

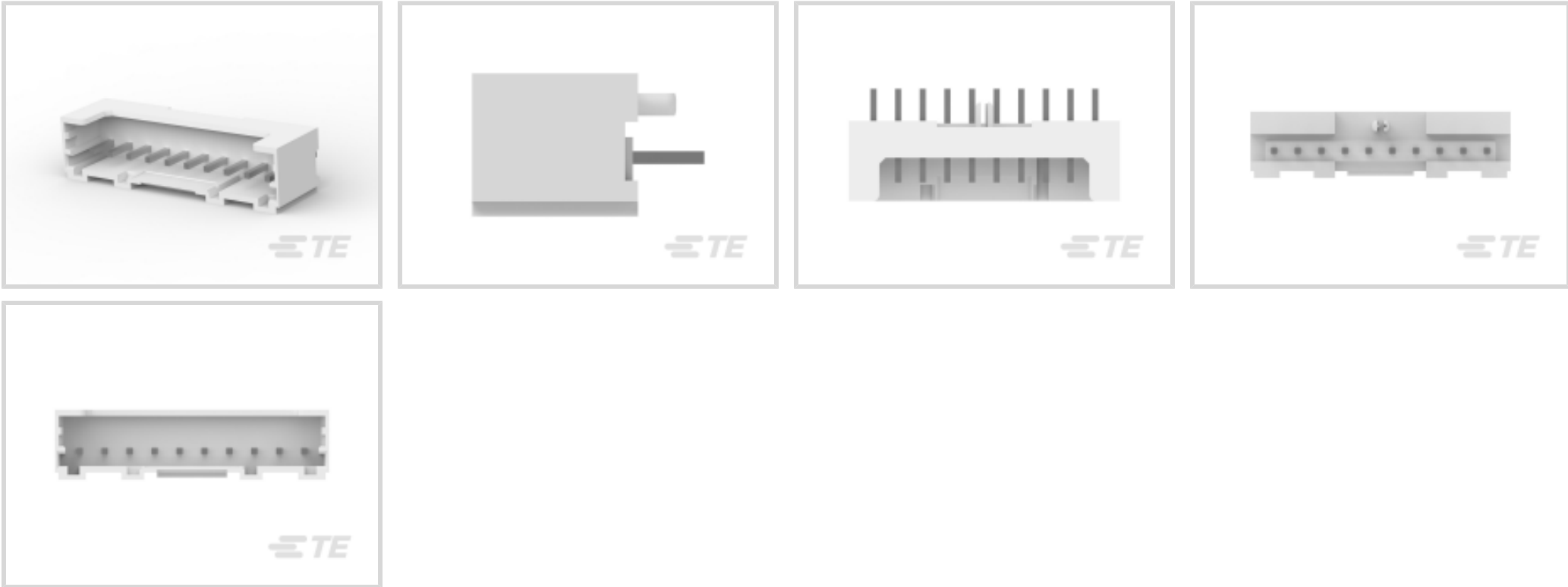


GRACE INERTIA 2.0

TE Internal #: 1971032-1  
PCB Mount Header, Vertical, Wire-to-Board, 10 Position, 2 mm [.079 in] Centerline, Fully Shrouded, Tin, Through Hole - Solder, GRACE INERTIA 2.0

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Connectors > PCB Connectors > PCB Headers & Receptacles



Connector System: **Wire-to-Board**  
Number of Positions: **10**  
Number of Rows: **1**  
Centerline (Pitch): **2 mm [.079 in]**  
PCB Mount Orientation: **Vertical**

Features

Product Type Features

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

Configuration Features

|                       |          |
|-----------------------|----------|
| Number of Positions   | 10       |
| Number of Rows        | 1        |
| PCB Mount Orientation | Vertical |

Electrical Characteristics

|                   |        |
|-------------------|--------|
| Operating Voltage | 50 VAC |
|-------------------|--------|

