

5120525-1  ACTIVE

#### Free Height

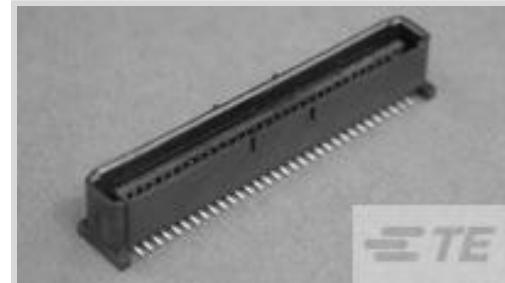
TE Internal #: 5120525-1

PCB Mount Header, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold, Surface Mount, Signal, Black, Free Height

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Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Plug Connector: Board-Board, Vertical, 64, 1mm



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

PCB Mount Orientation: **Vertical**

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

Number of Positions: **64**

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

[All Free Height Plug Connector: Board-Board, Vertical, 64, 1mm \(40\)](#)

## Features

### Product Type Features

PCB Connector Assembly Type	PCB Mount Header
Connector System	Board-to-Board
Header Type	Fully Shrouded
Connector & Contact Terminates To	Printed Circuit Board

### Configuration Features

Number of Columns	32
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	64
Board-to-Board Configuration	Parallel

### Electrical Characteristics

Insulation Resistance	2 MΩ
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 Mating Area Length	4.27 mm [.168 in]
PCB Contact Termination Area Plating Material Thickness	3.81 $\mu\text{m}$ [150 $\mu\text{in}$ ]
Contact Layout	Inline
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
Contact Base Material	Phosphor Bronze
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.00076 $\mu\text{m}$ [30 $\mu\text{in}$ ]
Contact Type	Pin
Contact Current Rating (Max)	.8 A

#### Termination Features

Rectangular Termination Post & Tail Thickness	.2 mm [.008 in]
Rectangular Termination Post & Tail Width	.3 mm [.012 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	With
Connector Mounting Type	Board Mount

#### Housing Features

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

## Dimensions

Connector Length	34.22 mm[1.347 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

Circuit Application	Signal
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## Industry Standards

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

## Packaging Features

Packaging Quantity	500
Packaging Method	Tape & Reel

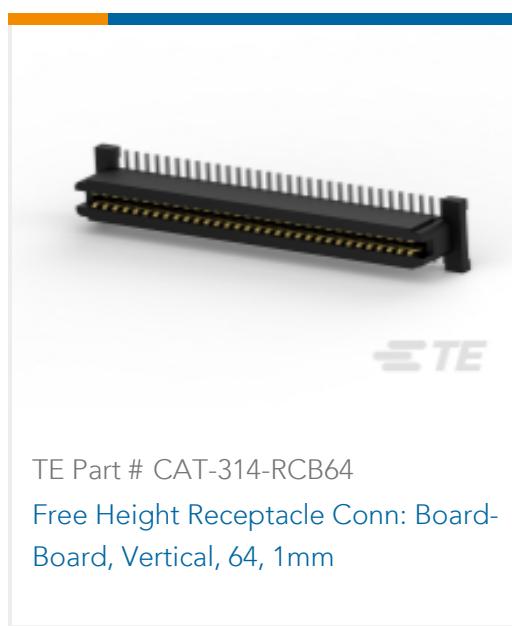
## Product Compliance

For compliance documentation, visit the product page on [TE.com](http://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: JAN 2024 (240) Candidate List Declared Against: JAN 2024 (240) 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	Reflow solder capable to 260°C

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 # CAT-314-RCB64  
Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm



TE Part # 2007042-3  
1FHR,64,50A/P,S,C,R13



TE Part # 2007042-4  
1FHR,64,50A/P,S,C,R14,15

## Also in the Series

### Free Height



PCB Headers & Receptacles(758)

## Customers Also Bought



TE Part # 2-1879233-5  
SMD Power Resistor: 7 Watt, 0.10-500 Ohm



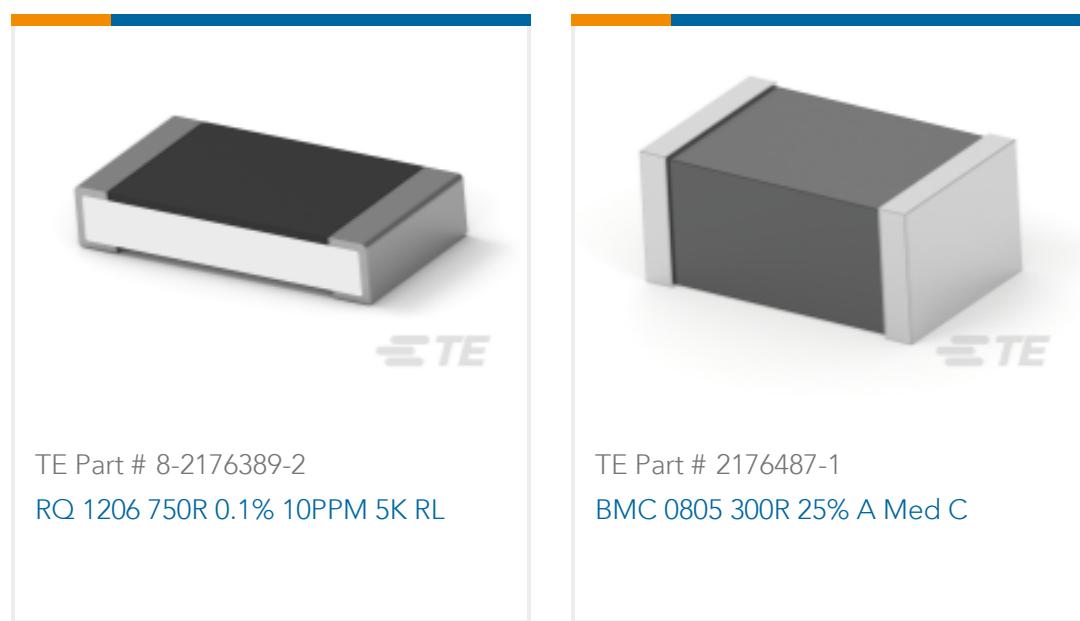
TE Part # 2-2176397-9  
3502 15R 1%



TE Part # 1-2176341-4  
CRGCQ 0805 120R 1%



TE Part # 6-2176389-5  
RQ 1206 499R 0.1% 10PPM 5K RL



## Documents

### Product Drawings

[1FHP,64,30A/S,S,N,S08](#)

English

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### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_A.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_A.3d\\_jgs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_A.3d\\_stp.zip](#)

English

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

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### Datasheets & Catalog Pages

[Fine Pitch Stacking Connectors - 1.0mm Free Height \(FH\) \(IEEE 1386\) Connectors](#)

English

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### Product Specifications

[Application Specification](#)

English