



GRACE INERTIA 3.3

TE Internal #: 1-1971906-6
PCB Mount Header, Vertical, Wire-to-Board, 12 Position, 3.3 mm [.129 in] Centerline, Fully Shrouded, Tin, Through Hole - Solder, GRACE INERTIA 3.3

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**
PCB Mount Orientation: **Vertical**
Connector System: **Wire-to-Board**
Number of Positions: **12**
Number of Rows: **2**

Features

Electrical Characteristics

Operating Voltage	250 VDC
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Dimensions

Row-to-Row Spacing	5.2 mm[.205 in]
Connector Width	11.6 mm[.456 in]
PCB Thickness (Recommended)	1.6 mm[.06 in]
Connector Height	14.25 mm[.561 in]
Connector Length	21.9 mm[.862 in]

Packaging Features

Packaging Quantity	175
Packaging Method	Tray

Industry Standards

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



Usage Conditions

Operating Temperature (Max)	105 °C[221 °F]
Operating Temperature Range	-30 – 105 °C[-22 – 221 °F]

Body Features

Connector & Keying Code	A
Primary Product Color	Natural

Mechanical Attachment

Panel Mount Feature	Without
Mating Retention Type	Locking Window
Mating Retention	With
PCB Mount Retention Type	Kinked
Mating Alignment Type	Keyed
PCB Mount Alignment Type	Locating Posts
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	With

Termination Features

Termination Post & Tail Length	3 mm[.118 in]
Square Termination Post & Tail Dimension	.5 mm[.02 in]
Termination Method to PCB	Through Hole - Solder

Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.25 µm[49.21 µin]
Contact Size	.5mm
Contact Mating Area Plating Material Thickness	2 µm[78.74 µin]
Mating Square Post Dimension	.5 mm[.02 in]
Contact Shape & Form	Square
PCB Contact Termination Area Plating Material Thickness	2 µm[78.74 µin]
Contact Layout	Matrix
Contact Mating Area Length	3.6 mm[.142 in]
Contact Base Material	Brass



PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Tin
Contact Type	Tab
Contact Current Rating (Max)	4 A

Housing Features

Mating Entry Location	Top
Housing Material	PA 66 GF
Centerline (Pitch)	3.3 mm[.129 in]

Configuration Features

Number of Columns	6
Number of Loaded Positions	12
Number of Power Positions	12
Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	12
Number of Rows	2

Product Type Features

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

Operation/Application

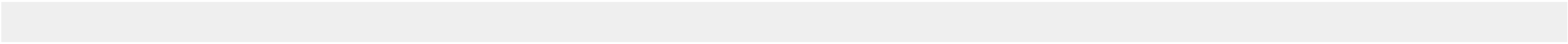
Circuit Application	Power
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Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

Product Compliance

For compliance documentation, visit the product page on TE.com>



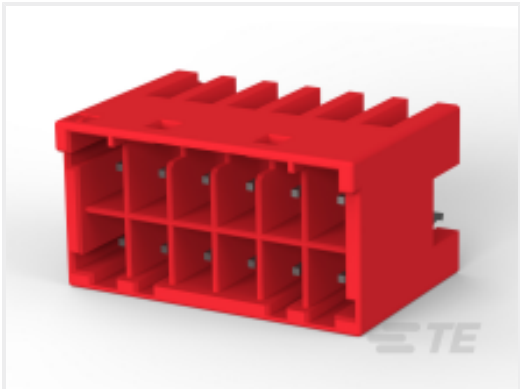


EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2024 (241) Candidate List Declared Against: JUNE 2024 (241) Does 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>

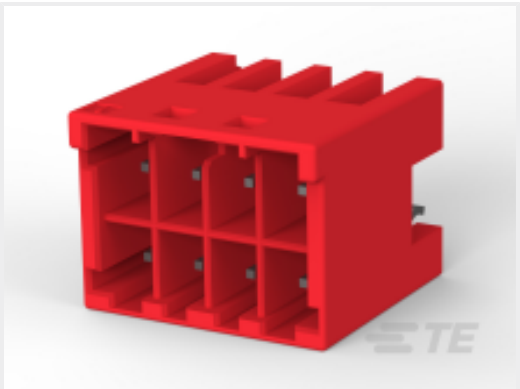
Compatible Parts



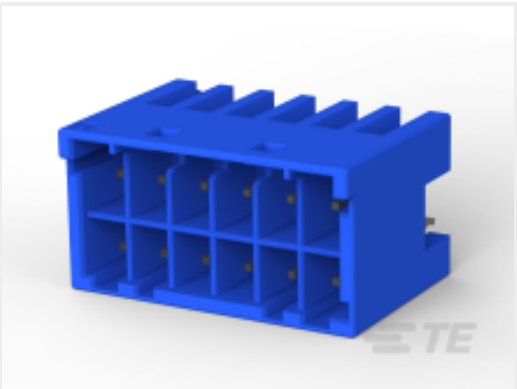
TE Part # 3-1971906-6
HEADER ASSY 12POS,KEYING-C,
NEW GIC3.3



