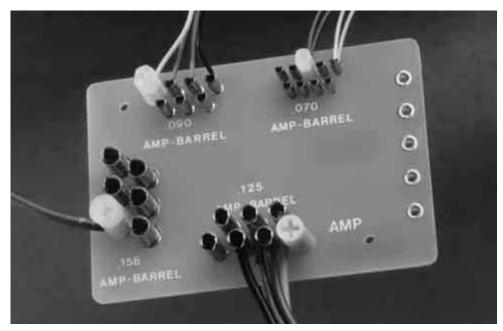
108-6043 .070 [1.78] Diameter Terminal 108-6044 .090 [2.29] Diameter Terminal 108-6025 .125 [3.18] Diameter Terminal 108-6026 .156 [3.96] Diameter Terminal

#### **Application Specification**

114-6000 AMP-BARREL Terminals

#### **Instruction Sheets**

408-3187 408-6505 408-6553



**AMP-BARREL Terminals** solve the problem of interconnecting discrete wires to printed circuit boards without permanently soldering them in place. and provide cost savings by eliminating the need for two-piece terminal systems, terminal strips or expensive space-consuming modular connectors.

These unique insulation displacement terminals are suitable for most printed circuit boards from .047 [1.19] to .125 [3.18] thick and are mounted in a space-saving, free-standing manner wherever required.

**AMP-BARREL Terminals** may be obtained in loose piece or strip form for semiautomatic machine insertion. Upon insertion, they are hand or wavesoldered with other components without fear of solder wicking into the wire termination area.

Termination is achieved by placing the end of a pre-cut unstripped wire horizontally to the board at the top of the AMP-BARREL Terminal. Insertion to the proper depth is accomplished by

the use of a simple. lowcost screwdriver type tool or low cost plastic stuffer cap. These caps use a standard Phillips type screwdriver to terminate the wire. When left in place on the terminal they provide strain relief and insulation. They may be removed and reused for field changes and/or repairs. The high compliancy of the terminal assures a highly reliable, stable interconnection and withstands extreme temperature, vibration and shock.

**AMP-BARREL Terminals** offer the added benefit of accepting a wide wire range, solid or stranded, within the same terminal. The .125 [3.18] diameter AMP-BARREL Terminal accepts a wire range of 28-18 AWG [0.08-0.8 mm<sup>2</sup>] with a maximum insulation diameter of .086 [2.18]. It is made of high strength, high ductility, pre-tinned phosphor bronze and accepts one or two wires of the same type that may vary in size by one wire gauge. The C-shaped cross-slot assures a reliable two-wire termination.

This product also offers a wire cutoff version which allows the wire to be placed across the top of the terminal where the hand tool terminates and trims the wire in one action.

Similarly constructed, but of smaller size, are the .070 [1.78] and .090 [2.29] diameter AMP-BARREL Terminals. These terminals accept, respectively, wire sizes of 28-26 AWG [0.08-0.15 mm<sup>2</sup>] with a maximum insulation diameter of .036 [0.91] and 28-22 AWG [0.08-0.4 mm<sup>2</sup>] with a maximum insulation diameter of .053 [1.35]. They also will accept two wires of the same gauge and type.

The .156 [3.96] diameter AMP-BARREL Terminal accepts a wire range of 24-18 AWG [0.2-0.8 mm<sup>2</sup>] with a maximum insulation diameter of .115 [2.92]. It is made of tin-lead plated brass and will accept one wire per terminal.

All AMP-BARREL Terminals are reusable. This feature is extremely important when correcting wiring errors, making field repairs or modifications.

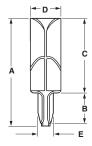


# **AMP-BARREL Terminals** (Continued)

#### .070 [1.78] and .090 [2.29] Terminals

#### **Material and Finish**

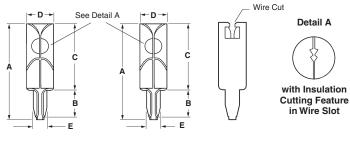
Pretinned phosphor bronze



#### .125 [3.18] Terminals

#### **Material and Finish**

Pretinned phosphor bronze



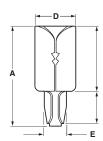
Standard

with Wire Cutoff Feature

#### .156 [3.96] Terminals

#### **Material and Finish**

Tin plated brass



Terminal		Conductor (solid or stranded)			PC	Board		Termir	nal Dime	nsions		Part	Nos.	
Size	Wire Si AWG	ize Range mm²	Max. Ins. O.D.	Wire per Terminal	Thk. Range	Mtg. Hole Dia.	Α	В	С	D	Е	Loose Pc.	Strip	
<b>.070</b> 1.78	28-26	0.08-0.15	<b>.036</b> 0.91	1 or 2	<b>.047062</b> 1.19-1.57	<b>.035040</b> 0.89-1.02	<b>.280</b> 7.11	<b>.090</b> 2.29	<b>.175</b> 4.45	<b>.070</b> 1.78	<b>.042</b> 1.07	1742255-1	1742255-2	
<b>.090</b> 2.29	28-22	0.08-0.4	<b>.053</b> 1.35	1 or 2	<b>.047094</b> 1.19-2.39	<b>.050054</b> 1.27-1.37	<b>.340</b> 8.64	<b>.120</b> 3.05	<b>.210</b> 5.33	<b>.090</b> 2.24	<b>.056</b> 1.42	1742254-1	1742254-2	
					<b>.062094</b> 1.57-2.39	<b>.061065</b> 1.55-1.65	<b>.458</b> 11.63	<b>.118</b> 3.00	<b>.325</b> 8.26	<b>.125</b> 3.18	<b>.067</b> 1.70	552699-1*	_	
.125	00.40	28-18 0.08-0.8 <b>.086</b> 1 o	20.10 0.00.00	.086	4 0	<b>.062125</b> 1.57-3.18	<b>.061065</b> 1.55-1.65	**	<b>.118</b> 3.00	<b>.325</b> 8.26	<b>.125</b> 3.18	<b>.067</b> 1.70	_	552699-2
3.18 Standard	28-18		1 or 2	<b>.062094</b> 1.57-2.39	<b>.061065</b> 1.55-1.65	<b>.458</b> 11.63	<b>.118</b> 3.00	<b>.325</b> 8.26	<b>.125</b> 3.18	<b>.067</b> 1.70	552699-4	_		
					<b>.062125</b> 1.57-3.18	<b>.061065</b> 1.55-1.65	**	<b>.118</b> 3.00	<b>.325</b> 8.26	<b>.125</b> 3.18	<b>.067</b> 1.70	_	552699-5	
.125 3.18 With wire cut-off features	28-18	0.08-0.8	<b>.086</b> 2.18	1 or 2	<b>.062094</b> 1.57-2.39	<b>.061065</b> 1.55-1.65	**	<b>.118</b> 3.00	<b>.325</b> 8.26	<b>.125</b> 3.18	<b>.067</b> 1.70	_	554935-2	
<b>.156</b> 3.96	24-18	0.2-0.8	<b>.115</b> 2.92	1	<b>.062094</b> 1.57-2.39	<b>.078082</b> 1.98-2.08	<b>.390</b> 9.91	<b>.125</b> 3.18	<b>.250</b> 6.35	<b>.156</b> 3.96	<b>.084</b> 2.13	1742253-1	1742253-2	

<sup>\*</sup>Has tough insulation cutting feature in wire slot (see Detail A in illustration). These barrels are not recommended for smaller standard wires.

#### Notes:

.070 [1.78] and .090 [2.29] terminals accept two wires of the same gauge and type.

2. The .125 [3.18] terminal accepts two wires of the same type that may vary in size by one wire gauge.

<sup>\*\*</sup>Cutoff is adjustable depending on board thickness.

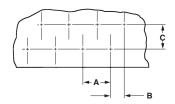
 <sup>11. 12.5 [3.16]</sup> terminal accepts two wires of the same type that may vary in size by one wire gauge.
 .070 [1.78] and .090 [2.29] terminals have a solder resist material on the inside of barrel which prevents solder wicking.



# **AMP-BARREL Terminals** (Continued)

# Recommended Printed Circuit Board Dimensions

(for use in .047 [1.19] to .125 [3.18] pc boards)



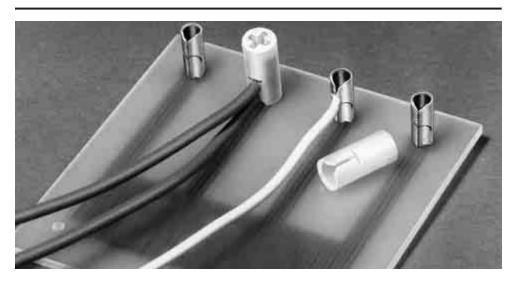
Terminal Size		Minimum Hole Spacing	
Terrinia Size	Α	В	С
. <b>070</b>	. <b>100</b>	<b>.050</b>	<b>.105</b>
1.78	2.54	1.27	2.67
<b>.090</b>	.150	. <b>075</b>	.135
2.29	3.81	1.91	3.43
<b>.125</b>	<b>.200</b>	<b>.100</b>	<b>.175</b>
3.18	5.08	2.54	4.45
<b>.156</b>	<b>.220</b>	<b>.110</b>	<b>.190</b>
3.96	5.59	2.79	4.83

# Wire Stuffer Caps Product Facts

- Insulates
- Provides strain relief
- Acts as field service repair tool

### Material

Thermoplastic



	ize Range_	Color	For Use With	Wire Stuffer Cap
AWG	mm <sup>2</sup>	00.0.	Terminal Part No.	Part No.
28-26	0.08-0.15	Natural	1742255	553593-1
28-22	0.08-0.4	Natural	1742254	553594-1
22-18	0.4-0.8	Yellow	552699	230707-1
28-24	0.08-0.2	Natural	552699	230707-3
24-18	0.2-0.8	Natural	1742253	553595-1



# **AMP-BARREL Terminals** (Continued)

### **Application Tooling**

#### Wire Insertion Tool

Precut, unstripped wires are easily terminated in the AMP-BARREL Terminal with a simple screwdriver type tool. It properly positions the wire to the correct depth in the terminal. For two wire applications, the second wire pushes the first wire into the lower section of the terminal.

