

1-1971906-5 ACTIVE



GRACE INERTIA 3.3

TE Internal #: 1-1971906-5

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 10 Position, 3.3 mm [.129 in] Centerline, Printed Circuit Board, GRACE INERTIA 3.3

[View on TE.com >](#)

Connectors > Power Connectors > Rectangular Power > Rectangular Power Connectors



Rectangular Power Connector Type: **Header**

Connector & Housing Type: **Receptacle**

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

Number of Positions: **10**

Centerline (Pitch): **3.3 mm [.129 in]**

Features

Product Type Features

| | |
|-----------------------------------|-----------------------|
| Header Type | Fully Shrouded |
| Rectangular Power Connector Type | Header |
| Connector & Housing Type | Receptacle |
| Connector System | Wire-to-Board |
| Sealable | No |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

| | |
|----------------------------|----------|
| Number of Positions | 10 |
| PCB Mount Orientation | Vertical |
| Number of Power Positions | 10 |
| Number of Signal Positions | 10 |
| Number of Rows | 2 |

Electrical Characteristics

| | |
|-------------------|---------|
| Operating Voltage | 250 VDC |
|-------------------|---------|



Body Features

| | |
|-------------------------|---|
| Connector & Keying Code | A |
|-------------------------|---|

Contact Features

| | |
|---|------------------------------|
| Mating Post Length | 6.6 mm[.26 in] |
| PCB Contact Termination Area Plating Material Thickness | 2 μ m[78.74 μ in] |
| Contact Layout | Matrix |
| Mating Tab Width | .5 mm[.02 in] |
| Contact Underplating Material Thickness | 1.25 μ m[49.21 μ in] |
| Contact Mating Area Plating Material | Tin |
| Contact Underplating Material | Nickel |
| Contact Base Material | Brass |
| Contact Current Rating (Max) | 4 A |
| Contact Retention Within Housing | With |
| Contact Type | Pin |
| PCB Contact Termination Area Plating Material | Tin |
| Contact Mating Area Plating Material Thickness | 78.73 μ m[2 μ in] |

Termination Features

| | |
|---|-----------------------|
| Termination Post & Tail Length | 3 mm[.118 in] |
| Termination Method to Printed Circuit Board | Through Hole - Solder |

Mechanical Attachment

| | |
|--------------------------|----------------|
| PCB Mount Alignment Type | Locating Posts |
| Mating Alignment Type | Keyed |
| Mating Retention | With |
| Mating Alignment | With |
| PCB Mount Alignment | With |
| PCB Mount Retention | With |
| PCB Mount Retention Type | Kinked |
| Mating Retention Type | Latch |
| Connector Mounting Type | Board Mount |

Housing Features

| | |
|--------------------|-----------------|
| Centerline (Pitch) | 3.3 mm[.129 in] |
| Housing Color | Natural |



| | |
|------------------|----------|
| Housing Material | PA 66 GF |
|------------------|----------|

Dimensions

| | |
|-----------------------------|----------------------|
| Connector Height | 14.25 mm[.561 in] |
| PCB Thickness (Recommended) | .06 mm[1.6 in] |
| Product Length | 18.6 mm[.73 in] |
| Wire Size | 414.44 - 1045.97 CMA |
| Row-to-Row Spacing | 5.2 mm[.205 in] |

Usage Conditions

| | |
|-----------------------------|----------------------------|
| Operating Temperature Range | -30 - 105 °C[-22 - 221 °F] |
|-----------------------------|----------------------------|

Operation/Application

| | |
|---------------------|----------------|
| Circuit Application | Power & Signal |
|---------------------|----------------|

Industry Standards

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

Packaging Features

| | |
|--------------------|------------|
| Packaging Quantity | 200 |
| Packaging Method | Box & Tray |

Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

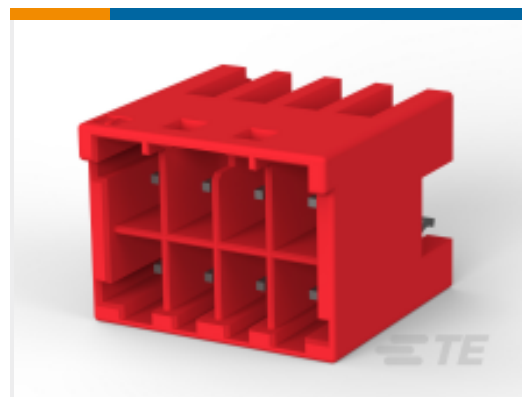
| | |
|---|---|
| EU RoHS Directive 2011/65/EU | Compliant |
| EU ELV Directive 2000/53/EC | Compliant |
| China RoHS 2 Directive MIIT Order No 32, 2016 | No Restricted Materials Above Threshold |
| EU REACH Regulation (EC) No. 1907/2006 | Current ECHA Candidate List: JAN 2024 (240) Candidate List Declared Against: JAN 2022 (223) Does not contain REACH SVHC |
| 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>

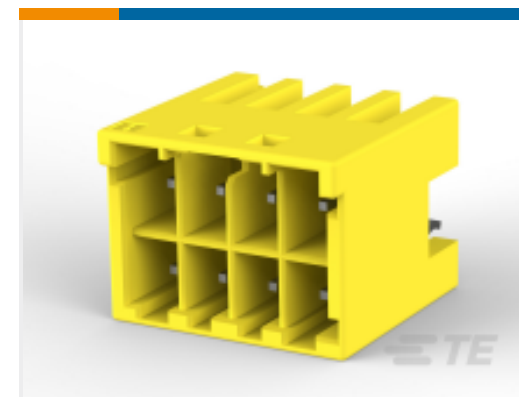
Compatible Parts



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



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



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



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



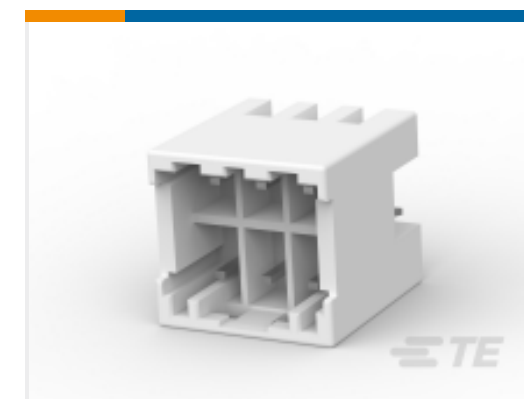
TE Part # 1-1971906-7
HEADER ASSY 14POS,KEYING-A,
NEW GIC3.3



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



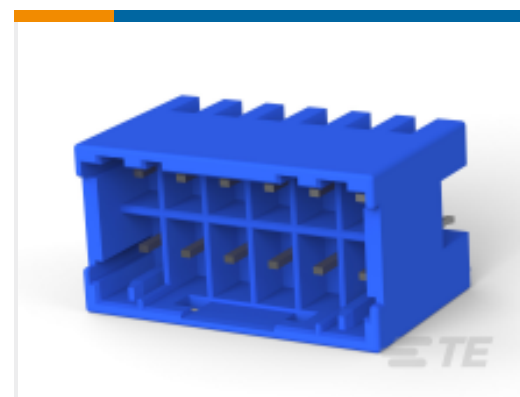
TE Part # 1939983-1
GIC3.3 HDR ASS'Y 10POS 2ROW



