

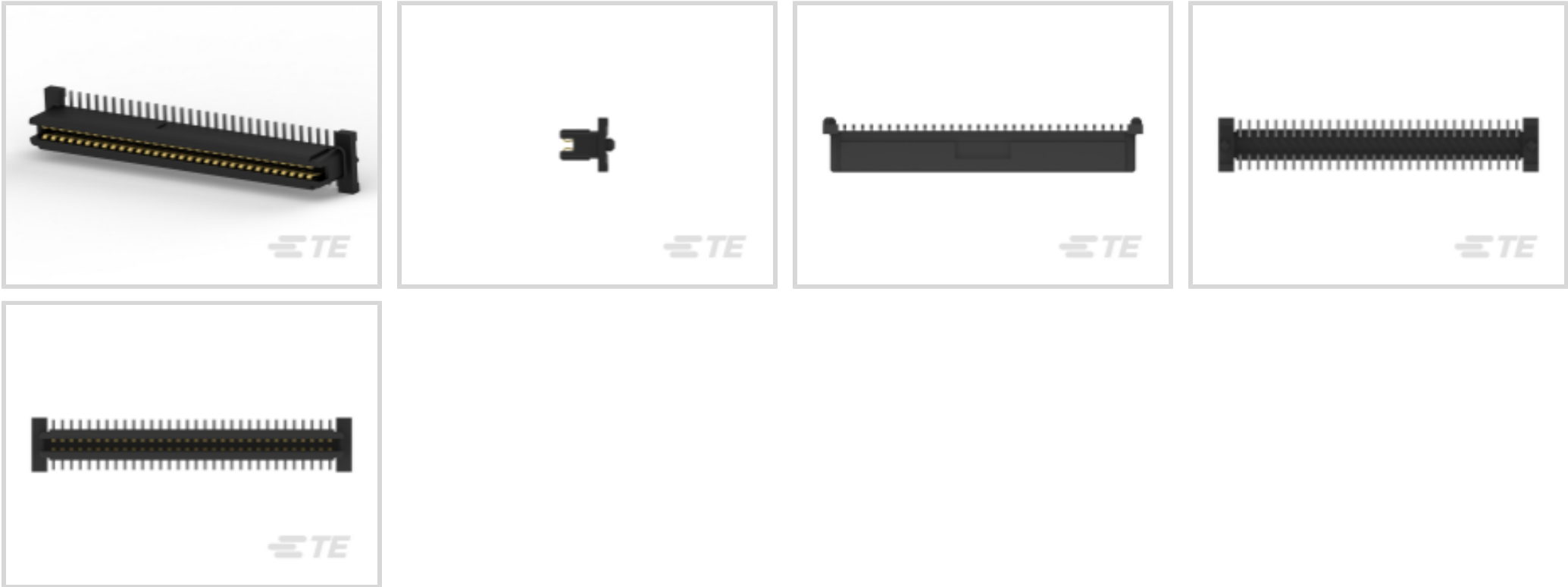


Free Height

TE Internal #: 120521-1
PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm
[.039 in] Centerline, Gold (Au), Surface Mount, Signal, Black, Free
Height

[View on TE.com >](#)

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



PCB Connector Type: **PCB Mount Receptacle**
PCB Mount Orientation: **Vertical**
Connector System: **Board-to-Board**
Number of Positions: **64**
Centerline (Pitch): **1 mm [.039 in]**

[All Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm \(57\)](#)

Features

Product Type Features

PCB Connector Type	PCB Mount Receptacle
Connector System	Board-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

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

Electrical Characteristics

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Operating Voltage	250 VAC
Insulation Resistance	2 MΩ

Signal Characteristics

Differential Signaling	Yes
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Body Features

Primary Product Color	Black
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Contact Features

