# 1903415-1 ACTIVE

#### **GRACE INERTIA 9.0**

TE Internal #: 1903415-1

Rectangular Power Connectors, Header, Receptacle, Wire-to-Board, 3 Position, 9 mm [.354 in] Centerline, Printed Circuit Board,

**GRACE INERTIA 9.0** 

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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): 9 mm [ .354 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        | 0                     |

#### **Electrical Characteristics**

| Operating Voltage 600 VDC |
|---------------------------|
|---------------------------|



#### **Contact Features**

| Mating Post Length                                      | 7.9 mm[.311 in] |
|---|-----------------|
| PCB Contact Termination Area Plating Material Thickness | 1 μm[39.36 μin] |
| Contact Layout  | Inline          |
| Contact Mating Area Plating Material                    | Tin             |
| Contact Mating Area Plating Material Finish             | Matte           |
| Contact Base Material                                   | Copper Alloy    |
| Contact Current Rating (Max)                            | 20 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              | 3.8 mm[.149 in]       |
|---|-----------------------|
| Termination Method to Wire & Cable          | Crimp                 |
| Termination Method to Printed Circuit Board | Through Hole - Solder |

### Mechanical Attachment

| Strain Relief            | Without      |
|--------------------------|--------------|
| Mating Alignment Type    | Polarization |
| Mating Retention         | With         |
| Mating Alignment         | With         |
| PCB Mount Alignment      | Without      |
| Panel Mount Feature      | Without      |
| PCB Mount Retention      | With         |
| PCB Mount Retention Type | Boardlock    |
| Mating Retention Type    | Latch        |
| Connector Mounting Type  | Board Mount  |
|                          |              |

# **Housing Features**

| Centerline (Pitch) | 9 mm[.354 in] |
|--------------------|---------------|
| Housing Color      | Natural       |
| Housing Material   | Nylon 6/6 GF  |

# Dimensions



| Connector Height            | 18.4 mm[.724 in]           |
|-----------------------------|----------------------------|
| Product Width               | 9.3 mm[.366 in]            |
| Product Length              | 26.8 mm[1.05 in]           |
| Wire Size                   | 2427 – 7144 CMA            |
| Usage Conditions            |                            |
| Operating Temperature Range | -40 - 105 °C[-40 - 221 °F] |
| Operation/Application       |                            |
| Circuit Application         | Power                      |
| Industry Standards          |                            |
| UL Flammability Rating      | UL 94V-0                   |
| Glow Wire Rating            | GWT 750°C (Without Flame)  |
| Packaging Features          |                            |
| 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 2023 (235) Candidate List Declared Against: JUNE 2023 (235) 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



# Also in the Series | GRACE INERTIA 9.0

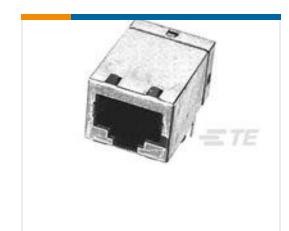


Rectangular Connector Locking(1)

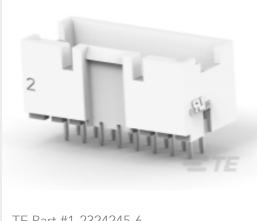


Rectangular Power Connectors(9)

# Customers Also Bought



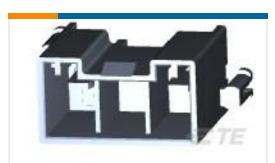
TE Part #1734795-1 RJ45,8P8C,SHD,W/O LED,DIP 6u"



TE Part #1-2324245-6 ASSY,HDR,VERT,GWT,BOSSED,DUAL ROW, EP2.5



TE Part #2-1903415-1
GHC 9.0 3POS HDR ASSY BLUE



TE Part #1747996-1 GHC EYELET 12.4 2POS HEADER ASSY NATURAL



TE Part #2-2324245-4 ASSY,HDR,VERT,GWT,BOSSED,DUAL ROW, EP2.5



TE Part #2-2360442-4
FOAMING PROOF UPPER TPA 2POS
24AWG



TE Part #2108744-1 POWER 2P HDR ASSY L/PRO NAT



TE Part #4-2324245-0 ASSY,HDR,VERT,GWT,BOSSED,DUAL ROW, EP2.5



TE Part #4-1903415-1 GHC 9.0 3POS HDR ASSY BLACK

### **Documents**

#### **Product Drawings**

GHC 9.0 3POS HDR ASSY

English

#### **CAD Files**

**Customer View Model** 

ENG\_CVM\_CVM\_1903415-1\_G.2d\_dxf.zip

English

3D PDF

3D

**Customer View Model** 

ENG\_CVM\_CVM\_1903415-1\_G.3d\_igs.zip

English

**Customer View Model** 

ENG\_CVM\_CVM\_1903415-1\_G.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

#### **Product Environmental Compliance**

MD\_1903415-1\_05112018441\_dmtec

English

MD\_1903415-1\_05112018441\_dmtec

English