

646442-1 ☐ SUPERSEDED

Z-PACK | Z-PACK 2mm HM

TE Internal #: 646442-1

TE Internal Description: 2MM HM,ASY,T-D,REC,TWIST TULIP

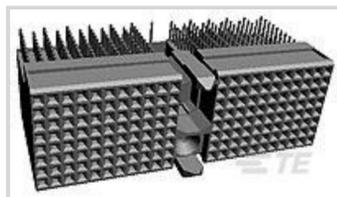
HM Receptacle Connector: Traditional Backplane, Coplanar, 2mm

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[Connectors >](#) [PCB Connectors >](#) [Backplane Connectors >](#) [Hard Metric Backplane Connectors >](#)

HM Receptacle Connector: Traditional Backplane, Coplanar, 2mm



PCB Connector Type: **PCB Mount Receptacle**

Data Rate: **≤1 Gb/s**

Number of Columns: **22**

Number of Rows: **8**

Backplane Architecture: **Mezzanine**

[All HM Receptacle Connector: Traditional Backplane, Coplanar, 2mm \(48\)](#)

## Features

### Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Connector & Contact Terminates To | Printed Circuit Board |
| Backplane Interface Type          | 2mm HM                |
| Connector System                  | Board-to-Board        |
| PCB Connector Type                | PCB Mount Receptacle  |
| Sealable                          | No                    |

### Configuration Features

|                        |             |
|------------------------|-------------|
| Number of Columns      | 22          |
| Number of Rows         | 8           |
| Backplane Architecture | Mezzanine   |
| Number of Positions    | 176         |
| PCB Mount Orientation  | Right Angle |

### Signal Characteristics

|           |         |
|-----------|---------|
| Data Rate | ≤1 Gb/s |
|-----------|---------|

### Body Features

|                       |      |
|-----------------------|------|
| Primary Product Color | Gray |
|-----------------------|------|

### Contact Features

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

|  |  |
|--|--|
| Contact Underplating Material                  | Nickel                                 |
| Contact Base Material                          | Phosphor Bronze                        |
| CompactPCI Designation                         | None                                   |
| PCB Contact Termination Area Plating Material  | Tin-Lead                               |
| Feedthrough Post Length                        | 3.3 mm                                 |
| Contact Type                                   | Socket                                 |
| Contact Mating Area Plating Material           | Gold (Au)                              |
| Contact Mating Area Plating Material Thickness | .76 $\mu\text{m}$ [30 $\mu\text{in}$ ] |
| Contact Current Rating (Max)                   | 1.5 A                                  |

### Termination Features

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

### Mechanical Attachment

|                         |                      |
|-------------------------|----------------------|
| Connector Mounting Type | Board Mount          |
| Mating Alignment Type   | Multi-Purpose Center |

### Housing Features

|                    |               |
|--------------------|---------------|
| Housing Material   | Polyester GF  |
| Centerline (Pitch) | 2 mm[.078 in] |

### Dimensions

|                         |       |
|-------------------------|-------|
| Backplane Module Length | 48 mm |
|-------------------------|-------|

### Operation/Application

|                     |        |
|---------------------|--------|
| Shielded            | No     |
| Circuit Application | Signal |

### Industry Standards

|                        |          |
|------------------------|----------|
| UL Flammability Rating | UL 94V-0 |
|------------------------|----------|

### Packaging Features

|                    |      |
|--------------------|------|
| Packaging Quantity | 10   |
| Packaging Method   | Tube |

### Product Compliance

[For compliance documentation, visit the product page on TE.com>](#)

|                              |               |
|------------------------------|---------------|
| EU RoHS Directive 2011/65/EU | Not Compliant |
| EU ELV Directive 2000/53/EC  | Out of Scope  |

China RoHS 2 Directive MIIT Order No 32, 2016

Restricted Materials Above Threshold

EU REACH Regulation (EC) No. 1907/2006

Current ECHA Candidate List: JAN 2025 (247)

Candidate List Declared Against: JUL 2021 (219)

SVHC > Threshold:

Pb (13% in Component Part)

**Article Safe Usage Statements:**

Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Recycle if possible and dispose of the article by following all applicable governmental regulations relevant to your geographic location.

Halogen Content

Not Low Halogen - contains Br or Cl > 900 ppm.

