

1-1734100-2 ✓ ACTIVE

CHAMP | CHAMP .050 Series I

TE Internal #: 1-1734100-2

CHAMP .050 Series I, PCB Mount Header, Vertical, Board-to-Board, 120 Position, 1.27mm [.05in] Centerline, Fully Shrouded, Gold Flash

[View on TE.com >](#)



Connectors > PCB Connectors > Board-to-Board Connectors > Board-to-Board Headers & Receptacles



PCB Connector Assembly Type: **PCB Mount Header**

PCB Mount Orientation: **Vertical**

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

Number of Positions: **120**

Centerline (Pitch): **1.27 mm [ .05 in ]**

## Features

### Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| PCB Connector Assembly Type       | PCB Mount Header      |
| Connector System                  | Board-to-Board        |
| Header Type                       | Fully Shrouded        |
| Sealable                          | No                    |
| Connector & Contact Terminates To | Printed Circuit Board |

### Configuration Features

|                       |          |
|-----------------------|----------|
| Number of Rows        | 4        |
| Stackable             | No       |
| PCB Mount Orientation | Vertical |
| Number of Positions   | 120      |

### Electrical Characteristics

|                                       |              |
|---------------------------------------|--------------|
| Dielectric Withstanding Voltage (Max) | 750 VAC      |
| Insulation Resistance                 | 4 M $\Omega$ |
| Operating Voltage                     | 250 VAC      |

### Body Features

|  |                        |
|--|------------------------|
| PCB Retention Feature Material         | Brass                  |
| PCB Retention Feature Plating Material | Tin-Copper over Nickel |
| Connector Profile                      | Standard               |

### Contact Features



|   |   |
|---|---|
| Contact Layout  | Matrix  |
| PCB Contact Termination Area Plating Material Thickness | 3.81 $\mu\text{m}$ [149.9997 $\mu\text{in}$ ] |
| Mating Tab Width  | .75 mm[.03 in]                                |
| Mating Tab Thickness                                    | .3 mm[.012 in]                                |
| PCB Contact Termination Area Plating Material Finish    | Matte   |
| Contact Shape & Form                                    | Square  |
| Contact Mating Area Plating Material Finish             | Matte   |
| PCB Contact Termination Area Plating Material           | Tin   |
| Contact Base Material                                   | Phosphor Bronze                               |
| Contact Mating Area Plating Material                    | Gold Flash                                    |
| Contact Mating Area Plating Material Thickness          | .76 $\mu\text{m}$ [30 $\mu\text{in}$ ]        |
| Contact Type  | Pin   |
| Contact Current Rating (Max)                            | 1 A   |

#### Termination Features

|   |                       |
|---|-----------------------|
| Rectangular Termination Post & Tail Thickness | .32 mm[.013 in]       |
| Rectangular Termination Post & Tail Width     | .5 mm[.02 in]         |
| Termination Post & Tail Length                | 2.54 mm[.1 in]        |
| Termination Method to Printed Circuit Board   | Through Hole - Solder |

#### Mechanical Attachment

|                          |                          |
|--------------------------|--------------------------|
| PCB Mount Alignment Type | Locating Posts           |
| PCB Mount Retention Type | Boardlock, Retention Leg |
| Mating Alignment         | With                     |
| Mating Alignment Type    | Guide Post               |
| PCB Mount Retention      | With                     |
| PCB Mount Alignment      | With                     |
| Connector Mounting Type  | Board Mount              |

#### Housing Features

|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 1.27 mm[.05 in] |
| Housing Material   | Matte           |

#### Dimensions

|                             |                     |
|-----------------------------|---------------------|
| Row-to-Row Spacing          | 1.9 mm[.075 in]     |
| PCB Thickness (Recommended) | .8 – 1.6 mm[.76 in] |



### Usage Conditions

|                             |                            |
|-----------------------------|----------------------------|
| Operating Temperature Range | -55 – 105 °C[-67 – 221 °F] |
|-----------------------------|----------------------------|

### Operation/Application

|                          |        |
|--------------------------|--------|
| Assembly Process Feature | None   |
| Circuit Application      | Signal |

### Industry Standards

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

### Packaging Features

|                    |         |
|--------------------|---------|
| Packaging Quantity | 54      |
| Packaging Method   | Package |

### 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 2021 (211)<br>Candidate List Declared Against: JAN 2021 (211)<br>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                     | Wave solder capable to 265°C  |

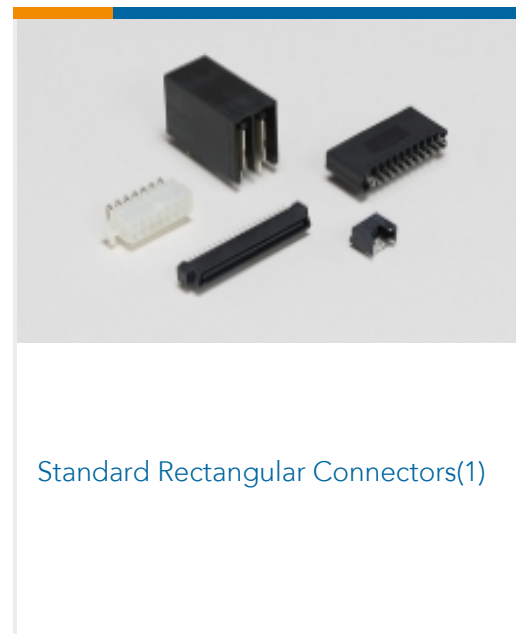
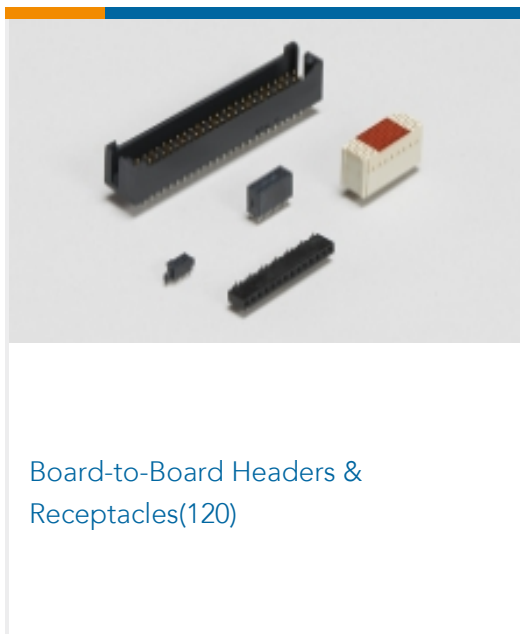
#### Product Compliance Disclaimer

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 | CHAMP .050 Series I



Customers Also Bought





## Documents

### Product Drawings

[Champ050 series,120pos,Au over PdNi](#)

English

---

### CAD Files

#### 3D PDF

3D

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-1734100-2\\_E.2d\\_dxf.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-1734100-2\\_E.3d\\_igs.zip](#)

English

#### Customer View Model

[ENG\\_CVM\\_CVM\\_1-1734100-2\\_E.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

#### CHAMP .050 High Density Connector

English

#### Application Specification

English