Body Features

|                         |         |
|-------------------------|---------|
| Connector & Keying Code | A       |
| Primary Product Color   | Natural |



Contact Features

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| Mating Square Post Dimension                            | .5 mm[.02 in]   |
| PCB Contact Termination Area Plating Material Thickness | 2 µm[78.74 µin] |
| Contact Layout                                          | Inline          |
| Mating Tab Width                                        | .5 mm[.02 in]   |
| Contact Underplating Material Thickness                 | 1 µm[39.37 µin] |
| Contact Mating Area Plating Material Thickness          | 2 µm[78.74 µin] |
| PCB Contact Termination Area Plating Material Finish    | Bright          |
| Contact Shape & Form                                    | Square          |
| Contact Mating Area Plating Material Finish             | Bright          |
| Contact Underplating Material                           | Nickel          |
| PCB Contact Termination Area Plating Material           | Tin             |
| Contact Base Material                                   | Brass           |
| Contact Mating Area Plating Material                    | Tin             |
| Contact Type                                            | Tab             |
| Contact Current Rating (Max)                            | 2.2 A           |

Termination Features

|                                          |                       |
|------------------------------------------|-----------------------|
| Square Termination Post & Tail Dimension | .5 mm[.02 in]         |
| Termination Post & Tail Length           | 2.6 mm[.102 in]       |
| Termination Method to PCB                | Through Hole - Solder |

Mechanical Attachment

|                          |                |
|--------------------------|----------------|
| PCB Mount Alignment Type | Locating Posts |
| Mating Alignment Type    | Keyed          |
| Mating Retention         | With           |
| Mating Retention Type    | Latch          |
| Connector Mounting Type  | Board Mount    |
| Mating Alignment         | With           |
| PCB Mount Alignment      | With           |
| PCB Mount Retention      | Without        |

Housing Features

|                    |               |
|--------------------|---------------|
| Housing Material   | Nylon 6/6 GF  |
| Centerline (Pitch) | 2 mm[.079 in] |



Dimensions

|                             |                 |
|-----------------------------|-----------------|
| Connector Length            | 6 mm[.23 in]    |
| Connector Height            | 6.35 mm[.25 in] |
| Connector Width             | 5.6 mm[.22 in]  |
| PCB Thickness (Recommended) | 1.6 mm[.063 in] |

Usage Conditions

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

Operation/Application

|                     |        |
|---------------------|--------|
| Circuit Application | Signal |
|---------------------|--------|

Industry Standards

|                                           |                               |
|-------------------------------------------|-------------------------------|
| Glow Wire Rating                          | Standard Part - Not Glow Wire |
| Compatible With Agency/Standards Products | UL                            |
| UL Flammability Rating                    | UL 94V-0                      |

Packaging Features

|                    |         |
|--------------------|---------|
| Packaging Quantity | 200     |
| Packaging Method   | Package |

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: JUNE 2024 (241)<br>Candidate List Declared Against: JUNE 2024 (241)<br>Does not contain REACH SVHC |
| Halogen Content                               | Not Low Halogen - contains Br or Cl > 900 ppm.                                                                                  |
| Solder Process Capability                     | Wave solder capable to 260°C                                                                                                    |

