

## 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 TE



TE now offers a complete line of printed circuit board tabs and receptacles. TE 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. TE currently has an entry level semi-automatic, air-powered bench machine under development for customers with moderate insertion requirements. The compact, fully automatic AccuSserter 2 machine is available for applications where larger volumes will be inserted and where programmable, microprocessor controlled equipment is desired. TE 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 TE 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.

TE 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<br>12.75 | .125<br>3.18 | .312<br>7.92  | .377<br>9.58  | Tin Plated Brass    | X | X | 63839-1 <sup>3</sup> | —                        |
| .312<br>7.92 | .547<br>13.89 | .157<br>3.99 | .312<br>7.92  | .400<br>10.16 | Tin Plated Brass    | X | X | 63986-1              | —                        |
|              | .552<br>14.02 | .150<br>3.81 | .312<br>7.92  | .402<br>10.21 | Tin Plated Brass    | X | X | 1217566-1            | —                        |
| .295<br>7.49 | .622<br>15.80 | .125<br>3.18 | .312<br>7.92  | .497<br>12.62 | Tin Plated Brass    | X | X | —                    | 62409-1 <sup>3</sup>     |
|              |               |              |               |               |                     | — | — | —                    | 1217056-1                |
|              | .487<br>12.37 | .125<br>3.18 | .312<br>7.92  | .362<br>9.19  | Tin Plated Brass    | X | X | 62650-1 <sup>3</sup> | —                        |
| .280<br>7.11 | .532<br>13.51 | .175<br>4.45 | .312<br>7.92  | .357<br>9.07  | Tin Plated Brass    | X | X | 63650-1 <sup>3</sup> | —                        |
|              | .622<br>15.80 | .125<br>3.18 | .452<br>11.48 | .497<br>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.

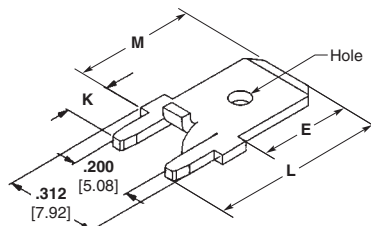
**Note:** All part numbers are RoHS compliant.

**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.

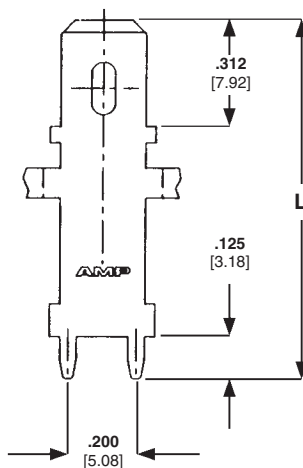


| Dimensions           |                     |                      |                      | Material and Finish | UL | SP | Terminal Part No.      |                        |
|----------------------|---------------------|----------------------|----------------------|---------------------|----|----|------------------------|------------------------|
| L                    | K                   | E                    | M                    |                     |    |    | Strip <sup>1</sup>     | Loose Piece            |
| <b>.552</b><br>14.02 | <b>.150</b><br>3.81 | <b>.312</b><br>7.92  | <b>.402</b><br>10.21 | Tin Plated Brass    | X  | X  | 63862-1 <sup>2</sup>   | 1742188-1 <sup>2</sup> |
| <b>.582</b><br>14.78 | <b>.180</b><br>4.57 | <b>.312</b><br>7.92  | <b>.402</b><br>10.21 | Tin Plated Brass    | X  | X  | 1217136-1              | 1217421-1              |
| <b>.650</b><br>16.51 | <b>.150</b><br>3.81 | <b>.410</b><br>10.41 | <b>.500</b><br>12.70 | Tin Plated Brass    | X  | X  | 1217126-1 <sup>2</sup> | —                      |
| <b>.710</b><br>18.03 | <b>.150</b><br>3.81 | <b>.470</b><br>11.94 | <b>.560</b><br>14.22 | Tin Plated Brass    | X  | X  | 1217125-1              | 1217169-1              |
| <b>.780</b><br>26.18 | <b>.150</b><br>3.81 | <b>.540</b><br>13.72 | <b>.630</b><br>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><br>26.97 | Tin Plated Brass    | X  | X  | 63949-1           |
| <b>1.207</b><br>30.66 | Tin Plated Brass    | X  | X  | 63950-1           |

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

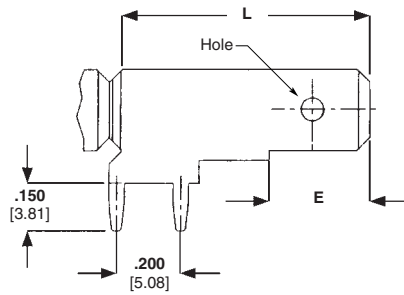
**FASTON Printed Circuit Board Tabs and Receptacles** (Continued)

