

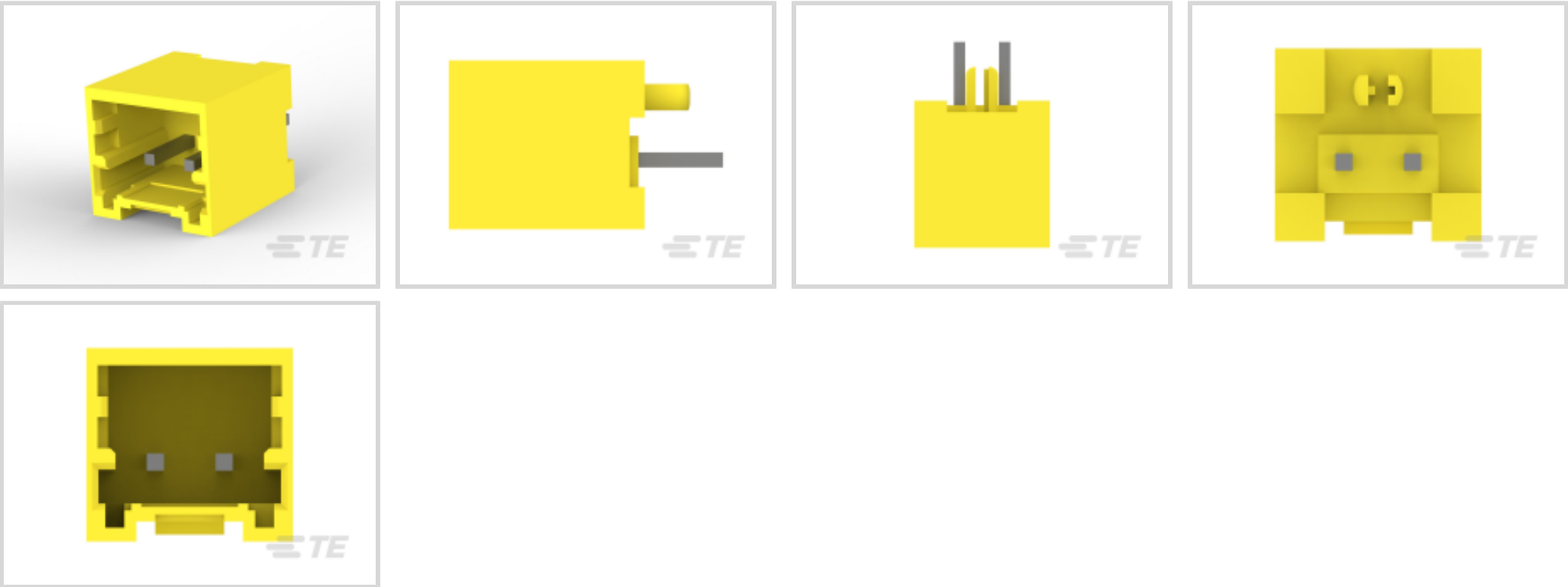


GRACE INERTIA 2.0

TE Internal #: 3-1971032-2  
PCB Mount Header, Vertical, Wire-to-Board, 2 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: **2**  
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   | 2        |
| Number of Rows        | 1        |
| PCB Mount Orientation | Vertical |

Electrical Characteristics

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

Body Features

|                       |        |
|-----------------------|--------|
| Primary Product Color | Yellow |
|-----------------------|--------|



Contact Features

|                                                         |                 |
|---------------------------------------------------------|-----------------|
| Mating Square Post Dimension                            | .5 mm[.02 in]   |
| PCB Contact Termination Area Plating Material Thickness | 2 µm[78.73 µin] |
| Contact Layout                                          | Inline          |
| 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 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 Printed Circuit Board | Through Hole - Solder |

Mechanical Attachment

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

Housing Features

|                    |               |
|--------------------|---------------|
| Housing Material   | Nylon 66 GF   |
| Centerline (Pitch) | 2 mm[.079 in] |

Dimensions

|                  |                 |
|------------------|-----------------|
| Connector Length | 6 mm[.23 in]    |
| Connector Height | 6.5 mm[.255 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

|                                           |    |
|-------------------------------------------|----|
| 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: JAN 2024 (240)<br>Candidate List Declared Against: JAN 2024 (240)<br>Does not contain REACH SVHC |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|