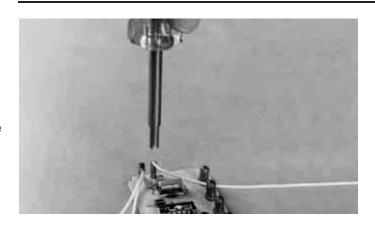
For improved comfort, a slip-on cushion grip is available.

The Wire Insertion Tool should be used for wire termination only; it should not be used to seat terminals onto the pc board.

#### Cushion Grip Material and Finish

Elastomer

Part No. 231279-1



Wire Siz	ze Range mm²	Color Code on Tool Shaft	For use with Terminal Part No.	Wire Insertion Tool Part Nos.	
22-18	0.4-0.8	Yellow	552699-1, 552699-2 552699-4, 552699-5	552714-1	
24-18	0.2-0.8	Red	1742253-1 and 1742253-2	552714-2	
28-24	0.08-0.2	White	552699-1, 552699-2 552699-4, 552699-5	552714-3	
28-22	0.08-0.4	Blue	1742254-1 and 1742254-2	552714-4	
28-26	0.08-0.15	Green	1742255-1 and 1742255-2	552714-5	
22-26	0.4-0.15	None	554935-2	231890-1	

#### Manual Terminal Insertion Kit

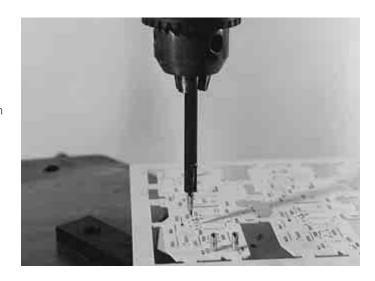
Each insertion kit consists of a ram and pedestal assembly for use in a standard drill press. The ram assembly holds the terminal and provides a firm seat during insertion. It fits into the drill chuck. The pedestal assembly sits on the drill table and supports the pc board during insertion.

**Kit No. 230549-3** for .070 [1.78] AMP-BARREL Terminal Part No. 1742255-1

**Kit No. 230549-4** for .090 [2.29] AMP-BARREL Terminal Part No. 1742254-1

**Kit No. 230549-1** for .125 [3.18] AMP-BARREL Terminals Part Nos. 552699-1 and 552699-4

**Kit No. 230549-2** for .156 [3.96] AMP-BARREL Terminal Part No. 1742253-1



 $\textbf{Note:} \ \mathsf{Part} \ \mathsf{Numbers} \ \mathsf{are} \ \mathsf{RoHS} \ \mathsf{compliant} \ \mathsf{except:} \ \blacklozenge \ \mathsf{Indicates} \ \mathsf{non-RoHS} \ \mathsf{compliant}.$ 



### QUADRA-MATE Wire-to-Printed Circuit Board Terminal

#### **Product Facts**

- Redundant wire insulation displacement termination
- **■** Built-in strain relief
- Accepts 28-24 AWG [0.09-0.2 mm<sup>2</sup>]
- Feed-thru connections allow wiring flexibility
- Free-standing
- Low board profile (less than 1/4" [6.35 mm] high)
- Available in loose piece or strip form
- Mass termination adaptability
- Capable of being reused
- Low applied costs

#### **Applications**

- **■** Electronic games
- **■** Computer

108-2032

- **■** Telephone equipment
- **■** Business machines
- **■** Electronic control equipment

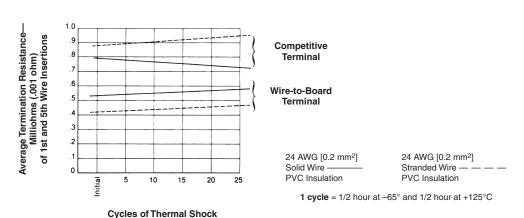
**Technical Documents Application Specification** Thermal Shock Data for 114-2051 Wire-to-Board Terminal **Product Specification** 

The QUADRA-MATE Wireto-Printed Circuit Board Terminal is an extension of the MAG-MATE connector program, and is designed to terminate discrete wires to a pc board via insulation displacement slot technology. It is capable of accepting solid or stranded wire and permits wire end or feed-thru terminations. The terminal features four slots for redundant wire terminations and strain relief. The terminals are installed in random positions or in rows on the edge of a pc board either by hand tool, semiautomatic or fully-automatic machines.

The terminal is compact in design and readily adaptable to a wide variety of materials and plating selections, as well as terminating techniques such as daisy chaining, single ending and on-board jumping and programming.

The .100 [2.54] wide terminal has an overall height of approximately .210 [5.33] and occupies less than .120 x .130 [3.05 x 3.3] of board area and accommodates wire sizes 28-24 AWG [0.09-0.2 mm<sup>2</sup>] (see table).

The terminals are supplied in both loose piece and strip form and are easily assembled to the pc board in conjunction with on-board components prior to wave soldering. With the terminal being an integral part of the board, insertion of the unstripped wire into the four insulation displacement slots is accomplished by use of a simple hand tool (see table).



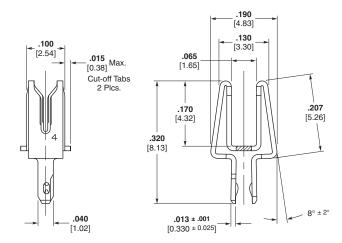
21



# **QUADRA-MATE Wire-to-Printed Circuit Board Terminal (Continued)**

# Typical Assembly Material and Finish

**Terminal** – Brass, tin plated over copper underplate
Other plating and terminal materials available. Contact Tyco Electronics. **Max. Ins. Dia.** — .060 [1.52]

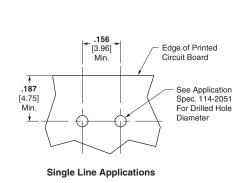


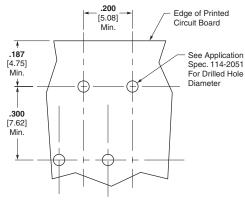
Wire	Size (AWG) over m	m²	Part Numbers		
7-Strand	Solid	Fused	Loose Piece	Strip	Wire to Term. Hand Tool
<b>24</b> 0.2	<b>24-26</b> 0.2-0.13	<b>26</b> 0.13	62977-1	63007-1	
<b>26</b> 0.14	<b>26-28</b> 0.13-0.08	<b>28</b> 0.09	63024-1*	63003-1*	274377-1 (Heavy Duty)
<b>28</b> 0.09	<b>28</b> 0.08	<b>28</b> 0.09	63025-1*	63004-1*	

Semiautomatic insertion of strip parts to pc board is accomplished using mini-insertion head, Part No. 803371-1 in "U" frame applicator, Part No. 691679-1. For more sophisticated application equipment including cable makers and C.N.C. machines, contact Tyco Electronics.

# Recommended PC Board Applications

Note: Wire slots are designed to terminate wire sizes and types with polyvinyl chloride (PVC) insulation, Class 12B. For other wire sizes and insulation types, contact Tyco Electronics for application approval.





**High Density Applications** 

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803

<sup>\*</sup> Available upon request, contact Tyco Electronics.



### **Printed Circuit Board Disconnects**

#### **Product Facts**

- Quick connect or disconnect
- Automatic or semiautomatic application of strip form receptacles to wire
- Receptacles for wire size range 28 AWG [0.08] thru 17 AWG [1.0] and tinsel wire
- Automatic or semiautomatic insertion of strip form pins to printed circuit boards
- Solid or formed pins, singleor double-sided printed circuit board capability
- Choice of materials and platings

# Technical Documents Product Specification

108-1025 108-1059

#### **Application Specification**

114-1008

#### **Instruction Sheets**

408-7850

408-7951

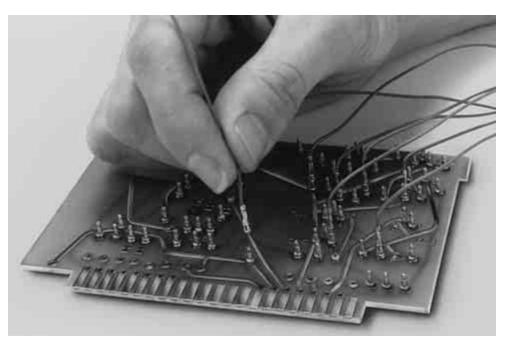
408-7963

408-7698

408-7850

408-7377

408-7345

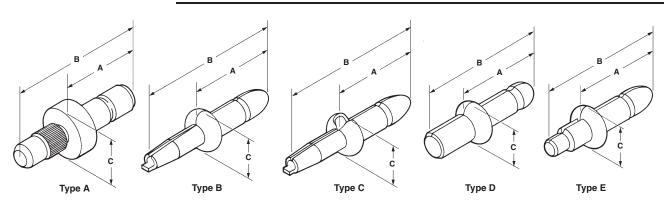


Tyco Electronics printed circuit disconnect embodies the dual features of automation and the ability to make quick wiring changes. The special formed pins, available in .058 [1.47] and .093 [2.36] diameters, can be inserted in a printed circuit board quickly and reliably by fully automatic or semiautomatic machinery. The solid pin family, in .058 [1.47] diameter, is attached manually; its knurled edge retains it mechanically in the board until soldering is complete. All pins must be soldered to insure mechanical and electrical reliability. Pins may be used for either single or doublesided pc boards. The receptacles are applied quickly and efficiently to wire using semiautomatic AMP-O-LECTRIC or fully automatic AMPOMATOR machines.