TE Part # 5-1871571-1
GIC 3.3 HDR ASSY 12POS W/O KINK



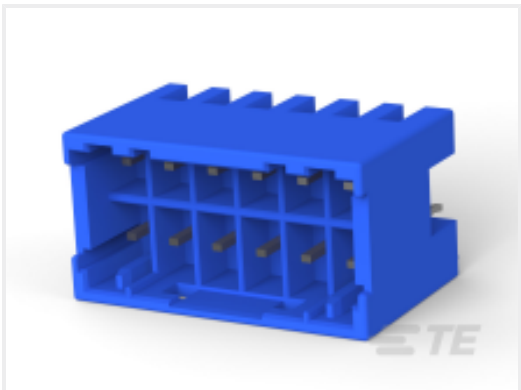
TE Part # 3-1971906-4
HEADER ASSY 8POS,KEYING-C,NEW
GIC3.3



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



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



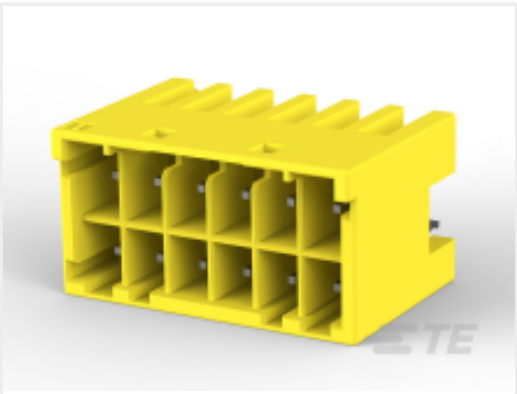
TE Part # 2-1871571-3
GIC 3.3 HEADER ASSY 12POS



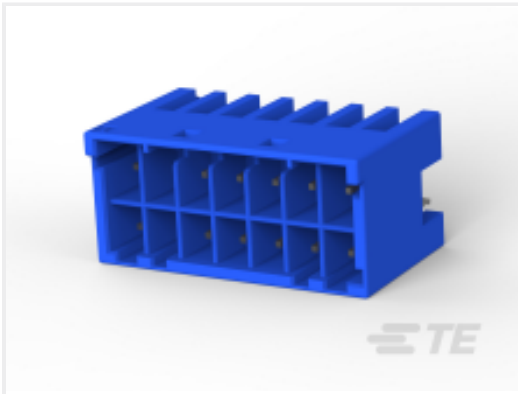
TE Part # 4-1971906-7
HEADER ASSY 14POS,KEYING-D,
NEW GIC3.3



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



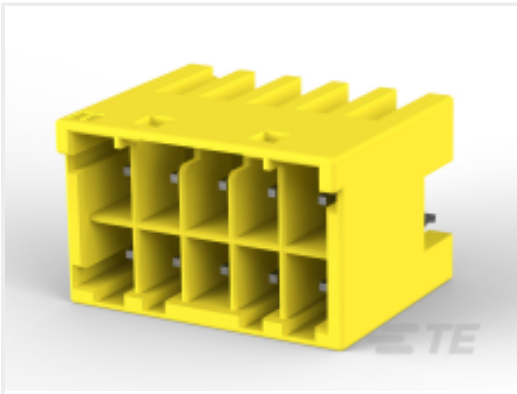
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HEADER ASSY 12POS,KEYING-D,
NEW GIC3.3



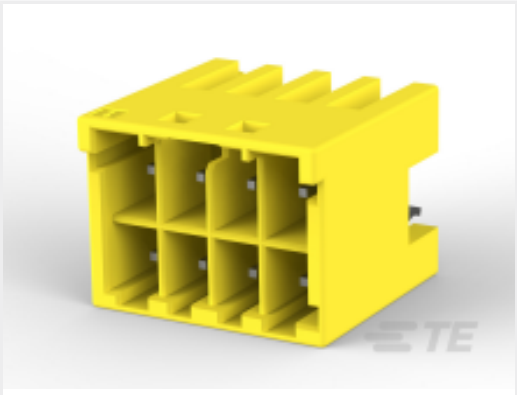
TE Part # 6-1971906-7
HEADER ASSY 14POS,KEYING-B,NEW
GIC3.3



