



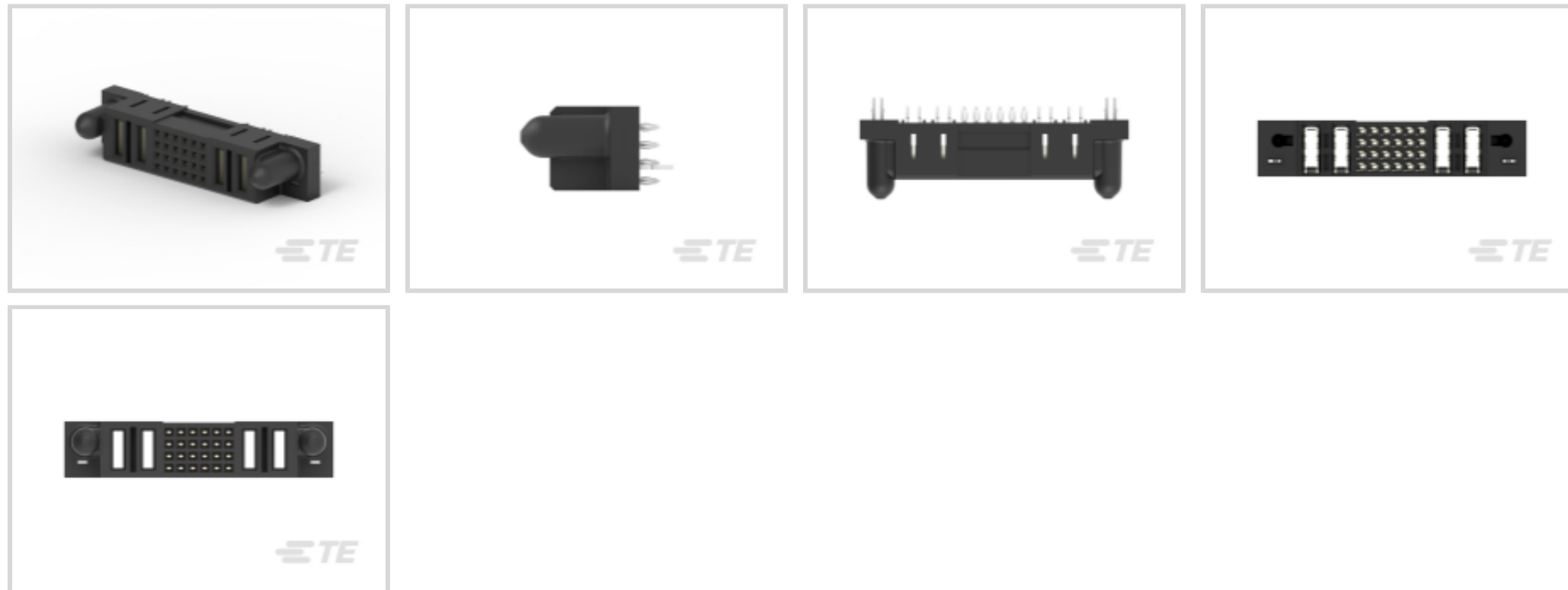
**MULTI-BEAM**

TE Internal #: 1-6450550-5

PCB Mount Receptacle, Vertical, Board-to-Board, 28 Position, 2.54 mm / 6.35 mm [.1 in / .25 in] Centerline, Fully Shrouded, Gold

[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



EU RoHS Compliance: **Compliant**

EU ELV Compliance: **Compliant**

PCB Connector Assembly Type: **PCB Mount Receptacle**

PCB Mount Orientation: **Vertical**

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

**Features**

**Other**

|                    |           |
|--------------------|-----------|
| EU RoHS Compliance | Compliant |
| EU ELV Compliance  | Compliant |

**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 |

**Configuration Features**

|                            |    |
|----------------------------|----|
| Number of Columns          | 10 |
| Number of Loaded Positions | 28 |
| Number of Signal Positions | 24 |



|                           |   |
|---------------------------|---|
| Number of Power Positions | 4 |
|---------------------------|---|

|                       |          |
|-----------------------|----------|
| PCB Mount Orientation | Vertical |
|-----------------------|----------|

|                     |    |
|---------------------|----|
| Number of Positions | 28 |
|---------------------|----|

|                |   |
|----------------|---|
| Number of Rows | 4 |
|----------------|---|

### Electrical Characteristics

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

### Body Features

|                       |       |
|-----------------------|-------|
| Primary Product Color | Black |
|-----------------------|-------|