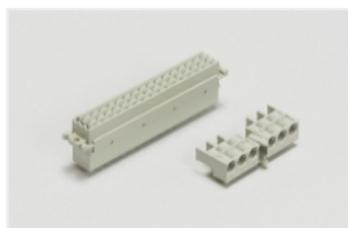
Solder Process Capability

Not applicable for solder process capability

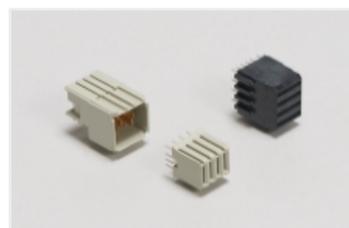
**Product Compliance Disclaimer**

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>

**Also in the Series | Z-PACK 2mm HM**



Backplane Connector Housings(4)



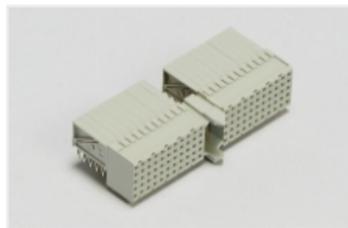
Backplane Power Connectors(1)



Connector Caps & Covers(62)



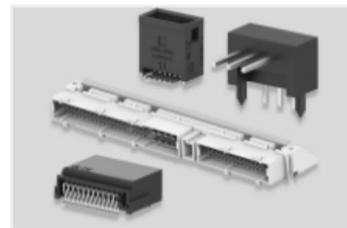
Connector Hardware(91)



Hard Metric Backplane Connectors (264)



Insertion & Extraction Tools(2)



PCB Headers & Receptacles(46)

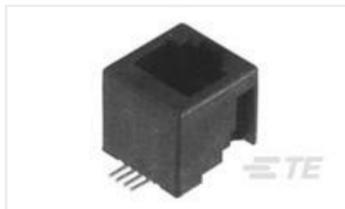


Rectangular Power Connectors(46)

**Customers Also Bought**



TE Part #84534-6  
1.25MM FFC POST PLATED V 6P



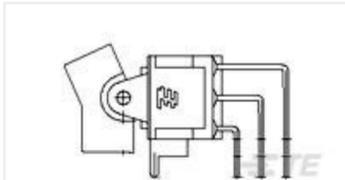
TE Part #3-338088-3  
8/8 INV.MOD.JACK LOW HALOGEN



TE Part #1241164-5  
2X 5P MOD2A-P STLEI



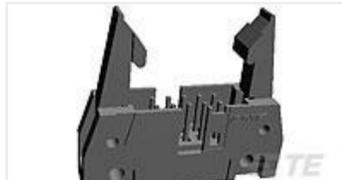
TE Part #3-1393789-9  
V23079A2011B301



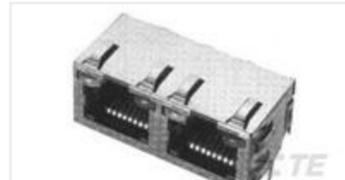
TE Part #7-1571986-2  
A101J1AV2Q004AM marking O -



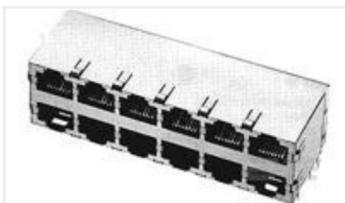
TE Part #4-1879269-9  
RP 2A 32R4 0.1% 15PPM CUT LENGTH



TE Part #5746443-1  
A/L UNIV HDR 10P ACT PIN LAT



TE Part #6116353-8  
INV MJ,1X2,PNL GRD,LED (YG/YG)



TE Part #6368296-1  
ASSY,SHLD,2X8,STK MJ,WAVE PNL



TE Part #6-147723-9  
20 MODIV VRT SR SFMNT 30AU

## Documents

### Product Drawings

[2MM HM,ASY,T-D,REC,TWIST TULIP](#)

English

### CAD Files

[3D PDF](#)

English

**Customer View Model**

[ENG\\_CVM\\_646442-1\\_H.3d\\_igs.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_646442-1\\_H.3d\\_stp.zip](#)

English

**Customer View Model**

[ENG\\_CVM\\_646442-1\\_H.2d\\_dxf.zip](#)

English

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### Product Specifications



**Product Specification**

English

**Product Specification**

English