

1-2007703-1 ✓ ACTIVE



## IMPACT

TE Internal #: 1-2007703-1

90 Position, Mating Alignment, Keyed Mating Alignment Type, 9 Row, 10 Column, PCB Mount Receptacle, IMPACT, High Speed Backplane Connectors

[View on TE.com >](#)

Connectors > PCB Connectors > Backplane Connectors > High Speed Backplane Connectors



Number of Positions: **90**

Row-to-Row Spacing: **1.35 mm [ .053 in ]**

Mating Alignment: **With**

Mating Alignment Type: **Keyed**

Number of Rows: **9**

### Features

#### Product Type Features

|                                   |                       |
|-----------------------------------|-----------------------|
| Signal Arrangement                | Differential          |
| Connector System                  | Board-to-Board        |
| Connector & Contact Terminates To | Printed Circuit Board |
| PCB Connector Assembly Type       | PCB Mount Receptacle  |
| Shroud Style                      | Unshrouded            |

#### Configuration Features

|                            |             |
|----------------------------|-------------|
| Number of Ground Positions | 30          |
| Number of Pairs            | 30          |
| Stackable                  | No          |
| Number of Signal Positions | 60          |
| Number of Positions        | 90          |
| Number of Rows             | 9           |
| Number of Columns          | 10          |
| PCB Mount Orientation      | Right Angle |
| Guide Location             | Left        |

#### Electrical Characteristics

|                   |              |
|-------------------|--------------|
| Impedance         | 100 $\Omega$ |
| Operating Voltage | 30 VAC       |



### Signal Characteristics

|   |              |
|---|--------------|
| Number of Differential Pairs per Column | 3            |
| Data Rate                               | 20 – 25 Gb/s |

### Body Features

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

### Contact Features

|   |                           |
|---|---------------------------|
| PCB Contact Termination Area Plating Material Thickness | 1.27 $\mu$ m[50 $\mu$ in] |
| Contact Layout  | Inline                    |
| Contact Type  | Socket                    |
| Contact Underplating Material Thickness                 | 1.27 $\mu$ m[50 $\mu$ in] |
| Contact Mating Area Plating Material Thickness          | .762 $\mu$ m[30 $\mu$ in] |
| Contact Mating Area Plating Material                    | Gold                      |
| Contact Shape & Form                                    | Dual Beam                 |
| Contact Underplating Material                           | Nickel                    |
| PCB Contact Termination Area Plating Material           | Tin                       |
| Contact Base Material                                   | Copper Alloy              |
| Contact Current Rating (Max)                            | .75 A                     |

### Termination Features

|                                |                          |
|--------------------------------|--------------------------|
| Termination Post & Tail Length | 1.2 mm[.047 in]          |
| Termination Method to PCB      | Through Hole - Press-Fit |

### Mechanical Attachment

|                          |                               |
|--------------------------|-------------------------------|
| PCB Mount Alignment Type | Locating Posts                |
| Guide Hardware           | With                          |
| Mating Retention         | Without                       |
| PCB Mount Retention      | With                          |
| PCB Mount Retention Type | Action/Compliant Tail & Screw |
| Mating Alignment         | With                          |
| Mating Alignment Type    | Keyed                         |
| Connector Mounting Type  | Board Mount                   |

### Housing Features

|                          |                                   |
|--------------------------|-----------------------------------|
| Number of Shrouded Sides | 0                                 |
| Housing Material         | LCP - GF (Liquid Crystal Polymer) |



|                    |                 |
|--------------------|-----------------|
| Centerline (Pitch) | 1.9 mm[.075 in] |
|--------------------|-----------------|

### Dimensions

|                  |                   |
|------------------|-------------------|
| Connector Length | 26.6 mm[1.047 in] |
|------------------|-------------------|

|                  |                  |
|------------------|------------------|
| Connector Height | 13.3 mm[.524 in] |
|------------------|------------------|

|                 |                  |
|-----------------|------------------|
| Connector Width | 24.2 mm[.953 in] |
|-----------------|------------------|

|                             |      |
|-----------------------------|------|
| PCB Thickness (Recommended) | 1 mm |
|-----------------------------|------|

|                   |                 |
|-------------------|-----------------|
| PCB Hole Diameter | .39 mm[.015 in] |
|-------------------|-----------------|

|                    |                  |
|--------------------|------------------|
| Row-to-Row Spacing | 1.35 mm[.053 in] |
|--------------------|------------------|

### Usage Conditions

|                             |                           |
|-----------------------------|---------------------------|
| Operating Temperature Range | -55 – 85 °C[-67 – 185 °F] |
|-----------------------------|---------------------------|

### Operation/Application

|                     |        |
|---------------------|--------|
| Circuit Application | Signal |
|---------------------|--------|

### Industry Standards

|   |           |
|---|-----------|
| Compatible With Approved Standards Products | UL E28476 |
|---|-----------|

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

### Packaging Features

|                  |                  |
|------------------|------------------|
| Packaging Method | Box & Tube, Tube |
|------------------|------------------|

## 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)<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 | Not applicable for solder process capability |
|---------------------------|--|

Product Compliance Disclaimer

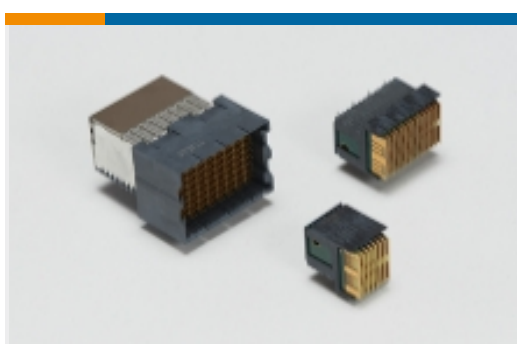
This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight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



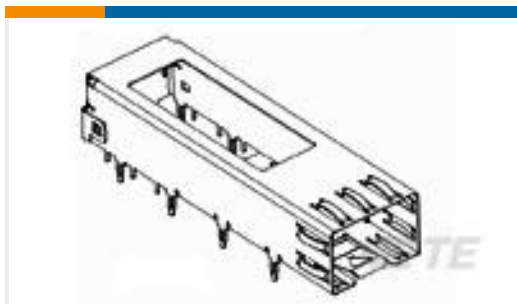
TE Part # 1-2007776-1  
IMP100S,H,V3P10C,LG,OEW46,4.5

## Also in the Series | IMPACT



High Speed Backplane Connectors  
(1318)

## Customers Also Bought



TE Part #2227316-1  
DWDM Cage Assembly, 11 PF



TE Part #1-440054-0  
AMP HPI 2.0 mm Headers



TE Part #2176050-7  
RLP73M 1E R091 5% 5K RL



TE Part #1871059-1  
SHIELD FINGER 1715 ON TAPE (EM)



## Documents

### CAD Files

[3D PDF](#)

3D

Customer View Model

[ENG\\_CVM\\_CVM\\_1-2007703-1\\_C.2d\\_dxf.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-2007703-1\\_C.3d\\_igs.zip](#)

English

Customer View Model

[ENG\\_CVM\\_CVM\\_1-2007703-1\\_C.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

### Agency Approvals

[Agency Approval Document](#)

English