

646346-1 ✓ ACTIVE

Z-PACK | Z-PACK 2mm HM

TE Internal #: 646346-1

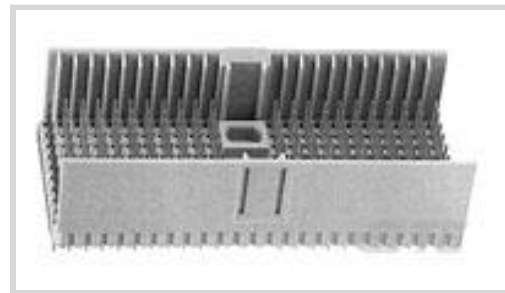
Hard Metric Backplane Connectors, PCB Mount Header,  $\leq 1$  Gb/s,  
22 Column, 8 Row, Mezzanine, Board-to-Board, 176 Position, Z-  
PACK 2mm HM

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

Hard Metric Male Connector: Traditional Backplane, Mezzanine, 2mm



PCB Connector Assembly Type: **PCB Mount Header**

Data Rate:  $\leq 1$  Gb/s

Number of Columns: **22**

Number of Rows: **8**

Backplane Architecture: **Mezzanine**

[All Hard Metric Male Connector: Traditional Backplane, Mezzanine, 2mm \(124\)](#)

## Features

### Product Type Features

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

### Configuration Features

Number of Columns	22
Number of Rows	8
Backplane Architecture	Mezzanine
Number of Positions	176
PCB Mount Orientation	Vertical

### Signal Characteristics

Crosstalk Version	Standard
Data Rate	$\leq 1$ Gb/s

### Contact Features

Contact Mating Area Length	13.45 mm
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Feedthrough Post Length	3.7 mm
Contact Type	Pin
Contact Underplating Material	Nickel
PCB Contact Termination Area Plating Material	Tin-Lead
Contact Base Material	Phosphor Bronze
CompactPCI Designation	None
Contact Mating Area Plating Material	Gold
Contact Mating Area Plating Material Thickness	.76 μm[30 μin]
Contact Current Rating (Max)	1.5 A

#### Termination Features

Termination Method to Printed Circuit Board	Through Hole - Press-Fit
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#### Mechanical Attachment

Front Mating Level	Level 1
Mating Alignment Type	Multi-Purpose Center
Connector Mounting Type	Board Mount

#### Housing Features

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

#### Dimensions

Backplane Module Length	50 mm
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#### Usage Conditions

Operating Temperature Range	-55 – 125 °C[-67 – 257 °F]
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#### Operation/Application

Shielded	No
Circuit Application	Signal

#### Industry Standards

UL Flammability Rating	UL 94V-0
AdvancedTCA Specified Product	No

#### 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	Compliant with Exemptions
China RoHS 2 Directive MIIT Order No 32, 2016	Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2022 (224) Candidate List Declared Against: JUNE 2022 (224) SVHC > Threshold: Pb (13% in Component Part) <b>Article Safe Usage Statements:</b> 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

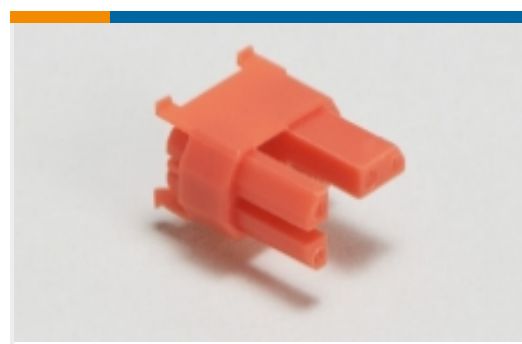
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight 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>

## Compatible Parts

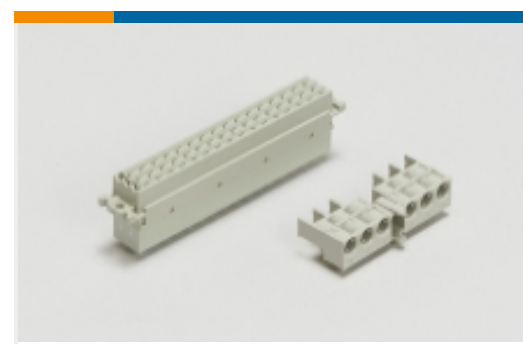


TE Part # 646538-1  
Z-PACK 2MM HM, TYPE D, VR

Also in the Series | [Z-PACK 2mm HM](#)



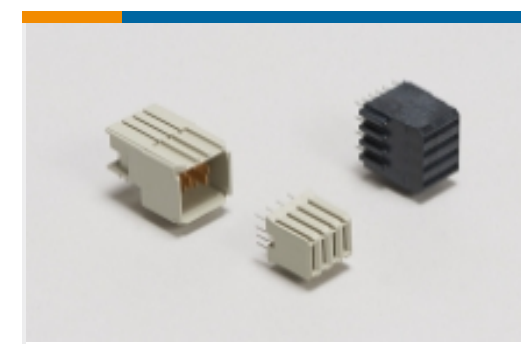
Backplane Coding Keys(60)



Backplane Connector Housings(4)



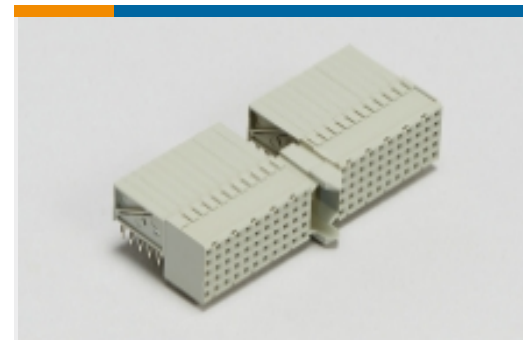
Backplane Guide Hardware(37)



Backplane Power Connectors(6)



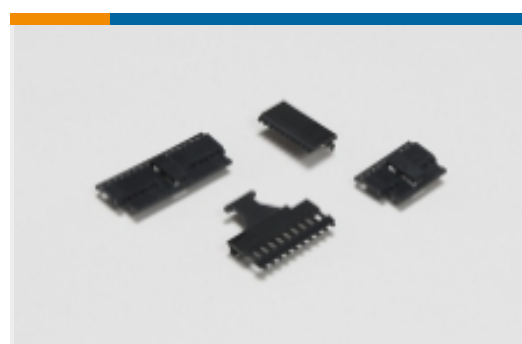
Board-to-Board Connector Contacts(2)

Hard Metric Backplane Connectors  
(269)

High Speed Backplane Connectors(1)



Insertion &amp; Extraction Tools(2)



PCB Connector Covers(4)



PCB Connector Shrouds(39)



PCB Ferrules &amp; Shields(19)



Rectangular Power Connectors(87)

## Documents

### Product Drawings

[2MM HM,ASY,T-D,HDR,8R,176P,AP](#)

English

### CAD Files

Customer View Model

[ENG\\_CVM\\_CVM\\_646346-1\\_K.2d\\_dxf.zip](#)

English

### 3D PDF

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_646346-1\\_K.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_646346-1\\_K.3d\\_stp.zip](#)

English

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**Product Specifications**

**Application Specification**

English

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**Product Environmental Compliance**

**Product Compliance**

English

**Product Compliance**

English