# Detailed Specifications & Technical Data

**METRIC MEASUREMENT VERSION**

**BELDEN**
SENDING ALL THE RIGHT SIGNALS

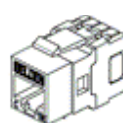## AX101307  Modular Connectors - CAT5E Modular Jack - KeyConnect

For more Information
please call

**1-800-Belden1**

RoHS COMPLIANT
ENVIRONMENTALLY FRIENDLY

## General Description:

CAT5E Modular Jack, RJ45, KeyConnect style, Gray

## Usage (Overall)

| | |
|---|---|
| **Suitable Applications:** | IBDN System 1200, TIA Category 5E, ISO Class D, 1000 BASE-T |
| **Related Parts:** | Compatible with KeyConnect Faceplates, Adapters, Boxes and Patch Panels |

## Physical Characteristics (Connectivity)

### Dimensions
**Dimensions:**

| Height (mm) | Width (mm) | Depth (mm) |
|---|---|---|
| 22.352 | 16.256 | 32.766 |

### Materials
**Materials:**

| Description | Type | Material |
|---|---|---|
| Front Connection | Lead Frame | Copper Allow with 50u inch Gold over Nickel |
| Rear Connection | IDC | Copper Allow with Nickel Plating |
| Connector Body | | Plastic - UL940V-0 |

### Color

| | |
|---|---|
| **Color:** | Gray |

### Wiring Scheme

| | |
|---|---|
| **Wiring Scheme:** | T568A/B |

### Weight

| | |
|---|---|
| **Weight:** | 0.006 kg |

### Included Parts

| | |
|---|---|
| **Included Parts:** | 1 T-Bar |

### Packaging

| | |
|---|---|
| **Packaging:** | Individually packaged in a plastic bag. Standard pack of 50 units. |

## Mechanical Characteristics (Connectivity)

| | |
|---|---|
| **Footprint/Type:** | KeyConnect |
| **Plug / Jack Compatibility:** | RJ45, RJ11 |

**Termination Interface:**

| Termination | Connection | Durabilities |
|---|---|---|
| Front | Mated Connection | 1,000 cycles |
| Rear | Gas Tight IDC Connection | 20 terminations |

| | |
|---|---|
| **Connector/Hardware Retention:** | 88.964 N |
| **Plug/Connector Retention:** | 50.042 N |
| **Storage Temperature Range:** | -40°C To +70°C |
| **Installation Temperature Range:** | -10°C To +60°C |
| **Operating Temperature Range:** | -10°C To +60°C |

03-24-2020

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| | |
|---|---|
| **Tool Compatibility:** | Belden 110 Connecting Tool, MediaFlex Termination Station |

## Applicable Specifications and Agency Compliance (Overall)

### Applicable Standards & Environmental Programs

| | |
|---|---|
| **Other Standards:** | FCC Part 68, Subpart F, IEC 60603-7 |
| **EU Directive 2002/95/EC (RoHS):** | Yes |
| **EU RoHS Compliance Date (mm/dd/yyyy):** | 07/01/2006 |
| **MII Order #39 (China RoHS):** | EUP 50 |
| **Telecommunications Standards:** | Category 5 - ISO/IEC 11801:2002 Ed.2 |
| **Third Party Performance Verification:** | ETL - Verified Category 5e |
| **Safety Listing:** | ACA, Bi-national Standard Listed |

### Suitability

| | |
|---|---|
| **Suitability - Indoor:** | Yes - Indoor |

## Transmission Characteristics (Connectivity)

Mated Connection Table 1:

| Frequency (MHz) | Max. Insertion Loss TIA* (dB) | Max. Insertion Loss Belden** (dB) | Min. NEXT TIA* (dB) | Min. NEXT Belden** (dB) | Min. FEXT TIA* (dB) | Min. FEXT Belden** (dB) |
|---|---|---|---|---|---|---|
| 1.000 | 0.100 | 0.100 | 65.000 | 77.000 | 65.000 | 77.000 |
| 4.000 | 0.100 | 0.100 | 65.000 | 73.800 | 63.100 | 74.800 |
| 8.000 | 0.100 | 0.100 | 64.900 | 67.700 | 57.000 | 68.700 |
| 10.000 | 0.100 | 0.100 | 63.000 | 65.800 | 55.100 | 66.800 |
| 16.000 | 0.100 | 0.100 | 58.900 | 61.700 | 51.000 | 62.700 |
| 20.000 | 0.100 | 0.100 | 57.000 | 59.800 | 49.100 | 60.800 |
| 25.000 | 0.100 | 0.100 | 55.000 | 57.800 | 47.100 | 58.800 |
| 31.250 | 0.110 | 0.100 | 53.100 | 55.900 | 45.200 | 56.900 |
| 62.500 | 0.160 | 0.120 | 47.100 | 49.900 | 39.200 | 50.900 |
| 100.000 | 0.200 | 0.160 | 43.000 | 45.800 | 35.100 | 46.800 |
| 160.000 | | 0.210 | | 41.700 | | 42.700 |

| | |
|---|---|
| **Mated Connection Table - Footnote:** | * TIA/EIA-568-C.2 Category 5e Standard.<br>** Worst-case performance for a CAT5e mated connection using CAT5e modular plugs. |

Mated Connection Table 2:

| Frequency (MHz) | Min. Return Loss TIA* (dB) | Min. Return Loss Belden** (dB) | Min. Balanced TCL Belden** (dB) |
|---|---|---|---|
| 1.000 | 30.000 | 32.000 | 42.000 |
| 4.000 | 30.000 | 32.000 | 42.000 |
| 8.000 | 30.000 | 32.000 | 42.000 |
| 10.000 | 30.000 | 32.000 | 42.000 |
| 16.000 | 30.000 | 32.000 | 42.000 |
| 20.000 | 30.000 | 32.000 | 42.000 |
| 25.000 | 30.000 | 32.000 | 42.000 |
| 31.250 | 30.000 | 32.000 | 42.000 |
| 62.500 | 24.100 | 31.100 | 36.100 |
| 100.000 | 20.000 | 27.000 | 32.000 |
| 160.000 | | 22.900 | 27.900 |

| | |
|---|---|
| **Dielectric Strength:** | 1,000 V RMS @ 60 Hz for 1 minute |
| **Current Rating:** | 1.500 A |
| **Insulation Resistance:** | 500 M-Ohm Minimum |
| **Max. Contact Resistance:** | 20 m-Ohm |
| **Termination Resistance:** | 2.5 m-Ohm |

## Notes (Overall)

**Notes:** Please see Installation Guide PX103329

**Notes (Cont'd.):**                                                                 IDC Wire Gauge: 22~24 AWG

## Product Family
### Part Number List:

| Item Number | Color |
|---|---|
| AX101307 | Gray |
| AX101308 | Almond |
| AX101309 | Elec. White |
| AX101310 | Black |
| AX101311 | Orange (TIA 606) |
| AX101312 | Red (TIA 606) |
| AX101313 | Yellow (TIA 606) |
| AX101314 | Green (TIA 606) |
| AX101315 | Blue (TIA 606) |
| AX101316 | Purple (TIA 606) |
| AX101317 | Brown (TIA 606) |
| AX103079 | Ivory |
| AX104182 | Orange |
| AX104183 | Red |
| AX104184 | Yellow |
| AX104185 | Green |
| AX104186 | Blue |
| AX104187 | Purple |

## Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|---|---|---|---|---|---|
| AX101307 | 1 EA | 0.024 LB | | | CAT5E JACK KCONN GREY |

Revision Number: 1     Revision Date: 05-31-2016

# Mouser Electronics

Authorized Distributor

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