All receptacles feature a precision wire crimp with an insulation crimp for high mechanical strength. A variety of wire and insulation ranges are available as listed. The combination of the pin and receptacle enables users to bring a variety of wires to a printed circuit board and offers the capability of a quick connect or disconnect. The product is ideal for use in prototype and production applications, particularly where wiring changes or rapid pc board interconnections are required. Specific users include radio, television, test equipment, computer and business machine industries.



# **Printed Circuit Board Disconnects** (Continued)



#### .058 [1.47] Diameter Solid Pins

Tuno	Hole	Pc Board		Dimension	S	Material	Part Nos.	
Type	Diameter	Thickness	Α	В	С	and Finish	Loose Piece	
А	<b>.062059</b> 1.57-1.50	<b>.125</b> 3.18	<b>.195</b> 4.95	<b>.385</b> 9.78	<b>.110</b> 2.79	Brass, Tin	3-60753-2	
Α	<b>.062059</b> 1.57-1.50	<b>.0312</b> 0.79	<b>.195</b> 4.95	<b>.260</b> 6.60	<b>.110</b> 2.79	Brass, Tin	3-60839-1	

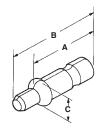
# .058 [1.47] Diameter Formed Pins

T	Hole	Pc Board		Dimensio	ns	Material	Part	Nos.	Insertion
Type	Diameter	Thickness	Α	В	С	and Finish	Strip Form	Loose Piece1	Head
	.050046	.063 or .094	.210	.360	.095	Phos. Brz., Pre-Tin	60802-2	60803-2	904554-1
В	1.27-1.17	1.60 or 2.39	5.33	9.14	9.14 2.41	Phos. Brz., Gold <sup>2</sup>	3-60802-1	3-60803-1	904554-1
						Phos. Brz., Pre-Tin	60809-1	60874-1	904554-1
В	<b>.062058</b> 1.57-1.47	<b>.063 or .094</b> 1.60 or 2.39	<b>.210</b> 5.33	<b>.360</b> 9.14	<b>.095</b> 2.41	Phos. Brz., Gold <sup>2</sup>	3-60809-2	3-60874-2	904554-1
	1.57-1.47	1.00 01 2.39	5.55	3.14	2.41	Phos. Brz., Tin	60809-4	_	904554-1
В	<b>.070066</b> 1.78-1.68	<b>.063 or .094</b> 1.60 or 2.39	<b>.210</b> 5.33	<b>.360</b> 9.14	<b>.095</b> 2.41	Phos. Brz., Pre-Tin	60813-1	61018-1	904554-1
С	<b>.050046</b> 1.27-1.17	<b>.063 or .094</b> 1.60 or 2.39	<b>.210</b> 5.33	<b>.360</b> 9.14	<b>.095</b> 2.41	Phos. Brz., Gold <sup>3</sup>	61038-1	61067-1	904554-1
	.073067	.063	.210	.310	.095	Phos. Brz., Pre-Tin	60824-1	61097-1	904554-2
D	1.85-1.70	1.60	5.33	7.87	2.41	Phos. Brz., Gold <sup>2</sup>	3-60824-2	3-61097-2	904554-2
E	<b>.050046</b> 1.27-1.17	<b>.063</b> 1.60	<b>.210</b> 5.33	<b>.310</b> 7.87	<b>.095</b> 2.41	Phos. Brz., Gold <sup>3</sup>	640967-2	_	904554-2
Е	<b>.061055</b> 1.55-1.40	<b>.047</b> 1.19	<b>.210</b> 5.33	<b>.310</b> 7.87	<b>.095</b> 2.41	Phos. Brz., Pre-Tin	641944-1	_	_
_	.061055	.063	.210	.310	.095	Phos. Brz., Pre-Tin	60973-1	640394-1	904554-2
E	1.55-1.40	1.60	5.33	7.87	2.41	Phos. Brz., Gold <sup>2</sup>	3-60973-2	_	904554-2

<sup>&</sup>lt;sup>1</sup>Use Insertion Tool Part No. 689141-1 for Loose Piece Pins

Note: All above formed pins are made from .010 [0.25] thick material

#### .093 [2.36] Diameter Formed Pins



Hole	Pc Board	Di	mensio	ns	Material Part Nos. Inse		Part Nos.	
Diameter	Thickness	Α	В	С	and Finish	Strip Form	Loose Piece	Machine
<b>.073067</b> 1.85-1.70	<b>.063</b> 1.60	<b>.305</b> 7.75	<b>.410</b> 10.41	<b>.115</b> 2.92	Phos. Brz., Pre-Tin	61137-1	350491-1	904558-1

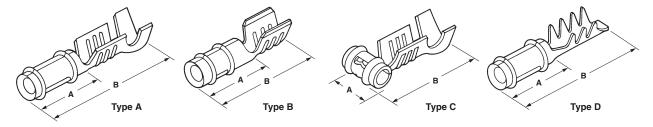
<sup>2.000030 [0.00076]</sup> gold plated

<sup>3.000030 [0.00076]</sup> gold plated in disconnect area



# **Printed Circuit Board Disconnects** (Continued)

# Receptacles



#### .058 [1.47] Diameter

	Wire S	Wire Size Range Insulation Dimension	neione			Part Nos.				
Type	AWG	mm <sup>2</sup>	Insulation Diameter	A	В	Material and Finish	Strip Form <sup>3</sup>	Loose Piece	Hand Tool	Insertion <sup>5</sup> Head
Α	28-26	0.08-0.15	<b>.035045</b> 0.89-1.14	<b>.155</b> 3.94	<b>.380</b> 9.65	Phos. Brz., Pre-Tin	60354-7	_	_	
						Phos. Brz., Gold <sup>1</sup>	60888-2	60983-1		
Α	26-22	0.15-0.4	.035065	.155	.380	Phos. Brz., Pre-Tin	60888-1	60983-2	00101 4	452383-1
^	20-22	0.15-0.4	0.89-1.65	3.94	9.65	Be. Cu., Tin	60888-3	60983-4	90131-4	
						Be. Cu., Gold <sup>1</sup>	60888-4	60983-3		
Α	26-20	0.15-0.6	<b>.040110</b> 1.02-2.79	<b>.155</b> 3.94	<b>.395</b> 10.03	Be. Cu., Tin	350196-14	_	_	_
						Phos. Brz., Pre-Tin	60598-3	60789-1		
	04.00	0 0.2-0.6 .045070 .155	.380	Be. Cu., Tin	60598-4	60789-2	91507-1	450000 1		
А	A 24-20 0.2-0.6	1.14-1.78	3.94	9.65	Phos. Brz., Gold	60598-7	60789-3	91507-1	452383-1	
						Be. Cu., Gold <sup>2</sup>	60598-9	60789-8		
Α	24-20	0.2-0.6	.060090	.155	.395	Phos. Brz., Pre-Tin	60940-1	60986-1	90221-2	
^	24-20	0.2-0.0	1.52-2.29	3.94	10.03	Be. Cu., Tin	60940-2			_
В	22-17	0.4-1.0	_	<b>.155</b> 3.94	<b>.300</b> 7.62	Be. Cu., Tin	640259-1	640024-1	90314-1	453850-1
С	26-22	0.15-0.4	.035065	.160	.330	Be. Cu., Gold <sup>2</sup>	61513-1	350189-2		
O	20-22	0.13-0.4	0.89-1.65	4.06	8.38	Phos. Brz., Pre-Tin	61513-2	350189-1	90131-4	
						Be. Cu., Gold <sup>2</sup>	61119-1	61276-1		
С	24-20	0.2-0.6	<b>.045070</b> 1.14-1.78	. <b>160</b> 4.06	<b>.330</b> 8.38	Phos. Brz., Pre-Tin	61119-2	61276-2	91507-1	453850-1
			1.14-1.70	4.00	0.30	Be. Cu., Tin	61119-3	61276-3		
D	Tinse	l Wire	<b>.030040</b> 0.76-1.02	<b>.155</b> 3.94	<b>.380</b> 9.65	Phos. Brz., Pre-Tin	350393-1	_		

#### .093 [2.36] Diameter

	_ Wire Size Range		e Insulation Dime		nsions			Part Nos.			
Type	AWG	mm <sup>2</sup>	Diameter	A	В	Material and Finish	Strip Form <sup>3</sup>	Loose Piece	Hand Tool	Insertion Head	
А	28-26	0.08-0.15	<b>.032057</b> 0.81-1.45	<b>.255</b> 6.48	<b>.545</b> 13.84	Phos. Brz., Tin	35022-1	_	_	452383-1	
А	22-18	0.4-0.8	<b>.060110</b> 1.52-2.79	<b>.255</b> 6.48	<b>.550</b> 13.97	Phos. Brz., Tin	61291-1	61260-1	90135-2	452383-3	
В	22-18	0.3-0.9	_	<b>.255</b> 6.48	<b>.435</b> 11.05	Phos. Brz., Tin	350015-2	_	_	435850-1	

<sup>1.000030 [0.00076]</sup> gold plated

Note: Part Nos. 350221-1, 61291-1 and 61260-1 are made from .012 [0.30] thick material. All other receptacles are made from .010 [0.25] thick material.

<sup>2.000015 [0.00038]</sup> gold plated

Machine applied; applicator required. For machine and applicator part numbers, call the Tooling Assistance Center at 1-800-722-1111.

<sup>&</sup>lt;sup>4</sup>These receptacles have an overlap insulation crimp.

<sup>&</sup>lt;sup>5</sup>Use the listed insertion head with either the Comp-U-Sert or II Insertion Machine No. 122300-1 or MIS Bench Machine No. 66280-4.