Contact Underplating Material Thickness	1.27 μm[50 μin]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	.76 μm[29.92 μin]
Mating Tab Width	.63 mm[.024 in]
PCB Contact Termination Area Plating Material Thickness	3.81 μm[150 μin]
Contact Shape & Form	Single Beam
Contact Layout	Inline
Contact Mating Area Length	2 mm
Contact Base Material	Phosphor Bronze
Mating Tab Thickness	.2 mm[.008 in]
PCB Contact Termination Area Plating Material	Tin-Lead
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Socket
Contact Current Rating (Max)	1 A

Termination Features

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

Mechanical Attachment

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



Mating Alignment	Without
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Housing Features

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

Dimensions

Stack Height	8 mm, 9 mm, 10 mm [.394 in]
Connector Width	3.81 mm [.15 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

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

Packaging Features

Packaging Quantity	650
Packaging Method	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: JAN 2025 (247) Candidate List Declared Against: JAN 2025 (247) SVHC > Threshold: Pb (13% in 4690948374) Article Safe Usage Statements: 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



TE Part # CAT-314-PCB64
Free Height Plug Connector: Board-Board, Vertical, 64, 1mm



TE Part # 120534-1
1FHP,64,30A/P,N,C,S10,12,13,15

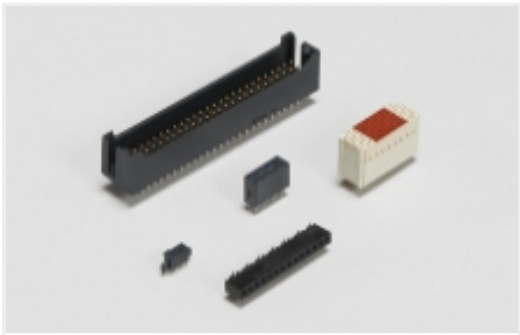


TE Part # 120526-1
1FHP,64,30A/P,S,N,S09,11,14

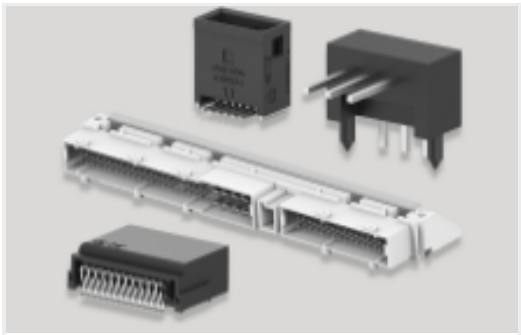


TE Part # CAT-314-RCB64
Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm

Also in the Series | Free Height



Board-to-Board Headers & Receptacles(747)



PCB Headers & Receptacles(747)

Customers Also Bought



TE Part #1-2176308-4
[RP 1E 0.1W 182K 0.1% 25PPM 5K RL](#)

TE Part #2-1879225-8
[CPF 0603 76K8 0.1% 25PPM 1K RL](#)

TE Part #5352171-1
[Z-PACK/B19 RAF 95P](#)

TE Part #2-2176308-5
[RP 1E 0.1W 237K 0.1% 25PPM 5K RL](#)

TE Part #443857-3
[3 ROW BOX RECEPTACLE,180 POS](#)

TE Part #9-2176307-6
[RP 1E 0.1W 121K 0.1% 25PPM 5K RL](#)

TE Part #103310-2
[014 LOPRO HDR RA 15DP](#)

TE Part #1410187-4
[MULTIGIG RT T2 7RW DC DF CT](#)

TE Part #103310-1
[010 LOPRO HDR RA 15DP](#)

TE Part #2176551-3
[RLW73P A3 1% R015 600ppm 1k RL](#)

Documents

Product Drawings

[1FHR,64,30A/P,S,N,S08,09,10](#)

English

CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_120521-1_K.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_120521-1_K.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_120521-1_K.3d_stp.zip](#)

English

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

Product Specifications

120521-1

PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in]
Centerline, Gold (Au), Surface Mount, Signal, Black, Free Height



Application Specification

English