



MULTI-BEAM

TE Internal #: 1-6450121-9
PCB Mount Header, Right Angle, Board-to-Board, 68 Position, 2.54 mm / 5.08 mm [.1 in / .2 in] Centerline, Fully Shrouded, Gold, Through Hole - Solder
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Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**
PCB Mount Orientation: **Right Angle**
Connector System: **Board-to-Board**
Number of Positions: **68**
Number of Rows: **4**

Features

Electrical Characteristics

Operating Voltage	60 VDC
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Dimensions

Row-to-Row Spacing	2.54 mm[.1 in]
Connector Width	23.62 mm[.93 in]
PCB Thickness (Recommended)	2.11 – 2.62 mm[.083 – .103 in]
Connector Height	14.58 mm[.574 in]
Connector Length	111.13 mm[4.375 in]

Other

Position Locations Omitted	Column 11, 12
Number of Blocked Positions	8
EU ELV Compliance	Compliant

Industry Standards

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

Usage Conditions

Operating Temperature (Max)	105 °C[221 °F]
Operating Temperature Range	-55 – 105 °C[-67 – 221 °F]

Mechanical Attachment



Mating Retention	Without
Mating Alignment Type	Polarization
PCB Mount Retention	Without
PCB Mount Alignment	Without
Connector Mounting Type	Board Mount
Mating Alignment	With

Termination Features

Termination Post & Tail Length	3.43 mm[.135 in]
Square Termination Post & Tail Dimension	.64 mm[.025 in]
Termination Method to PCB	Through Hole - Solder

Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.27 µm[50 µin]
Contact Size	.64mm
Contact Mating Area Plating Material Thickness	.076 µm[3 µin]
Mating Square Post Dimension	.64 mm[.025 in]
Contact Shape & Form	Square
PCB Contact Termination Area Plating Material Thickness	2.54 – 5.08 µm[100 – 200 µin]
Contact Layout	Matrix
Contact Base Material	Copper Alloy
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material	Gold
Contact Type	Blade, Tab
Contact Current Rating (Max)	42 A

Housing Features

Housing Material	High Temperature Thermoplastic Glass-Filled
Centerline (Pitch)	5.08 mm, 2.54 mm[.1 in][.2 in]

Configuration Features

Number of Columns	23
Number of Loaded Positions	60
Number of Signal Positions	60
Number of Power Positions	8



PCB Mount Orientation	Right Angle
Number of Positions	68
Number of Rows	4

Product Type Features

Mixed & Hybrid Header	Yes
Connector Shape	Rectangular
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

Body Features

Primary Product Color	Black
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Operation/Application

Circuit Application	Power & Signal
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Product Compliance

For compliance documentation, visit the product page on TE.com>

EU RoHS Directive 2011/65/EU	Not Yet Reviewed
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: DEC 2012 (138) SVHC > Threshold: Not Yet Reviewed
Halogen Content	Not Yet Reviewed for halogen content
Solder Process Capability	Wave solder capable to 265°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 Regulations, TE’s information on SVHC in articles for this part number is still based on the European Chemical Agency (ECHA) ‘Guidance on requirements for substances in articles’(Version: 2, April 2011), applying the 0.1% weight on weight concentration threshold at the finished product level. TE is aware of the European Court of Justice ruling of September 10th, 2015 also known as O5A (Once An Article Always An Article) stating that, in case of ‘complex object’, the threshold for a SVHC must be applied to both the product as a whole and simultaneously to each of the articles forming part of its composition. TE has evaluated this ruling based on the new ECHA “Guidance on requirements for substances in articles” (June 2017, version 4.0) and will be updating its statements accordingly.

Compatible Parts



TE Part # 1-6450541-9

MBXL VERT RCPT 60S+8P

Customers Also Bought



TE Part #1614770-4

BDS 2 A 250 10R 10%



TE Part #ZPF000000000136485

RECEPTACLE MALE FOR 12 PINS, CAL1,6

TE Part #EC9833-000

ZHD-SCE-3.2-50-S1-4



TE Part #1-1415543-5

RTE44110



TE Part #ASA158F12390235000

623 PLUG



TE Part #ZPF000000000205373

PLUG MALE ANG.90 CAL.20 - FXP



TE Part #YZ-KC-212751A-PY00

TOOL DISMOUNTING - FXP2



TE Part #55992-1

TERMINAL,AMPOWER R 2/0 5/16



TE Part #ZPF000000000205378

CONTACT MALE ANG.90, CAL20, 120MM2 - FXP



TE Part #ZPF000000000205388

CONTACT FEMALE CAL.20, M12 - FXP

Documents



Product Drawings

MBXL R/A HDR 60S+8P

English

Product Specifications

Application Specification

English