

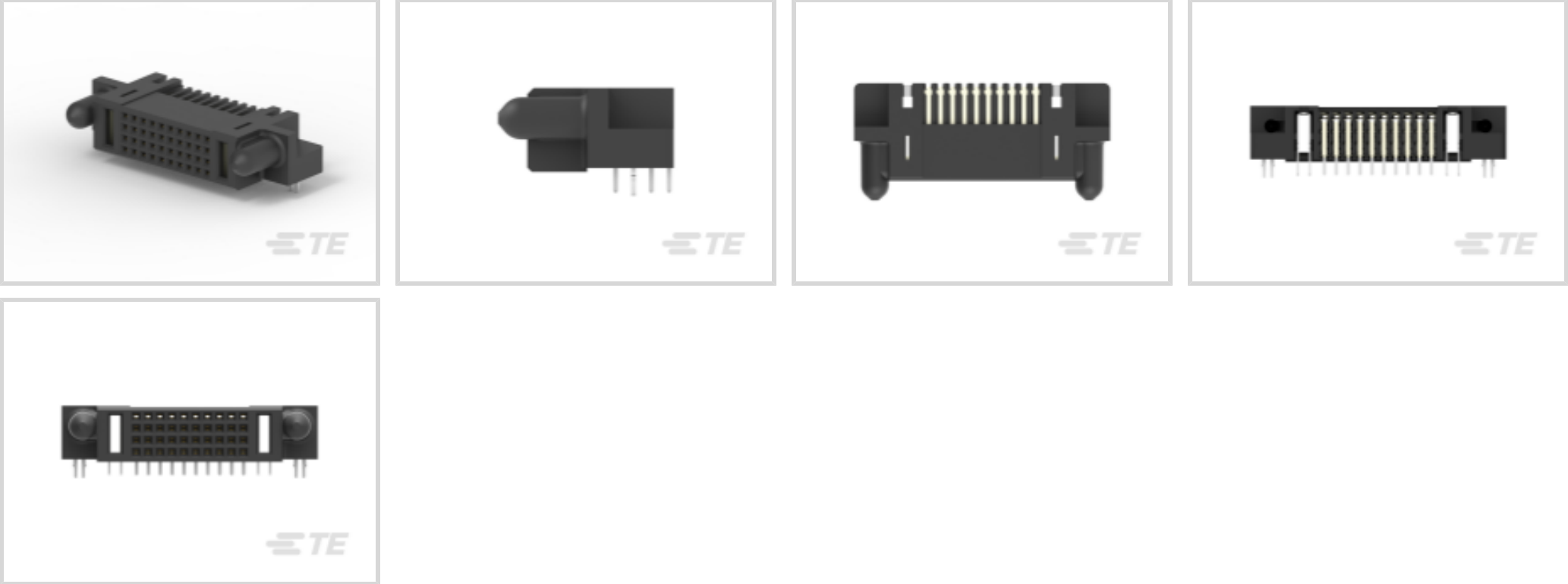


MULTI-BEAM

TE Internal #: 3-6450170-8
PCB Mount Receptacle, Right Angle, Board-to-Board, 42 Position,
2.54 mm [.1 in] Centerline, Fully Shrouded, Gold (Au), Through Hole
- Solder

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Type: **PCB Mount Receptacle**
Connector System: **Board-to-Board**
Number of Positions: **42**
Number of Rows: **4**
Centerline (Pitch): **2.54 mm [.1 in]**

Features

Product Type Features

Mixed & Hybrid Header	Yes
Connector Shape	Rectangular
PCB Connector Type	PCB Mount Receptacle
Connector System	Board-to-Board
Header Type	Fully Shrouded
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board
Connector Product Type	Connector Assembly

Configuration Features

Number of Columns	12
Number of Loaded Positions	42
Number of Positions	42
Number of Rows	4
PCB Mount Orientation	Right Angle



Number of Power Positions	2
Number of Signal Positions	40

Electrical Characteristics

Operating Voltage	60 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 – 2.54 µm[50 – 100 µin]
PCB Contact Termination Area Plating Material Thickness	2.54 – 5.08 µm[100 – 200 µin]
Contact Layout	Matrix
Contact Base Material	Copper Alloy
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Receptacle
Contact Current Rating (Max)	42 A
PCB Contact Termination Area Plating Material	Tin
Contact Mating Area Plating Material Thickness	.076 µm[3 µin]

Termination Features

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

Mechanical Attachment

Mating Retention	Without
PCB Mount Retention Type	Hold-Down
PCB Mount Alignment Type	Hold-Down
Mating Alignment Type	Guide Post
Connector Mounting Type	Board Mount
Mating Alignment	With
PCB Mount Alignment	With
PCB Mount Retention	With

Housing Features

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



Filled

Dimensions

Connector Width	20.83 mm[.82 in]
Connector Height	11.94 mm[.47 in]
Connector Length	54.61 mm[2.15 in]
Row-to-Row Spacing	2.54 mm[.1 in]
PCB Thickness (Recommended)	2.11 – 2.62 mm[.083 – .103 in]

Usage Conditions

Operating Temperature (Max)	105 °C[221 °F]
Operating Temperature Range	-55 – 105 °C[-67 – 221 °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	44
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 2025 (250) Candidate List Declared Against: JUNE 2025 (250) 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

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 # 1892130-3
MBXL R/A HEADER W/ GUIDE ,
1P+40S+1P

TE Part # 6-6450330-5
MBXL R/A HDR 1P+40S+1P

Customers Also Bought

TE Part #114017-ZZ
SEALING PLUG, SIZE 12/16, WHT

TE Part #CAT-D48-ST273
DEUTSCH Solid Contacts

TE Part #DT04-2P
REC, 2P, GRY, N

TE Part #CAT-D487-W416
Wedgelocks: DEUTSCH DT

TE Part #DT06-2S
PLG, 2P, GRY, N

TE Part #281934-2
SINGLE WIRE SEAL

TE Part #CAT-AM71-CH8172
AMP SUPERSEAL 1.5MM,
CONNECTOR HOUSING

Documents

- Product Drawings
- MBXL R/A RCPT 1P+40S+1P
- English
- CAD Files
- Customer View Model



[ENG_CVM_CVM_3-6450170-8_2.2d_dxf.zip](#)

English

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_3-6450170-8_2.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_3-6450170-8_2.3d_stp.zip](#)

English

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Product Specifications

[Application Specification](#)

English