

146893-1 ✓ ACTIVE



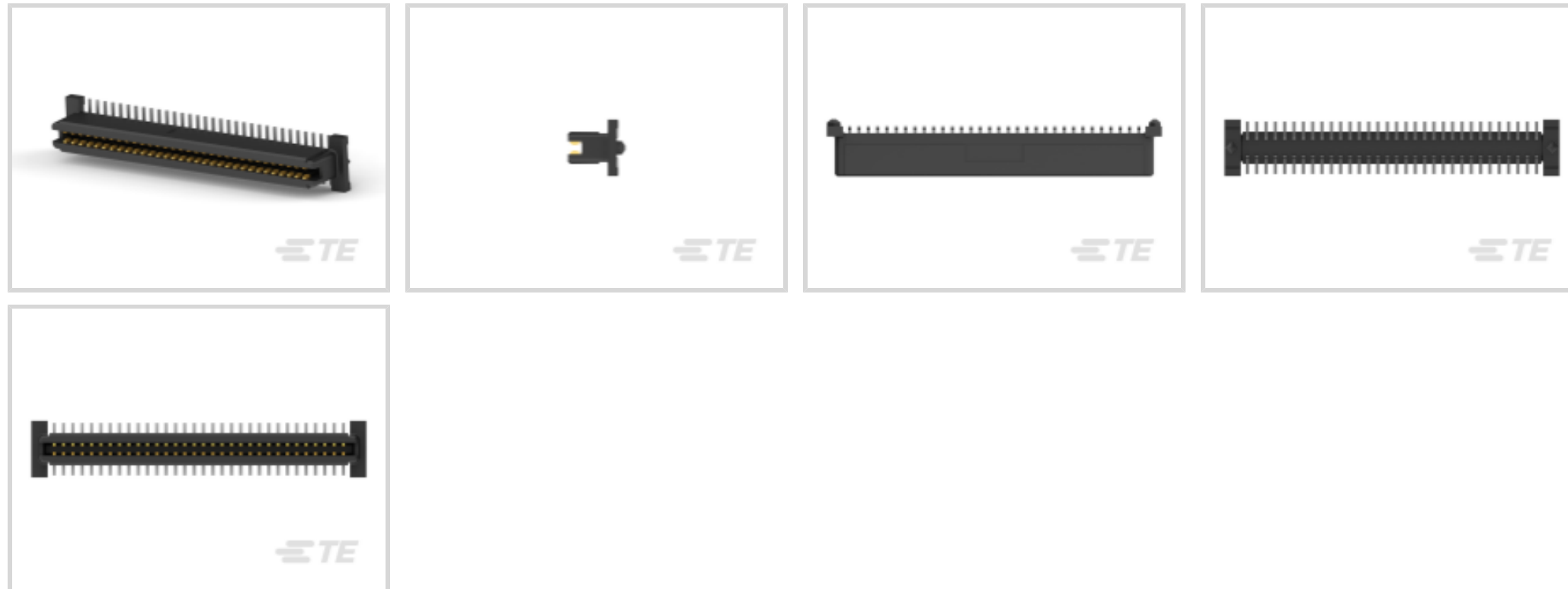
### Free Height

TE Internal #: 146893-1

PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in] Centerline, Gold, Surface Mount, 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

### Electrical Characteristics

Operating Voltage	250 VAC
Insulation Resistance	2 MΩ

### Signal Characteristics

Differential Signaling	Yes
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### Operation/Application

Assembly Process Feature	Pick and Place Cover
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### Dimensions

Stack Height	9 mm, 8 mm, 10 mm[.394 in]
Connector Width	3.81 mm[.150 in]
Connector Height	5.37 mm[.211 in]
Connector Length	34.22 mm[1.347 in]

### Industry Standards



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

### Mechanical Attachment

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

### 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

### Contact Features

Contact Underplating Material Thickness	1.27 $\mu\text{m}$ [50 $\mu\text{in}$ ]
	29.9212 $\mu\text{in}$
Mating Tab Width	.63 mm[.024 in]
Contact Shape & Form	Single Beam
PCB Contact Termination Area Plating Material Thickness	3.81 – 6.35 $\mu\text{m}$ [150 – 250 $\mu\text{in}$ ]
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
Contact Type	Tab
Contact Current Rating (Max)	1 A

