



Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

Connector System: **Wire-to-Board**

Number of Positions: **10**

Number of Rows: **2**

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Mixed & Hybrid Header             | No                    |
| Connector Shape                   | Rectangular           |
| PCB Connector Type                | PCB Mount Header      |
| Connector System                  | Wire-to-Board         |
| Header Type                       | Fully Shrouded        |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |
| Connector Product Type            | Connector Assembly    |

Configuration Features

|                                  |              |
|----------------------------------|--------------|
| Number of Columns                | 5            |
| Number of Loaded Positions       | 10           |
| Number of Power Positions        | 10           |
| Connector Contact Load Condition | Fully Loaded |
| PCB Mount Orientation            | Vertical     |
| Number of Positions              | 10           |



|                                                         |                       |
|---------------------------------------------------------|-----------------------|
| Number of Rows                                          | 2                     |
| Electrical Characteristics                              |                       |
| Operating Voltage                                       | 250 VDC               |
| Body Features                                           |                       |
| Connector & Keying Code                                 | A                     |
| Primary Product Color                                   | Natural               |
| Contact Features                                        |                       |
| Contact Underplating Material                           | Nickel                |
| Contact Underplating Material Thickness                 | 1.25 µm[49.21 µin]    |
| Contact Size                                            | .5mm                  |
| Contact Mating Area Plating Material Thickness          | 2 µm[78.74 µin]       |
| Mating Square Post Dimension                            | .5 mm[.02 in]         |
| PCB Contact Termination Area Plating Material Thickness | 2 µm[78.74 µin]       |
| Contact Shape & Form                                    | Square                |
| Contact Layout                                          | Matrix                |
| Contact Mating Area Length                              | 3.6 mm[.142 in]       |
| Contact Base Material                                   | Brass                 |
| PCB Contact Termination Area Plating Material           | Tin                   |
| Contact Mating Area Plating Material                    | Tin (Sn)              |
| Contact Type                                            | Tab                   |
| Contact Current Rating (Max)                            | 4 A                   |
| Termination Features                                    |                       |
| Termination Post & Tail Length                          | 3 mm[.118 in]         |
| Square Termination Post & Tail Dimension                | .5 mm[.02 in]         |
| Termination Method to PCB                               | Through Hole - Solder |
| Mechanical Attachment                                   |                       |
| Panel Mount Feature                                     | Without               |
| Mating Retention Type                                   | Locking Window        |
| Mating Retention                                        | With                  |
| PCB Mount Retention Type                                | Kinked                |
| Mating Alignment Type                                   | Keyed                 |
| PCB Mount Alignment Type                                | Locating Posts        |
|                                                         |                       |



|                         |             |
|-------------------------|-------------|
| PCB Mount Retention     | With        |
| PCB Mount Alignment     | With        |
| Connector Mounting Type | Board Mount |
| Mating Alignment        | With        |

Housing Features

|                       |                  |
|-----------------------|------------------|
| Mating Entry Location | Top              |
| Housing Material      | PA 66 GF         |
| Centerline (Pitch)    | 3.3 mm [.129 in] |

Dimensions

|                             |                    |
|-----------------------------|--------------------|
| Row-to-Row Spacing          | 5.2 mm [.205 in]   |
| Connector Width             | 11.6 mm [.456 in]  |
| PCB Thickness (Recommended) | 1.6 mm [.06 in]    |
| Connector Height            | 14.25 mm [.561 in] |
| Connector Length            | 18.6 mm [.732 in]  |

Usage Conditions

|                             |                             |
|-----------------------------|-----------------------------|
| Operating Temperature (Max) | 105 °C [221 °F]             |
| Operating Temperature Range | -30 – 105 °C [-22 – 221 °F] |

Operation/Application

|                     |       |
|---------------------|-------|
| Circuit Application | Power |
|---------------------|-------|

Industry Standards

|                        |                           |
|------------------------|---------------------------|
| Glow Wire Rating       | GWT 750°C (Without Flame) |
| UL Flammability Rating | UL 94V-0                  |

Packaging Features

|                    |      |
|--------------------|------|
| Packaging Quantity | 200  |
| Packaging Method   | Tray |

