146896-2 ✔ ACTIVE

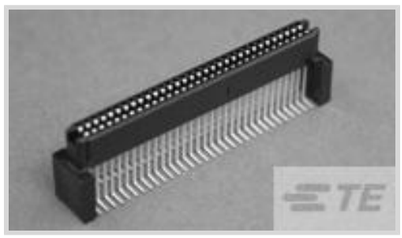
Free Height

TE Internal #: 146896-2

PCB Mount Receptacle, Vertical, Board-to-Board, 84 Position, 1 mm [.039 in] Centerline, Gold (Au), Surface Mount, Signal, Black, Free Height

View on TE.com >

Connectors > PCB Connectors > PCB Headers & Receptacles > Free Height Receptacle Conn: Board-Board, Vertical, 84, 1mm



PCB Connector Type: **PCB Mount Receptacle**

Connector System: **Board-to-Board**

Number of Positions: **84**

Centerline (Pitch): **1 mm [.039 in]**

PCB Mount Orientation: **Vertical**

All Free Height Receptacle Conn: Board-Board, Vertical, 84, 1mm (42)

Features

Product Type Features

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

Configuration Features

Number of Columns	42
Stackable	Yes
Number of Positions	84
PCB Mount Orientation	Vertical
Board-to-Board Configuration	Parallel

Electrical Characteristics

Operating Voltage	250 VAC
Insulation Resistance	2 MΩ

Signal Characteristics

Differential Signaling	Yes

Body Features

Primary Product Color	Black

Contact Features

Contact Underplating Material Thickness	1.27 µm[50 µin]
Mating Tab Width	.63 mm[.024 in]
PCB Contact Termination Area Plating Material Thickness	3.81 – 6.35 µm[150 – 250 µin]
Contact Shape & Form	Single Beam
Contact Layout	Inline
Contact Mating Area Length	2 mm
Contact Base Material	Phosphor Bronze
Mating Tab Thickness	.2 mm[.008 in]
PCB Contact Termination Area Plating Material	Tin-Lead
Contact Mating Area Plating Material Thickness	.76 µm[29.92 µin]
Contact Mating Area Plating Material	Gold (Au)
Contact Type	Socket
Contact Current Rating (Max)	1 A

Termination Features

Rectangular Termination Post & Tail Width	.3 mm[.011 in]
Rectangular Termination Post & Tail Thickness	.2 mm[.008 in]
Termination Method to PCB	Surface Mount

Mechanical Attachment

Mating Retention	Without
PCB Mount Alignment Type	Locating Posts
Mating Alignment Type	None
Mating Alignment	Without
PCB Mount Alignment	With
PCB Mount Retention	Without

Housing Features

Mating Entry Location	Top
Centerline (Pitch)	1 mm[.039 in]
Housing Material	Thermoplastic

Dimensions

Connector Width	3.81 mm[.15 in]
Connector Height	10.37 mm[.408 in]
Connector Length	44.22 mm[1.74 in]
Stack Height	14 mm, 15 mm[.591 in]

Usage Conditions

Operating Temperature Range	-55 – 110 °C[-67 – 230 °F]

Operation/Application

Assembly Process Feature	Pick and Place Cover
Circuit Application	Signal

Industry Standards

Compatible With Agency/Standards Products	CSA, UL
Industry Standard	IEEE 1386
UL Rating	Listed
Compatible With Approved Standards Products	CSA LR7189, UL E28476
UL Flammability Rating	UL 94V-0

Packaging Features

Packaging Quantity	300
Packaging Method	Tape & Reel

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 2025 (250) Candidate List Declared Against: JUNE 2025 (250) SVHC > Threshold: Pb (13% in 4690948374) **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	Low Halogen - Br, Cl, F < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Reflow solder capable to 260°C

Product Compliance Disclaimer

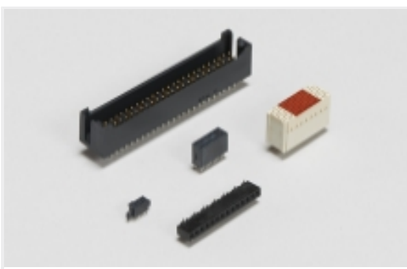
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight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

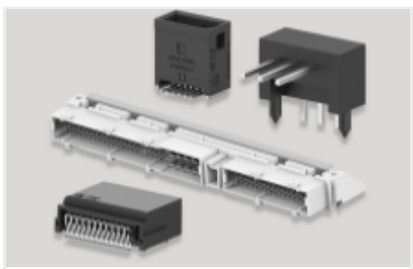


TE Part # CAT-314-PCB84
Free Height Plug Connector: Board-Board, Vertical, 84, 1mm

Also in the Series | Free Height



Board-to-Board Headers & Receptacles(737)



PCB Headers & Receptacles(737)

Customers Also Bought



TE Part #CAT-D48-ST273
DEUTSCH Solid Contacts



TE Part #DT04-2P
REC, 2P, GRY, N



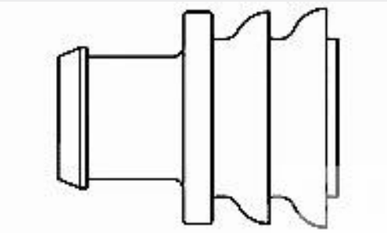
TE Part #CAT-D487-W416
Wedgelocks: DEUTSCH DT



TE Part #DT06-2S
PLG, 2P, GRY, N



TE Part #114017-ZZ
SEALING PLUG, SIZE 12/16, WHT



TE Part #281934-2
SINGLE WIRE SEAL



TE Part #CAT-AM71-CH8172
AMP SUPERSEAL 1.5MM, CONNECTOR HOUSING

Documents

Product Drawings

1FHR,84,30A/P,S,C,S14,15

English

CAD Files

3D PDF

3D

Customer View Model

ENG_CVM_CVM_146896-2_M.2d_dxf.zip

English

Customer View Model

ENG_CVM_CVM_146896-2_M.3d_igs.zip

English

Customer View Model

ENG_CVM_CVM_146896-2_M.3d_stp.zip

English

By downloading the CAD file I accept and agree to the Terms and Conditions of use.

Product Specifications

Application Specification

English