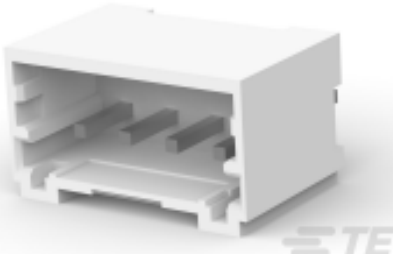
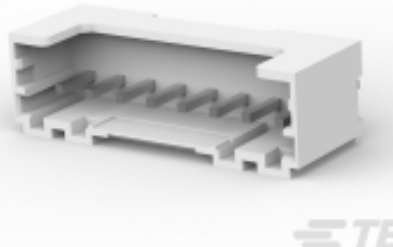
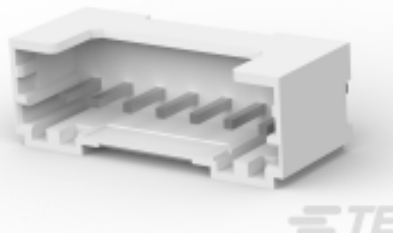
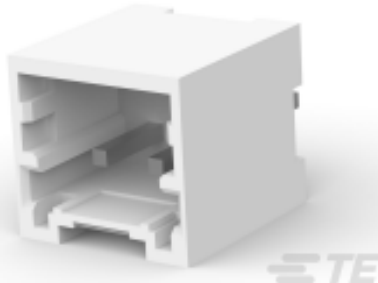
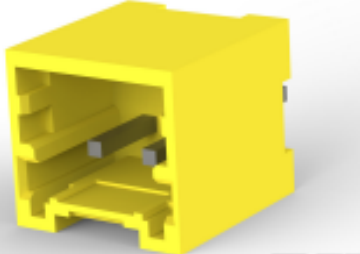
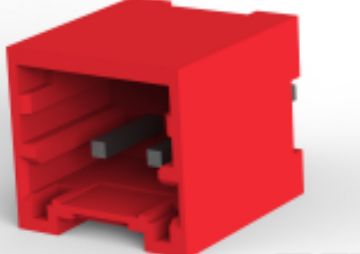
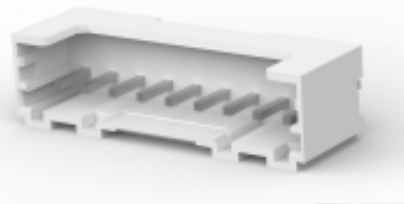
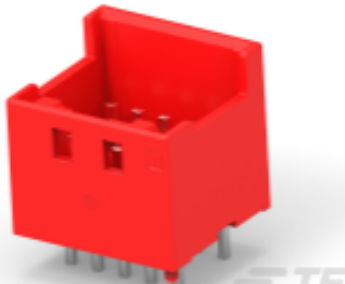
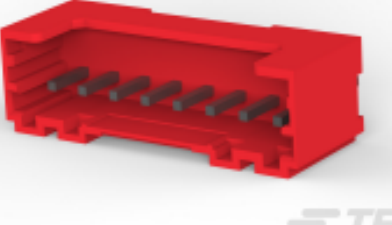
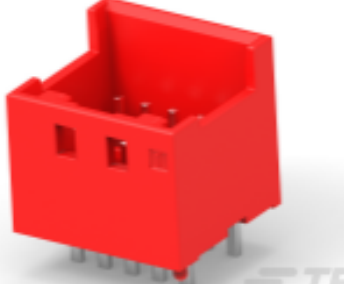
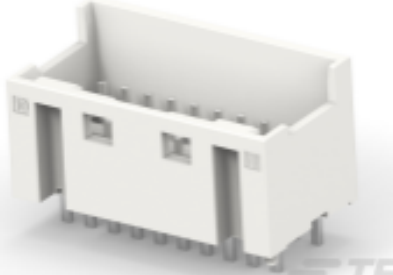
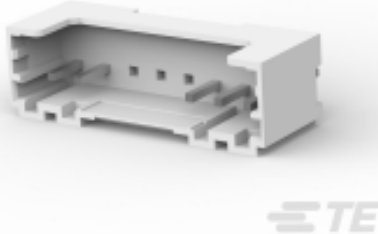
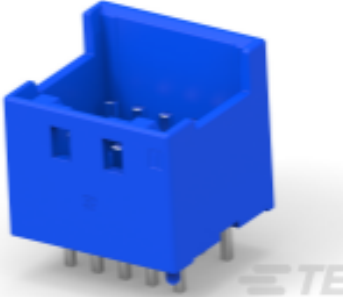
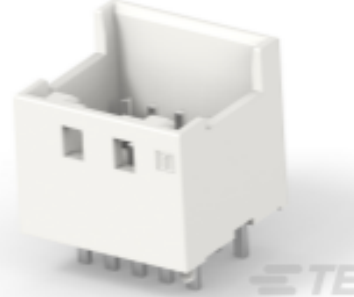
Product Compliance Disclaimer