Product Compliance

For compliance documentation, visit the product page on TE.com>

|                                               |                                         |
|-----------------------------------------------|-----------------------------------------|
| EU RoHS Directive 2011/65/EU                  | Compliant                               |
| EU ELV Directive 2000/53/EC                   | Compliant                               |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold |
| EU REACH Regulation (EC) No. 1907/2006        |                                         |



Current ECHA Candidate List: JAN 2025  
(247)  
Candidate List Declared Against: JAN 2022  
(223)  
Does not contain REACH SVHC

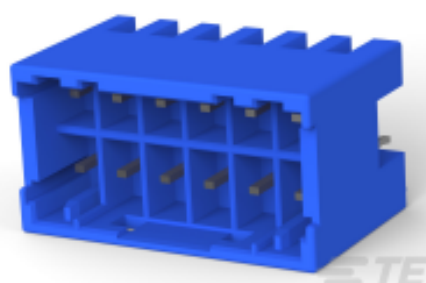
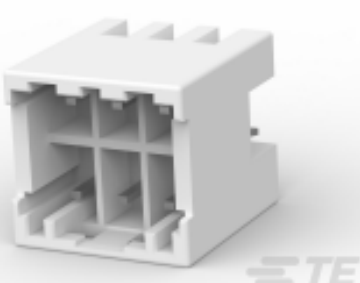
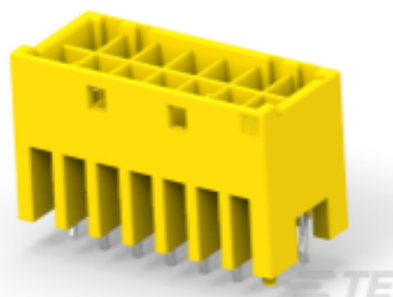
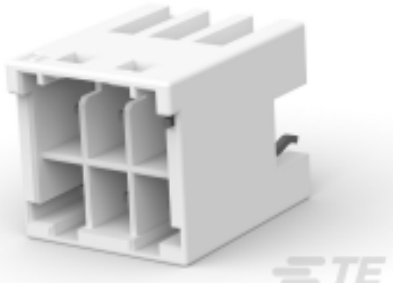
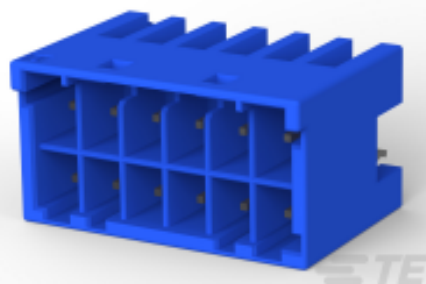
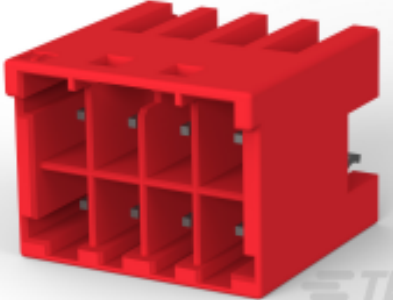
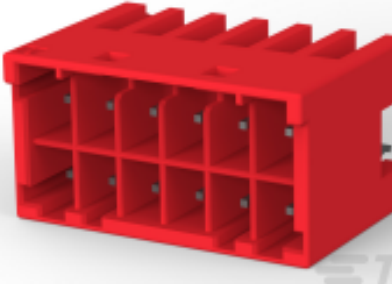
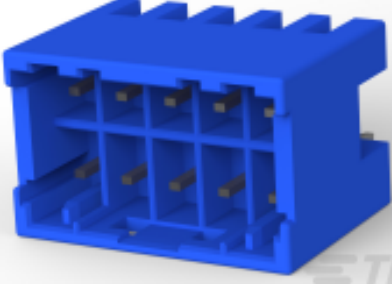
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|-----------------|------------------------------------------------|
| Halogen Content | Not Low Halogen - contains Br or Cl > 900 ppm. |
|-----------------|------------------------------------------------|

|                           |                                            |
|---------------------------|--------------------------------------------|
| Solder Process Capability | Not reviewed for solder process capability |
|---------------------------|--------------------------------------------|

Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: <https://echa.europa.eu/guidance-documents/guidance-on-reach>

