

## 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 line. Tyco Electronics currently has an entry level semi-automatic, air-powered bench machine under development for customers with moderate insertion requirements. The compact, fully automatic AccuSert 2 machine is available for applications where larger volumes will be inserted and where programmable, microprocessor controlled equipment is desired. Tyco Electronics also offers the P300 and P350 series machines for even higher automation. Capabilities include: servo drive, force monitoring, up to three heads. This machine is available in stand-alone or in-line configurations.

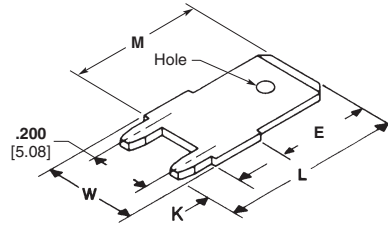
The Tyco Electronics product has been designed to be compatible with industry insertion equipment. In many cases, this product will work as a "drop in" replacement for existing product. In some cases, slight modifications or minor tooling changes are necessary. Please consult technical support or the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

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**250 Series Printed Circuit Board Tabs**

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



Dimensions					Material and Finish	Ⓡ	Ⓢ	Terminal Part No.	
W	L	K	E	M				Strip <sup>2</sup>	Loose Piece <sup>1</sup>
	.502 12.75	.125 3.18	.312 7.92	.377 9.58	Tin Plated Brass	X	X	63839-1 <sup>3</sup>	—
.312 7.92	.547 13.89	.157 3.99	.312 7.92	.400 10.16	Tin Plated Brass	X	X	63986-1	—
	.552 14.02	.150 3.81	.312 7.92	.402 10.21	Tin Plated Brass	X	X	1217566-1	—
.295 7.49	.622 15.80	.125 3.18	.312 7.92	.497 12.62	Tin Plated Brass	X	X	—	62409-1 <sup>3</sup>
						—	—	—	1217056-1
	.487 12.37	.125 3.18	.312 7.92	.362 9.19	Tin Plated Brass	X	X	62650-1 <sup>3</sup>	—
.280 7.11	.532 13.51	.175 4.45	.312 7.92	.357 9.07	Tin Plated Brass	X	X	63650-1 <sup>3</sup>	—
	.622 15.80	.125 3.18	.452 11.48	.497 12.62	Tin Plated Brass	X	X	—	63900-1
						X	X	63755-1 <sup>3</sup>	—

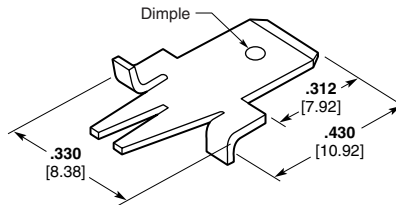
<sup>1</sup> Board hole size: .060/.053 [1.52/1.35] dia.

<sup>2</sup> Insertion equipment available.

<sup>3</sup> Dimple.

Stock Thickness — .032 [0.81]

Board Hole Size —  
.100 ± .002 [2.54 ± 0.05] Dia.



Material and Finish	Ⓡ	Ⓢ	Terminal Part No.	
			Strip <sup>1</sup>	Loose Piece
Tin Plated Brass	X	X	63066-1	63067-1

<sup>1</sup> Insertion equipment available.

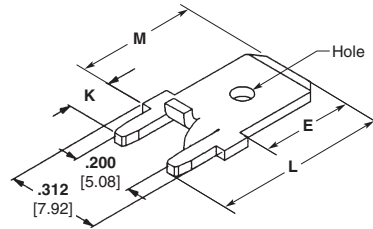
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**250 Series Printed Circuit Board Tabs** (Continued)

