



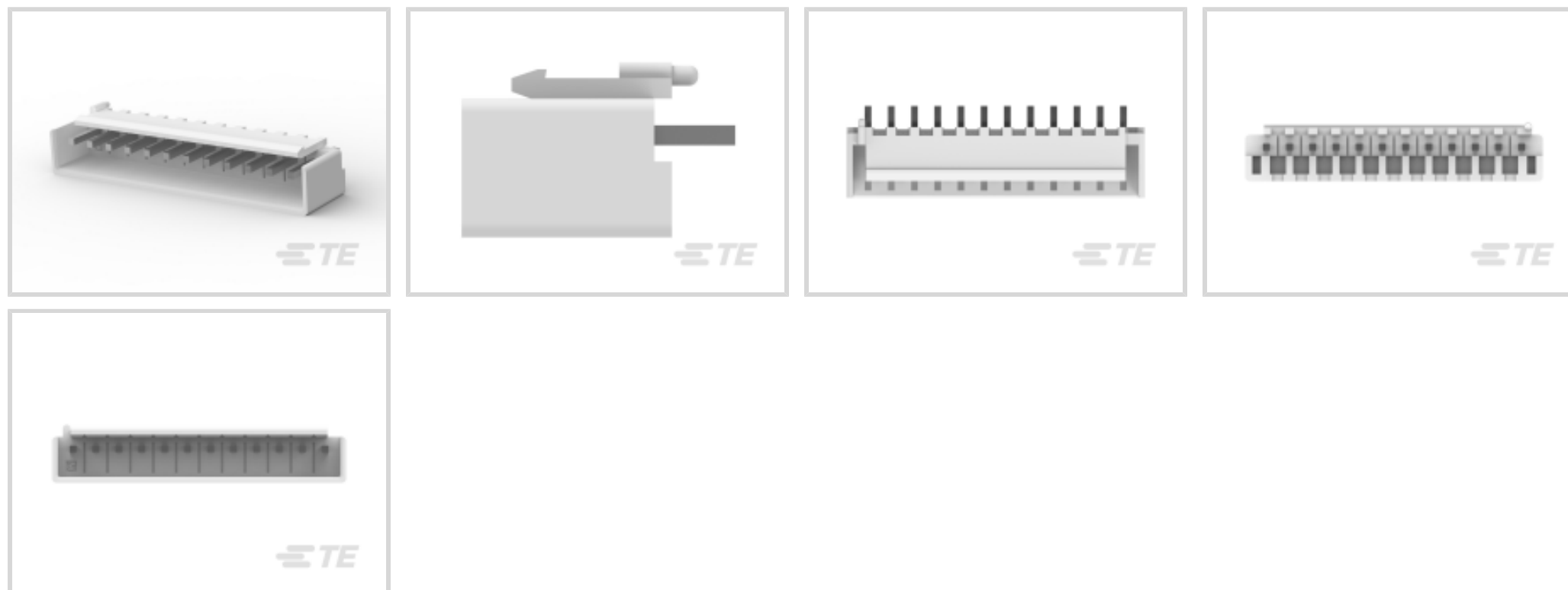
**Economy Power**

TE Internal #: 1-1877285-2

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

Primary Product Color	White
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### Contact Features

Contact Layout	Inline
Contact Mating Area Length	7.78 mm[.306 in]
Mating Square Post Dimension	1.14 mm[.045 in]
PCB Contact Termination Area Plating Material Thickness	1 $\mu$ m[39.37 $\mu$ in]
Contact Underplating Material Thickness	.8 $\mu$ m[31.49 – 70.86 $\mu$ in]
Contact Mating Area Plating Material Thickness	1 $\mu$ m[39.37 $\mu$ in]
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)	7.5 A

### Termination Features

Square Termination Post & Tail Dimension	1.14 mm[.045 in]
Termination Post & Tail Length	3.6 mm[.141 in]
Termination Method to Printed Circuit Board	Through Hole - Solder

### Mechanical Attachment

PCB Mount Alignment Type	Boss
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	With
PCB Mount Retention	Without

### Housing Features

Housing Material	PBT GF
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Centerline (Pitch)	3.96 mm [.156 in]
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### Dimensions

	1.998 in
Connector Height	12 mm [.472 in]
Connector Width	9.54 mm [.375 in]
PCB Thickness (Recommended)	1.6 mm [.063 in]

### Usage Conditions

Operating Temperature Range	-25 – 105 °C [-13 – 221 °F]
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### Operation/Application

Circuit Application	Power
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### Industry Standards

Glow Wire Rating	Standard Part - Not Glow Wire
Agency/Standard	UL, VDE
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Quantity	150
Packaging Type	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 2022 (224) Candidate List Declared Against: JAN 2021 (211) 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

TE Part # 1-2132781-2  
12P EP-II HOUSING, NATURAL

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

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

TE Part # 1-1744427-8  
EP HEADER ASY,SHROUDED,8 POS, GW,NO PIN7

TE Part # 1744357-3  
3.96 EP SHROUDED HDR ASSY 3P W

TE Part # 1744357-4  
3.96 EP SHROUDED HDR ASSY 4P W

TE Part # 1744357-7  
3.96 EP SHROUDED HDR ASSY 7P W /PEGS

TE Part # 1744357-8  
3.96 EP SHROUDED HDR ASSY 8P W

TE Part # 2108744-4  
POWER 2P HDR ASSY L/PRO YEL

TE Part # 3-1877285-1  
11P EP SHRD HDR ASMY, BLACK

TE Part # 3-1877285-2  
12P EP SHRD HDR ASMY, BLACK

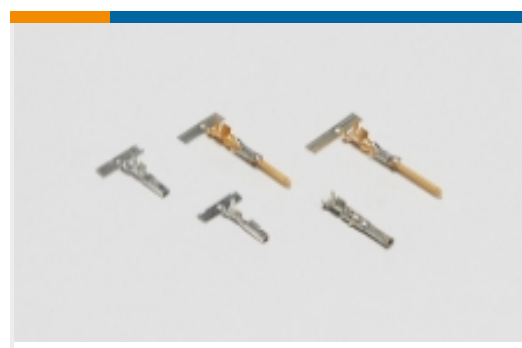
## Also in the Series | Economy Power

Connector Contacts(1)

Insertion & Extraction Tools(1)

PCB Headers & Receptacles(166)

PCB Latches, Locks & Retainers(2)



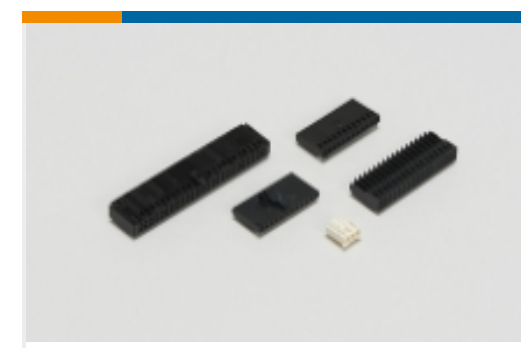
Power Contacts(8)



Rectangular Connector Housings(1)



Rectangular Power Connectors(301)

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

Wire-to-Board Connector Contacts(6)

## Documents

### Product Drawings

[12P EP SHRD HDR ASMY, WHITE](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_1-1877285-2\\_C.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-1877285-2\\_C.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-1877285-2\\_C.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

[AMP\\_ECONOMY\\_POWER\\_SHROUDED\\_HEADERS](#)

English

[7-1773458-5\\_ECONOMY\\_POWER\\_QRG](#)

English

### Product Specifications



## Application Specification

English