

1-120532-2 ✓ ACTIVE



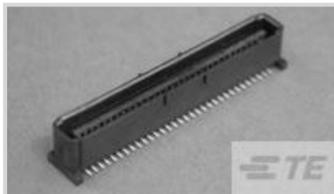
### Free Height

TE Internal #: 1-120532-2

PCB Mount Header, Vertical, Board-to-Board, 84 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold, Surface Mount, Signal, Black, Free Height

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Plug Connector: Board-Board, Vertical, 84, 1mm



PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **84**

Centerline (Pitch): **1 mm [ .039 in ]**

[All Free Height Plug Connector: Board-Board, Vertical, 84, 1mm \(28\)](#)

## Features

### Product Type Features

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

### Configuration Features

Number of Columns	42
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	84
Board-to-Board Configuration	Parallel

### Electrical Characteristics

Insulation Resistance	2 M $\Omega$
Operating Voltage	250 VAC

### Signal Characteristics

Differential Signaling	Yes
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### Body Features

Primary Product Color	Black
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### Contact Features

Contact Layout	Inline
PCB Contact Termination Area Plating Material Thickness	3.81 $\mu\text{m}$ [150 $\mu\text{in}$ ]
Mating Tab Width	.63 mm[.024 in]
Mating Tab Thickness	.2 mm[.008 in]
Contact Underplating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Shape & Form	Single Beam
PCB Contact Termination Area Plating Material	Tin-Lead
Contact Base Material	Phosphor Bronze
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
Contact Type	Pin
Contact Current Rating (Max)	1 A

### Termination Features

Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
Rectangular Termination Post & Tail Width	.3 mm[.011 in]
Termination Method to Printed Circuit Board	Surface Mount

### Mechanical Attachment

PCB Mount Alignment Type	Locating Posts
Mating Retention	Without
PCB Mount Retention Type	None
Mating Alignment	Without
Mating Alignment Type	None
PCB Mount Retention	Without
PCB Mount Alignment	Without

### Housing Features

Mating Entry Location	Top
Centerline (Pitch)	1 mm[.039 in]
Housing Material	Matte



### Dimensions

Connector Length	44.22 mm[1.74 in]
Connector Height	6.35 mm[.249 in]
Connector Width	3.81 mm[150 in]
Stack Height	8 mm[.315 in]

### Usage Conditions

Operating Temperature Range	-55 – 110 °C[-67 – 230 °F]
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### Operation/Application

Assembly Process Feature	Pick and Place Cover
Circuit Application	Signal

### Industry Standards

UL Rating	Listed
Agency/Standard	CSA, UL
Approved Standards	CSA LR7189, UL E28476
Industry Standard	IEEE 1386
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Quantity	500
Packaging Type	Tape & Reel

### Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

EU RoHS Directive 2011/65/EU	Not Compliant
EU ELV Directive 2000/53/EC	Compliant with Exemptions
China RoHS 2 Directive MIIT Order No 32, 2016	Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2022 (224) Candidate List Declared Against: JUNE 2022 (224) SVHC > Threshold: Pb (13% in Component Part) <b>Article Safe Usage Statements:</b> Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location.
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free

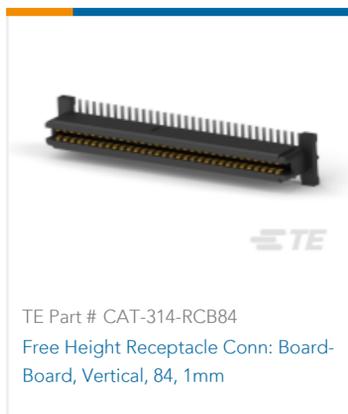
## Solder Process Capability

Reflow solder capable to 260°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 | Free Height



## Documents

## Product Drawings

1FHP,84,50A/P,N,C,S08

English

## CAD Files

3D PDF

3D

## Customer View Model

ENG\_CVM\_CVM\_1-120532-2\_J.2d\_dxf.zip



English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_1-120532-2\\_J.3d\\_igs.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_1-120532-2\\_J.3d\\_stp.zip](#)

English

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

**Product Specifications**

[Application Specification](#)

English