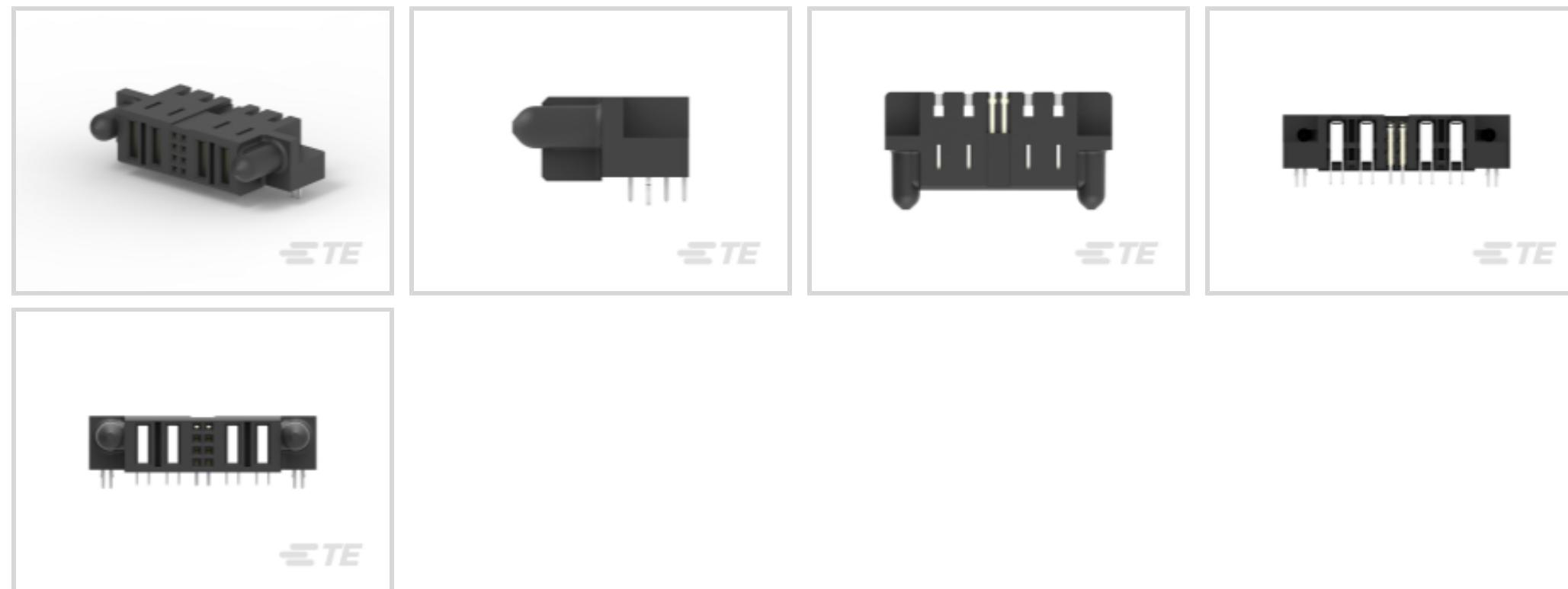


**MULTI-BEAM**

TE Internal #: 3-6450170-5

PCB Mount Receptacle, Right Angle, Board-to-Board, 12 Position,  
2.54 mm / 6.35 mm [.1 in / .25 in] Centerline, Fully Shrouded, Gold[View on TE.com >](#)

Connectors &gt; PCB Connectors &gt; PCB Headers &amp; Receptacles

PCB Connector Assembly Type: **PCB Mount Receptacle**PCB Mount Orientation: **Right Angle**Connector System: **Board-to-Board**Number of Positions: **12**Number of Rows: **4****Features****Electrical Characteristics**

Operating Voltage	200 VDC, 60 VDC
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**Dimensions**

Row-to-Row Spacing	2.54 mm [.1 in]
Connector Width	20.83 mm [.82 in]
PCB Thickness (Recommended)	2.11 – 2.62 mm [.083 – .103 in]
Connector Height	11.94 mm [.47 in]
Connector Length	48.26 mm [1.9 in]

**Packaging Features**

Packaging Quantity	55
Packaging Method	Tray

**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	Guide Post
PCB Mount Retention Type	Hold-Down
PCB Mount Alignment Type	Hold-Down
PCB Mount Retention	With
PCB Mount Alignment	With
Connector Mounting Type	Board Mount
Mating Alignment	With

#### Termination Features

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

#### Contact Features

Contact Underplating Material	Nickel
Contact Underplating Material Thickness	1.27 – 2.54 µm[50 – 100 µin]
Contact Mating Area Plating Material Thickness	.076 µm[3 µin]
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	Receptacle
Contact Current Rating (Max)	42 A

#### Housing Features

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

#### Configuration Features

Number of Columns	6
Number of Loaded Positions	12
Number of Signal Positions	8

Number of Power Positions	4
PCB Mount Orientation	Right Angle
Number of Positions	12
Number of Rows	4

#### Product Type Features

Mixed & Hybrid Header	Yes
Connector Shape	Rectangular
PCB Connector Assembly Type	PCB Mount Receptacle
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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#### Other

EU RoHS Compliance	Compliant
EU ELV Compliance	Compliant

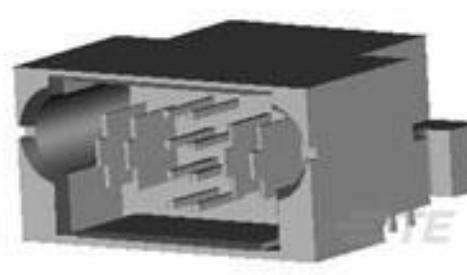
#### Product Compliance

For compliance documentation, visit the product page on [TE.com](http://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 2024 (241) Candidate List Declared Against: JUNE 2024 (241) Does not contain REACH SVHC
Halogen Content	Not Low Halogen - contains Br or Cl > 900 ppm.
Solder Process Capability	Wave solder capable to 265°C

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

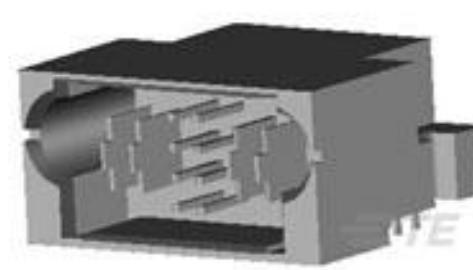


TE Part # 6450830-1  
MBXL R/A HDR 2LP + 8S + 2LP

## Customers Also Bought



TE Part #1-1825027-1  
FSMRA4JH04=R/A,TACT PB SW,160G



TE Part #6450830-1  
MBXL R/A HDR 2LP + 8S + 2LP

## Documents

### Product Drawings

[MBXL R/A RCPT 2P+8S+2P](#)

English

### CAD Files

[3D PDF](#)

3D

[Customer View Model](#)

[ENG\\_CVM\\_CVM\\_3-6450170-5\\_3.2d\\_dxf.zip](#)

English

[Customer View Model](#)

[ENG\\_CVM\\_CVM\\_3-6450170-5\\_3.3d\\_igs.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_CVM\\_3-6450170-5\\_3.3d\\_stp.zip](#)

English

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

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**Product Specifications**

[Application Specification](#)

English