



STEP-Z

TE Internal #: 6-1761617-5  
PCB Mount Receptacle, Vertical, Board-to-Board, 296 Position, 1.3 mm [.051 in] Centerline, Gold, Surface Mount - Solder Ball, Power & Signal, Natural  
[View on TE.com >](#)

Connectors > PCB Connectors > PCB Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Receptacle**  
PCB Mount Orientation: **Vertical**  
Connector System: **Board-to-Board**  
Number of Positions: **296**  
Number of Rows: **2**

Features

Electrical Characteristics

Operating Voltage	48 VAC
Insulation Resistance	18 MΩ
Dielectric Withstanding Voltage (Max)	500 VAC

Dimensions

Row-to-Row Spacing	2 mm[.079 in]
Stack Height	35 mm, 30 mm, 28 mm, 25 mm, 27 mm, 40 mm[1.575 in]
PCB Thickness (Recommended)	1.57 mm[.8 in]
Connector Height	20.65 mm[.812 in]

Packaging Features

Packaging Quantity	20
Packaging Method	Tray

Operation/Application

Assembly Process Feature	None
Circuit Application	Power & Signal

Mechanical Attachment

Mating Retention	With
PCB Mount Retention	Without



PCB Mount Alignment	Without
Connector Mounting Type	Board Mount
Mating Alignment	Without

Contact Features

Contact Mating Area Plating Material Thickness	.76 µm[29.9212 µin]
Mating Tab Width	1 mm[.04 in]
Contact Shape & Form	Dual Beam, Single Beam
Contact Layout	Matrix
Contact Base Material	Copper Alloy
Mating Tab Thickness	.2 mm[.008 in]
PCB Contact Termination Area Plating Material	Tin-Silver
Contact Mating Area Plating Material	Gold
Contact Type	Socket
Contact Current Rating (Max)	1 A

Housing Features

Housing Material	Thermoplastic
Centerline (Pitch)	1.3 mm[.051 in]

Configuration Features

Board-to-Board Configuration	Parallel
Stackable	Yes
PCB Mount Orientation	Vertical
Number of Positions	296
Number of Rows	2

Product Type Features

PCB Connector Assembly Type	PCB Mount Receptacle
Connector System	Board-to-Board
Sealable	No
Connector & Contact Terminates To	Printed Circuit Board

Body Features

Primary Product Color	Natural
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Termination Features

Termination Method to PCB	Surface Mount - Solder Ball
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Usage Conditions

Operating Temperature Range	0 – 100 °C[32 – 212 °F]
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Industry Standards

UL Flammability Rating	UL 94V-0
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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>

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	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Reflow solder capable to 260°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 # 6-1761616-2  
STEP-Z PLUG 12MM 296P LF ST



TE Part # 6-1761616-0  
STEP-Z PLUG 10MM 296P LF ST



TE Part # 6-1761616-3  
STEP-Z PLUG 13MM 296P LF ST



TE Part # 7-1761616-0  
STEP-Z PLUG 20MM 296P LF ST

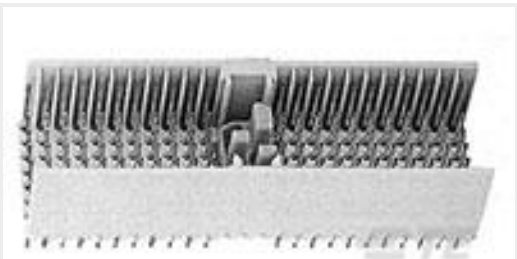


TE Part # 7-1761616-5  
STEP-Z PLUG 25MM 296P LF ST

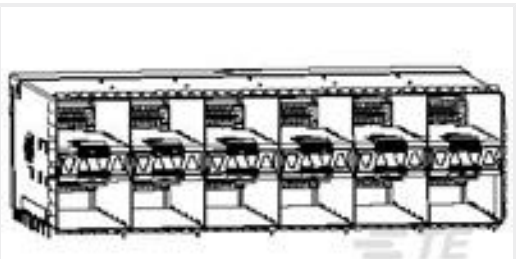


TE Part # 6-1761616-5  
STEP-Z PLUG 15MM 296P LF ST

Customers Also Bought



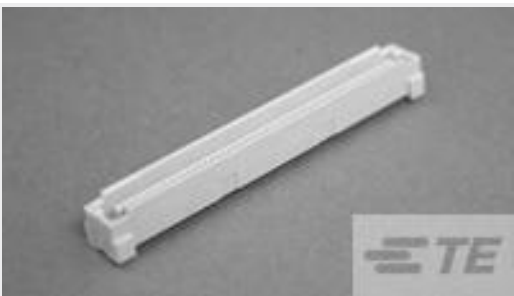
TE Part #5352332-1  
2MM HM TYPE A MALE HDR 154 POS



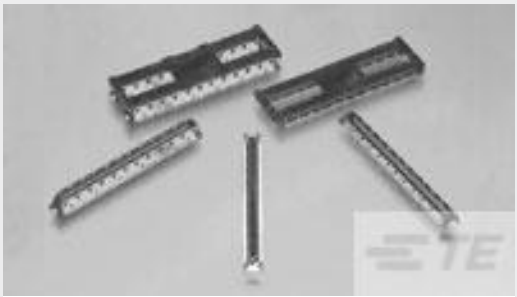
TE Part #2198339-6  
zSFP+ STACKED 2X6 RECEPTACLE ASSEMBLY



TE Part #8-215079-2  
MICRO-MATCH FOB.12P



TE Part #1-5177986-3  
0.8FH,P06H.5,080,08/Sn,TR,SC



TE Part #3-1827233-6  
.5FHP05H,440,B,GIG,08/Sn,HT,NS



TE Part #6469001-1  
HM-ZD 4PR RECP 80P



TE Part #9-1614889-6  
CPF 0805 4R99 0.1% 25PPM 1K RL



TE Part #2336568-1  
RECEPT ASSY, RA, 168 POS, SLIVER 2.0



TE Part #RXM-GNSS-GM-T  
Module GM L1 GNSS RX RCVR T&R



TE Part #7-2176390-5  
RQ 1206 6K81 0.1% 10PPM 5K RL

Documents



Product Drawings

STEP-Z RCPT 15MM 296P LF ST

English

CAD Files

3D PDF

3D

Customer View Model

ENG\_CVM\_CVM\_6-1761617-5\_A.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_6-1761617-5\_A.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_6-1761617-5\_A.3d\_stp.zip

English

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

Datasheets & Catalog Pages

STEP-Z Interconnection System

English

Product Specifications

Application Specification

English