



Free Height

TE Internal #: 3-1827231-6
PCB Mount Receptacle, Vertical, Board-to-Board, 440 Position, .5 mm [.02 in] Centerline, Gold (Au), Surface Mount, Signal, Black, Tray, Free Height

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Receptacle**
PCB Mount Orientation: **Vertical**
Connector System: **Board-to-Board**
Number of Positions: **440**
Centerline (Pitch): **.5 mm [.02 in]**

Features

Product Type Features

Ground Feature Type	Grounding Contact
PCB Connector Type	PCB Mount Receptacle
Connector System	Board-to-Board
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

Board-to-Board Configuration	Parallel
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	440

Electrical Characteristics

Operating Voltage	50 VAC
Insulation Resistance	4 MΩ
Dielectric Withstanding Voltage (Max)	200 VAC



Body Features

Primary Product Color	Black
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Contact Features

Contact Mating Area Plating Material Thickness	.2 µm[7.87 µin]
Mating Tab Width	.33 mm[.013 in]
PCB Contact Termination Area Plating Material Thickness	1 µm[39.37 µin]
Contact Layout	Matrix
Contact Mating Area Length	1 mm, 1.3 mm
Contact Base Material	Copper Alloy
Mating Tab Thickness	.2 mm[.008 in]
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Socket
Contact Current Rating (Max)	.5 A

Termination Features

Rectangular Termination Post & Tail Width	.9 mm[.035 in]
Rectangular Termination Post & Tail Thickness	.15 mm[.005 in]
Termination Method to PCB	Surface Mount

Mechanical Attachment

Mating Alignment Type	Polarization
PCB Mount Retention Type	Solder Peg
PCB Mount Alignment Type	Locating Posts
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	With

Housing Features

Housing Material	High Temperature Thermoplastic
Centerline (Pitch)	.5 mm[.02 in]

Dimensions

Stack Height	4 mm, 5 mm, 8 mm[.315 in]
Connector Height	3.25 mm[.128 in]



Usage Conditions

Operating Temperature Range	-40 – 85 °C[-40 – 185 °F]
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Operation/Application

Assembly Process Feature	None
Circuit Application	Signal

Industry Standards

UL Flammability Rating	UL 94V-0
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Packaging Features

Packaging Quantity	90
Packaging Method	Tray

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 245°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 # 3-5353652-7
.5FHP08H,440,B,GIG,08/Sn,HT,NSYes

TE Part # 4-1827253-8
.5FHP05H,220,S,GIG,08/Sn,TR,NSYes

TE Part # 3-5353652-6
.5FHP08H,440,B,GIG,08/Sn,HT,NSYes

TE Part # 3-1827233-6
.5FHP05H,440,B,GIG,08/Sn,HT,NS

Also in the Series | Free Height

Board-to-Board Headers & Receptacles(747)

PCB Headers & Receptacles(747)

Customers Also Bought

TE Part #1-177665-2
DYNAMIC D3100 5P HDR VERTICAL SMT TYPE

TE Part #3-1551920-2
zQSFP+ connector assembly

TE Part #2364010-1
MB Lite,R/A,Ort,REC,PF,2P

TE Part #1-5316318-0
.6FHR12H,140,S,GIG,08/Sn,HT,SEYes

TE Part #2204539-4
PDBB 25A POWER CONNECTOR, W AUTO TRAY

TE Part #2334542-6
MB PLUS HEADER 2P+5S

TE Part #2358271-1
CA, Elcon Micro 2x4 to Press-fit Power

TE Part #2364009-1
MB Lite,R/A,HDR,PF,2P

TE Part #6469001-1
HM-ZD 4PR RECP 80P

TE Part #1-2334540-2
MBPLUS,BOARD SIDE



Documents

Product Drawings

[.5FHR04H,440,B,GIG,08/Sn,HT,NS](#)

English

CAD Files

3D PDF

3D

Customer View Model

[ENG_CVM_CVM_3-1827231-6_B.2d_dxf.zip](#)

English

Customer View Model

[ENG_CVM_CVM_3-1827231-6_B.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_3-1827231-6_B.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 - 0.5mm Free Height \(FH\) Connectors](#)

English

[COM Connectors Brochure \(English\)](#)

English

Product Specifications

Product Specification

English

[0.5mm Pitch Board to Board Connector, Free Height Type](#)

English

Agency Approvals

UL

English