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

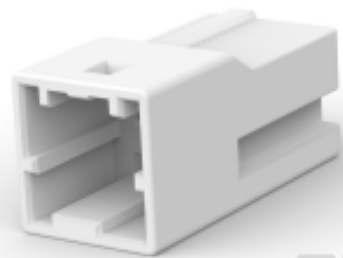
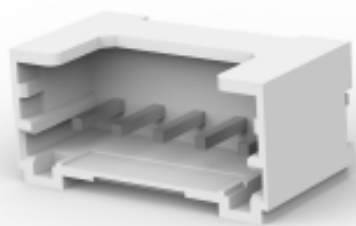
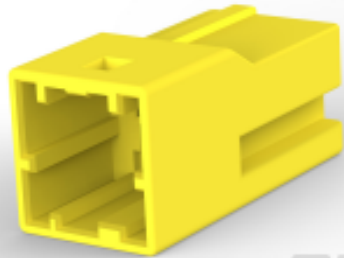
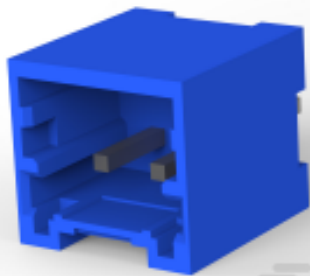
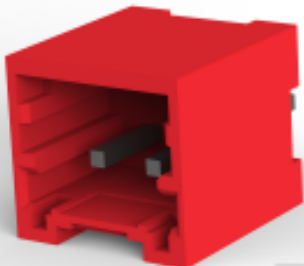
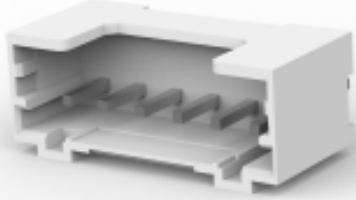
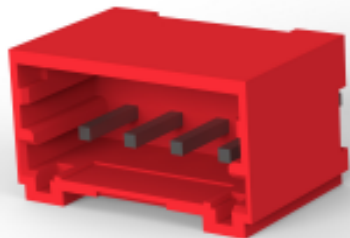
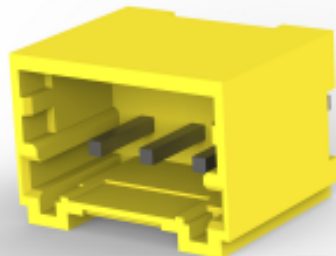
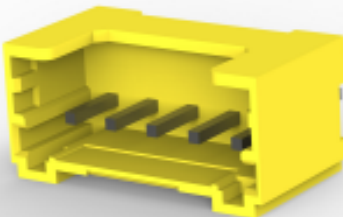
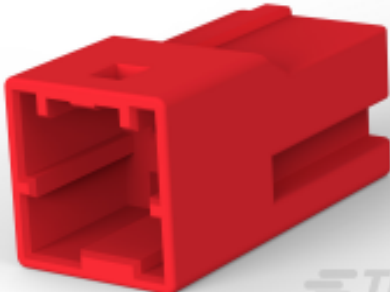
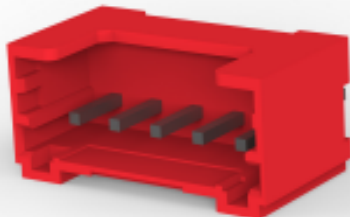
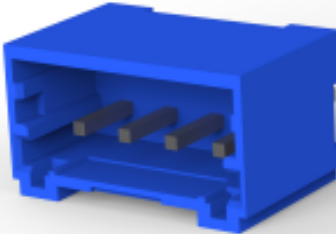
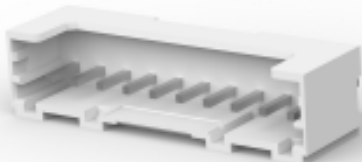
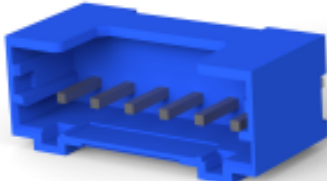
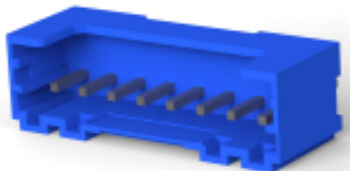
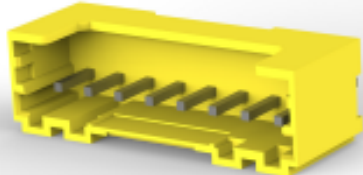
|                           |                              |
|---------------------------|------------------------------|
| Solder Process Capability | Wave solder capable to 260°C |
|---------------------------|------------------------------|

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 # 1903391-1<br/>GIC 2.5 W CAP HSG 2P NATURAL</p>            |  <p>TE Part # 1971032-5<br/>5P HEADER ASSEMBLY FOR GIC 2.0 EV</p>       |  <p>TE Part # CAT-G7534A-C1701<br/>STD Temp Sig GRACE INERTIA Cap</p>   |  <p>TE Part # 2-1971032-2<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 # 1971032-6<br/>6POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>    |  <p>TE Part # 1-1971032-4<br/>4POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>  |  <p>TE Part # 3-1971032-3<br/>3POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>  |
|  <p>TE Part # 3-1971032-5<br/>5POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |  <p>TE Part # 1-1903391-2<br/>GIC 2.5 W CAP HSG 2P RED</p>            |  <p>TE Part # 1-1971032-5<br/>5POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |  <p>TE Part # 2-1971032-4<br/>4POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |
|  <p>TE Part # 1971032-1<br/>10POS HEADER ASSEMBLY FOR GIC 2.0 EV</p>  |  <p>TE Part # 2-1971032-6<br/>6POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |  <p>TE Part # 2-1971032-8<br/>8POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |  <p>TE Part # 3-1971032-8<br/>8POS HEADER ASSEMBLY FOR GIC 2.0 EV</p> |