**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.



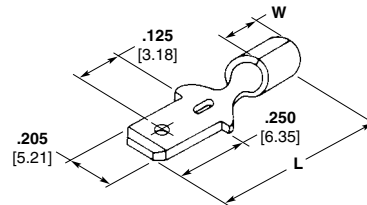
| Dimensions    |               | Material and Finish | UL | SP | Terminal Part No.  |             |
|---------------|---------------|---------------------|----|----|--------------------|-------------|
| E             | L             |                     |    |    | Strip <sup>1</sup> | Loose Piece |
| .312<br>7.92  | .800<br>20.32 | Tin Plated Brass    | X  | X  | 63951-1            | 1217754-1   |
| .358<br>9.09  | .630<br>16.00 | Tin Plated Brass    | —  | —  | —                  | 928814-1    |
| .662<br>16.83 | 1.00<br>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<br>13.34 | .070<br>1.78 | Tin Plated Brass    | X  | X  | 62411-1 <sup>1</sup> | —           |
| .545<br>13.84 | .160<br>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<br>0.81 (LIF)                  | .075<br>1.91 | .480<br>12.19 | Tin Plated Brass       | —  | —  | 63968-1                | —           |
|       | .032<br>0.81                        | .075<br>1.91 | .480<br>12.19 | Tin Plated Brass       | —  | —  | 63969-1                | 1217080-1   |
|       | .025<br>0.64 (LIF)                  | .075<br>1.91 | .480<br>12.19 | Tin Plated Brass       | —  | —  | 63994-1                | —           |
|       | .025<br>0.64                        | .075<br>1.91 | .510<br>12.95 | Tin Plated Brass       | —  | —  | 1217137-1 <sup>2</sup> | —           |
|       | .025<br>0.64                        | .075<br>1.91 | .480<br>12.19 | Tin Plated Brass       | —  | —  | 1217180-1              | —           |
| B     | .020<br>0.51                        | —            | —             | Tin Plated Phos Bronze | —  | —  | 1217107-1 <sup>1</sup> | —           |
| C     | .250 x .016<br>6.35 x 0.41<br>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<br>1.57    | —            | .545<br>13.84 | .250<br>6.35 | —            | Tin Plated Brass    | X  | X  | 61907-1 <sup>1</sup> |
| B    | .062<br>1.57    | .250<br>6.35 | .332<br>8.43  | .250<br>6.35 | .303<br>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<br>0.81  | .053-.057<br>1.35-1.45 | .487<br>12.37 | .362<br>9.19 | .280<br>7.11 | Tin Plated Brass    | X  | X  | 63525-1 <sup>1</sup> | 1217057-1 <sup>1</sup> |
|               |                        | .487<br>12.37 | .362<br>9.19 | .285<br>7.24 | Tin Plated Brass    | X  | X  | 63603-1              | 1217131-1              |
| .020<br>0.51  | .050-.054<br>1.27-1.37 | .440<br>11.18 | .315<br>8.00 | .312<br>7.92 | Tin Plated Brass    | X  | X  | 63838-1              | —                      |

<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<br>0.81  | .490<br>12.45 | .250<br>6.35  | .340<br>8.64  | Tin Plated Brass    | X  | X  | 63860-1 <sup>1</sup> | —                      |
|               | .510<br>12.95 | .250<br>6.35  | .370<br>9.40  | Tin Plated Brass    | X  | X  | 1742361-1            | —                      |
|               | .710<br>18.03 | .470<br>11.94 | .560<br>14.22 | Tin Plated Brass    | X  | X  | 1217124-1            | —                      |
|               | .635<br>16.13 | .395<br>10.03 | .485<br>12.32 | Tin Plated Brass    | X  | X  | —                    | 1217332-1 <sup>2</sup> |
| .020<br>0.51  | .490<br>12.45 | .250<br>6.35  | .340<br>8.64  | Tin Plated Brass    | X  | X  | 63823-1              | 63982-1                |
|               | .510<br>12.95 | .250<br>6.35  | .370<br>9.40  | Tin Plated Brass    | X  | X  | 1742362-1            | —                      |

<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 | CS | Terminal Part No.      |
|-----------------|------------------------|---------------------|----|----|------------------------|
| .032<br>0.81    | .053-.057<br>1.35-1.45 | Tin Plated Brass    | X  | X  | 1217061-1              |
|                 |                        |                     | —  | —  | 1217756-1 <sup>1</sup> |
| .020<br>0.51    | .050-.054<br>1.27-1.37 | Tin Plated Brass    | X  | X  | 1217062-1              |
|                 |                        |                     | —  | —  | 1217156-1 <sup>1</sup> |

<sup>1</sup> Loose piece.