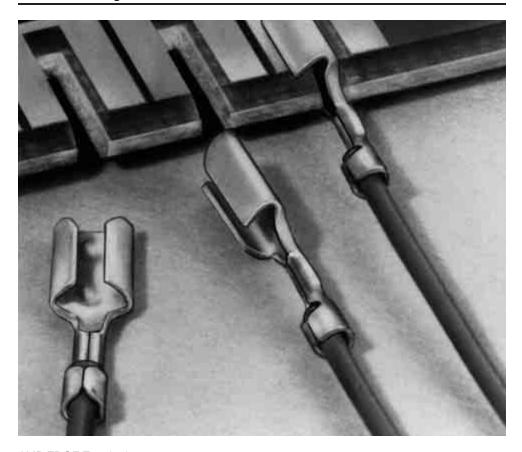


# **AMP EDGE Single Lead Printed Circuit Terminals**

#### **Product Facts**

- Friction fitting, quick connect/disconnects no insertion nor extraction tools required
- Excellent vibration and shock resistance
- Accepts wire size range 32-16 AWG [0.03-1.4 mm²]
- Wide choice of materials and finishes
- High-speed machine terminated for volume production at lowest installed cost

**Technical Documents Product Specification**108-1011 AMP EDGE Terminals

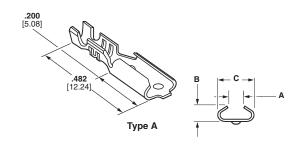


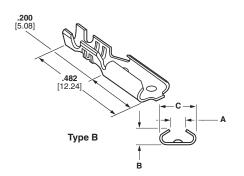
AMP EDGE Terminals are quick connect/disconnect devices that adjust securely, through friction fitting, to machine slots in the type of board for which they are designed. Friction fitting not only precleans the contact areas, but also provides excellent vibration and shock resistance even under heavy stresses. Firm wire insulation support is a companion factor for positive retention in the board. These terminals, wholly aerated to eliminate moisture traps, may be applied anywhere on the perimeter of the board. They eliminate the need for eyelets and plated-through holes on two-sided boards and can be used back-to-back for commoning circuits.

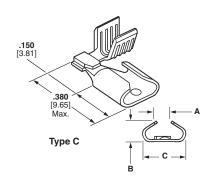


# **AMP EDGE Single Lead Printed Circuit Terminals (Continued)**

**Related Product Data** Application Tooling — pages 36-38







Time	Wire Size Range		Material	Finish	Stock	Inc. Die	Board	I	Dimensions	3	Strip Form
Type	AWG	mm <sup>2</sup>	iviateriai	rinish	Thk.	Ins. Dia.	Thk.	Α	В	С	Part Nos.7
А	32-24	0.03-0.2	Phos. Brz.	Tin	<b>.010</b> 0.25	<b>.020050</b> 0.51-1.27	<b>.062</b> 1.57	<b>.045</b> 1.14	<b>.080</b> 2.03	<b>.153</b> 3.89	61389-21
А	30-22	0.05-0.4	Phos. Brz.	Tin	<b>.010</b> 0.25	<b>.075</b> 1.91	<b>.062</b> 1.57	<b>.046</b> 1.17	<b>.080</b> 2.03	<b>.153</b> 3.89	61455-21
А	22-20	0.4-0.6	Phos. Brz.	Tin	<b>.010</b> 0.25	<b>.075</b> 1.91	<b>.062</b> 1.57	<b>.050</b> 1.27	<b>.080</b> 2.03	<b>.153</b> 3.89	42263-71
В	22-18	0.4-0.8	Phos. Brz.	Tin	<b>.010</b> 0.25	. <b>080100</b> 2.03-2.54	<b>.062</b> 1.57	<b>.050</b> 1.27	<b>.080</b> 2.03	<b>.153</b> 3.89	61561-22
В	22-18	0.4-0.8	Brass	Tin	<b>.016</b> 0.41	. <b>080100</b> 2.03-2.54	<b>.062</b> 1.57	<b>.052</b> 1.32	<b>.088</b> 2.24	<b>.160</b> 4.06	60156-23
В	22-18	0.4-0.8	Brass	Tin	<b>.016</b> 0.41	. <b>080100</b> 2.03-2.54	<b>.062</b> 1.57	<b>.056</b> 1.42	<b>.088</b> 2.24	<b>.160</b> 4.06	60704-14
С	22-16	0.4-1.4	Brass	Tin	<b>.012</b> 0.30	=	<b>.062</b> 1.57	<b>.046</b> 1.17	<b>.070</b> 1.78	<b>.200</b> 5.08	61782-15
С	22-16	0.4-1.4	Brass	Tin	<b>.012</b> 0.30	=	<b>.062</b> 1.57	<b>.046</b> 1.17	<b>.070</b> 1.78	<b>.200</b> 5.08	61782-26

<sup>1(2)</sup> dimples outside (.010 high) [0.25]

Note: Part Numbers are RoHS compliant except: ♦ Indicates non-RoHS compliant.

<sup>(2)</sup> dimples outside (.020 high) [0.25] 3(2) dimples inside (.014 high) [0.36] 4(2) dimples inside (.005 high) [0.13]

f(2) dimples inside (.023 high) [0.58]
f(2) dimples inside (.023 high) [0.58]
f(2) dimples inside (.023 high) [0.58], reverse reeled
Machine applied applicator required. For machine and applicator part numbers, call the Tooling Assistance Center at 1-800-722-1111.



### **Miniature AMP-IN Terminals**

#### **Product Facts**

- Eliminates manual preparation of wires prior to soldering into pc boards
- Low applied cost
- Total height above pc board is less than most other components
- Available for 26-10 AWG, [0.15-5.5 mm<sup>2</sup>]
- Terminal locking lance holds wire in pc board for flow soldering
- Design allows both wire and terminal to be soldered and assures proper solder flow
- Insulation support provides strain relief for wire and protection of solder joint
- Type A terminals will provide both a positive board stop and positive insulation stop
- Type E terminal offers minimum below pc board length



Technical Documents Product Specification 108-1081

**Application Specification** 114-1016

# **Material and Finish**

008 phosphor bronze, Pre-tin plated **Pc Board Thickness** — .062 [1.57]

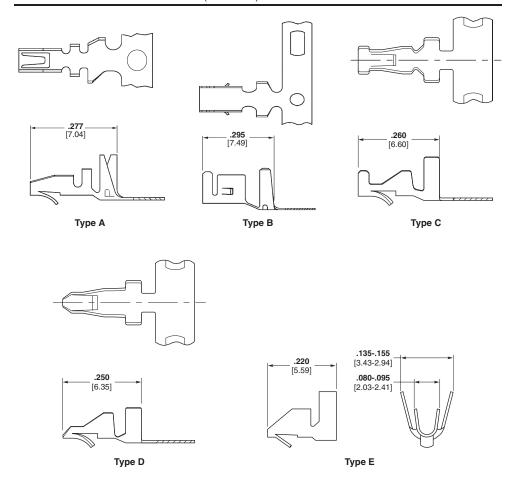
The miniature AMP-IN Terminal is designed not as an electrical terminal but as a mechanical holding device to enhance soldering of hookup wires to printed circuit boards. The combination of terminal and application tooling eliminates costly manual preparation of wires prior to soldering, and positions the wire to achieve reliable solder joints. Movement of the wire during soldering is restricted, providing for proper solder flow.

www.tycoelectronics.com

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803



# Miniature AMP-IN Terminals (Continued)



Туре	Wire S AWG	Wire Size Range AWG mm²		Board Hole Diameter	Extension Below Board (Ref.)	Strip Form Terminal Part Nos. <sup>3</sup>
	22-18	0.3-0.9	<b>.060110</b> 1.52-2.79	.072± .003 1.83±.0.08	<b>.100</b> 2.54	3-794121-1
Α	26-22	0.12-0.4	<b>.040110</b> 1.02-2.79	.055± .004 1.40±0.10	<b>.100</b> 2.54	3-794122-1
	18-14	0.8-2.0	<b>.090150</b> 2.29-3.81	.125± .003 3.18±0.08	<b>.125</b> 3.18	3-770060-1
В	12	3.0	<b>.090150</b> 2.29-3.81	.125± .003 3.18±0.08	<b>.125</b> 3.18	3-794013-1
	10	5.5	<b>.200</b> 5.08	.150 3.81 Ref.	<b>.125</b> 3.18	3-794037-1
С	22-18	0.4-0.8	<b>.060110</b> 1.52-2.79	.073± .004 1.85±.0.10	<b>.100</b> 2.54	3-640311-1
C	26-22	0.15-0.4	<b>.040100</b> 1.02-2.54	.055± .004 1.40±0.10	<b>.100</b> 2.54	3-640401-1
	22-18	0.4-0.8	<b>.060110</b> 1.52-2.79	.073± .004 1.85±.0.10	<b>.125</b> 3.18	3-350566-1
D	26-22	0.15-0.4	<b>.060100</b> 1.52-2.54	.055± .004 1.40±0.10	<b>.135</b> 3.43	3-640108-1
	26-22	0.15-0.4	<b>.040070</b> 1.02-1.78	.125± .003 3.18±0.08	<b>.125</b> 3.18	3-640663-1
E	22-18	0.8-0.4	<b>.060110</b> 1.52-2.79	.072± .004 1.83±.0.10	<b>.090</b> 2.29	3-770565-2

Notes: 1. Higher tensile available with nose crimp type C.

- 2. Not available in loose piece.
- 3. No hand tools available.
- 4. Machine applied applicator required. For machine and applicator part numbers, call the Tooling Assistance Center at 1-800-722-1111.



# **Low Profile Miniature AMP-IN Connectors**

#### **Product Facts**

- Connector housing provides gang insertion into pc board
- Housing insulates and provides short-circuit protection between contacts
- Housings are available in 2 to 15 positions for .079
   [2.01] and 2 to 20 for .098
   [2.49] centerline spacing
- Low profile design— .200 [5.08]
- Contacts available for 30-26 AWG [0.05-0.15 mm²] and 26-22 AWG [0.15-0.4 mm²]

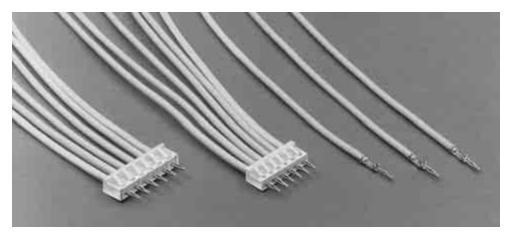
#### **Technical Documents**

**Product Specification**— 108-5163

**Application Specification**—114-5062

#### **Material and Finish**

Housing—Nylon, 94V-0 rated Contact—See chart Pc Board Thickness Range— .047-.062 [1.19-1.57]



Low Profile Miniature AMP-IN Connectors provide an easy means of gang inserting leads into printed circuit boards. The design of the crimp snap-in contact aids in locating the pc board hole and inserting the contact into that hole.