Also in the Series | GRACE INERTIA 2.0



Connector Contacts(3)



PCB Headers & Receptacles(70)



Rectangular Connector Housings(20)



Standard Rectangular Connectors(18)

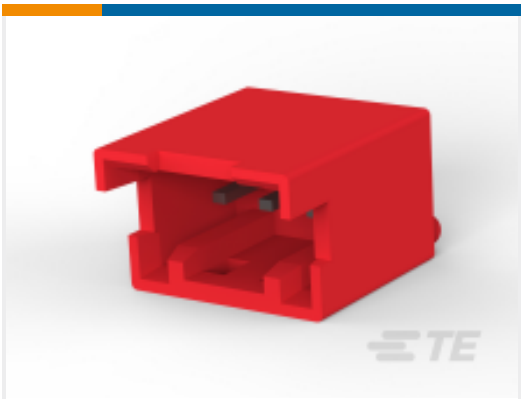


Wire-to-Board Connector Assemblies & Housings(1)

Customers Also Bought



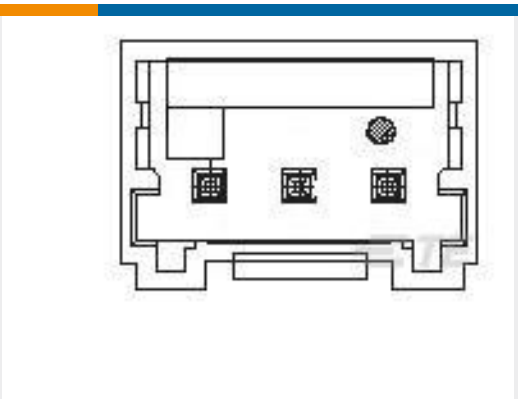
TE Part # 1-292173-4  
CT BOX HDR H SMT 4P O/TAPE NAT



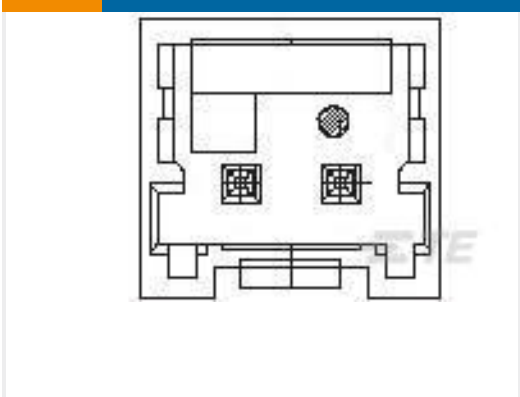
TE Part # 1-1871843-3  
GIC 2.5 HDR ASSY TIN VERSION 3P RED



TE Part # 1871843-3  
GIC 2.5 HDR ASSY TIN VERSION 3P



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



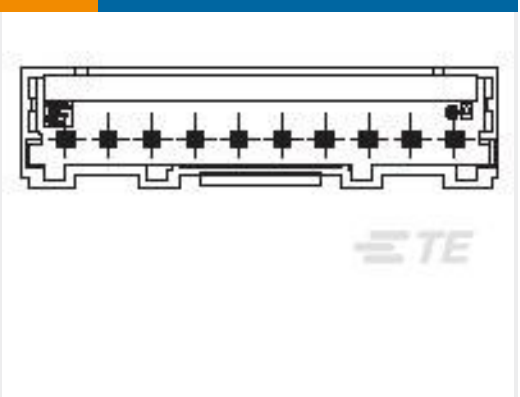
TE Part # 1971032-2  
2POS HEADER ASSEMBLY FOR GIC 2.0 EV



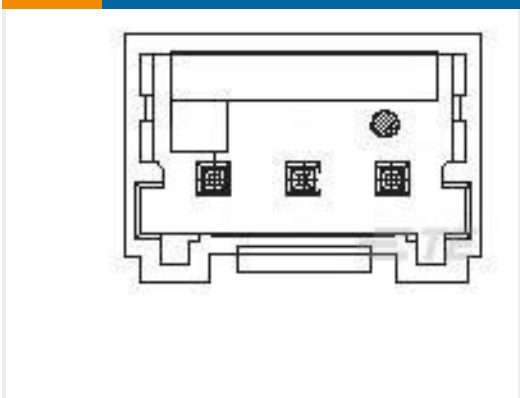
TE Part # 1971032-6  
6POS HEADER ASSEMBLY FOR GIC 2.0 EV



TE Part # 2-1747052-3  
GIC 7.92MM CONN HDR ASS'Y 2POS BLUE



TE Part # 1971032-9  
9POS HEADER ASSEMBLY FOR GIC 2.0 EV



TE Part # 1-1971032-8  
8POS HEADER ASSEMBLY FOR GIC 2.0 EV

Documents



Product Drawings

2POS HEADER ASSEMBLY FOR GIC 2.0 EV

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_3-1971032-2\_D.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_3-1971032-2\_D.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_3-1971032-2\_D.3d\_stp.zip

English

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Product Specifications

Application Specification

English