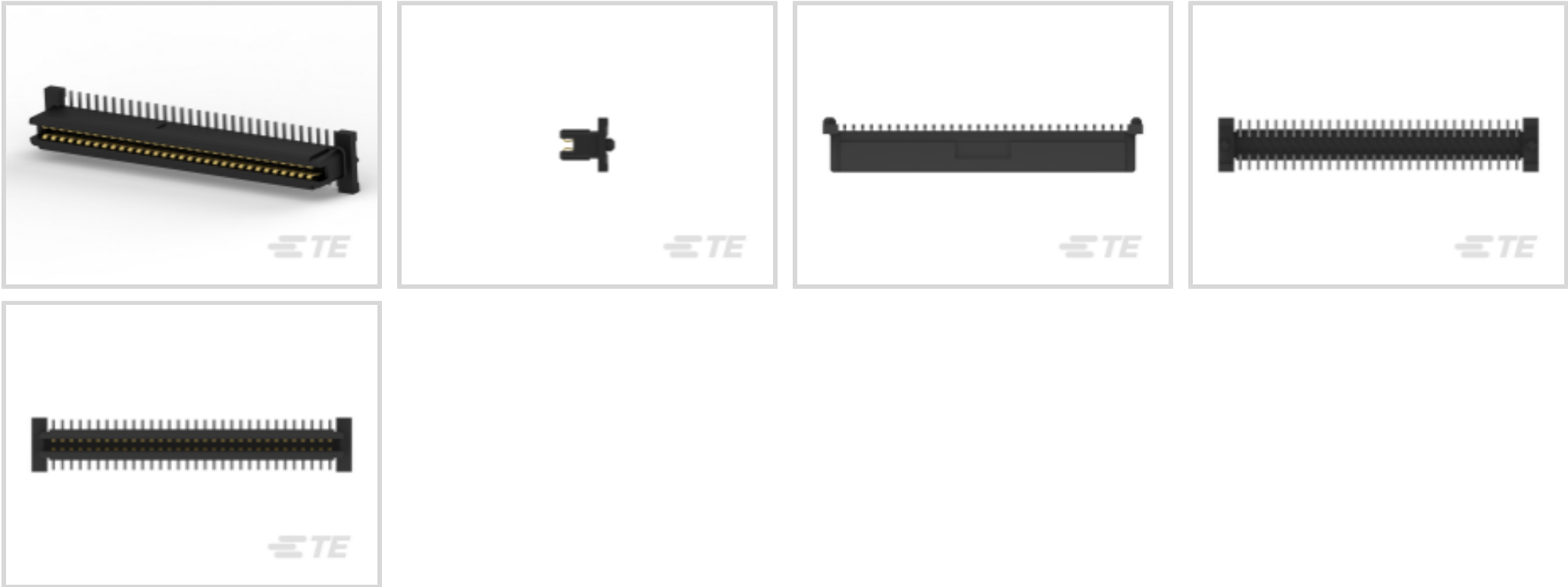




Free Height

TE Internal #: 120521-1  
PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm  
[.039 in] Centerline, Gold, Surface Mount, Signal, Black, Tape &  
Reel, Free Height  
[View on TE.com >](#)

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



PCB Connector Assembly 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 Assembly Type	PCB Mount Receptacle
Connector System	Board-to-Board
Sealable	No
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
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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	2 mm
PCB Contact Termination Area Plating Material Thickness	3.81 µm[150 µin]
Contact Layout	Inline
Mating Tab Width	.63 mm[.024 in]
Mating Tab Thickness	.2 mm[.008 in]
Contact Underplating Material Thickness	1.27 µm[50 µin]
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	.76 µm[29.9212 µin]
Contact Type	Socket
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	With



Housing Features

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

Dimensions

Connector Width	3.81 mm[150 in]
Stack Height	8 mm, 9 mm, 10 mm[.394 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	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 2024 (240) Candidate List Declared Against: JAN 2024 (240) 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



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



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



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



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

Also in the Series | Free Height



PCB Headers & Receptacles(758)

Customers Also Bought



TE Part #3-641126-5  
05P MTA100 HDR ASY FL/STR LF

TE Part #5106775-1  
Z-PACK/C VF 55P

TE Part #5120525-1  
1FHP,64,30A/S,S,N,S08

TE Part #1375800-4  
ASSY,120 POS PC104 PLUS LF

TE Part #6-2176307-5  
RP 1E 0.1W 57K6 0.1% 25PPM 5K RL

TE Part #1589810-8  
SSM015T2HN = SMT Conn

TE Part #1-87215-7  
34 MODII HDR DRST UNSHRD .100

TE Part #294743-E  
STVM 24-8 F ABC VV 7-00 EE 5,5 \*  
247 E0

TE Part #1883500-4  
BLINDMATE PLUG SZ 6

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, Surface Mount, Signal, Black, Tape & Reel, Free Height



Application Specification

English