

1-647689-2 ✓ ACTIVE

Economy Power

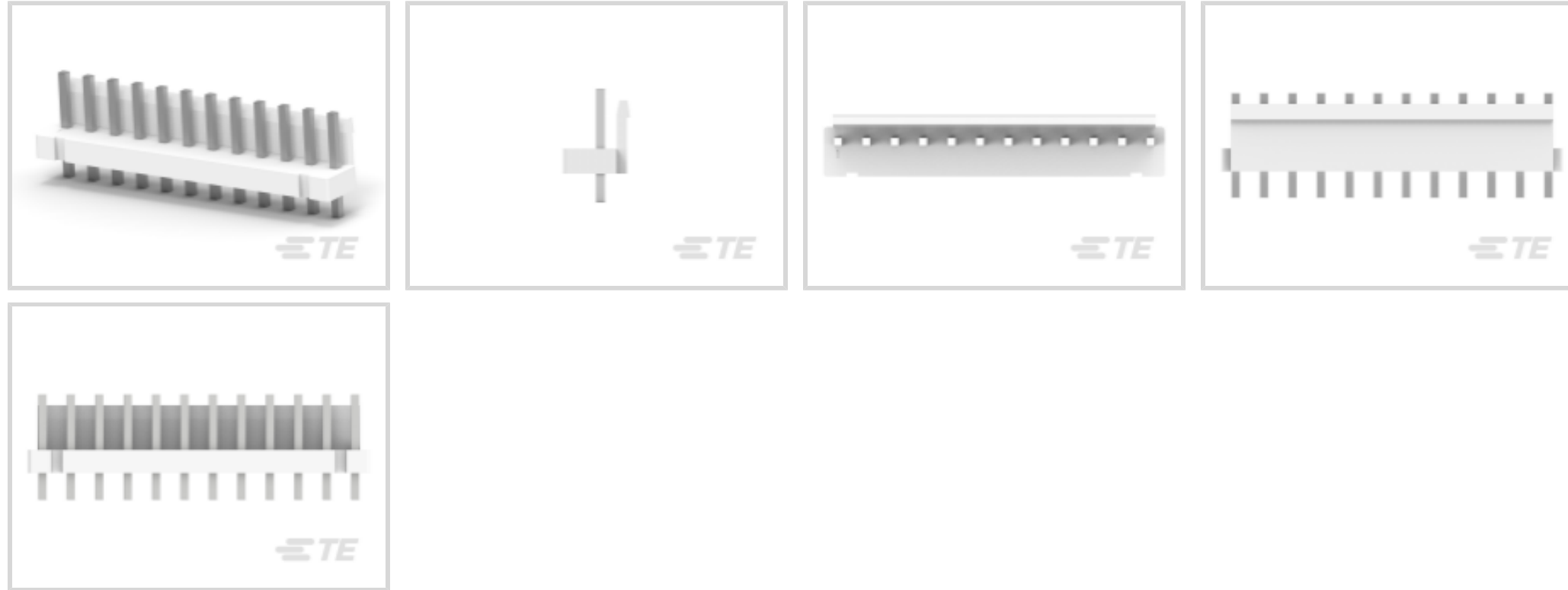
TE Internal #: 1-647689-2

PCB Mount Header, Vertical, Wire-to-Board, 12 Position, 3.96 mm [.156 in] Centerline, Partially Shrouded, Tin, Through Hole - Solder, Economy Power

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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: **1**

Features

Electrical Characteristics

Operating Voltage	250 VDC
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Dimensions

Connector Width	8.6 mm[.339 in]
PCB Thickness (Recommended)	1.6 mm[.063 in]
Connector Height	10.9 mm[.429 in]
	1.87 in

Packaging Features

Packaging Quantity	500
Packaging Method	Package

Industry Standards

Compatible With Approved Standards Products	UL E28476
Glow Wire Rating	Standard Part - Not Glow Wire
UL Flammability Rating	UL 94V-0



Body Features

Connector Profile	Low
Primary Product Color	Natural

Mechanical Attachment

Panel Mount Feature	Without
Mating Retention Type	Latch
Mating Retention	With
Mating Alignment Type	Polarization
PCB Mount Retention	Without
PCB Mount Alignment	Without
Connector Mounting Type	Board Mount
Mating Alignment	With

Termination Features

Termination Post & Tail Length	3.7 mm[.146 in]
Square Termination Post & Tail Dimension	1.14 mm[.045 in]
Termination Method to PCB	Through Hole - Solder

Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1 μm [39.37 μin]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	3 μm [118.11 μin]
Mating Square Post Dimension	1.14 mm[.045 in]
PCB Contact Termination Area Plating Material Thickness	3 μm [118.11 μin]
Contact Shape & Form	Square
Contact Layout	Inline
Contact Mating Area Length	7.8 mm[.307 in]
Contact Base Material	Brass
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material Finish	Matte
Contact Mating Area Plating Material	Tin
Contact Type	Pin
Contact Current Rating (Max)	8 A

Housing Features



Housing Material	Nylon
Centerline (Pitch)	3.96 mm [.156 in]

Configuration Features

Connector Contact Load Condition	Fully Loaded
PCB Mount Orientation	Vertical
Number of Positions	12
Number of Rows	1

Product Type Features

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

Usage Conditions

Operating Temperature Range	-25 – 105 °C [-13 – 221 °F]
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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	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