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>

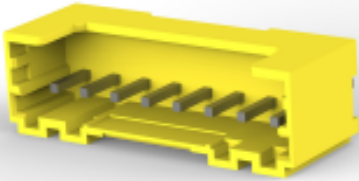
Compatible Parts

|                                                                                                                                                             |                                                                                                                                                               |                                                                                                                                                                 |                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>TE Part # 1971032-4<br/>4POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>        |  <p>TE Part # 1971032-3<br/>3P HEADER ASSEMBLY FOR GIC 2.0 EV</p>            |  <p>TE Part # 1971032-8<br/>8POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>          |  <p>TE Part # 1971032-7<br/>7pos header assembly for gic 2.0 ev</p>        |
|  <p>TE Part # 1971032-2<br/>2POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>      |  <p>TE Part # 3-1971032-2<br/>2POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>      |  <p>TE Part # 1-1971032-2<br/>2POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>      |  <p>TE Part # 1971032-9<br/>9POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>      |
|  <p>TE Part # 1-1747070-1<br/>GRACE INERTIA ONN 2.0 HDR ASSY 10P RED</p> |  <p>TE Part # 1-1971032-8<br/>8POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>      |  <p>TE Part # 1-2013924-1<br/>GIC 2.0 HDR ASSY 10POS TIN VERTION (RED)</p> |  <p>TE Part # 1827229-6<br/>GIC 2.0 HDR ASSY 20P</p>                     |
|  <p>TE Part # 1971200-1<br/>GIC 2.0 EV 5/8P HEADER ASSEMBLY</p>          |  <p>TE Part # 2-1747070-1<br/>GRACE INERTIA CONN 2.0 HDR ASSY 10P BLUE</p> |  <p>TE Part # 2-2013924-1<br/>GIC 2.0 HDR ASSY 10P TIN VERTION (BLUE)</p>  |  <p>TE Part # 2013924-1<br/>GIC 2.0 HDR ASSY 10POS TIN VERTION (NAT)</p> |





TE Part # 3-1747070-1  
GRACE INERTIA CONN 2.0 HDR ASSY  
10P YELL



TE Part # 3-1971032-8  
8POS HEADER ASSEMBLY FOR GIC  
2.0 EV

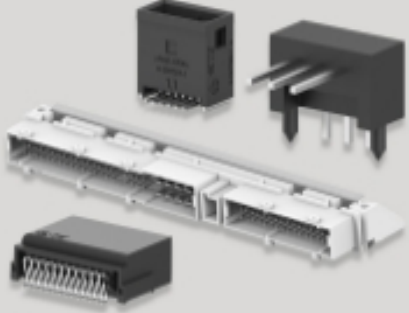


TE Part # 3-2013924-1  
GIC 2.0 HDR ASSY 10P TIN VERTION  
YELLOW

Also in the Series | GRACE INERTIA 2.0



Connector Contacts(3)



PCB Headers & Receptacles(70)



Rectangular Connector Housings(20)



Standard Rectangular Connectors(18)



Wire-to-Board Connector Assemblies  
& Housings(1)

Customers Also Bought



TE Part #87499-4  
02 MODIV HSG COMP SR .100CL

Documents

Product Drawings  
10POS HEADER ASSEMBLY FOR GIC 2.0 EV  
English

CAD Files  
3D PDF  
3D



Customer View Model

[ENG\\_CVM\\_CVM\\_1971032-1\\_D.2d\\_dxf.zip](#)

English

Customer View Model

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English

Customer View Model

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Product Specifications

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