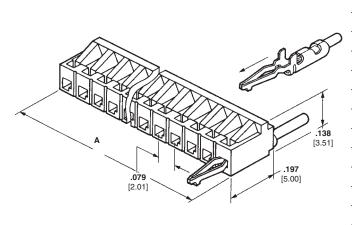
The low profile housing allows compactness of leads while providing insulation between them to prevent short-circuits. Housings are available in 2 to 15 positions for .079 [2.01] centerline spacing and 2 to 20 positions for .098 [2.49] centerline spacing.

Contacts come in 26-22 AWG [0.15-0.4 mm²] and 30-26 AWG [0.05-0.15 mm²] with insulation support crimp to provide strain relief. They accommodate a board thickness of .047 [1.19] to .062 [1.57].

Wire S	ize Range	Insulation			Contact	Part No.	Hand Tool	
AWG	mm <sup>2</sup>	Diameter	Diameter	Diameter and Finish		Loose Piece	Part Nos.	
30-26	0.05-0.15	.043055	<b>.031</b> 0.79	Brass, Pre-Tin	172781-1	172797-1		
30-20	30-26 0.05-0.15	1.09-1.40	<b>.039</b> 0.99	Brass, Tin	172781-4	172797-4	755405-1	
26-22	26-22 0.15-0.4	.055059	<b>.031</b> 0.79	Brass, Tin	172782-5	_		
20-22 0.15-0.4	1.40-1.50	<b>.039</b> 0.99	Brass, Tin	172782-7	_	755405-1		

Notes: 1. Refer to pages 36-38 for application tooling.

- 2. Use Extraction Tool Part No. 753760-1.
- 3. Machine applied applicator required. For machine and applicator part numbers, call the Tooling Assistance Center at 1-800-722-1111.



Note: Part Numbers are RoHS
compliant except: ♦ Indicates
non-RoHS compliant.

No. of	.079 [2.	01] Centerline	.098 [2.	49] Centerline
Positions	Α	Part Nos.	Α	Part Nos.
2	<b>.189</b> 4.80	172890-2	<b>.236</b> 5.99	172520-2
3	<b>.268</b> 6.81	172890-3	<b>.335</b> 8.51	172520-3
4	<b>.346</b> 8.79	172890-4	<b>.433</b> 11.00	172520-4
5	<b>.425</b> 10.80	172890-5	<b>.532</b> 13.51	172520-5
6	<b>.504</b> 12.80	172890-6	<b>.630</b> 16.00	172520-6
7	<b>.583</b> 14.81	172890-7	<b>.729</b> 18.52	172520-7
8	<b>.661</b> 16.79	172890-8	<b>.827</b> 21.01	172520-8
9	<b>.741</b> 18.82	172890-9	<b>.926</b> 23.52	172520-9
10	<b>.820</b> 20.83	1-172890-0	<b>1.024</b> 26.01	1-172520-0
11	_	_	<b>1.123</b> 28.52	1-172520-1
12	<b>.977</b> 24.82	1-172890-2	<b>1.221</b> 31.01	1-172520-2
13	_	_	1.320 33.53	1-172520-3
14	_	_	<b>1.418</b> 36.02	1-172520-4
15	<b>1.214</b> 30.84	1-172890-5	<b>1.517</b> 38.53	1-172520-5
20	_	_	<b>2.010</b> 51.05	2-172520-0

USA: 1-800-522-6752 Canada: 1-905-470-4425 Mexico: 01-800-733-8926 C. America: 52-55-1106-0803 South America: 55-11-2103-6000 Hong Kong: 852-2735-1628 Japan: 81-44-844-8013 UK: 44-8706-080-208



# **Test Probe Receptacles**

#### **Product Facts**

- Leg mounts are "V" shaped to promote solder wicking and consistent fillets
- Receptacle is recessed in housing to prevent shorting or flashover
- Probe may be inserted in either end of test probe receptacle except Type C
- Housing color is molded, not dyed
- Accepts .080±.001 [2.03±0.025] probes

#### **Material and Finish**

**Housing**—Nylon type 6/6 **Contact**—Beryllium copper

**Receptacle and Legs**—Brass, ASTM B36, Alloy 6

Contact Plating—See table below

### **Technical Documents**

Product Specification—

108-1082 Receptacle, Test Probe

# **Performance Characteristics**

Insulation Resistance-

10,000 megohms

Retention Value-

16oz. [4.45 N]

#### Operating Temperature—

55°C to 85°C [131°F to 185°F]

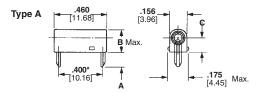
The Tyco Electronics line of Test Probe Receptacles is designed to pro-vide low-cost test probe capability of circuits on pc boards, with-out interruption of operating currents, with precise reliability.

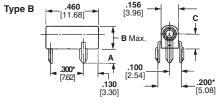
Receptacles are available with either two or three mounting

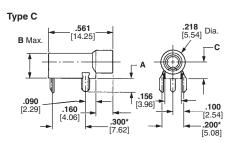
legs. Two legs of a tri-leg mount are not part of the live testing circuit. Receptacles are also available either in the standard height, or in a taller height (to permit probing at any position on the board where clearance to probe is necessary). The three-leg mount gives maximum

stability. The two-leg mount yields maximum density.

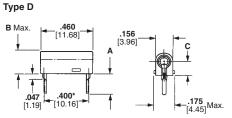
The present line of test probe receptacles fits a range of board thicknesses from 1/32 to 1/8 depending on the length of the receptacle legs. The legs mount in .052 [1.32] diameter holes.







\*Mounting hole location for .050-.054 [1.27-1.37] dia. holes.



Color	Suffix	Table

Suffix Dash Number	Housing Color
-0	Black
-1	Brown
-2	Red
-3	Orange
-4	Yellow
-5	Green
-6	Blue
-7	Violet
-8	Gray
-9	White

Turne	Contact		Dimensions		Housing	Doub Noo *	
Туре	Finish	Α	В	С	Colors	Part Nos.*	
	Bright Tin	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	1-521799-x	
	Silver	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	2-582118-x	
Α	Gold	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	3-582118-x	
^	Gold	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	Natural	6-582118-9	
	Bright Tin	<b>.130</b> 3.30	<b>.467</b> 11.86	<b>.375</b> 9.53	See Table	1-521800-x	
	Gold	.130	.467	.375	See Table	3-582340-x	
		3.30	11.86	9.53			
В	Gold	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	3-582119-x	
	Gold	<b>.130</b> 3.30	<b>.467</b> 11.86	<b>.375</b> 9.53	See Table	3-582120-x	
С	Gold	<b>.130</b> 3.30	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	350180-x	
D	Gold	<b>.180</b> 4.57	<b>.230</b> 5.84	<b>.138</b> 3.51	See Table	1-380736-x	
	Bright Tin	<b>.180</b> 4.57	<b>.230</b> 5.84	<b>.138</b> 3.51	Green	3-521801-5	

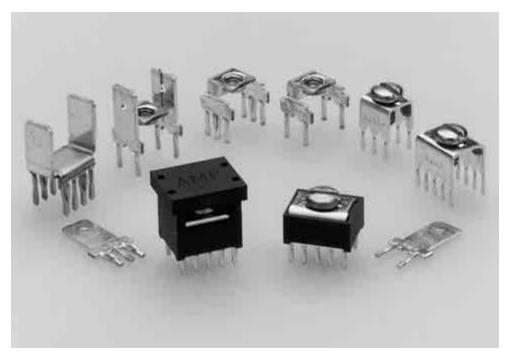
<sup>\*</sup>Part numbers with a numerical suffix are only for the specific color listed in the chart.



# **Power Taps**

# **Product Facts**

- ACTION PIN contacts eliminate soldering
- Provides high current, separable connection to pc board traces
- Wire-to-board connection using common terminals
- All metal-to-metal assembly for long-term integrity
- Standard DIP outlines (.300 x .100 [7.62 x 2.54]), 10 positions, and .250 x .125 [6.35 x 3.18], 6 and 10 positions, plus high current versions on .400 x .200 [10.16 x 5.08] footprint in 4 and 6 positions, .300 x .100 [7.62 x 2.54] in 8 positions, and both 2 and 3 position in-line .100 [2.54] tab taps
- Low resistance interface
- Internally threaded tap to secure screw to terminal
- Anti-rotational embossments hold wire and terminal in place
- Standard Power Taps rated at 2.5 amps per pin—
   6 position 15 amps,
   10 position 25 amps current carrying capability
- High Current Power Taps rated at up to 5 amps per pin—
   2 position 10 amps,
   3 position 15 amps,
   4 and 6 position 20 amps and 8 position 40 amps



Tyco Electronics Power Taps are designed for the growing need for power to printed circuit board applications required in today's electronic industry. The taps provide a high current, separable connection to a pc board. Pin configuration is of the standard DIP outline with .300 x .100 [7.62 x 2.54] or .250 x .125 [6.35 x 3.18] for the Standard versions, plus .400 x .200 [10.16 x 5.08], .300 x .100 [7.62 x 2.54] and in-line spacing for the High Current versions.

ACTION PIN contacts provide a low resistance interface with tin plated-through holes in the pc board, thereby eliminating the need for soldering.