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



TE Part # 1-1744416-2
12 POS EP II HSG, GLOW WIRE



TE Part # 4-1744057-5
3.96 EP HDR ASSY 5P W/PEGS,YEL



TE Part # 1-2421886-2
EP II PLUG HOUSING, 12P, GREY, NON-GWT



TE Part # 5-2421885-2
EP II PLUG HOUSING, 12P, GREEN, NON-GWT



TE Part # 1-2421885-2
EP II PLUG HOUSING, 12P, RED, NON-GWT



TE Part # 3-2421886-2
EP II PLUG HOUSING, 12P, ORANGE, NON-GWT



TE Part # 5-2421886-2
EP II PLUG HOUSING, 12P, BLACK, NON-GWT



TE Part # 7-2421885-2
EP II PLUG HOUSING, 12P, YELLOW, NON-GWT



TE Part # 3-2421885-2
EP II PLUG HOUSING, 12P, BLUE, NON-GWT



TE Part # 1-2132782-2
12 pos. EP II breakaway retain

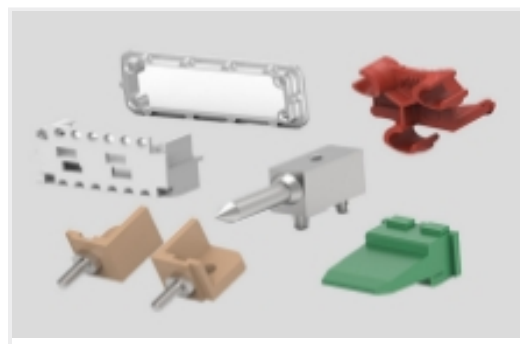


TE Part # 1-2377130-2
EP II plug housing, 12P, NON-GWT

Also in the Series | **Economy Power**



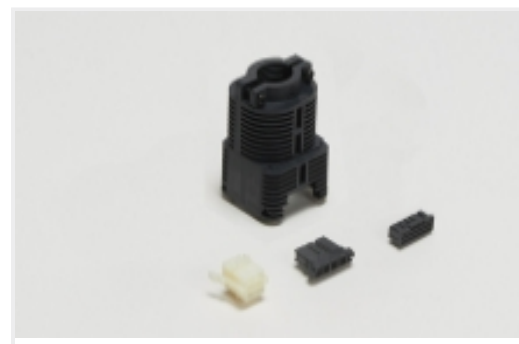
Connector Contacts(15)



Connector Hardware(2)



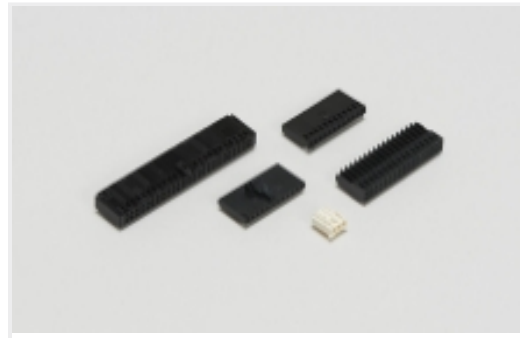
Power Contacts(9)



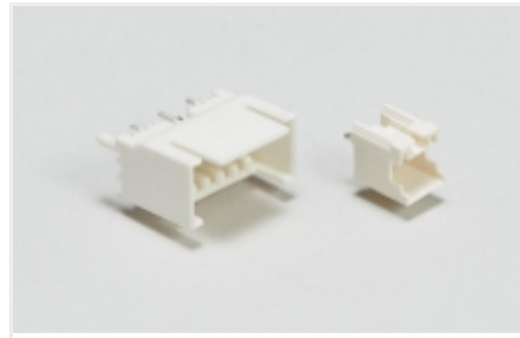
Rectangular Connector Housings(1)



Rectangular Power Connectors(57)



Wire-to-Board Connector Assemblies & Housings(141)



Wire-to-Board Headers & Receptacles (402)

Customers Also Bought



TE Part #1462042-8
IMC03GR=IM RELAY 140mW 5V 1CO



TE Part #CAT-M5833-F3492A
Female-on-Board Connector, Top Entry



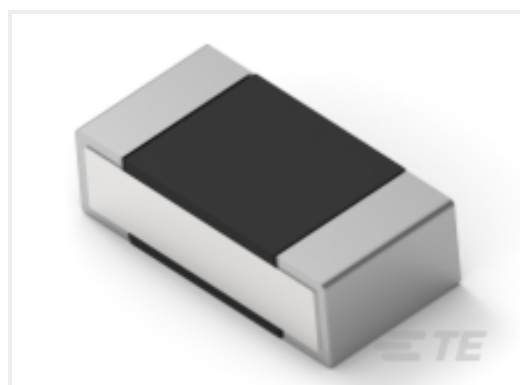
TE Part #1-1879233-3
SMW5 R33 5%



TE Part #282841-8
TERMI-BLOK PCB MOUNT 8P. 5



TE Part #2-1676481-9
CPF 0603 75R 0.1% 25PPM 1K RL



TE Part #4-2176311-5
RP 1E 0.1W 3K32 0.1% 25PPM 1K RL



TE Part #1825255-1
MHS12204=SPDT SL SW VERT AG



TE Part #1-2176604-0
RLC73K 3A R75 1% 1K RL



TE Part #6-2176575-1
RLC73PW 2A R28 1% 1K RL

Documents



CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_1-647689-2_A.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-647689-2_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_1-647689-2_A.3d_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

[1-1773885-9 Economy Power Connectors](#)

English

Product Specifications

[Application Specification](#)

Japanese

[Application Specification](#)

English

Agency Approvals

[VDE Certificate](#)

English