

MULTI-BEAM

TE Internal #: 6450820-3

Rectangular Power Connectors, Connector Assembly, Plug, Board-to-Board, 38 Position, 6.35 mm / 2.54 mm [.25 in / .1 in] Centerline

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Connectors > Power Connectors > Rectangular Power > Rectangular Power Connectors



Rectangular Power Connector Type: **Connector Assembly**

Connector & Housing Type: **Plug**

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

Number of Positions: **38**

Centerline (Pitch): **2.54 mm, 6.35 mm [ .1 in, .25 in ]**

Features

Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Assembly Requirement              | Factory Assembled     |
| Rectangular Power Connector Type  | Connector Assembly    |
| Connector & Housing Type          | Plug                  |
| Connector System                  | Board-to-Board        |
| Connector & Contact Terminates To | Printed Circuit Board |

Configuration Features

|                                 |          |
|---------------------------------|----------|
| Mating & Unmating Configuration | Normal   |
| Number of Positions             | 38       |
| PCB Mount Orientation           | Vertical |
| Number of Power Positions       | 6        |
| Number of Signal Positions      | 32       |
| Number of Rows                  | 4        |

Electrical Characteristics

|                   |                 |
|-------------------|-----------------|
| Operating Voltage | 60 VDC, 200 VDC |
|-------------------|-----------------|

Body Features

|                   |       |
|-------------------|-------|
| Wire Color (Base) | Black |
|-------------------|-------|

Contact Features

|                             |     |
|-----------------------------|-----|
| Power Contact Base Material | Tin |
|-----------------------------|-----|



|                                                |                |
|------------------------------------------------|----------------|
| Contact Underplating Material Thickness        | 4.19 µm        |
| Contact Mating Area Plating Material           | Gold           |
| Contact Underplating Material                  | Nickel         |
| Contact Current Rating (Max)                   | 50 A           |
| Contact Retention Within Housing               | Without        |
| Contact Type                                   | Blade, Pin     |
| PCB Contact Termination Area Plating Material  | Gold           |
| Contact Mating Area Plating Material Thickness | .076 µm[3 µin] |

Termination Features

|                                             |                          |
|---------------------------------------------|--------------------------|
| Termination Post & Tail Length              | 4.19 mm[.165 in]         |
| Termination Method to Printed Circuit Board | Through Hole - Press-Fit |

Mechanical Attachment

|                          |             |
|--------------------------|-------------|
| PCB Mount Retention      | With        |
| PCB Mount Retention Type | Boardlock   |
| Mating Retention Type    | Boardlock   |
| Connector Mounting Type  | Board Mount |

Housing Features

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

Dimensions

|                    |                |
|--------------------|----------------|
| Row-to-Row Spacing | 2.54 mm[.1 in] |
|--------------------|----------------|

Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -40 – 125 °C[-40 – 257 °F] |
|-----------------------------|----------------------------|

Operation/Application

|                     |                |
|---------------------|----------------|
| Circuit Application | Power & Signal |
|---------------------|----------------|

Industry Standards

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

Packaging Features

|                  |      |
|------------------|------|
| 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: JUNE 2023 (235)<br>Candidate List Declared Against: JUNE 2023 (235)<br>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 #8-2176459-5  
SMW 7W 330R 5% Taped



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



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



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



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



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

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

2\_PIECE\_POWER\_CONNECTORS\_qrg\_4-1773458-1

English

Product Specifications

Application Specification

English

Product Environmental Compliance

MD\_6450820-3\_03192018238\_dmtec

English

MD\_6450820-3\_03192018238\_dmtec

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