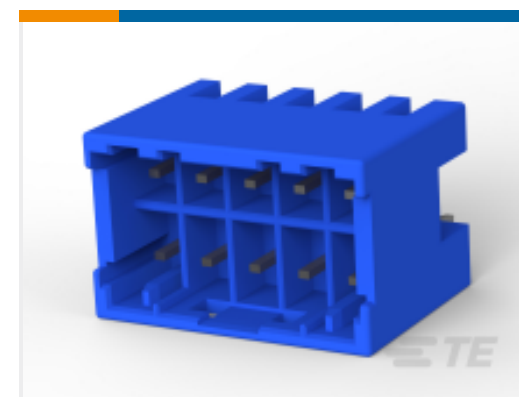
TE Part # 1827392-1
GIC 3.3 HDR ASSY 6P



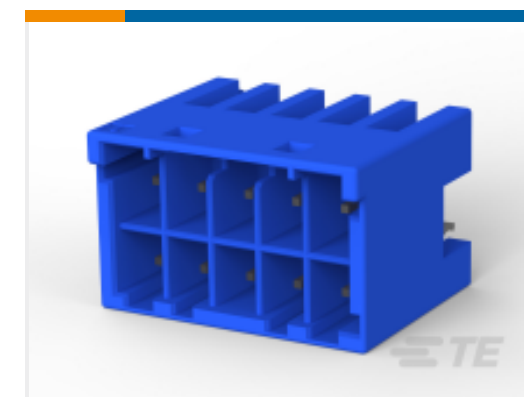
TE Part # 1871571-1
GIC 3.3 HDR ASSY 12POS KINK



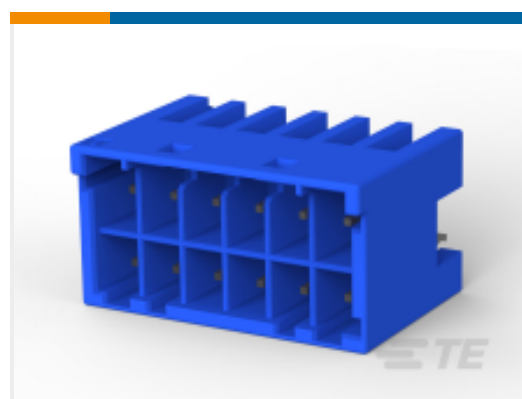
TE Part # 2-1871571-3
GIC 3.3 HEADER ASSY 12POS



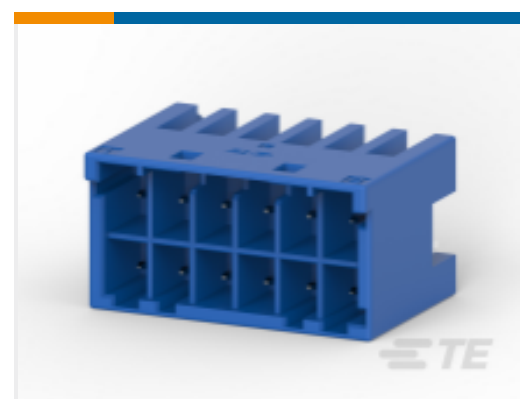
TE Part # 2-1939983-3
GIC 3.3 HDR ASSY 10P 2ROW BLUE



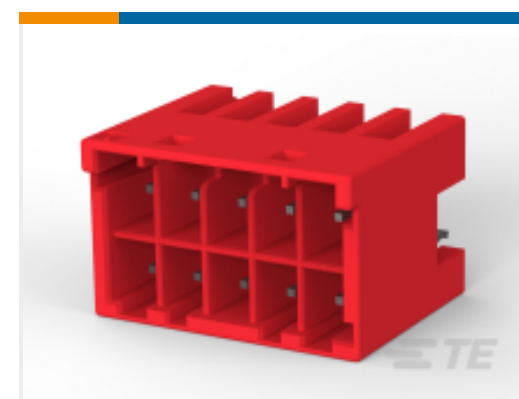
TE Part # 2-1971906-5
HEADER ASSY 10POS,KEYING-B,NEW
GIC3.3



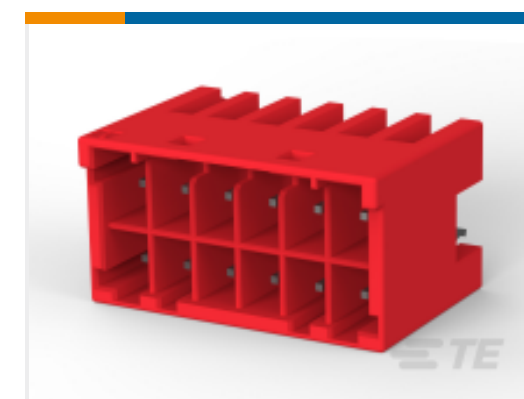
TE Part # 2-1971906-6
HEADER ASSY 12POS,KEYING-B,NEW
GIC3.3