### Housing Features

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

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

PCB Connector Assembly Type	PCB Mount Receptacle
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Connector System	Board-to-Board
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Connector & Contact Terminates To	Printed Circuit Board
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### Body Features

Primary Product Color	Black
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### Usage Conditions

Operating Temperature Range	-55 – 110 °C [-67 – 230 °F]
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### Packaging Features

Packaging Method	Tape & Reel
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### Other

EU RoHS Compliance	Not Compliant
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EU ELV Compliance	Compliant with Exemptions
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### Product Compliance

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

EU RoHS Directive 2011/65/EU	Not Compliant
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EU ELV Directive 2000/53/EC	Compliant with Exemptions
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China RoHS 2 Directive MIIT Order No 32, 2016	Restricted Materials Above Threshold
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EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2024 (241) Candidate List Declared Against: JUNE 2024 (241) SVHC > Threshold: Pb (13% in Component Part) Article Safe Usage Statements:
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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



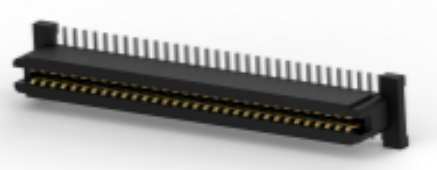
TE Part # 120526-1  
1FHP,64,30A/P,S,N,S09,11,14



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

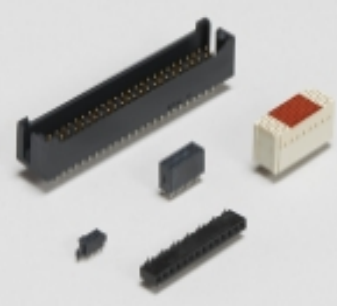


TE Part # 120534-1  
1FHP,64,30A/P,N,C,S10,12,13,15



TE Part # 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



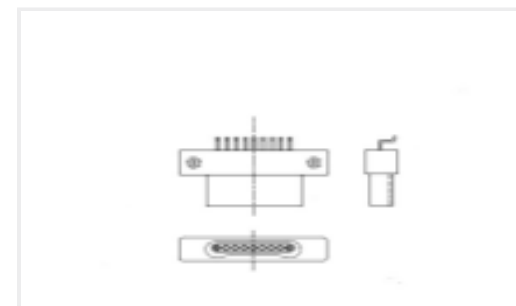
TE Part #2101510-2  
4 Pos RF Module, Backplane, OSMM  
PASSIVA



TE Part #2102735-1  
BP, Half Left End, MULTIGIG RT 2R



TE Part #794440-1  
MINI UMNL PIN SN 22-18 AWG



TE Part #1589700-1  
SSM051B2H = SMT CONN



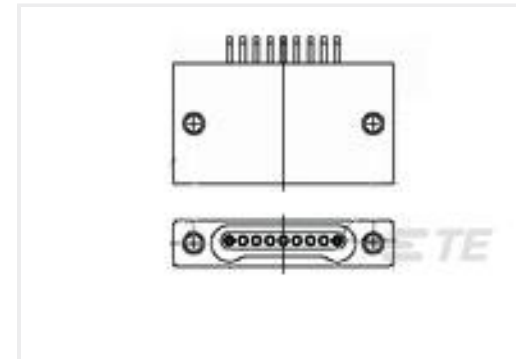
TE Part #CAT-P592-R472  
PIDG Radiation Resistant C Rings  
/Spades



TE Part #1996883-4  
4 Pos RF Module, Daughter Card,VITA  
67.1



TE Part #2-320630-2  
TERMINAL,PIDG R 16-14HD 10



TE Part #1589462-9  
SSL009L2HN = SMT CONN



TE Part #52263-4  
TERMINAL R PG 8 10

## Documents

### Product Drawings

1FHR,64,30A/P,S,C,S08,09,10

English

### CAD Files

3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_146893-1\\_M.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_146893-1\\_M.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_146893-1\\_M.3d\\_stp.zip](#)

English

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

## Product Specifications

146893-1

PCB Mount Receptacle, Vertical, Board-to-Board, 64 Position, 1 mm [.039 in]  
Centerline, Gold, Surface Mount, Black, Tape & Reel, Free Height



## Application Specification

English