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



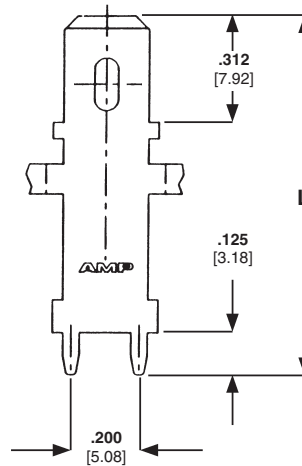
Dimensions				Material and Finish	UL	SP	Terminal Part No.	
L	K	E	M				Strip <sup>1</sup>	Loose Piece
<b>.552</b> 14.02	<b>.150</b> 3.81	<b>.312</b> 7.92	<b>.402</b> 10.21	Tin Plated Brass	X	X	63862-1 <sup>2</sup>	1742188-1 <sup>2</sup>
<b>.582</b> 14.78	<b>.180</b> 4.57	<b>.312</b> 7.92	<b>.402</b> 10.21	Tin Plated Brass	X	X	1217136-1	1217421-1
<b>.650</b> 16.51	<b>.150</b> 3.81	<b>.410</b> 10.41	<b>.500</b> 12.70	Tin Plated Brass	X	X	1217126-1 <sup>2</sup>	—
<b>.710</b> 18.03	<b>.150</b> 3.81	<b>.470</b> 11.94	<b>.560</b> 14.22	Tin Plated Brass	X	X	1217125-1	1217169-1
<b>.780</b> 26.18	<b>.150</b> 3.81	<b>.540</b> 13.72	<b>.630</b> 16.00	Tin Plated Brass	X	X	1217127-1	1217167-1

<sup>1</sup> Insertion equipment available.

<sup>2</sup> Dimple.

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



Dimension L	Material and Finish	UL	SP	Terminal Part No.
<b>1.062</b> 26.97	Tin Plated Brass	X	X	63949-1
<b>1.207</b> 30.66	Tin Plated Brass	X	X	63950-1

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

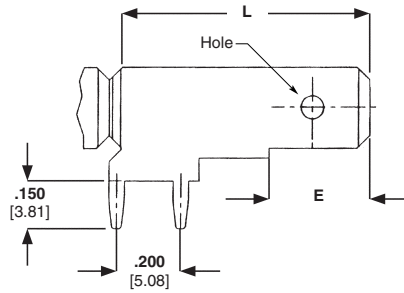
**FASTON Printed Circuit Board Tabs and Receptacles (Continued)**

**250 Series Printed Circuit Board Tabs (Continued)**

**Right-Angle Printed Circuit Board Tabs**

Stock Thickness — .032 [0.81]

Board Hole Size —  
.055 ± .002 [1.40 ± 0.05] Dia.



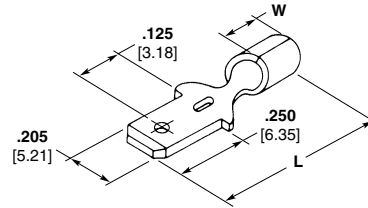
Dimensions		Material and Finish	UL	SP	Terminal Part No.	
E	L				Strip <sup>1</sup>	Loose Piece
.312 7.92	.800 20.32	Tin Plated Brass	X	X	63951-1	1217754-1
.358 9.09	.630 16.00	Tin Plated Brass	—	—	—	928814-1
.662 16.83	1.00 25.40	Tin Plated Brass	—	—	63952-1	—

<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.

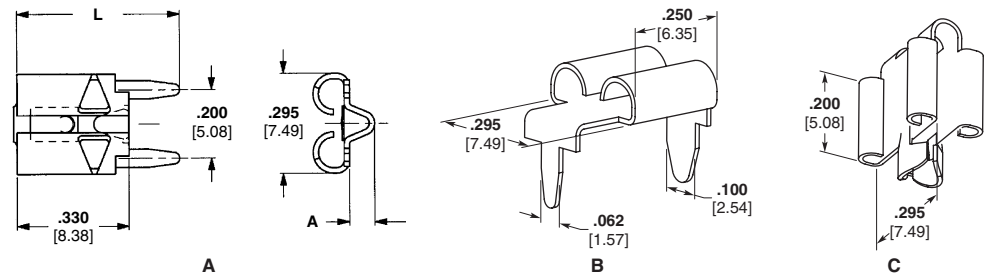


Dimensions		Material and Finish	UL	SP	Terminal Part No.	
L	W				Strip <sup>1</sup>	Loose Piece
.525 13.34	.070 1.78	Tin Plated Brass	X	X	62411-1 <sup>1</sup>	—
.545 13.84	.160 4.06	Tin Plated Brass	X	X	60284-2 <sup>1</sup>	—

<sup>1</sup> Loose piece only.