The variety of available power taps allow for various installation schemes. The Uninsulated Tap and Low Profile Tap can be used in bus bar pattern. The High Profile and Low Profile Taps offer insulation protection from other components. The High Current versions provide a greater power

density option with current ratings from 10 amps on the 2 position in-line .250 [6.35] tab tap up to 40 amps on the 8 position dual .250 [6.35] tab tap.

All Tyco Electronics Power Tap configurations are easily inserted into the pc board with a simple Tyco Electronics or customer supplied tool.



# **Standard Power Taps**

# Standard Insulated Power Tap Material and Finish

**Connector Body and Lid**—Nylon, 105°C 94V-0 rated

**Contact**—Copper alloy, bright tin-lead plated and matte tin plated

Screw—Plated steel

# Electrical and Mechanical Characteristics

**Resistance**—2 milliohms, max. (stud hole to ACTION PIN contact)

**Insertion Force**—40 lbs. [177.9 N], max. per pin

**Retention Force**—7 lbs. [31.1 N], min. per pin

# **Technical Documents**

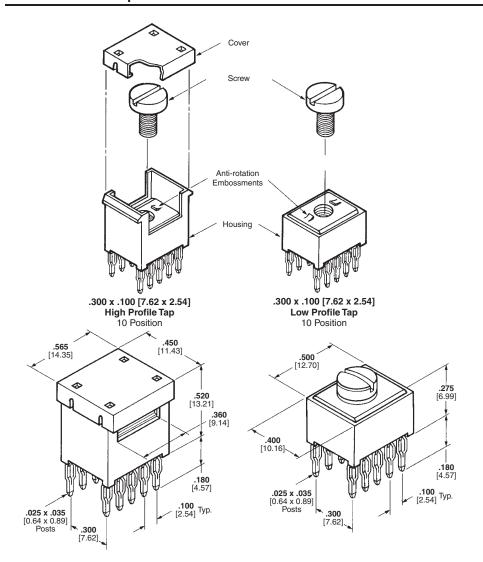
Product Specification

# 108-11030 Tap, Power Distribution **Application Specification**

114-11000 Tap, Power Distribution

#### Handbook

5697 Guide to Application of ACTION PIN Connectors



Тар	Pcb	Description	Screw	Part Nos.	
Version	Thickness	Description	Hole Size	Tin-Lead	Tin
High Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled without screw1	6-32	55557-3♦	5055557-3
High Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled with screw <sup>1,2</sup>	6-32	55557-4 ♦	5055557-4
Low Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled with screw <sup>2</sup>	6-32	55556-4◆	5055556-4
Low Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled with screw <sup>2,3</sup>	6-32	55673-2♦	5055673-2
Low Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled without screw	6-32	55556-3 ♦	5055556-3
Low Profile	<b>.062125</b> 1.57-3.18	Housing and contact assembled without screw	M4	55556-9♦	5055556-9

<sup>&</sup>lt;sup>1</sup>Cover not assembled

<sup>&</sup>lt;sup>2</sup>Screw not assembled

<sup>&</sup>lt;sup>3</sup>No anti-rotational embossments



# Standard Power Taps (Continued)

### Standard Uninsulated Power Taps

#### **Material and Finish**

**Contact**—Copper alloy, post plated bright tin-lead and matte tin plated

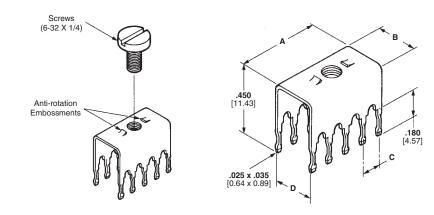
**Screw**—Stainless steel, passivated

# Electrical and Mechanical Characteristics

**Resistance**—2 milliohms, max. (stud hole to ACTION PIN contact)

**Insertion Force**—40 lbs. [177.9 N] max. per pin

**Retention Force**—7 lbs. [31.1 N] min. per pin



Size Pcb		Dimensions		Description	Screw	Part Number						
Size	Thickness	Α	В	С	D	Description	Size	Tin Lead	Tin			
.300 x .100	000 405	440	005	400	000	Without Screw	6-32	55558-3♦	5055558-3			
7.62 x 2.54	. <b>062125</b> 1.57-3.18	<b>.440</b> 11.18	<b>.325</b> 8.26	<b>.100 .300</b> 2.54 7.62					With Screw	6-32	55558-4 ♦	5055558-4
10 Position	1.57 0.10	11.10	0.20		2.04 7.02	Without Screw	6-32	55558-7 ♦ 1	5055558-7			
.250 x .125 6.35 x 3.18	.062125	.320	.275	.125	.250	Without Screw	6-32	55323-5♦	5055323-5			
6 Position	1.57-3.18	8.13	6.99	3.18	3.18 6.35	With Screw	6-32	55323-9 ♦	5055323-9			
.250 x .125 6.35 x 3.18	.062125	.570	.275	.125	.250	Without Screw	6-32	55323-6♦	5055323-6			
10 Position	1.57-3.18	14.48	6.99	3.18	6.35	With Screw	6-32	1-55323-0♦	1-5055323-0			

<sup>&</sup>lt;sup>1</sup>No Anti-rotation Embossments

# High Current\* Power Taps \*Up to 20 amps

#### **Material and Finish**

**Contact**—Phosphor bronze, tin-lead and matte tin plated

**Screw**—Stainless steel, passivated

Washer—Stainless steel

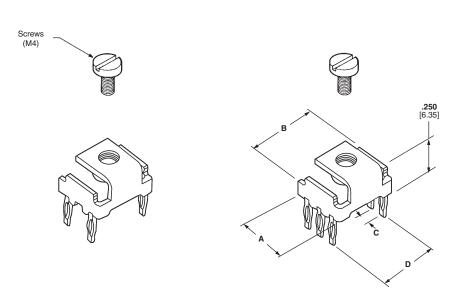
# Electrical and Mechanical Characteristics

Current Rating—20 amperes max.

Insertion Force—40 lbs. [180 N]

max. per pin

**Retention Force**—7 lbs. [30 N] min. per pin



Size	Pcb		Dimer	nsions		Description	Part Number									
Size	Thickness	Α	В	С	D	Description	Tin Lead	Tin								
4 Position	.062125	.358	.431	.200	.400	With Screw	213815-1 ♦	5-213815-1								
4 Position	1.57-3.18	9.09	10.95	10.95	10.95	10.95	10.95	10.95	10.95	5.08	5.08	5.08 10.16	10.16	Without Screw	216906-1 ♦	_
6 Position	.062125	.358	.431	.100	.400	With Screw	213816-1 ♦	5-213816-1								
o Fusition	1.57-3.18	9.09	10.95	2.54 10.16	Without Screw	216907-1 ♦	_									

<sup>1</sup>No Anti-rotation Embossments featured on High Current Taps. Therefore, if application requires, use of Bellville lockwashers with a high surface contact area are strongly recommended.



# **High Current\* Power Taps**

### Designed to mate with FASTON and Positive-Lock Receptacles

\*Up to 5 amps per pin

#### **Material and Finish**

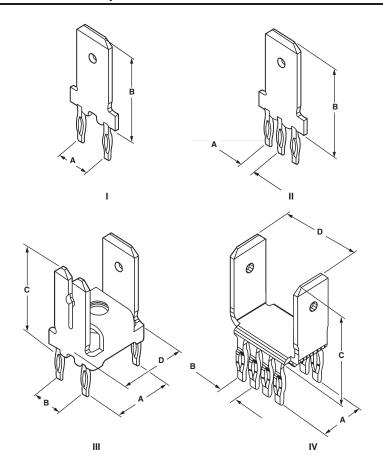
**Contact**—Phosphor bronze, post plated tin-lead, except as noted in chart

Screw—Stainless steel, passivated

Washer—Stainless steel

# Electrical and Mechanical Characteristics

Current Rating—5 amps max. per pin Insertion Force—40 lbs. [180 N] max. per pin



Chula	Pcb		Dimer	nsions		Configuration	Description	Part	Receptacle
Style	Thickness	Α	В	С	D	Configuration	Description	Number	Mating
1	<b>.062 x .125</b> 1.57 x 3.18	<b>.200</b> 5.08	<b>.531</b> 13.49	_	_	<b>.250 x .032</b> 6.35 x 0.81 Tab	With Hole	216926-1 ♦	Positive Lock
II	<b>.062 x .125</b> 1.57 x 3.18	<b>.100</b> 2.54	<b>.531</b> 13.49	_	_	.250 x .032 6.35 x 0.81 Tab	With Hole	216843-1 ♦	Positive Lock
III	<b>.062 x .125</b> 1.57 x 3.18	<b>.400</b> 10.16	<b>.200</b> 5.08	<b>.531</b> 13.49	<b>.431</b> 10.95	1250 x .032 6.35 x 0.81 Tab 2110 x .032 2.79 x 0.81 Tab	With Hole Without Washer Without Screw	216905-1 ♦ ¹	Positive Lock
IV	.125	.300	.100	.485	.500	2- <b>.250 x .032</b> Tab 6.35 x 0.81	With Dimple	5167892-32	FASTON Receptacle
IV	3.18	7.62	2.54	12.32	12.7	6.35 x 0.81	With Hole	167892-62	Positive Lock

<sup>&</sup>lt;sup>1</sup>No Anti-rotation Embossments featured on High Current Taps. Therefore, if application requires product supplied without washer and screw, use of lockwashers with a high surface contact area are strongly recommended.

<sup>2</sup>Phosphor bronze, post plated matte tin.



