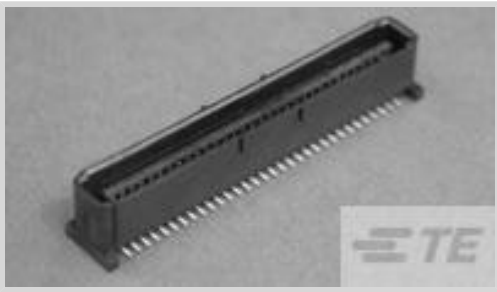




Free Height

TE Internal #: 5120525-1
PCB Mount Header, Vertical, Board-to-Board, 64 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, 64, 1mm



PCB Connector Type: **PCB Mount Header**
PCB Mount Orientation: **Vertical**
Connector System: **Board-to-Board**
Number of Positions: **64**
Centerline (Pitch): **1 mm [.039 in]**

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

Features

Product Type Features

PCB Connector Type	PCB Mount Header
Connector System	Board-to-Board
Header Type	Fully Shrouded
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

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 µm[50 µin]
PCB Contact Termination Area Plating Material Finish	Matte
Contact Mating Area Plating Material Thickness	.76 µm[30 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)	.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
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Housing Material	Thermoplastic
Centerline (Pitch)	1 mm[.039 in]

Dimensions

Stack Height	8 mm[.315 in]
Connector Width	3.81 mm[.15 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	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	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: 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



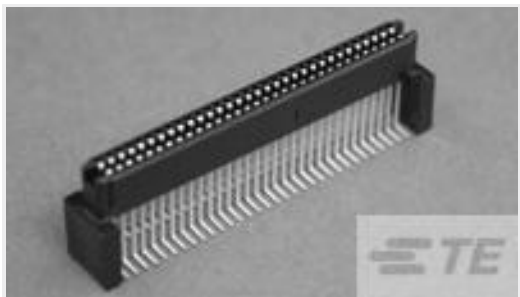
Solder Process Capability

Reflow solder capable to 260°C

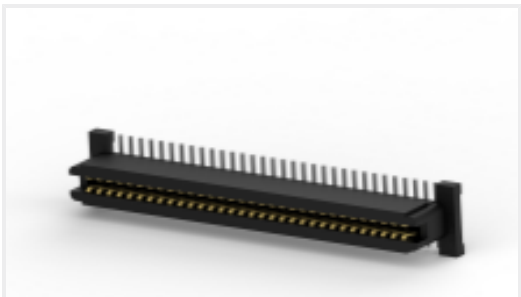
Product Compliance Disclaimer

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>

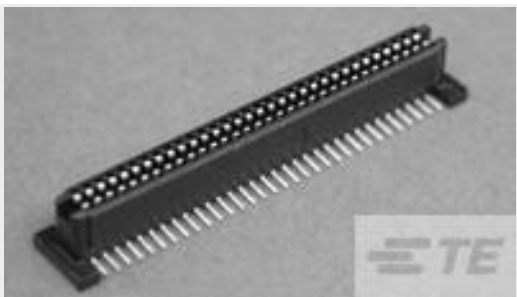
Compatible Parts



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

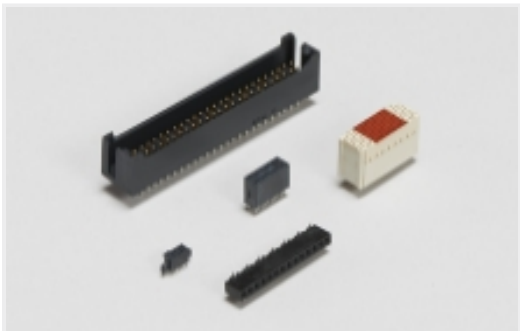


TE Part # CAT-314-RCB64
Free Height Receptacle Conn: Board-Board, Vertical, 64, 1mm

