



Free Height

TE Internal #: 2-5120527-2  
PCB Mount Header, Vertical, Board-to-Board, 84 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold (Au), Surface Mount, Signal, Free Height  
[View on TE.com >](#)

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



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

Configuration Features

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

Electrical Characteristics

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	1.27 µm[50 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	4.27 mm[.168 in]
Contact Base Material	Phosphor Bronze
Mating Tab Thickness	.2 mm[.008 in]
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Pin
Contact Current Rating (Max)	1 A

Termination Features

Rectangular Termination Post & Tail Width	.3 mm[.012 in]
Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
Termination Method to PCB	Surface Mount

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

Housing Features

Mating Entry Location	Top
Housing Material	Thermoplastic



Centerline (Pitch)	1 mm[.039 in]
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Dimensions

Stack Height	10 mm, 12 mm, 13 mm, 15 mm[.591 in]
Connector Width	3.81 mm[150 in]
Connector Height	8.38 mm[.329 in]
Connector Length	44.22 mm[1.74 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	400
Packaging Method	Tape & Reel

Product Compliance

For compliance documentation, visit the product page on 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 2025 (247) Candidate List Declared Against: JAN 2025 (247) 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



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-RCB84  
Free Height Receptacle Conn: Board-Board, Vertical, 84, 1mm

TE Part # 5146894-1  
1FHR,64,30A/S,S,C,S11,12

Also in the Series | Free Height

Board-to-Board Headers & Receptacles(747)

PCB Headers & Receptacles(747)

Customers Also Bought

TE Part #5-103911-3  
60 SYSTEM 50 RCPT ASSY DRRA

TE Part #5-104076-2  
60 SYS50 HDR DRST SHRD W/SL SN

TE Part #1761072-3  
RECPT,HSSDC2,FIBRE,TRAY PKG

TE Part #5146893-2  
1FHR,84,30A/S,S,C,S08,09,10



TE Part #2176314-4  
MELF SMA\_A 180R 0.1% 15PPM 0102 0.3W

TE Part #3-1415020-1  
PT570N20

TE Part #1-928836-2  
MOD2 PIN WITH A-PIN L/P

TE Part #1-1437581-1  
ASE22RL=AUTOSLIDE DP

TE Part #4-2176391-7  
RQ 1206 37K4 0.1% 10PPM 5K RL

TE Part #7-2176246-6  
CRGS2512 5% 1M8

Documents

Product Drawings

1FHP,84,30A/S,R,N,S10,12,13,15

English

CAD Files

Customer View Model

ENG\_CVM\_CVM\_2-5120527-2\_A.2d\_dxf.zip

English

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_2-5120527-2\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_2-5120527-2\_A.3d\_stp.zip

English

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Product Specifications

Application Specification

English