



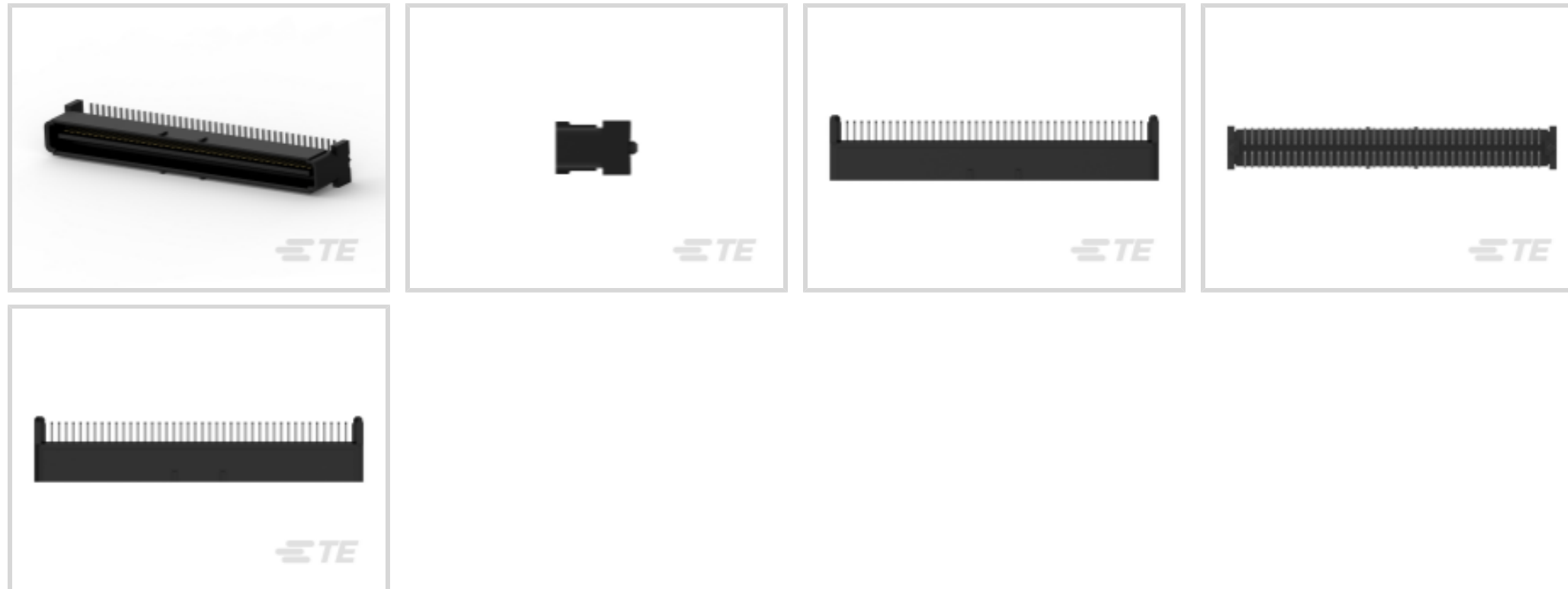
Free Height

TE Internal #: 5120527-2

PCB Mount Header, Vertical, Board-to-Board, 84 Position, 1 mm [.039 in] Centerline, Fully Shrouded, Gold, Surface Mount, Signal, Black, Free Height

[View on TE.com >](#)

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



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

Configuration Features

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

Electrical Characteristics

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Insulation Resistance	2 MΩ
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Operating Voltage	250 VAC
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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]
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PCB Contact Termination Area Plating Material Thickness	3.81 μm[150 μin]
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Contact Layout	Inline
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Mating Tab Width	.63 mm[.024 in]
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Mating Tab Thickness	.2 mm[.008 in]
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Contact Underplating Material Thickness	1.27 μm[50 μin]
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PCB Contact Termination Area Plating Material Finish	Matte
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Contact Shape & Form	Single Beam
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PCB Contact Termination Area Plating Material	Tin
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Contact Base Material	Phosphor Bronze
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Contact Mating Area Plating Material	Gold
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Contact Mating Area Plating Material Thickness	.76 μm[29.92 μin]
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Contact Type	Pin
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Contact Current Rating (Max)	1 A
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Termination Features

Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
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Rectangular Termination Post & Tail Width	.3 mm[.012 in]
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Termination Method to Printed Circuit Board	Surface Mount
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Mechanical Attachment

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

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

Dimensions

Connector Length	44.22 mm [1.74 in]
Connector Height	8.38 mm [.329 in]
Connector Width	3.81 mm [150 in]
Stack Height	10 mm, 12 mm, 13 mm, 15 mm [.591 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
Agency/Standard	CSA, UL
Approved Standards	CSA LR7189, UL E28476
Industry Standard	IEEE 1386
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Quantity	400
Packaging Type	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: JUNE 2023 (235) Candidate List Declared Against: JUNE 2023 (235)

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>

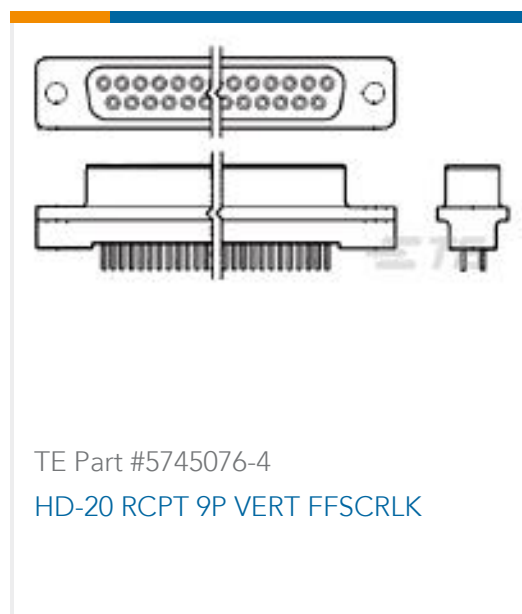
Compatible Parts



Also in the Series | Free Height



Customers Also Bought



Documents

Product Drawings

[1FHP,84,30A/S,S,N,S10,12,13,15](#)

English

CAD Files

Customer View Model

[ENG_CVM_CVM_5120527-2_A.2d_dxf.zip](#)

English

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_5120527-2_A.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_5120527-2_A.3d_stp.zip](#)

English

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

Datasheets & Catalog Pages



Fine Pitch Stacking Connectors - 1.0mm Free Height (FH) (IEEE 1386) Connectors

English

Product Specifications

Application Specification

English