5-1761617-5 ACTIVE

STEP-Z

TE Internal #: 5-1761617-5

PCB Mount Receptacle, Vertical, Board-to-Board, 296 Position, 1.3 mm [.051 in] Centerline, Gold, Surface Mount - Solder Ball, Power &

Signal, Natural

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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 ΜΩ
Operating Voltage	48 VAC

Body Features

Contact Features

Contact Layout	Matrix
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Mating 1sb Inickness	Mating Tab Width	1 mm[.04 in]
PCB Contact Termination Area Plating Material Contact Base Material Contact Base Material Contact Mating Area Plating Material Contact Mating Area Plating Material Contact Mating Area Plating Material Thickness Contact Type Societ Contact Current Rating (Max) 1 A Termination Features Termination Method to PCB Surface Mount Solder Ball Mechanical Attachment Mating Retention With Mating Alignment Without PCB Mount Alignment Without Connector Mounting Type Board Mount Housing Features Centerline (Ptich) Liamm[051 in] Itousing Material Thermoplastic Dimensions Connector Height Row-to-Row Spacing 2 mm[0/9 in] Stack Height 10.65 mm[419 in] PCB Thickness (Recommended) 1.57 mm[18 in] Usage Conditions Operation/Application None Circuit Application None Circuit Application None Circuit Application Power & Signal		.2 mm[.008 in]
Contact Base Material Copper Alloy Contact Mating Area Plating Material Gold Contact Mating Area Plating Material Thickness 7.6 µm(29.9212 µin) Contact Type Socket Contact Current Rating (Max) 1 A Termination Features Termination Method to PCB Surface Mount - Solder Ball Mechanical Attachment Mating Retention With Mating Alignment Without PCB Mount Retention Without PCB Mount Alignment Without Connector Mounting Type Beard Mount Housing Features Centerline (Pitch) 1.3 mm (051 in) Housing Material Thermoplastic Dimensions Connector Height 10.65 mm (419 in) Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm (1.181 in) PCB Thickness (Recommended) 1.57 mm (18 mm, 20 mm, 25 mm, 30 mm (1.181 in) Usage Conditions Operating Temperature Range 0 - 100 °C(32 - 212 °F) Operation/Application None Circuit Application Power & Signal	Contact Shape & Form	Dual Beam, Single Beam
Contact Mating Area Plating Material Gold Contact Mating Area Plating Material Thickness 7.6 μm[29,9212 μin] Contact Type Socket Contact Current Rating (Max) 1 A Termination Features Larmination Method to PCB Surface Mount - Solder Ball Mechanical Attachment Mating Retention 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 Hoight 10.65 mm[,419 in] Row-to-Row Spacing 2 mm[,079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[,181 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	PCB Contact Termination Area Plating Material	Tin-Silver
Contact Mating Area Plating Material Thickness Contact Type Socket Contact Current Rating (Max) 1 A Termination Features Termination Method to PCB Surface Mount Solder Ball Mechanical Attachment Mating Retention With Mating Alignment PCB Mount Retention Without PCB Mount Alignment Without Connector Mounting Type Board Mount Housing Features Centerline (Pitch) 1.3 mm [.051 in] Housing Material Dimensions Connector Height 10.65 mm [.412 in] Stack Height 15 mm , 17 mm , 18 mm , 20 mm , 25 mm , 30 mm [1.181 in] PCB Thickness (Recommended) Usage Conditions Operating Temperature Range O – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Contact Base Material	Copper Alloy
Contact Type Socket Contact Current Rating (Max) 1 A Termination Features Termination Method to PCB 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 Ihermoplastic Dimensions Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Contact Mating Area Plating Material	Gold
Contact Current Rating (Max) Termination Features Termination Method to PCB Mechanical Attachment Mating Retention Mating Alignment Mount Retention Without PCB Mount Alignment Without Connector Mounting Type Board Mount Housing Features Conterline (Pitch) 1.3 mm(.051 in) Housing Material Thermoplastic Dimensions Connector Height 10.65 mm(419 in) Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm(.131 in) PCB Thickness (Recommended) Usage Conditions Operating Temperature Range O=100 °C[32 - 212 °F] Operation/Application Assembly Process Feature None Cricuit Application Power & Signal	Contact Mating Area Plating Material Thickness	.76 μm[29.9212 μin]
Termination Features Termination Method to PCB Surface Mount - Solder Ball Mechanical Attachment Mating Retention 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 10.65 mm[.419 in] Row to Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in] PCB Thickness (Recommended) Usage Conditions Operating Temperature Range 0 – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Contact Type	Socket
