

MULTI-BEAM

TE Internal #: 6450820-3
PCB Mount Header, Vertical, Board-to-Board, 38 Position, 2.54 mm / 6.35 mm [.1 in / .25 in] Centerline, Fully Shrouded, Gold (Au)

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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Header**
Connector System: **Board-to-Board**
Number of Positions: **38**
Number of Rows: **4**
Centerline (Pitch): **2.54 mm, 6.35 mm [.1 in, .25 in]**

Features

Product Type Features

Mixed & Hybrid Header	Yes
Connector Shape	Rectangular
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	14
Number of Loaded Positions	38
Mating & Unmating Configuration	Normal
Number of Positions	38
Number of Rows	4
PCB Mount Orientation	Vertical
Number of Power Positions	6
Number of Signal Positions	32

Electrical Characteristics

Operating Voltage	60 VDC, 200 VDC
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Body Features



Primary Product Color	Black
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Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.27 µm[50 µin]
Contact Size	.64mm
Mating Square Post Dimension	.64 mm[.025 in]
PCB Contact Termination Area Plating Material Thickness	2.54 – 5.08 µm[100 – 200 µin]
Contact Shape & Form	Square
Contact Layout	Matrix
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Blade, Tab
Contact Current Rating (Max)	50 A
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material Thickness	.76 µm[30 µin]

Termination Features

Termination Post & Tail Length	4.19 mm[.165 in]
Termination Method to PCB	Through Hole - Press-Fit

Mechanical Attachment

PCB Mount Retention Type	Hold-Down
PCB Mount Alignment Type	Hold-Down
Mating Alignment Type	Polarization
Connector Mounting Type	Board Mount
Mating Alignment	With
PCB Mount Alignment	With
PCB Mount Retention	With

Housing Features

Centerline (Pitch)	2.54 mm, 6.35 mm[.1 in][.25 in]
Housing Material	High Temperature Thermoplastic Glass-Filled

Dimensions

Connector Width	14.58 mm[.574 in]
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Connector Height	12.7 mm[.5 in]
Connector Length	70.86 mm[2.79 in]
Row-to-Row Spacing	2.54 mm[.1 in]
PCB Thickness (Recommended)	1.35 mm[.053 in]

Usage Conditions

Operating Temperature (Max)	125 °C[257 °F]
Operating Temperature Range	-40 – 125 °C[-40 – 257 °F]

Operation/Application

Circuit Application	Power & Signal
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Industry Standards

Glow Wire Rating	High Temperature Part - Not Glow Wire
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Quantity	24
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	Not Low Halogen - contains Br or Cl > 900 ppm.
Solder Process Capability	Not applicable for solder process capability

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 # 6450870-8
MBXLE R/A RCPT 3P+32S+3P

Customers Also Bought



TE Part #5223654002
CGPE-105-1/2-X-SP



TE Part #6-1761612-5
STEP-Z PLUG 15MM 104P LF ST



TE Part #1775133-2
MOD JACK, RJ45, MULTIPLE, 1X4, 15u" Au



TE Part #1982198-1
INV.MOD.JACK,4/4POS,HANDSET SM



TE Part #2-2170705-8
CAGE ASSY, QSFP28 1X1, SPRING, HS, LP



TE Part #4-2170747-2
CAGE ASSY, 1X4, QSFP28, SPRING, HS, LP



TE Part #8-2176459-5
SMW 7W 330R 5% Taped



TE Part #6367580-4
ASSY Z-DOK+4 HOST BOARD 32PR



TE Part #6450870-8
MBXLE R/A RCPT 3P+32S+3P



TE Part #5767178-2
MICTOR .355 RECEPTACLE, 76 POS T&R PACKA

Documents

Product Drawings
MBXL VERT HDR 3P+32S+3P



English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_6450820-3_D2.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_6450820-3_D2.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_6450820-3_D2.3d_stp.zip

English

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

Datasheets & Catalog Pages

POWER_CONNECTORS_CATALOG_SEC01_BOARD_TO_BOARD

English

MULTI-BEAM XLE Connectors Quick Reference Guide

English

Product Specifications

Application Specification

English