**.250/.205 Printed Circuit Board Receptacles**

Stock Thickness — .016 [0.41]



Style	Fits Tab	Dimensions		Material and Finish	UL	SP	Part No.	
		A	L				Strip	Loose Piece
A	.032 0.81 (LIF)	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63968-1	—
	.032 0.81	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63969-1	1217080-1
	.025 0.64 (LIF)	.075 1.91	.480 12.19	Tin Plated Brass	—	—	63994-1	—
	.025 0.64	.075 1.91	.510 12.95	Tin Plated Brass	—	—	1217137-1 <sup>2</sup>	—
	.025 0.64	.075 1.91	.480 12.19	Tin Plated Brass	—	—	1217180-1	—
B	.020 0.51	—	—	Tin Plated Phos Bronze	—	—	1217107-1 <sup>1</sup>	—
C	.250 x .016 6.35 x 0.41 Spade	—	—	Tin Plated Brass	—	—	62751-1	62806-1

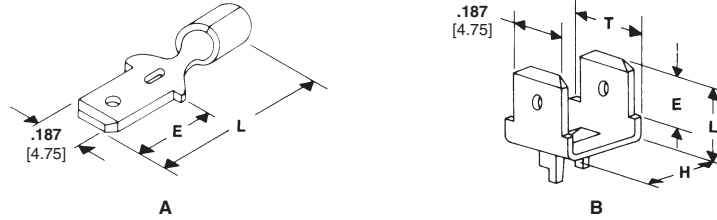
**Note:** All part numbers are RoHS compliant.

<sup>1</sup> Horizontal mount.  
<sup>2</sup> .180 [4.57] length — solder legs.

**FASTON Printed Circuit Board Tabs and Receptacles (Continued)**

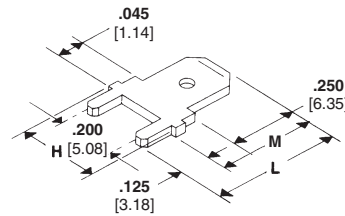
**187 Series  
Printed Circuit Board Tabs**

Stock Thickness — .020 [0.51]



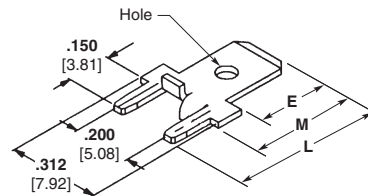
Type	Board Thickness	Dimensions				Material and Finish	UL	SP	Terminal Part No.
		T	L	E	H				
A	.062 1.57	—	.545 13.84	.250 6.35	—	Tin Plated Brass	X	X	61907-1 <sup>1</sup>
B	.062 1.57	.250 6.35	.332 8.43	.250 6.35	.303 7.70	Pre-Tin Brass	X	X	62221-1 <sup>2</sup>

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



Tab Thickness	Board Hole Size	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
		L	M	H				Strip <sup>2</sup>	Loose Piece
.032 0.81	.053-.057 1.35-1.45	.487	.362	.280	Tin Plated Brass	X	X	63525-1 <sup>1</sup>	1217057-1 <sup>1</sup>
		12.37	9.19	7.11					
.020 0.51	.050-.054 1.27-1.37	.487	.362	.285	Tin Plated Brass	X	X	63603-1	1217131-1
		12.37	9.19	7.24					
		.440	.315	.312	Tin Plated Brass	X	X	63838-1	—
		11.18	8.00	7.92					

<sup>1</sup> Dimple.  
<sup>2</sup> Insertion equipment available.



Tab Thickness	Dimensions			Material and Finish	UL	SP	Terminal Part No.	
	L	E	M				Strip <sup>3</sup>	Loose Piece
.032 0.81	.490	.250	.340	Tin Plated Brass	X	X	63860-1 <sup>1</sup>	—
	12.45	6.35	8.64		X	X	1217133-1	—
	.510	.250	.370	Tin Plated Brass	X	X	1742361-1	—
	12.95	6.35	9.40					
.020 0.51	.710	.470	.560	Tin Plated Brass	X	X	1217124-1	—
	18.03	11.94	14.22					
.020 0.51	.635	.395	.485	Tin Plated Brass	X	X	—	1217332-1 <sup>2</sup>
	16.13	10.03	12.32					
.020 0.51	.490	.250	.340	Tin Plated Brass	X	X	63823-1	63892-1
	12.45	6.35	8.64					
.020 0.51	.510	.250	.370	Tin Plated Brass	X	X	1742362-1	—
	12.95	6.35	9.40					

<sup>1</sup> Dimple.  
<sup>2</sup> No hole or dimple.  
<sup>3</sup> Insertion equipment available.