Printed Circuit Board  
Tabs and Receptacles

**Tab Caps 187 and 250  
Series**



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

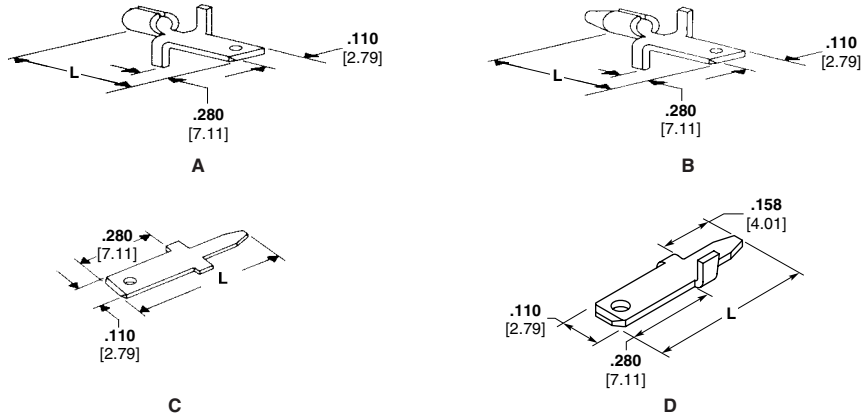
<sup>1</sup> Flammability rating.

**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<br>1.52-1.40 | .490<br>12.45 | Tin Plated Brass    | X | X | 61134-3 <sup>1</sup>                         |
| B     | .067-.063<br>1.70-1.60 | .485<br>12.32 | Tin Plated Brass    | X | X | 61968-1 <sup>2</sup><br>62437-1 <sup>1</sup> |
| C     | .044-.048<br>1.12-1.22 | .490<br>12.45 | Tin Plated Brass    | X | X | 62395-1 <sup>2</sup>                         |
|       |                        | .622<br>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<br>0.81  | .055<br>1.40                      | Tin Plated Brass    | — | — | 725963-2          |
| .020<br>0.51  | .051<br>1.30                      | Tin Plated Brass    | — | — | 725996-2          |

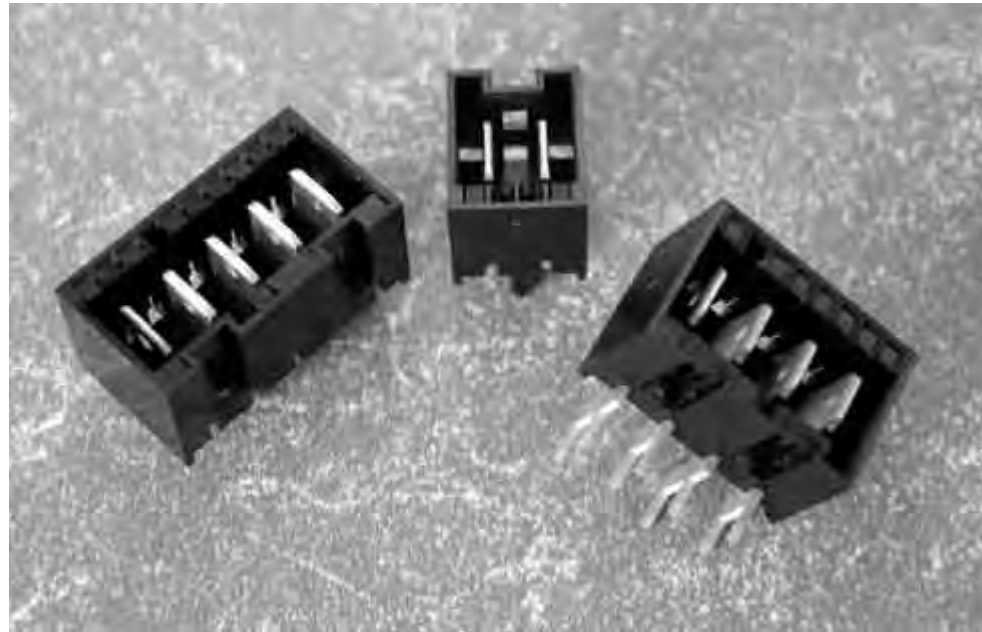
**Note:** All part numbers are RoHS compliant.

**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 TE 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

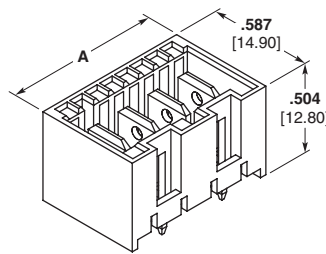
See TE Catalog 1654742 for the complete line of RAST products.



**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 TE Customer Drawing for additional details and specific keying patterns.  
For more information related to the RAST 5 Standard, see TE 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.