Termination Method to PCB Mechanical Attachment Mating Retention Mith Mating Alignment 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 10.65 mm[.419 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in] PCB Thickness (Recommended) Usage Conditions Operating Temperature Range 0 – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Contact Current Rating (Max)	1 A
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) Conterline (Pitch) 1.3 mm[.051 in] Housing Material Thermoplastic Dimensions Connector Height Row to Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in] PCB Thickness (Recommended) 1.57 mm[.8 in] Usage Conditions Operating Temperature Range 0 – 100 °C[32 – 212 °F] Operating/Application None Circuit Application Power & Signal	Termination Features	
Mating RetentionWithoutMating AlignmentWithoutPCB Mount RetentionWithoutPCB Mount AlignmentWithoutConnector Mounting TypeBoard MountHousing FeaturesCenterline (Pitch)1.3 mm[.051 in]Housing MaterialThermoplasticDimensionsConnector Height10.65 mm[./19 in]Row-to-Row Spacing2 mm[.079 in]Stack Height15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in]PCB Thickness (Recommended)1.57 mm[.8 in]Usage ConditionsOperating Temperature Range0 - 100 °C[32 - 212 °F]Cepration/ApplicationNoneCircuit ApplicationPower & Signal	Termination Method to PCB	Surface Mount - Solder Ball
Mating Alignment 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 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Mechanical Attachment	
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PCB Mount Alignment Without Connector Mounting Type Board Mount Housing Features Centerline (Pitch) 1.3 mm[.051 in] Housing Material Thermoplastic Dimensions Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Mating Alignment	Without
Connector Mounting Type Housing Features Centerline (Pitch) Housing Material Dimensions Connector Height Row-to-Row Spacing Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in] PCB Thickness (Recommended) Usage Conditions Operating Temperature Range O = 100 °C[32 = 212 °F] Operation/Application Assembly Process Feature None Circuit Application Band Mount 1.3 mm[.051 in] Thermoplastic 10.65 mm[.419 in] Thermoplastic 10.65 mm[.419 in] 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 in] PCB Thickness (Recommended) 1.57 mm[.8 in] Vage Conditions Operation/Application	PCB Mount Retention	Without
Housing Features Centerline (Pitch) 1.3 mm[.051 in] Housing Material Thermoplastic Dimensions Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	PCB Mount Alignment	Without
Centerline (Pitch) Housing Material Thermoplastic Dimensions Connector Height Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Connector Mounting Type	Board Mount
Housing Material Dimensions Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Housing Features	
Dimensions Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Centerline (Pitch)	1.3 mm[.051 in]
Connector Height 10.65 mm[.419 in] Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Housing Material	Thermoplastic
Row-to-Row Spacing 2 mm[.079 in] Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Dimensions	
Stack Height 15 mm, 17 mm, 18 mm, 20 mm, 25 mm, 30 mm[1.181 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	Connector Height	10.65 mm[.419 in]
mm[1.181 in] PCB Thickness (Recommended) 1.57 mm[.8 in] Usage Conditions Operating Temperature Range O – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Row-to-Row Spacing	2 mm[.079 in]
Usage Conditions Operating Temperature Range 0 – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Stack Height	
Operating Temperature Range 0 – 100 °C[32 – 212 °F] Operation/Application Assembly Process Feature None Circuit Application Power & Signal	PCB Thickness (Recommended)	1.57 mm[.8 in]
Operation/Application Assembly Process Feature None Circuit Application Power & Signal	Usage Conditions	
Assembly Process Feature Circuit Application None Power & Signal	Operating Temperature Range	0 - 100 °C[32 - 212 °F]
Circuit Application Power & Signal	Operation/Application	
	Assembly Process Feature	None
Industry Standards	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: 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 # 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



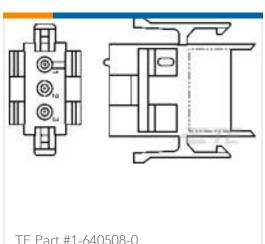
Customers Also Bought



TE Part #1367073-2 20 POS SMT CONN, SFP, 30AU







TE Part #1-640508-0 03P MR II CAP HSG V0





TE Part #292317-4 STD USB TYPE B, R/A, T/H



TE Part #350778-1

02P UMNL CAP HSG









Documents

Product Drawings
STEP-Z RCPT 05MM 296P LF ST

English

CAD Files

3D PDF

3D

Customer View Model ENG_CVM_CVM_5-1761617-5_A.2d_dxf.zip



English

Customer View Model

ENG_CVM_CVM_5-1761617-5_A.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_5-1761617-5_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