# **Application Tooling/PCB Layout**

# For Standard Threaded Taps Only

#### Recommended Pc Board Layout

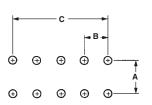
Drilled Hole Diameter— .0453±.001 [1.15±0.03] After Plating

.037-.043 [0.94-1.09] After Reflow— .036-.043 [0.91-1.09]

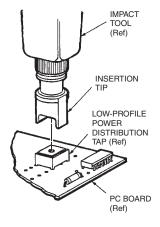
# Installation and Extraction Tooling

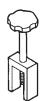
Impact Insertion Tool Number 313102-1

(Insertion Tip Part No. 58133-1 required)



Size		Dimensions	
Size	Α	В	С
.300 x .100 7.62 x 2.54 10 Position	<b>.300</b> 7.62	<b>.100</b> 2.54	<b>.400</b> 10.16
.250 x .125 6.35 x 3.18 6 Position	<b>.250</b> 6.35	<b>.125</b> 3.18	<b>.250</b> 6.35
<b>250 x .125</b> 6.35 x 3.18 10 Position	<b>.250</b> 6.35	<b>.125</b> 3.18	<b>.500</b> 12.7





**Extraction Tool Number 68380-1** 

# For High Current and FASTON Taps

#### Recommended Pc Board Layout

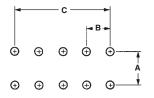
**Drilled Hole Diameter— .063±.001** [1.60±0.03]

**Cu Thickness**— **.001-.003** [0.03-0.08]

**Sn Thickness**— **.0002 min.**[0.004 min.]

Finished Hole— .055-.061 [1.39-1.54]

**After Reflow**— **.054-.061** [1.36-1.54]



Туре	Dimensions				
туре	Α	В	С		
4 Position	<b>.400</b> 10.16	<b>.200</b> 5.08	<b>.200</b> 5.08		
6 Position	<b>.400</b> 10.16	<b>.100</b> 2.54	<b>.200</b> 5.08		
I	_	<b>.200</b> 5.08	<b>.200</b> 5.08		
II	_	<b>.100</b> 2.54	<b>.200</b> 5.08		
III	<b>.400</b> 10.16	<b>.200</b> 5.08	<b>.200</b> 5.08		
IV	<b>.300</b> 7.62	<b>.100</b> 2.54	<b>.300</b> 7.62		

#### **Installation Tooling**

Use with Hand Press Part No. **677430-1** 

# **High Current Power Tap**

Tuno	Part Number	Tooling Part Number		
Туре	Part Number	Upper Tool	Lower Tool	
4 Position	216906-1	432848-1	433600-2 or	
6 Position	216907-1	432040-1	432130-2	
Style I	216926-1	432845-1	433600-2 or	
Style II	216843-1	432045-1	432130-2	
Style III	216905-1	432847-1	433600-2 or 432130-2	
Style IV	5-167892-3 167892-6	432849-1	433600-2 or 432130-2	

# **Application Tooling**

AMPOMATOR CLS IV+ Lead-Making Machines, Part Nos. 356500-1, -2



Fully-automatic machines that measure, cut, strip and terminate single leads. Microprocessor-controlled, and programmed and operated using an easy-to-follow, menu-driven touch-screen. Features include directdrive terminating units with precision crimp height adjustment, fully programmable setups, wire runout and splice detection, and motorized pre-feed with wire straightener. Crimp quality monitoring is also available. For more information, request Catalog 124324.

AMP-O-MATIC Stripper-Crimper Machines, Part Nos. 1320895-1, -2



Semiautomatic bench crimping machines that also strip the wire, and are therefore used for terminating jacketed cable. Feature manual precision adjustment of crimp height, keyed strip blades for faster, more accurate setups, and an efficient scrap removal system. All adjustments can be made from the front of the machines without special tools. Available with crimp quality monitoring.

For more information, request Catalog **65004**.

AMP-O-LECTRIC Model "G" Terminating Machines, Part Nos. 354500-1, -9, -11



Semiautomatic bench machines for crimping reeled terminals and contacts, featuring a quiet and reliable direct motor drive. microprocessor controls for ease of setup and operation, and guarding and lighting designed for operator convenience. All models are equipped with either manual or automatic precision adjustment of crimp height. Machine-mounted sensors are available for crimp quality monitoring using conventional miniature-style applicators. For more information, request Catalog **65828**.

AMP 3K/40 and AMP 5K/40 Terminating Machines



As a value oriented terminator, the AMP 3K/40 and AMP 5K/40 terminators are designed for customers that require the increased output and quality of a semiautomatic machine at a competitive price. By incorporating the most commonly requested features as standard and offering a long list of optional equipment, these terminators offer flexibility to meet the specific needs of various applications at the lowest possible cost. For more information, request Catalog 1654856.

Optional Stripping Module for the AMP 3K/40, AMP 5K/40 and AMP-O-LECTRIC Model "G" Terminating Machines



The combination of the Stripping Module with the AMP-O-LECTRIC Model "G" Terminator or the AMP 3K/40. and AMP 5K/40 terminating machines provides an economical, proficient method of stripping wire and crimping terminals on the same machine. Wires are stripped moments before crimping. meaning there is virtually no chance of damaging wire conductors during handling or storage. Once the wire is fed into the start sensor, the Stripping Module does the rest, improving placement accuracy.

For more information, request Catalog **1309085**.



# **Application Tooling (Continued)**

#### **Applicators**



Applicators manufactured from high grade tool steels, and processed through state-of-the-art CNC equipment for tightest tolerances. Made for high repeatability and fast throughput.

We offer an unmatched selection of applicator styles and terminals types, with configurations for both Tyco Electronics and other manufacturers' terminals. For more information, request Catalogs 296393 and 296393-2.

The 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 mis-adjustment.

For more information, request Catalog 1773385.

#### CERTI-CRIMP Straight Action Hand Tools (SAHT)



Premium grade hand tools featuring ratchet control to provide complete crimp cycle. Die sets close in a straight line. Include a contact locator and wire stop, plus an insulation crimp adjustment lever, when applicable. Approximate weight 1.3 lb [0.59 kg] For more information, request Catalog **65780**.



# **Application Tooling** (Continued)

AMP-O-MATIC "U" Frame Machine Part No. 691679-1 (Installs Board Mount Receptacles)

#### **Product Specifications**

Weight — 50 lbs.

**Width** — 18

Height — 23

**Depth** — 19

Air Supply - 80 psi

Electrical Power — 115 VAC, 60 Hz



These insertion machines install contacts into printed circuit boards at rates to 2000 per hour. A spotlight highlights the insertion area and a lower tooling assures precise board location. The machines are actuated by a foot pedal and are bench mounted.

Comp-U-Sertor II Machines, Part Nos. 122300-1, -2



# **Modular Insertion System** (MIS) Bench Machines, 217600 Series, 662820 Series (shown)

Strip Form Part Number	Insertion Head Part Number
60802-1	904554-1
60802-2	904554-1
60809-1	904554-1
60809-2	904554-1
60809-4	904554-1
60813-1	904554-1
61038-1	904554-1
60824-1	904554-2
60824-2	904554-2
640967-2	904554-2
641944-1	904554-2
60973-1	904554-2
60973-2	904554-2
61137-1	904558-1



Microprocessor-controlled X-Y positioning table inserts a variety of products into pc boards, including .0252 stamped or bandoliered posts, mini-spring sockets, and FASTON tabs. Insertion heads for various products are interchangeable, and can be used with bench machines. Controlled, programmed and operated using an interactive touchscreen. Options include double-action clinch tooling, powered dereeler, splice run-out detector, take-up winder for paper tape, and scrap chopper. For more information, request Catalog **296059**.

Bench machines for inserting a variety of products into pc boards. Uses the same interchangeable insertion heads as the Comp-U-Sertor Il Machines. Series 217600 features a manually-operated X-Y positioning fixture and locator spotlight. The machine cycles when the board hole is placed on the anvil and both triggers on the dual handles attached to the X-Y fixture are depressed. Series 662820, without board fixturing, cycle automatically when the hole is properly located. A stabilizing disk over the anvil helps keep the board level. For more information, request Catalog 296059.



# **Part Number Index**

**Note:** This index lists all cataloged parts by base no. only. Complete part nos. (with prefixes and/or suffixes) are shown on the page(s) indicated.

Part No.	Page	Part No.	Page	Part No.	Page
35022	25	63024	22	360041	13
42263	27	63025	22	360041	13
55323	34	63066	9	380736	31
55556	33	63067	9	432130	36
55557	33	63525	12	432845	36
55558	34	63566	5	432847	36
55673	33	63572	5	432848	36
60156	27	63603	12	432849	36
60284	11	63650	9	433600	36
60354	25	63755	9	435850	25
60598	25	63756	14	452383	25
60704	27	63794	14	453850	25
60753	24	63824	10	467322	7
60789	25	63838	12	521382	16
60802	24, 39	63839	9	521384	16
60803	24	63849	10	521799	31
60809	24, 39	63860	13	521800	31
60813	24, 39	63862	10	521801	31
60824	24, 39	63900	9	552699	18, 19, 20
60839	24	63949	10	552714	20
60874	24	63950	10	553593	19
60888	25	63951	11	553594	19
60940	25	63952	11	553595	19
60973	24, 39	63968	11	554935	18, 20
60983	25	63969	11	582118	31
60986	25	63982	13	582119	31
61018	24	63986	9	582120	31
61038	24, 39	63994	11	582340	31
61067	24	90131	25	640024	25
61097	24	90135	25	640108	29
61119	25	90221	25	640259	25
61134	14	90314	25	640311	29
61137	24, 39	91507	25	640394	24
61260	25	122300	39	640401	29
61276	25	167892	35, 36	640663	29
61291	25	172520	30	640967	24, 39
61389	27	172781	30	641944	24, 39
61455	27	172782	30	662820	39
61513	25	172797	30	691679	39
61543	12	172890	30	725963	14
61561	27	213815	34	725996	14
61782	27	213816	34	755405	30
61907	12	216843	35, 36	770060	29
61968	14	216905	35, 36	770565	29
62111	7	216906	34, 36	794013	29
62172	7	216907	34, 36	794037	29
62199	7	216926	35, 36	794121	29
62221	12	217600	39	794122	29
62395	14	230549	20	853439	5
62403	12	230707	19	904554	24, 39
62409	9	231279	20	904558	24, 39
62411	11	231890	20	904608	5
62437	14	274377	22	928814	11
62650	9	350015	25	1217056	9
62669	14	350180	31	1217057	12
62745	7	350189	25	1217061	13
62751	7, 11	350196	25	1217062	13
62806	7, 11	350393	25	1217080	11
62977	22	350491	24	1217107	11
63003	22	350566	29	1217124	13
63004	22	354500	37	1217125	10
63004	22	356500	37	1217126	10
03007		330300	31	1411140	10