### Contact Features

|                               |        |
|-------------------------------|--------|
| Contact Underplating Material | Nickel |
|-------------------------------|--------|

|   |  |
|---|--|
| Contact Underplating Material Thickness | 1.27 – 2.54 $\mu\text{m}$ [50 – 100 $\mu\text{in}$ ] |
|---|--|

|  |  |
|--|--|
| Contact Mating Area Plating Material Thickness | .76 $\mu\text{m}$ [30 $\mu\text{in}$ ] |
|--|--|

|   |   |
|---|---|
| PCB Contact Termination Area Plating Material Thickness | 2.54 – 5.08 $\mu\text{m}$ [100 – 200 $\mu\text{in}$ ] |
|---|---|

|                |        |
|----------------|--------|
| 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 |
|------------------------------|------|

### Termination Features

|                                |                  |
|--------------------------------|------------------|
| Termination Post & Tail Length | 2.92 mm[.115 in] |
|--------------------------------|------------------|

|                           |                          |
|---------------------------|--------------------------|
| Termination Method to PCB | Through Hole - Press-Fit |
|---------------------------|--------------------------|

### 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 |
|------------------|------|

### Housing Features



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

### Dimensions

|                    |                    |
|--------------------|--------------------|
| Row-to-Row Spacing | 2.54 mm [.1 in]    |
| Connector Width    | 11.94 mm [.47 in]  |
| Connector Height   | 12.7 mm [.5 in]    |
| Connector Length   | 57.15 mm [2.25 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 |
|---------------------|----------------|

### Industry Standards

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

### Packaging Features

|                    |         |
|--------------------|---------|
| Packaging Quantity | 44      |
| Packaging Method   | Package |

### 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 2024 (241)<br>Candidate List Declared Against: JUNE 2024 (241)<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  |

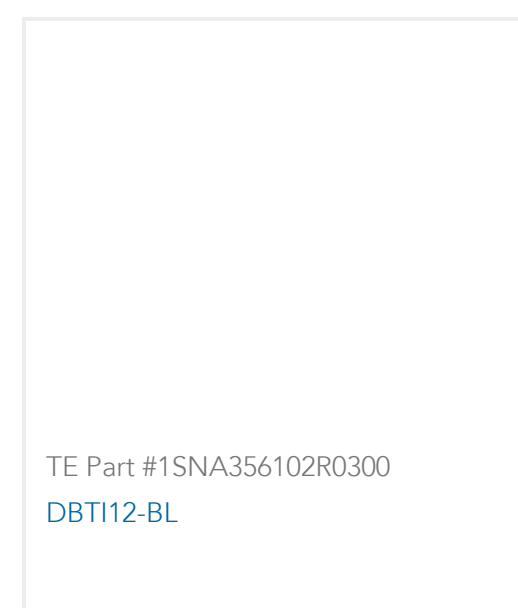
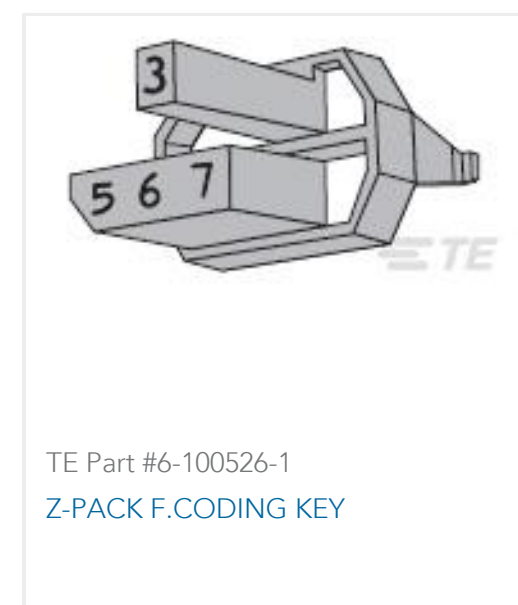
Product Compliance Disclaimer

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



## Customers Also Bought



## Documents

### Product Drawings

MBXL VERT RCPT 2P+24S+2P

English

### CAD Files

Customer View Model



[ENG\\_CVM\\_CVM\\_1-6450550-5\\_T.2d\\_dxf.zip](#)

English

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_1-6450550-5\\_T.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-6450550-5\\_T.3d\\_stp.zip](#)

English

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

[Product Specifications](#)

[Application Specification](#)

English