



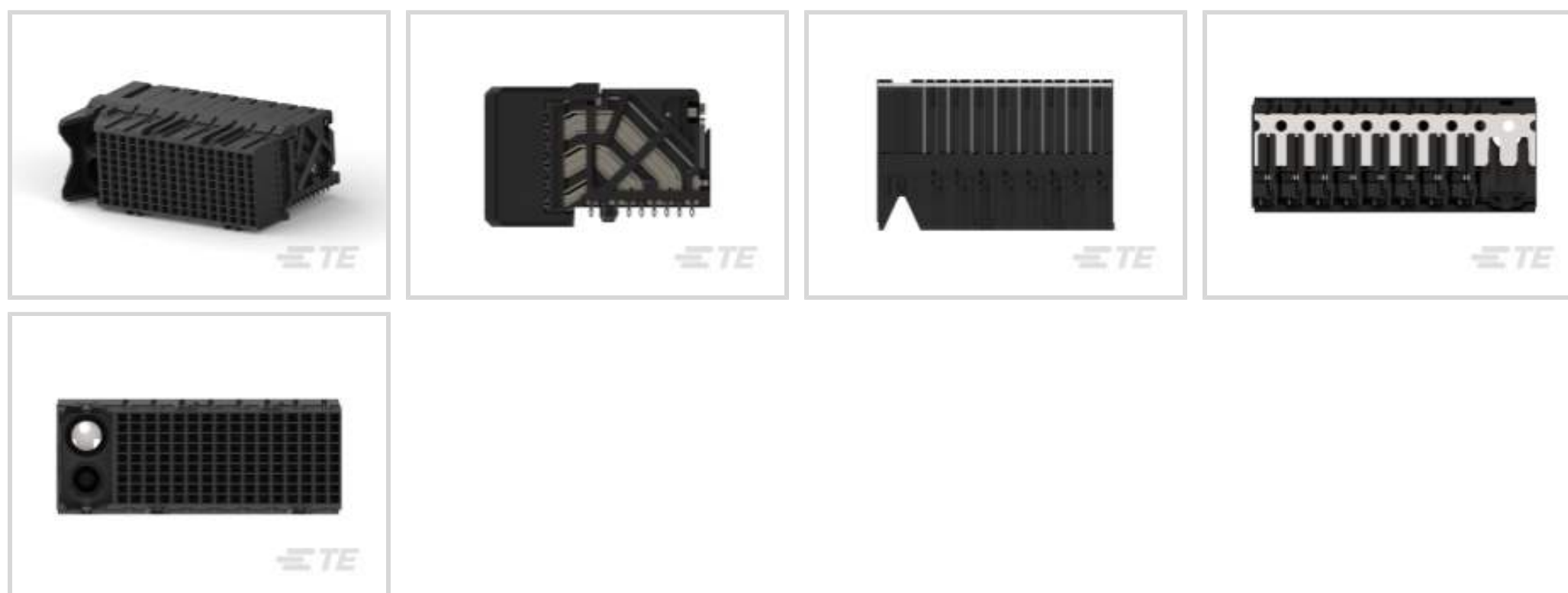
IMPACT

TE Internal #: 2007709-1

High Speed Backplane Connectors, 144 Position, Mating Alignment, Keyed Mating Alignment Type, 9 Row, 16 Column, PCB Mount Receptacle, IMPACT

[View on TE.com >](#)

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



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

Number of Positions: **144**

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

Mating Alignment: **With**

Mating Alignment Type: **Keyed**

Features

Product Type Features

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

Configuration Features

| | |
|----------------------------|-------------|
| Number of Ground Positions | 48 |
| Number of Pairs | 48 |
| Stackable | No |
| Number of Signal Positions | 96 |
| Number of Positions | 144 |
| Number of Rows | 9 |
| Number of Columns | 16 |
| PCB Mount Orientation | Right Angle |



| | |
|----------------|------|
| Guide Location | Left |
|----------------|------|

Electrical Characteristics

| | |
|-------------------|--------------|
| Impedance | 100 Ω |
| 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 μm [50 μin] |
| Contact Layout | Inline |
| Contact Type | Socket |
| Contact Underplating Material Thickness | 1.27 μm [50 μin] |
| Contact Mating Area Plating Material Thickness | .762 μm [30 μin] |
| 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 Printed Circuit Board | 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

38 mm[1.496 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

Approved Standards

CSA Certified, 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](https://www.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 2023 (235)
 Candidate List Declared Against: JAN 2023 (233)
 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

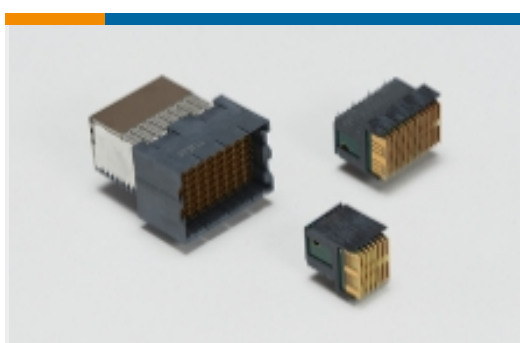


TE Part # 2007804-2
IMP100S,H,V3P16C,UG,OEW39,4,9



TE Part # 2018381-1
TOOL, SEAT 3 PR 16 COL, BP CONN

Also in the Series | IMPACT



High Speed Backplane Connectors
(1768)

Customers Also Bought

Documents

Product Drawings
IMP100S,R,RA3P16C,LG,39

English

CAD Files
Customer View Model



[ENG_CVM_CVM_2007709-1_D.2d_dxf.zip](#)

English

[3D PDF](#)

3D

Customer View Model

[ENG_CVM_CVM_2007709-1_D.3d_igs.zip](#)

English

Customer View Model

[ENG_CVM_CVM_2007709-1_D.3d_stp.zip](#)

English

By downloading the CAD file I accept and agree to the [Terms and Conditions](#) of use.

Datasheets & Catalog Pages

[7-1773458-1_IMPACT_BACKPLANE_CONNECTOR_SYSTEM_CATALOG](#)

English

Product Specifications

[Application Specification](#)

English

Product Environmental Compliance

[Product Compliance](#)

English

[Product Compliance](#)

English

Agency Approvals

[Agency Approval Document](#)

English