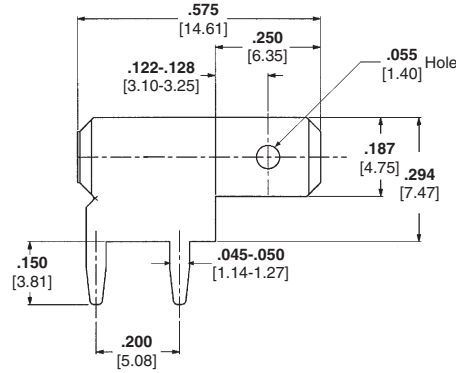
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**187 Series Printed Circuit Board Tabs**

(Continued)

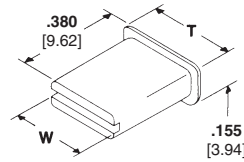
**Right-Angle Printed Circuit Board Tabs**



Stock Thickness	Board Hole Size	Material and Finish	UL	SP	Terminal Part No.
.032 0.81	.053-.057 1.35-1.45	Tin Plated Brass	X	X	1217061-1
			—	—	1217756-1 <sup>1</sup>
.020 0.51	.050-.054 1.27-1.37	Tin Plated Brass	X	X	1217062-1
			—	—	1217156-1 <sup>1</sup>

<sup>1</sup> Loose piece.

**Tab Caps 187 and 250 Series**



Tab Size	Material	UL 94 <sup>1</sup>	Color	Dimensions		Insulator Part No.
				T	W	
"187" Series .020 [0.51] Thick	Nylon	V2	Natural	.320 8.13	.260 6.60	360041-1
"250" Series .032 [0.81] Thick	Nylon	V2	Natural	.380 9.65	.320 8.13	360042-1

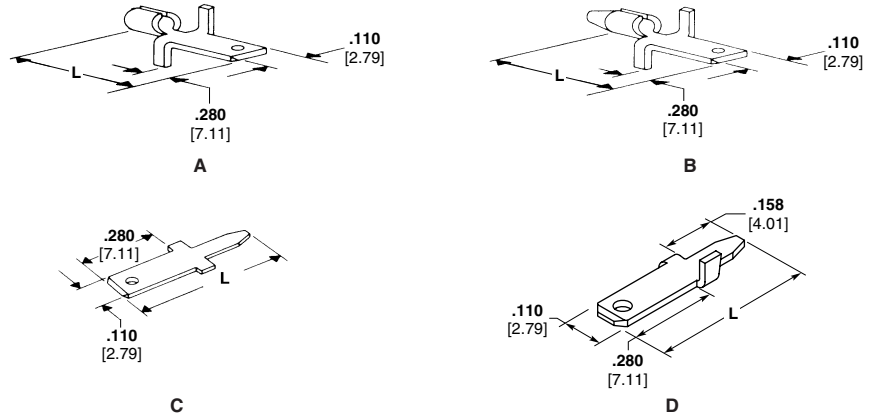
<sup>1</sup> Flammability rating.

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

**FASTON Printed Circuit Board Tabs and Receptacles (Continued)**

**.110 Series Printed Circuit Board Tabs**

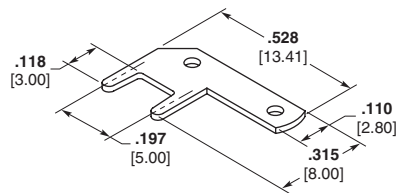
Stock Thickness — .020 [0.51]



Style	Mating Hole Diameter	Dim. L	Material and Finish	Ⓜ	Ⓢ	Terminal Part No.
A	.060-.055 1.52-1.40	.490 12.45	Tin Plated Brass	X	X	61134-3 <sup>1</sup>
B	.067-.063 1.70-1.60	.485 12.32	Tin Plated Brass	X	X	61968-1 <sup>2</sup> 62437-1 <sup>1</sup>
C	.044-.048 1.12-1.22	.490 12.45	Tin Plated Brass	X	X	62395-1 <sup>2</sup>
		.622 15.80	Tin Plated Brass	X	X	63756-1 <sup>2,3</sup>

<sup>1</sup> Loose piece only.  
<sup>2</sup> Insertion machine available.  
<sup>3</sup> .032 [0.81] stock.  
<sup>4</sup> .060 [1.52] tab width.