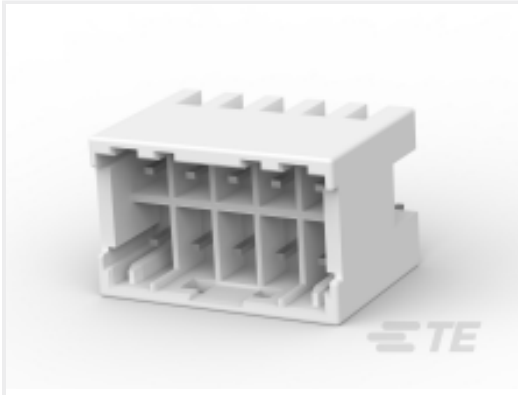
TE Part # 1-1971906-5
HEADER ASSY 10POS,KEYING-A,
NEW GIC3.3



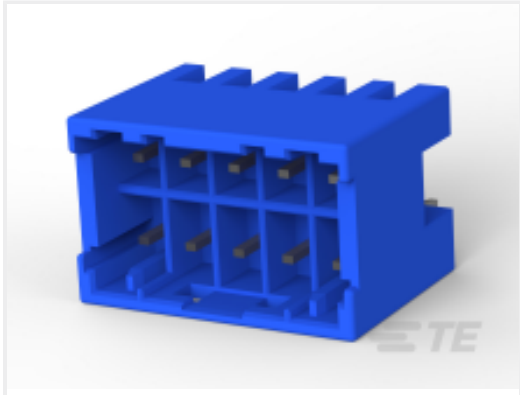
TE Part # 4-1971906-5
HEADER ASSY 10POS,KEYING-D,
NEW GIC3.3



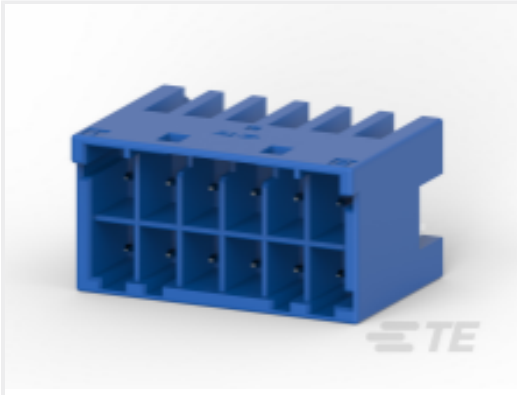
TE Part # 4-1971906-4
HEADER ASSY 8POS,KEYING-D,NEW
GIC3.3



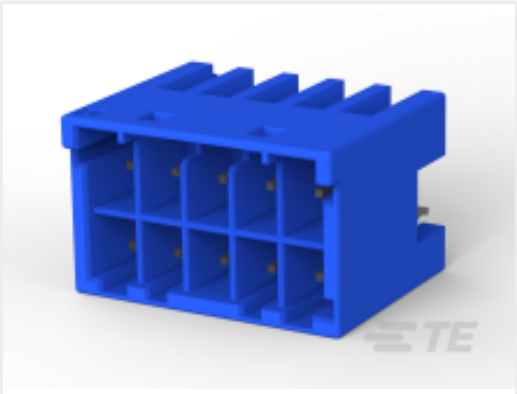
TE Part # 1939983-1
GIC3.3 HDR ASS'Y 10POS 2ROW



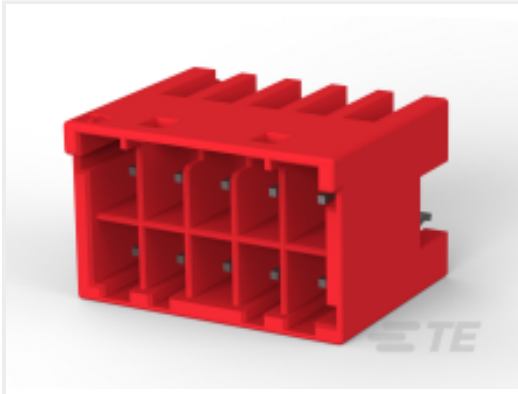
TE Part # 2-1939983-3
GIC 3.3 HDR ASSY 10P 2ROW BLUE



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



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



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



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



TE Part # 5-1971906-7
HEADER ASSY 14POS,KEYING-A,
NEW GIC3.3

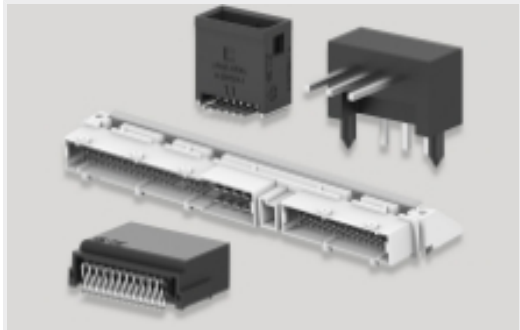
Also in the Series | GRACE INERTIA 3.3



Connector Contacts(3)