# Part Number Index (Continued)

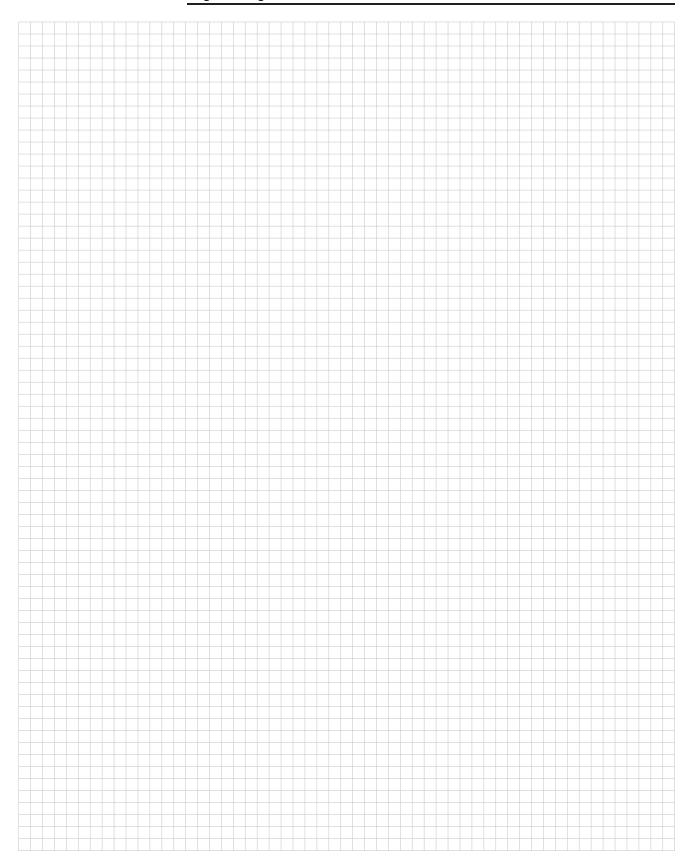
Part No.	Page
1217127	10
1217131	12
1217136	10
1217137	11
1217156	13
1217167	10
1217169	10
1217180	11
1217332	13
	<u> </u>

Part No.	Page
1217421	10
1217514	14
1217566	9
1217577	14
1217754	11
1217756	13
1320895	37
1742188	10
1742253	18, 19, 20

Part No.	Page
1742254	18, 19, 20
1742255	18, 19, 20
1742361	13
1742362	13
5055323	34
5055556	33
5055557	33
5055558	34
5055673	33



# **Engineering Notes**







#### Americas

**Argentina** – Buenos Aires Phone: +54-11-4733-2200 +54-11-4733-2211

Brasil - São Paulo

+55-11-3611-1311 +55-11-3611-0397 Fay:

Canada – Toronto Phone: +905-475-6222 +905-474-5520 **Product Information Center:** 

(Technical Support) Phone: +905-470-4425 Fax: +905-474-5525

Colombia – Bogota

Phone: +57-1-231-9398 +57-1-660-0206 Fax:

**Mexico** – Mexico City Phone: +52-55-1106-0800

+01-800-733-8926 +52-55-1106-0901

United States - Harrisburg, PA Phone: +717-564-0100 +717-986-7575 Fax:

**Product Information Center:** (Technical Support)

+800-522-6752 Phone: +717-986-7575 For Latin/South American Countries not shown

Phone: +54-11-4733-2015 Fax: +54-11-4733-2083

#### Asia/Pacific

Australia - Sydney +61-2-9554-2600 +61-2-9502-2556 Phone: Fax: **Product Information Center:** 

(Technical Support) +61-2-9840-8200 Phone: +61-2-9634-6188

India - Bangalore

+91-80-285-40800 Fax: +91-80-285-40820

Indonesia – Jakarta +65-6482-0311 Phone: Fax: +65-6482-1012 Japan – Toyko

Phone: +81-44-844-8111 +81-44-812-3207 Fax: **Product Information Center:** 

(Technical Support) +81-44-844-8013 Phone: +81-44-812-3200

Korea - Seoul

+82-2-3415-4500 Phone: Fax: +82-2-3486-3810

Malaysia - Kuala Lumpur Phone: +60-3-78053055 +60-3-78053066 Fax:

New Zealand - Auckland

+64-9-634-4580 Phone: +64-9-634-4586 Fax:

Philippines - Makati City +632-848-0171 Phone: +632-867-8661

People's Republic of China

Hong Kong +852-2735-1628 Phone: +852-2735-0243 Fax:

Shanghai

Phone: +86-21-2407-1588 +86-21-2407-1599

Taiwan - Taipei

+886-2-8768-2788 Fax: +886-2-8768-2268 Singapore - Singapore

+65-6482-0311 +65-6482-1012 Fax:

**Thailand** – Bangkok Phone: +66-2-955-0500 +66-2-955-0505

Vietnam and Indochina -

Ho Chi Minh City Phone: +84-8 930-5546

Phone: +84-8 930-3443 Fax:

#### **Europe/Middle East/Africa**

Austria - Vienna

Phone: +43-1 90 5 60-0 Fax: +43-1 90 5 60-1333

Belgium - Kessel-Lo

Phone: +32-16-35-23-00 +32-16-35-23-52

Bulgaria - Sofia

Phone: +359-2-971-2152 +359-2-971-2153 Fax:

Czech Republic - Kurim

+420-5-41-162-111 Phone: +420-5-41-162-223

Denmark - Glostrup

+45-43-480-452 +45-43-441-414 Fax:

Egypt - Cairo

+20-2-29 04 281 Phone: +20-2-41 92 334

+372-5138-274 Phone: +372-7400-779 Fax:

Finland - Helsinki

+358-95-12-34-20 Phone: +358-95-12-34-250

France - Cergy-Pontoise Phone: +33-1-3420-8888 +33-1-3420-8600 Fax: **Product Information Center:** 

(Technical Support)
Phone: +33-1-3420-8943 +33-1-3420-8623

Germany - Bensheim

Phone: +49-6251-133-0 Fax: +49-6251-133-1600 Product Information Center:

(Technical Support) Phone: +49-6251-133-1999 +49-6251-133-1988

Germany - Langen

Phone: +49-6103-709-0 +49-6103-709-1223

Fax:

**Germany** – Speyer Phone: +49-6232-30-0

+49-6232-30-2243

Germany - HTS Division - Neunkirchen

Phone: +49-2247-305-0 Fax: +49-2247-305-122

**Greece** - Athens Phone: +30-210-9370-396/397 +30-210-9370-655

Hungary - Budapest

+36-1-289-1000 Fax: +36-1-289-1010

Ireland - Dublin

+353-1-820-3000 Phone: +353-1-820-9790

Israel - Yokneam

+972-4-959-0508 Phone: +972-4-959-0506 Fax:

Italy - Collegno (Torino) Phone: +39-011-4012-111 +39-011-4031116 Fax:

Lithuania - Vilnius

Phone: +370-5-2131-402 Fax: +370-5-2131-403

Netherlands - 's-Hertogenbosch

+31-73-624-62-46 Phone: Fax: +31-73-621-23-65 **Product Information Center:** 

(Technical Support)
Phone: +31-73-6246-999 +31-73-6246-998 Fax:

Norway - Nesbru

+47-66-77-8886 Phone: Fax: +47-66-77-8855

Poland - Warsaw

+48-22-45-76-700 Phone: +48-22-45-76-720

Romania - Bucharest

+40-21-311-3479/3596 Phone: +40-21-312-0574 Fax:

Russia - Moscow

+7-495-926-5506/07/08/09 Phone: Fax: +7-495-926-5505

Russia – St. Petersburg Phone: +7-812-718-8192

+7-812-718-8193

Slovenia - Ljubljana Phone: +386-1561-3270 Fax: +386-1561-3240

South Africa - Port Elizabeth Phone: +2741-503-4500 +2741-581-0440

Spain - Barcelona

Phone: +34-93-291-0330 Fax: +34-93-201-7879 Product Information Center:

(Technical Support): Phone: +34-93-291-0330 +34-93-200-3779

Sweden - Upplands Väsby Phone: +46-8-50-72-50-00 +46-8-50-72-50-01 Fax:

Switzerland - Steinach Phone: +41-71-447-0447 +41-71-447-0444

Turkev - Istanbul

+90-212-281-8181/2/3 Phone: +90-212-281-8184 Fax:

**Ukraine** – Kiev Phone: +380-044-206-2265 +380-044-206-2264

United Kingdom - Swindon Phone: +44-8706-080-208 +44-1793-572-516 Fax: **Product Information Center:** 

(Technical Support) Freephone GB: 0800-267-666 Phone: +44-8706-080-208 +44-208-420-8081

For Middle East/African Countries Not Shown

Phone: +33-1-3420-8866 +33-1-3420-8300



# **ПОСТАВКА** ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

# Данный компонент на территории Российской Федерации Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

# http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

# Офис по работе с юридическими лицами:

105318, г. Москва, ул. Щербаковская д. 3, офис 1107, 1118, ДЦ «Щербаковский»

Телефон: +7 495 668-12-70 (многоканальный)

Факс: +7 495 668-12-70 (доб.304)

E-mail: info@moschip.ru

Skype отдела продаж:

moschip.ru moschip.ru\_6 moschip.ru\_4 moschip.ru\_9