

146896-2 ✓ ACTIVE



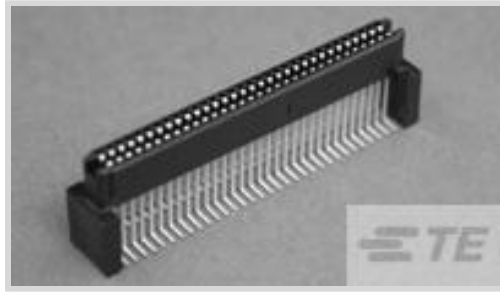
Free Height

TE Internal #: 146896-2

PCB Mount Receptacle, Vertical, Board-to-Board, 84 Position, 1 mm [.039 in] Centerline, Gold, 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 Assembly Type: **PCB Mount Receptacle**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **84**

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

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

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

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

Electrical Characteristics

| | |
|-----------------------|---------|
| Insulation Resistance | 2 MΩ |
| Operating Voltage | 250 VAC |

Signal Characteristics

| | |
|------------------------|-----|
| Differential Signaling | Yes |
|------------------------|-----|

Body Features

| | |
|-----------------------|-------|
| Primary Product Color | Black |
|-----------------------|-------|



Contact Features

| | |
|---|---|
| Contact Layout | Inline |
| Contact Mating Area Length | 2 mm |
| PCB Contact Termination Area Plating Material Thickness | 3.81 – 6.35 μm [150 – 250 μin] |
| Mating Tab Width | .63 mm[.024 in] |
| Mating Tab Thickness | .2 mm[.008 in] |
| Contact Underplating Material Thickness | 1.27 μm [50 μin] |
| Contact Shape & Form | Single Beam |
| PCB Contact Termination Area Plating Material | Tin-Lead |
| Contact Base Material | Phosphor Bronze |
| 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

| | |
|---|----------------|
| Rectangular Termination Post & Tail Thickness | .2 mm[.008 in] |
| Rectangular Termination Post & Tail Width | .3 mm[.011 in] |
| Termination Method to Printed Circuit Board | Surface Mount |

Mechanical Attachment

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

Housing Features

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

Dimensions

| | |
|------------------|-------------------|
| Connector Length | 44.22 mm[1.74 in] |
|------------------|-------------------|



| | |
|------------------|-----------------------|
| Connector Height | 10.37 mm[.408 in] |
| Connector Width | 3.81 mm[.150 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

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

Packaging Features

| | |
|--------------------|-------------|
| Packaging Quantity | 300 |
| Packaging Type | 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 2022 (224) Candidate List Declared Against: JUNE 2022 (224) SVHC > Threshold: Pb (13% in Component Part) 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, 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>

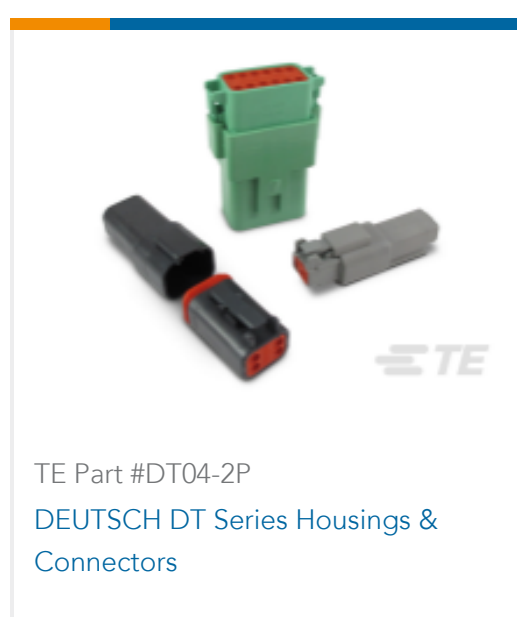
Compatible Parts

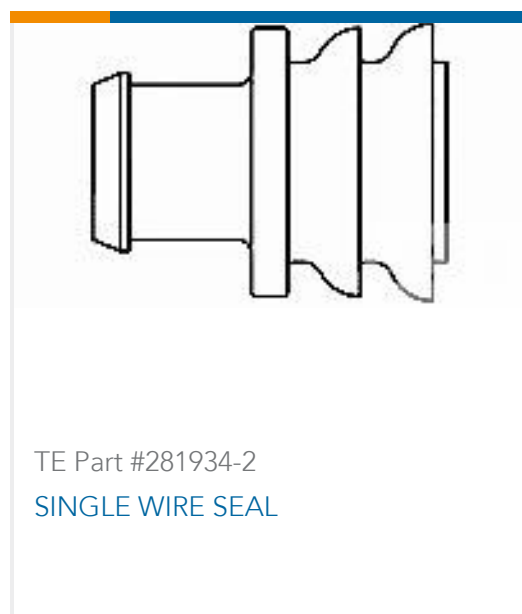


Also in the Series | Free Height



Customers Also Bought





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