

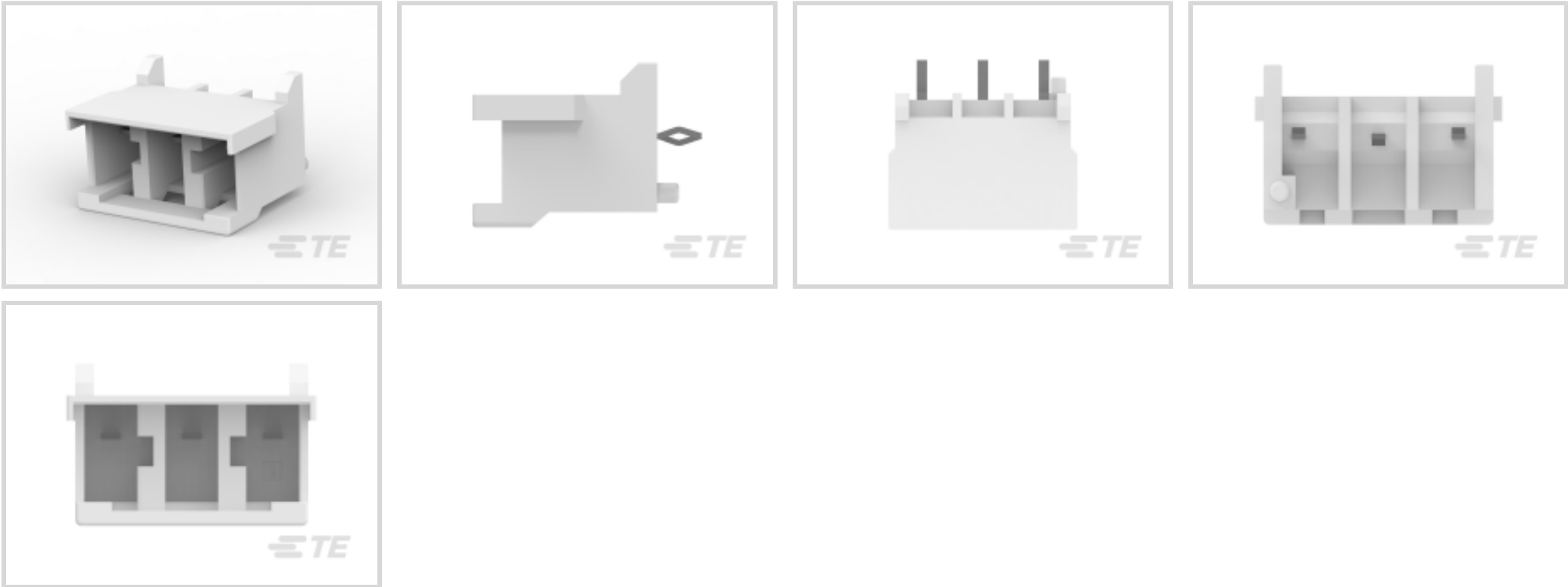


GRACE INERTIA 6.5

TE Internal #: 1747049-1  
Header, Receptacle, Wire-to-Board, 3 Position, 6.5 mm [.255 in]  
Centerline, Printed Circuit Board, GRACE INERTIA 6.5, Rectangular  
Power Connectors

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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: **3**  
Centerline (Pitch): **6.5 mm [ .255 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        | 3        |
| PCB Mount Orientation      | Vertical |
| Number of Power Positions  | 3        |
| Number of Signal Positions | 3        |
| Number of Rows             | 1        |

Electrical Characteristics

|                   |         |
|-------------------|---------|
| Operating Voltage | 300 VDC |
|-------------------|---------|