Compatible Parts

|                                                                                                                                                                |                                                                                                                                                               |                                                                                                                                                                   |                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>TE Part # 2-1871571-3<br/>GIC 3.3 HEADER ASSY 12POS</p>                 |  <p>TE Part # 1827392-1<br/>GIC 3.3 HDR ASSY 6P</p>                        |  <p>TE Part # 4-1971906-7<br/>HEADER ASSY 14POS,KEYING-D,<br/>NEW GIC3.3</p> |  <p>TE Part # 1-1971906-3<br/>HEADER ASSY 6POS,KEYING-A,NEW<br/>GIC3.3</p> |
|  <p>TE Part # 2-1971906-6<br/>HEADER ASSY 12POS,KEYING-B,NEW<br/>GIC3.3</p> |  <p>TE Part # 3-1971906-4<br/>HEADER ASSY 8POS,KEYING-C,NEW<br/>GIC3.3</p> |  <p>TE Part # 3-1971906-6<br/>HEADER ASSY 12POS,KEYING-C,<br/>NEW GIC3.3</p> |  <p>TE Part # 2-1939983-3<br/>GIC 3.3 HDR ASSY 10P 2ROW BLUE</p>           |



TE Part # 1981065-1  
GIC 3.3 10P DBL LOCK PLATE (2ROW, M TYPE)

TE Part # 1871571-1  
GIC 3.3 HDR ASSY 12POS KINK

TE Part # 2-1971906-7  
HEADER ASSY 14POS,KEYING-B,NEW GIC3.3

TE Part # 1939983-1  
GIC3.3 HDR ASS'Y 10POS 2ROW

TE Part # 1-1971906-6  
HEADER ASSY 12POS,KEYING-A, NEW GIC3.3

TE Part # 1-1971906-7  
HEADER ASSY 14POS,KEYING-A, NEW GIC3.3

TE Part # 2-1971906-5  
HEADER ASSY 10POS,KEYING-B,NEW GIC3.3

TE Part # 5-1971906-7  
HEADER ASSY 14POS,KEYING-A, NEW GIC3.3

TE Part # 3-1971906-5  
HEADER ASSY 10POS,KEYING-C, NEW GIC3.3

TE Part # 3-1971906-7  
HEADER ASSY 14POS,KEYING-C, NEW GIC3.3

TE Part # 6-1971906-7  
HEADER ASSY 14POS,KEYING-B,NEW GIC3.3

TE Part # 4-1971906-4  
HEADER ASSY 8POS,KEYING-D,NEW GIC3.3

Also in the Series | GRACE INERTIA 3.3

Connector Contacts(3)

Connector Hardware(15)

PCB Headers & Receptacles(36)

Power Contacts(3)

Rectangular Connector Housings(34)

Rectangular Power Connectors(70)

Wire-to-Board Headers & Receptacles (36)

Customers Also Bought



TE Part #5-1123824-1  
EP CONN HDR ASSY 1P BLACK

TE Part #2-1971906-7  
HEADER ASSY 14POS,KEYING-B,NEW GIC3.3

TE Part #2151085-1  
OCEAN-2.0-APPLICATOR-S-046F067F-RSM

TE Part #1-1971906-4  
HEADER ASSY 8POS,KEYING-A,NEW GIC3.3

TE Part #2-1971906-5  
HEADER ASSY 10POS,KEYING-B,NEW GIC3.3

TE Part #2-1376382-3  
5mm B-T-W Conn. 2P HDR ASSEMBL

TE Part #2-1415012-1  
V23047-A1110-A511

TE Part #2-1971906-2  
HEADER ASSY 4POS,KEYING-B,NEW GIC3.3

TE Part #6-1971906-7  
HEADER ASSY 14POS,KEYING-B,NEW GIC3.3

TE Part #8-1481631-7  
SHEAR BLADE LOWER

Documents

Product Drawings

HEADER ASSY 10POS,KEYING-A,NEW GIC3.3

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_1-1971906-5\_A\_c-1-1971906-5-a.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_1-1971906-5\_A\_c-1-1971906-5-a.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_1-1971906-5\_A\_c-1-1971906-5-a.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages



[1-1773883-5 GRACE INERTIA connector quick reference guide](#)

English

[5-1773465-4-GI3.3Flyer](#)

English

[7-1773465-7-GI3.3-ChineseFlyer](#)

[GI3.3\\_QRG\\_CN](#)

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[Product Specifications](#)

[Application Specification](#)

English