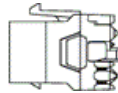


## AX104152 Modular Connectors - 10GX Modular Jack -KeyConnect



For more Information  
please call

1-800-Belden1



### General Description:

10GX Modular Jack, Category 6A, RJ45, KeyConnect, Orange

### Usage (Overall)

|                               |   |
|-------------------------------|---|
| <b>Suitable Applications:</b> | IBDN System 10GX, TIA Category 6A, ISO Class EA, 10GBASE-T              |
| <b>Related Parts:</b>         | Compatible with KeyConnect Faceplates, Adapters, Boxes and Patch Panels |

### Physical Characteristics (Connectivity)

#### Dimensions

Dimensions:

| Height (in.) | Width (in.) | Depth (in.) |
|--------------|-------------|-------------|
| 0.900        | 0.675       | 1.170       |

#### Materials

Materials:

| Description      | Type         | Material                                     |
|------------------|--------------|--|
| Front Connection | Flexible PCB | Flexible PCB with 50u inch Gold over Nickel  |
| Rear Connection  | IDC          | Phosphor Bronze with Tin Plating over Nickel |
| Connector Body   | N/A          | Plastic - UL94V-0                            |

#### Color

Color: Orange

#### Wiring Scheme

Wiring Scheme: T568A/B

#### Weight

Weight: 0.016 lbs.

#### Included Parts

Included Parts: 1 X-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 | 750 cycles      |
| Rear        | IDC Connection   | 20 terminations |

Cable/Connector Retention: 15 lbs.

Connector/Hardware Retention: 20 lbs.

Plug/Connector Retention: 11.250 lbs.

Storage Temperature Range: -40°C To +70°C

Installation Temperature Range: -10°C To +60°C

Operating Temperature Range: -10°C To +60°C

Tool Compatibility: Belden 110 Connecting Tool

### 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

## AX104152 Modular Connectors - 10GX Modular Jack -KeyConnect

|  |  |
|--|--|
| <b>Mill Order #39 (China RoHS):</b>          | EUP 50   |
| <b>Telecommunications Standards:</b>         | Category 6A - TIA 568.B.2-10, ISO/IEC 11801:2002 Amendment 2 |
| <b>Third Party Performance Verification:</b> | ETL - Verified Category 6A                                   |
| <b>Safety Listing:</b>                       | ACA, Bi-national Standard Listed                             |

### Suitability

|                              |              |
|------------------------------|--------------|
| <b>Suitability - Indoor:</b> | 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                         | 0.050                             | 75.000              | 77.000                  | 75.000              | 80.000                  |
| 4.000           | 0.100                         | 0.050                             | 75.000              | 77.000                  | 71.100              | 75.100                  |
| 8.000           | 0.100                         | 0.050                             | 75.000              | 77.000                  | 65.000              | 69.000                  |
| 10.000          | 0.100                         | 0.050                             | 74.000              | 77.000                  | 63.100              | 67.100                  |
| 16.000          | 0.100                         | 0.060                             | 69.900              | 72.900                  | 59.000              | 63.000                  |
| 20.000          | 0.100                         | 0.070                             | 68.000              | 71.000                  | 57.100              | 61.100                  |
| 25.000          | 0.100                         | 0.080                             | 66.000              | 69.000                  | 55.100              | 59.100                  |
| 31.250          | 0.110                         | 0.090                             | 64.100              | 67.100                  | 53.200              | 57.200                  |
| 62.500          | 0.160                         | 0.140                             | 58.100              | 61.100                  | 47.200              | 51.200                  |
| 100.000         | 0.200                         | 0.180                             | 54.000              | 57.000                  | 43.100              | 47.100                  |
| 200.000         | 0.280                         | 0.260                             | 48.000              | 51.000                  | 37.100              | 41.100                  |
| 250.000         | 0.320                         | 0.300                             | 46.000              | 49.000                  | 35.100              | 39.100                  |
| 300.000         | 0.350                         | 0.330                             | 42.900              | 46.700                  | 33.600              | 37.600                  |
| 400.000         | 0.400                         | 0.380                             | 37.900              | 42.900                  | 31.100              | 35.100                  |
| 500.000         | 0.450                         | 0.430                             | 34.000              | 40.000                  | 29.100              | 33.100                  |
| 625.000         |                               | 0.480                             |                     | 37.100                  |                     | 31.200                  |

Mated Connection Table - Footnote:

\* TIA/EIA-568-B.2-10-2008 Category 6A Standard.