**Right-Angle Printed Circuit Board Tabs**



Tab Thickness	PCB Hole Dia. +0/-0.01 [+0/-0.03]	Material and Finish	Ⓜ	Ⓢ	Terminal Part No.
.032 0.81	.055 1.40	Tin Plated Brass	—	—	725963-2
.020 0.51	.051 1.30	Tin Plated Brass	—	—	725996-2

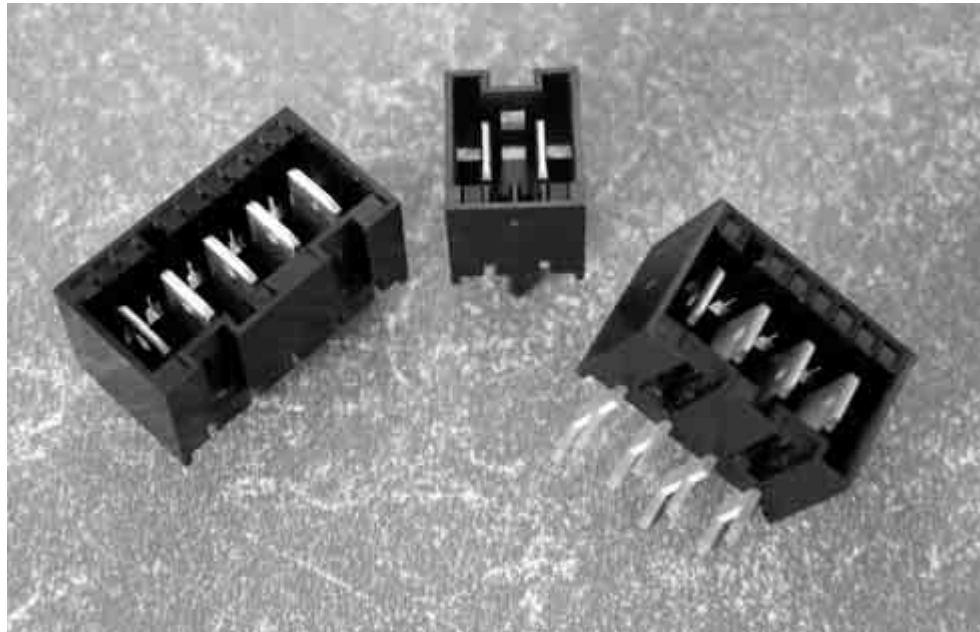
**Note:** All part numbers are RoHS compliant.

**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**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 mismatching 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**

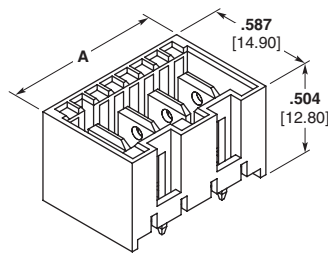
UL 94 V-0, 6/6 Nylon

See Tyco Electronics Catalog 1654742 for the complete line of RAST products.

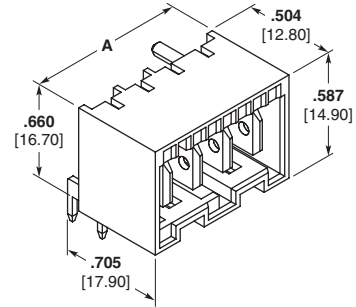


**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

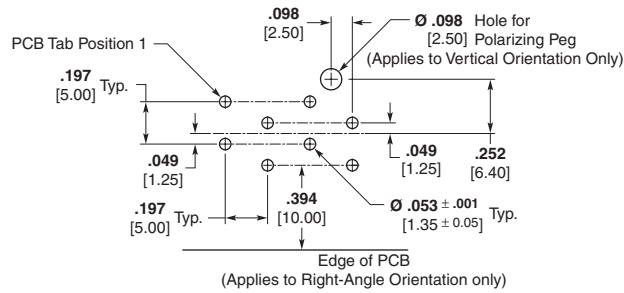
**FASTON RAST 5 Tab Header Assembly, 250 Series**  
(Continued)



Vertical Orientation



Right-Angle Orientation



PCB Layout  
(Ref.) from Component Side

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

Refer to the Tyco Electronics Customer Drawing for additional details and specific keying patterns.  
For more information related to the RAST 5 Standard, see Tyco Electronics Literature Distribution no. 1308243.

Available variations include: silver plated tabs, DIN style tabs, and Glow Wire housings.

RAST 5 headers mate to the following product families: AMP multifitting MKII, RAST 5 Positive Lock MKIII, AMP Standard Timer and AMP Standard Power Timer.

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