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



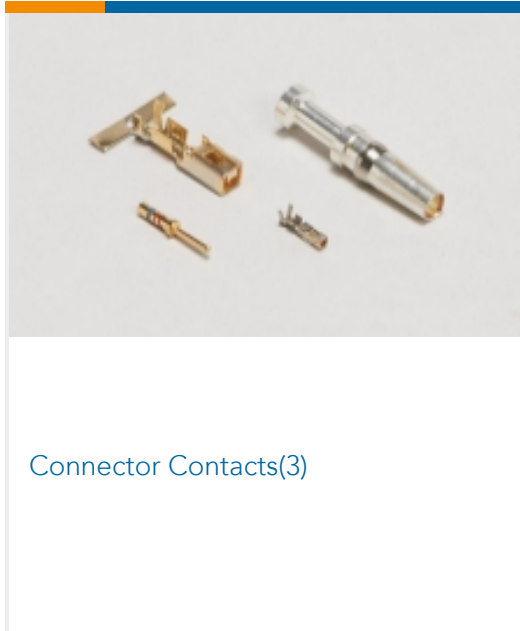
TE Part # 3-1971906-5
HEADER ASSY 10POS,KEYING-C,
NEW GIC3.3



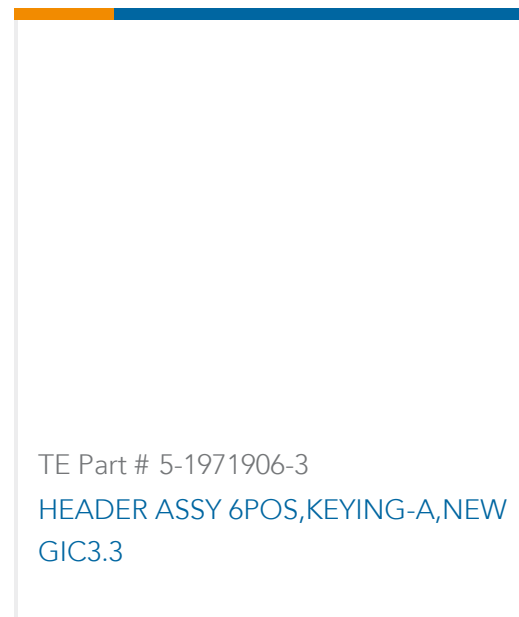
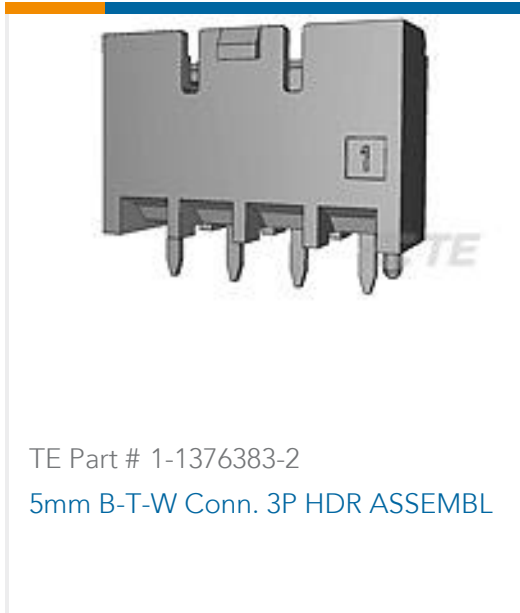
TE Part # 3-1971906-6
HEADER ASSY 12POS,KEYING-C,
NEW GIC3.3



Also in the Series | **GRACE INERTIA 3.3**



Customers Also Bought



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](#)

Product Specifications

[Application Specification](#)

English