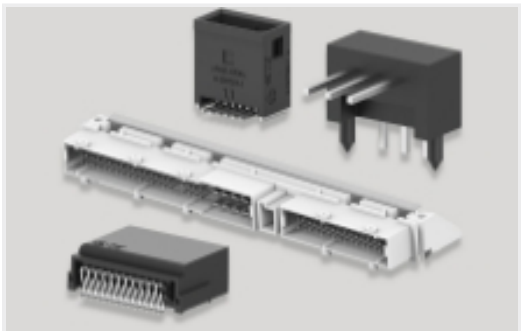


TE Part # 2007042-3
1FHR,64,50A/P,S,C,R13

Also in the Series | Free Height

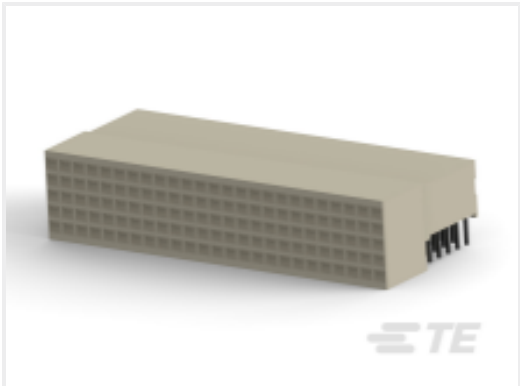


Board-to-Board Headers & Receptacles(747)



PCB Headers & Receptacles(747)

Customers Also Bought



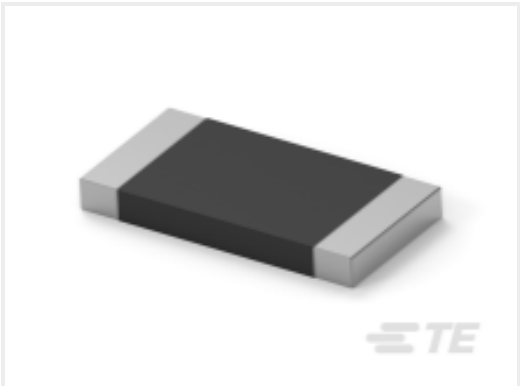
TE Part #CAT-472-Z12553
HM Receptacle Connector: Traditional Backplane, Coplanar, 2mm



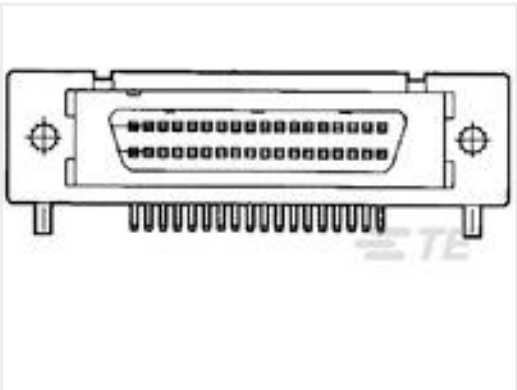
TE Part #ZPF000000000103568
983-0A 10-05 PN



TE Part #ZPF000000000098385
FDBA 50-16-21 PN-K 090 A499



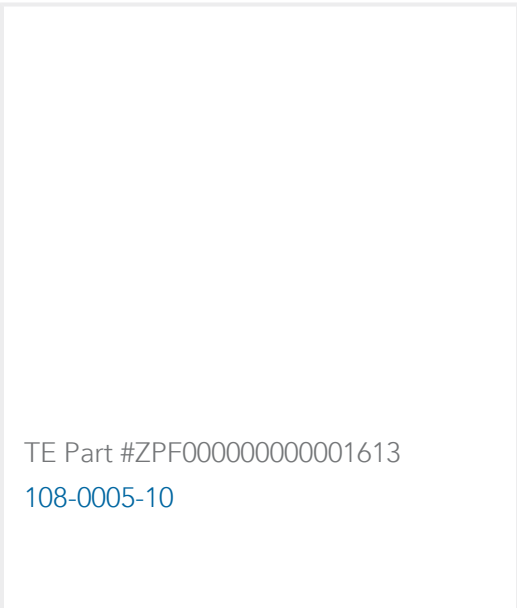
TE Part #2176422-6
TLRP 2512 3.0W R020 1% 75PPM 4K RL



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



TE Part #ZPF000000000018096
FDBA 50-14-15 PN-K-A285



TE Part #ZPF000000000001613
108-0005-10



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



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

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

Product Specifications

Application Specification

English