



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

Product Type Features

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

Configuration Features

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

Electrical Characteristics

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

Body Features

Primary Product Color	Natural
-----------------------	---------

Contact Features

Contact Layout	Matrix
----------------	--------



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

Termination Features

Termination Method to Printed Circuit Board	Surface Mount - Solder Ball
---	-----------------------------

Mechanical Attachment

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

Housing Features

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

Dimensions

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

Usage Conditions

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

Operation/Application

Assembly Process Feature	None
Circuit Application	Power & Signal

Industry Standards

--	--



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

Packaging Features

Packaging Quantity	20
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: JAN 2024 (240) Candidate List Declared Against: JAN 2024 (240) 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 # 7-1761616-5 STEP-Z PLUG 25MM 296P LF ST	TE Part # 6-1761616-3 STEP-Z PLUG 13MM 296P LF ST	TE Part # 6-1761616-0 STEP-Z PLUG 10MM 296P LF ST	TE Part # 6-1761616-2 STEP-Z PLUG 12MM 296P LF ST



TE Part # 6-1761616-5

STEP-Z PLUG 15MM 296P LF ST



TE Part # 7-1761616-0

STEP-Z PLUG 20MM 296P LF ST

Customers Also Bought



TE Part #5557789-1

MJ,8POS,R/A,SHORTNG,PCBG



TE Part #5-1879215-7

CPF 0402 17K4 0.1% 25PPM 1K RL



TE Part #5-2176089-3

RP 1J 0.166W 39K2 0.1% 25PPM 1K RL



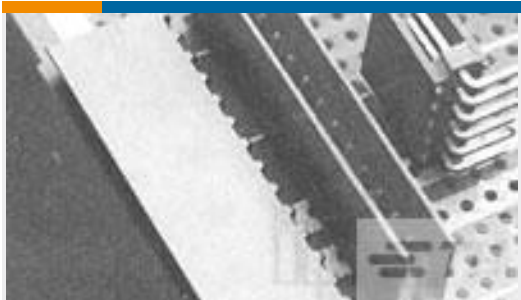
TE Part #8-2176089-8

RP 1J 0.166W 95K3 0.1% 25PPM 1K RL



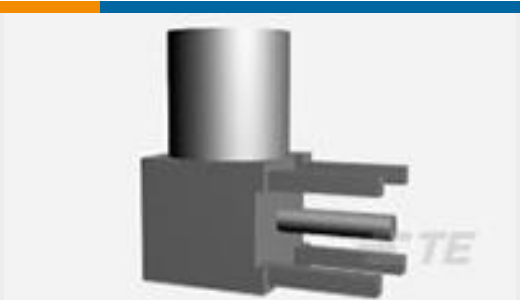
TE Part #6-1761612-0

STEP-Z PLUG 10MM 104P LF ST



TE Part #281696-2

HEADER HE13 STRAIGHT 2 P



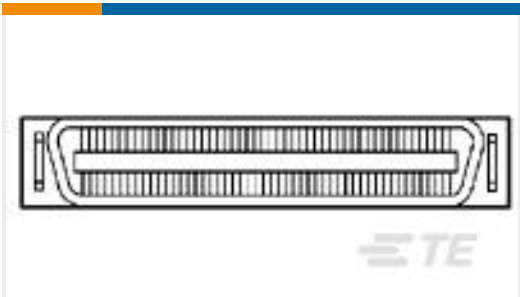
TE Part #1408151-1

MMCX PCB RIGHT ANGLE JACK THRU



TE Part #5175473-3

CHAMP 050 BTB PLUG V 30P W/LEG



TE Part #5-5175473-1

.050CL CHAMP VERT PLUG 20 POS

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