Body Features

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

Contact Features

|                                                         |                                |
|---------------------------------------------------------|--------------------------------|
| PCB Contact Termination Area Plating Material Thickness | .8 µm[31.496 µin]              |
| Contact Layout                                          | Inline                         |
| Mating Tab Width                                        | 1.5 mm[.059 in]                |
| Contact Underplating Material Thickness                 | .8 – 3 µm[31.496 – 118.11 µin] |
| Contact Mating Area Plating Material                    | Tin                            |
| Contact Underplating Material                           | Nickel                         |
| Contact Base Material                                   | Copper Alloy                   |
| Contact Current Rating (Max)                            | 9 A                            |
| Contact Retention Within Housing                        | With                           |
| Contact Type                                            | Tab                            |
| PCB Contact Termination Area Plating Material           | Tin                            |
| Contact Mating Area Plating Material Thickness          | .8 µm[31.5 µin]                |

Termination Features

|                                    |                       |
|------------------------------------|-----------------------|
| Termination Post & Tail Length     | 4.4 mm[.173 in]       |
| Termination Method to Wire & Cable | Crimp                 |
| Termination Method to PCB          | Through Hole - Solder |

Mechanical Attachment

|                          |                        |
|--------------------------|------------------------|
| Strain Relief            | Without                |
| Mating Alignment Type    | Keyed                  |
| Mating Retention         | With                   |
| Mating Alignment         | With                   |
| PCB Mount Alignment      | Without                |
| Panel Mount Feature      | Without                |
| PCB Mount Retention      | With                   |
| PCB Mount Retention Type | Kinked                 |
| Mating Retention Type    | Inertia Locking, Latch |
| Connector Mounting Type  | Board Mount            |

Housing Features

|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 6.5 mm[.255 in] |
|--------------------|-----------------|



|                  |              |
|------------------|--------------|
| Housing Color    | Natural      |
| Housing Material | Nylon 6/6 GF |

Dimensions

|                             |                      |
|-----------------------------|----------------------|
| Connector Height            | 14.5 mm[.57 in]      |
| PCB Thickness (Recommended) | .06 mm[1.6 in]       |
| Product Length              | 20.1 mm[.791 in]     |
| Wire Size                   | 434.18 – 2723.46 CMA |

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -40 – 105 °C[-40 – 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 | 250 |
| Packaging Method   | Bag |

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 265°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 # CAT-G7534-P729A<br/>Glow Wire GRACE INERTIA Plug</p>              |  <p>TE Part # 2-2232876-1<br/>GIC6.0MM CONNECTOR HEAD<br/>HOUSING ASS 2POS</p>  |  <p>TE Part # 3-2232876-1<br/>GIC6.0MM CONNECTOR HEAD<br/>HOUSING ASS 3POS</p> |  <p>TE Part # 1-1747049-2<br/>GIC 6.5MM PITCH CONN HDR ASS'Y<br/>3POS RED</p>   |
|  <p>TE Part # 2-1747049-1<br/>GRACE INERTIA CONNECTOR 6.5<br/>3POS HEADER</p>  |  <p>TE Part # 2-1747049-3<br/>GIC 6.5MM PITCH CONN HDR ASS'Y<br/>3POS BLUE</p> |  <p>TE Part # 3-1747049-4<br/>GIC 6.5MM CONN HDR ASS'Y 3POS<br/>YELLOW</p>    |  <p>TE Part # 3-2232876-3<br/>GIC6.0MM CONNECTOR HEAD<br/>HOUSING ASS 3POS</p> |
|  <p>TE Part # 3-2232876-4<br/>GIC6.0MM CONNECTOR HEAD<br/>HOUSING ASS 3POS</p> |                                                                                                                                                                    |                                                                                                                                                                    |                                                                                                                                                                     |

Also in the Series | GRACE INERTIA 6.5



Rectangular Power Connectors(2)



Customers Also Bought

Documents

Product Drawings

GRACE INERTIA CONNECTOR 6.5 3POS HEADER

English

CAD Files

Customer View Model

ENG\_CVM\_CVM\_1747049-1\_D.2d\_dxf.zip

English

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_1747049-1\_D.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_1747049-1\_D.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

Product Specifications

Application Specification

English