

5120525-1 ✓ ACTIVE



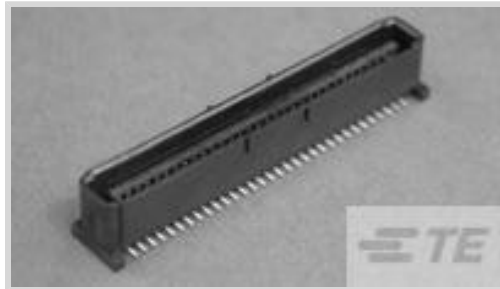
## Free Height

TE Internal #: 5120525-1

PCB Mount Header, Vertical, Board-to-Board, 64 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, 64, 1mm



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

Connector System: **Board-to-Board**

[All Free Height Plug Connector: Board-Board, Vertical, 64, 1mm \(39\)](#)

## Features

### Other

EU RoHS Compliance **Compliant**

EU ELV Compliance **Compliant**

### Product Type Features

PCB Connector Assembly Type **PCB Mount Header**

Connector System **Board-to-Board**

Header Type **Fully Shrouded**

Connector & Contact Terminates To **Printed Circuit Board**

### Configuration Features

Number of Columns **32**

Board-to-Board Configuration **Parallel**

Stackable **Yes**

PCB Mount Orientation **Vertical**

Number of Positions **64**

### 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 $\mu\text{m}$ [50 $\mu\text{in}$ ]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	.00076 $\mu\text{m}$ [30 $\mu\text{in}$ ]
Mating Tab Width	.63 mm[.024 in]
PCB Contact Termination Area Plating Material Thickness	3.81 $\mu\text{m}$ [150 $\mu\text{in}$ ]
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
Contact Type	Pin
Contact Current Rating (Max)	.8 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
Mating Alignment Type	None
PCB Mount Retention Type	None
PCB Mount Alignment Type	Locating Posts
PCB Mount Retention	Without
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	Without



### Housing Features

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

### Dimensions

Stack Height	8 mm [.315 in]
Connector Width	3.81 mm [.150 in]
Connector Height	6.35 mm [.249 in]
Connector Length	34.22 mm [1.347 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	UL, CSA
Industry Standard	IEEE 1386
UL Rating	Listed
Compatible With Approved Standards Products	UL E28476, CSA LR7189
UL Flammability Rating	UL 94V-0

### Packaging Features

Packaging Quantity	500
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: JUNE 2024 (241) Candidate List Declared Against: JUNE 2024 (241) Does not contain REACH SVHC
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per



homogenous material. Also BFR/CFR/PVC Free

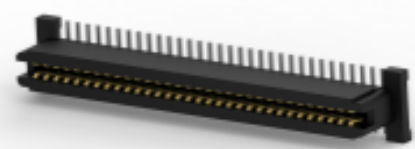
Solder Process Capability

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-RCB64  
Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm



TE Part # 2007042-3  
1FHR,64,50A/P,S,C,R13



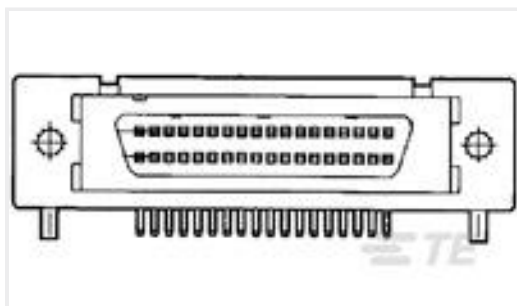
TE Part # 2007042-4  
1FHR,64,50A/P,S,C,R14,15

### Also in the Series | Free Height

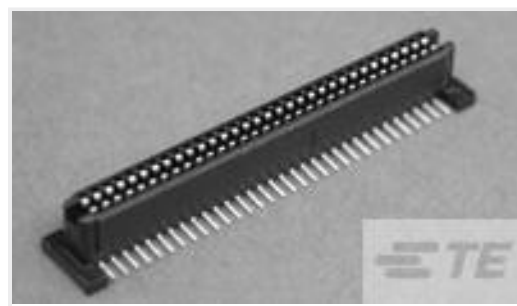


PCB Headers & Receptacles(751)

### Customers Also Bought



TE Part #2-5174225-5  
AMPLIMITE 050-2B HOR 68P M2.5



TE Part #120521-1  
1FHR,64,30A/P,S,N,S08,09,10



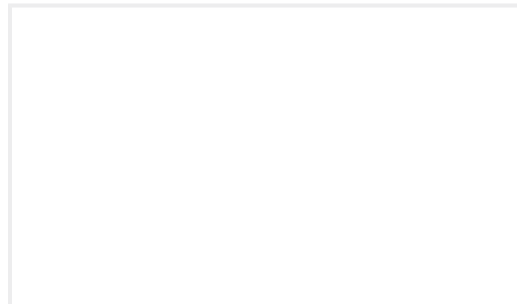
TE Part #3-2339978-3  
SFP56 STACKED 2X4 RECEPTACLE ASSEMBLY



TE Part #ZPF000000000103568  
983-0A 10-05 PN



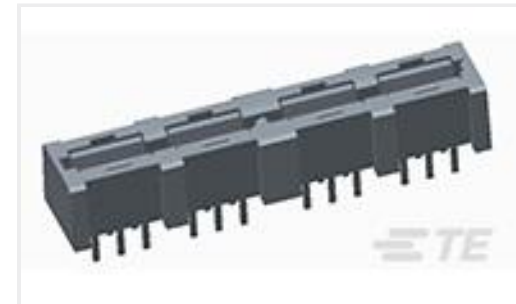
TE Part #ZPF000000000018646  
FDBA 50-8-33 PN-K-A285



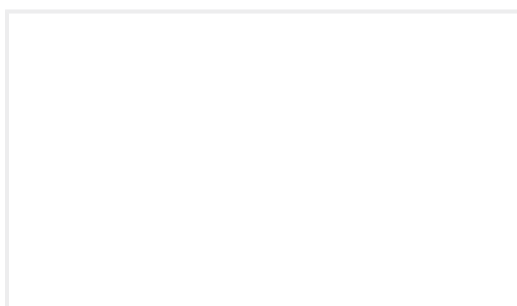
TE Part #ZPF000000000001613  
108-0005-10



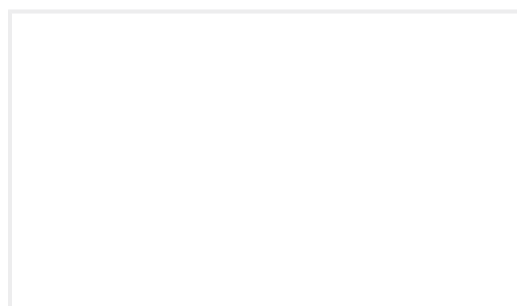
TE Part #1469734-1  
HM-ZD 2PR HDR 40P SEQ, LF



TE Part #1766355-1  
284-0332-04003=TA CONN,SKT



TE Part #3-2340033-5  
SFP56 STACKED 2X8 RECEPTACLE ASSEMBLY



TE Part #6645262-1  
2MM H.M. TYPE "C" PIN ASSY, L.

## Documents

### Product Drawings

[1FHP,64,30A/S,S,N,S08](#)

English

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_A.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_A.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_5120525-1\\_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

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### Product Specifications

#### Application Specification

English