Connector Hardware(15)



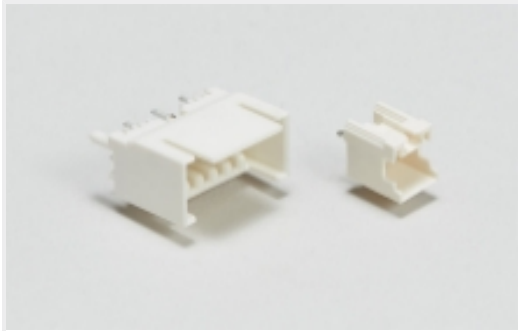
PCB Headers & Receptacles(36)



Power Contacts(3)



Rectangular Power Connectors(34)



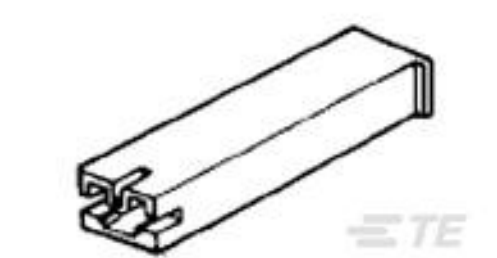
Wire-to-Board Headers & Receptacles
(36)

Customers Also Bought





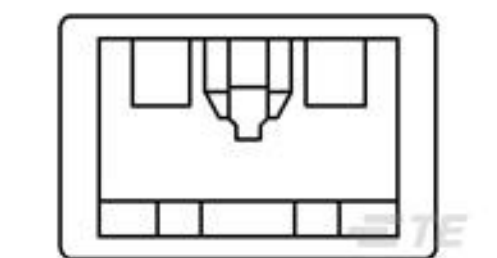
TE Part #179938-1
AMP POWER DBL LOCK PLUG HSG 3P



TE Part #173974-1
187 HSG. PL MKII REC. NAT



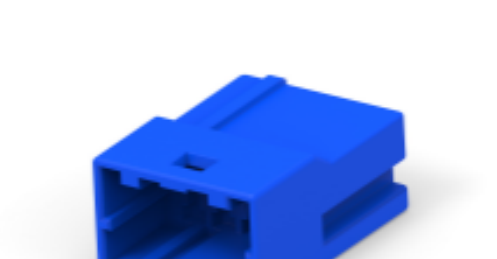
TE Part #1-1123824-1
EP 1P HDR NATURAL



TE Part #1318954-1
250 HSG. PL EX REC. NAT



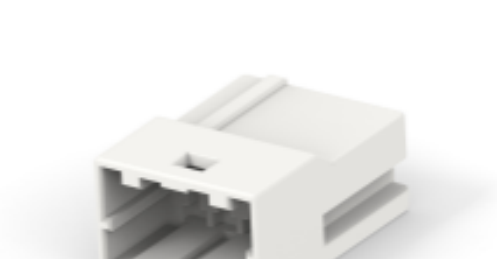
TE Part #1376386-2
5mm B-T-W Conn. 4P(2row) HDR A



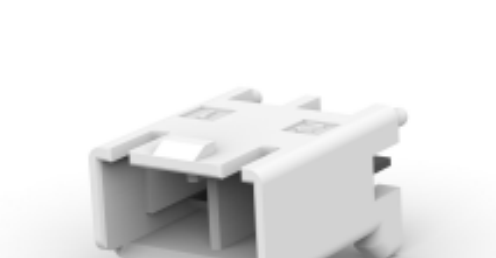
TE Part #2-2232574-3
GIC 2.5 W CAP HSG 4P BLUE



TE Part #2174298-1
5mm POWER KEY 3P HDR ASSEMBLY



TE Part #2232574-1
GIC 2.5 W CAP HSG 4P NATURAL



TE Part #1376382-2
5MM B-T-W CONN. 2P HDR ASSEMBL (W/O GF)



TE Part #3-1376386-5
5mm B-T-W Conn. 4P(2row) HDR A

Documents

Product Drawings

HEADER ASSY 12POS,KEYING-A,NEW GIC3.3

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_1-1971906-6_A_c-1-1971906-6-a.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_1-1971906-6_A_c-1-1971906-6-a.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_1-1971906-6_A_c-1-1971906-6-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