1-647689-2 ✔ ACTIVE

Economy Power

TE Internal #: 1-647689-2

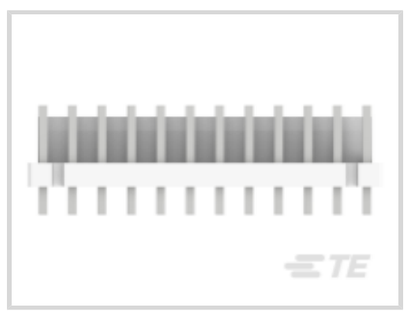
PCB Mount Header, Vertical, Wire-to-Board, 12 Position, 3.96 mm [.156 in] Centerline, Partially Shrouded, Tin, Through Hole - Solder, Economy Power

View on TE.com >

Connectors > PCB Connectors > PCB Headers & Receptacles







Connector System: **Wire-to-Board**

Number of Positions: **12**

Number of Rows: **1**

Centerline (Pitch): **3.96 mm [.156 in]**

PCB Mount Orientation: **Vertical**

Features

Product Type Features

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

Configuration Features

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

Electrical Characteristics

Operating Voltage	250 VAC

Body Features

Connector Profile	Low

Primary Product Color	Natural

Contact Features

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

Termination Features

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

Mechanical Attachment

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

Housing Features

Housing Material	Nylon

Centerline (Pitch)	3.96 mm[.156 in]

Dimensions

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

Usage Conditions

Operating Temperature Range	-25 – 105 °C[-13 – 221 °F]

Operation/Application

Circuit Application	Power

Industry Standards

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

Packaging Features

Packaging Quantity	500
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: 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 # 1-2132782-2
12 pos. EP II breakaway retain



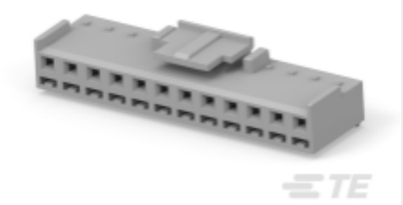
TE Part # 1-2377130-2
EP II plug housing, 12P, NON-GWT



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



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



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



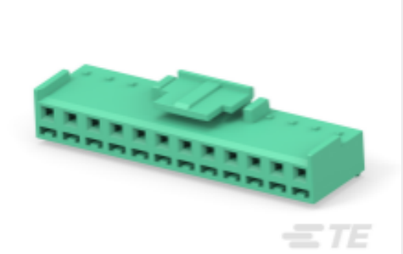
TE Part # 3-2421885-2
EP II PLUG HOUSING, 12P, BLUE, NON-GWT



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



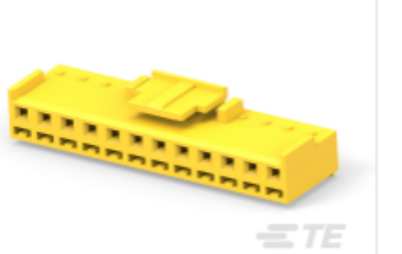
TE Part # 4-1744057-5
3.96 EP HDR ASSY 5P W/PEGS,YEL



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

Also in the Series | Economy Power



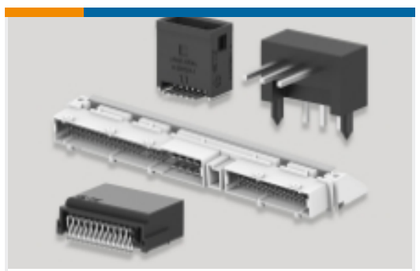
Connector Contacts(15)



Connector Hardware(2)



Insertion & Extraction Tools(1)



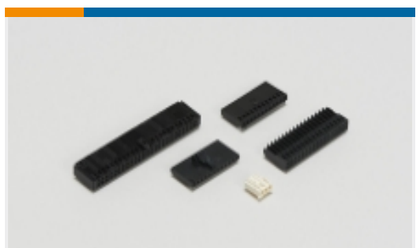
PCB Headers & Receptacles(400)



Rectangular Connector Housings(1)



Rectangular Power Connectors(64)

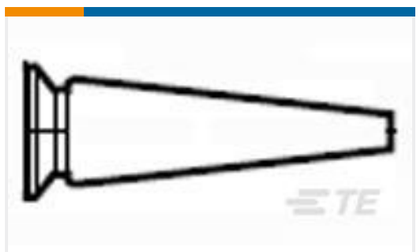


Wire-to-Board Connector Assemblies & Housings(142)

Customers Also Bought



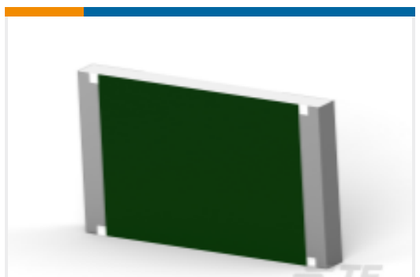
TE Part #1-1609112-4
15CBE1=F8274



TE Part #640254-1
KEYING PLUG .045 SQ PST CONN



TE Part #2199070-4
0.5MM FPH BTB, 4H/24POS/15U/TR /WOB



TE Part #7-2176407-7
3560 3R3 5%



TE Part #1-640250-8
18P SL156 HSG W/LCK RAMP NATL



TE Part #1825057-2
ADE0304=DIP SWITCH,EXT,THRU/HL



TE Part #2334100-2
D-SUB CRIMP MALE 15 POS



TE Part #4-647615-2
12P MTA156 POL LOCK HDR ASSY LF



TE Part #CONMCX001
MCX Jack 50 Ohm PCB Through Hole



TE Part #216833-1
15P.HDP20 REC.ASSY.

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

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

TE Connectivity:

175977-2 1903112-2 3631B101LL 650075-000 917696-1 MPT100C18RF 1-794222-0 141991-2 936348-1 1-962915-1 1743455-2 2005330-1 CRGCQ2010J3K3 ROX05SJ18R U5254-000005-030PA 2380312-2 2834055-1 3-1393225-0 SBCHE154R7K SBCHE64R7K 1393431-1 1969656-1 2310537-1 2377783-2 3430B2F51RTDF CPF0402B37K4E1 TE50BR39J 2-292161-3 SMW73R0JT RH73H2A40MKTN