\*\* Worst-case performance for a 10GX mated connection using 10GX modular plugs.

Mated Connection Table 2:

| Frequency (MHz) | Min. Return Loss TIA* (dB) | Min. Return Loss Belden** (dB) | Min. PSANEXT TIA* (dB) | Min. PSANEXT Belden** (dB) | Min. PSAACRF TIA* (dB) | Min. PSAACRF Belden** (dB) | Min. Balanced TCL TIA* (dB) | Min. Balanced TCL Belden** (dB) |
|-----------------|----------------------------|--------------------------------|------------------------|----------------------------|------------------------|----------------------------|-----------------------------|---------------------------------|
| 1.000           | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 4.000           | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 8.000           | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 10.000          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 16.000          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 20.000          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 25.000          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 40.000                      | 45.000                          |
| 31.250          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 38.100                      | 45.000                          |
| 62.500          | 30.000                     | 34.100                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 32.100                      | 39.100                          |
| 100.000         | 28.000                     | 30.000                         | 70.500                 | 72.000                     | 67.000                 | 72.000                     | 28.000                      | 35.000                          |
| 200.000         | 22.000                     | 24.000                         | 64.500                 | 66.000                     | 61.000                 | 66.000                     | 22.000                      | 29.000                          |
| 250.000         | 20.000                     | 22.000                         | 62.500                 | 64.000                     | 59.000                 | 64.000                     | 20.000                      | 27.000                          |
| 300.000         | 18.500                     | 20.500                         | 61.000                 | 62.500                     | 57.500                 | 62.500                     | 18.500                      | 25.500                          |
| 400.000         | 16.000                     | 18.000                         | 58.500                 | 60.000                     | 55.000                 | 60.000                     | 16.000                      | 23.000                          |
| 500.000         | 14.000                     | 16.000                         | 56.500                 | 58.000                     | 53.000                 | 58.000                     | 14.000                      | 21.000                          |
| 625.000         |                            | 13.000                         |                        | 56.100                     |                        | 56.100                     |                             | 19.100                          |

**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 PX103771

### Product Family

Part Number List:

| Item Number | Color  |
|-------------|--------|
| AX102280    | Gray   |
| AX102281    | Almond |

## AX104152 Modular Connectors - 10GX Modular Jack -KeyConnect

|          |                  |
|----------|------------------|
| AX102282 | Elec. White      |
| AX102283 | Black            |
| AX102284 | Orange (TIA 606) |
| AX102285 | Red (TIA 606)    |
| AX102286 | Yellow (TIA 606) |
| AX102287 | Green (TIA 606)  |
| AX102288 | Blue (TIA 606)   |
| AX102289 | Purple (TIA 606) |
| AX103073 | Ivory            |
| AX104152 | Orange           |
| AX104153 | Red              |
| AX104154 | Yellow           |
| AX104155 | Green            |
| AX104156 | Blue             |
| AX104157 | Purple           |

### Put Ups and Colors:

| Item #   | Putup | Ship Weight | Color | Notes | Item Desc                     |
|----------|-------|-------------|-------|-------|-------------------------------|
| AX104152 | 1 EA  | 0.024 KG    |       |       | 10GX JACK KCONN ORANGE (DARK) |

Revision Number: 0    Revision Date: 03-01-2010

© 2017 Belden, Inc  
All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described herein are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability. Belden provides the information and specifications herein on an "AS IS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein. All sales of Belden products are subject to Belden's standard terms and conditions of sale. Belden believes this product to be in compliance with EU RoHS (Directive 2002/95/EC, 27-Jan-2003). Material manufactured prior to the compliance date may be in stock at Belden facilities and in our Distributor's inventory. The information provided in this Product Disclosure, and the identification of materials listed as reportable or restricted within the Product Disclosure, is correct to the best of Belden's knowledge, information, and belief at the date of its publication. The information provided in this Product Disclosure is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. This Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.