# **Detailed Specifications & Technical Data**



## ENGLISH MEASUREMENT VERSION

# AX101051 Modular Connectors - CAT5E Modular Jack - MDVO style







For more Information please call

1-800-Belden1



# **Description:**

CAT5E Modular Jack, RJ45, MDVO style, Green (TIA 606)

## **Usage (Overall)**

Suitable Applications:

**Related Parts:** 

IBDN System 1200, TIA Category 5E, ISO Class D, 1000 BASE-T Compatible with Interface and MDVO Style Faceplates, Adapters, Boxes and Patch Panels

# **Physical Characteristics (Connectivity)**

# **Dimensions**

**Dimensions:** 

Height (in.) Width (in.) Depth (in.) 1.290

Installation Temperature Range:

0.765 0.770

## **Materials**

|       | aterials:                     |               |                            |  |  |  |
|-------|-------------------------------|---------------|----------------------------|--|--|--|
|       | Description                   | Туре          | Material                   |  |  |  |
|       | Front Connection              | Lead Frame    | Copper Allow with 50u inc  | h Gold over Nickel   |  |  |
|       | Rear Connection               | IDC           | Copper Allow with Nickel F | Plating  |  |  |
|       | Connector Boby                |               | Plastic - UL940V-0         |  |  |  |
| Colo  | or                            |               |                            |  |  |  |
| (     | Color:                        |               |                            | Green (TIA 606)  |  |  |
| Wiri  | ng Scheme                     |               |                            |  |  |  |
|       | Wiring Scheme                 | :             |                            | T568A/B  |  |  |
| Wei   | ght                           |               |                            |  |  |  |
| 1     | Weight:                       |               |                            | 0.014 lbs.   |  |  |
| Inclu | uded Parts                    |               |                            |  |  |  |
| I     | Included Parts:               |               |                            | 1 T-Bar + 1 Dust Cap   |  |  |
| Pac   | kaging                        |               |                            |  |  |  |
| I     | Packaging:                    |               |                            | Individually packaged in a plastic bag. Standard pack of 50 units. |  |  |
| Mecl  | hanical Chai                  | acteristic    | s (Connectivity)           |  |  |  |
| I     | Footprint/Type:               |               |                            | MDVO-Style   |  |  |
| Ī     | Plug / Jack Con               | npatibility:  |                            | RJ45, RJ11   |  |  |
| Term  | nination Interfac             | ce:           |                            |  |  |  |
| Te    | ermination Conne              |               | Durabilities               |  |  |  |
| Fr    |                               | Connection    | 1,000 cycles               |  |  |  |
| Re    | ear Gas Ti                    | ght IDC Conne | ection 10 terminations     |  |  |  |
| (     | Connector/Hardware Retention: |               | tion:                      | 20 lbs.  |  |  |
|       | Plug/Connector                | Retention:    |                            | 11.250 lbs.  |  |  |
|       | Storage Tempe                 | rature Rang   | e:                         | -40°C To +70°C   |  |  |

-10°C To +60°C

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| Operating Temperature Range:                             | -10°C To +60°C<br>Belden 110 Connecting Tool, MediaFlex Termination Station |  |  |  |
|--|---|--|--|--|
| Tool Compatibility:                                      |   |  |  |  |
| pplicable Specifications and Agency Compliance (Overall) |   |  |  |  |
| Applicable Standards & Environmental Prog                | rams  |  |  |  |
| 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 5e - TIA 568.B.2, Category 5 - ISO/IEC 11801:2002 Ed.2             |  |  |  |
| Third Party Performance Verification:                    | ETL - Verified Category 5e  |  |  |  |
| Safety Listing:  | ACA, Bi-national (UL/CSA) Standard Listed                                   |  |  |  |
| Suitability  |   |  |  |  |
| Suitability - Indoor:                                    | Yes - Indoor  |  |  |  |

# **Transmission Characteristics (Connectivity)**

## Mated Connection Table 1:

| Frequency<br>(MHz) | Max.<br>Insertion Loss<br>TIA* (dB) | Max.<br>Insertion Loss<br>Belden** (dB) | Min.<br>NEXT<br>TIA* (dB) | Min.<br>NEXT<br>Belden** (dB) | Min.<br>FEXT<br>TIA* (dB) | Min.<br>FEXT<br>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             | 100.000                             | 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-B.2 Category 5E Standard. \*\* Worst-case performance for a CAT5E mated connection using CAT5E

modular plugs.

## Mated Connection Table 2:

| Frequency<br>(MHz) | Min.<br>Return Loss<br>TIA* (dB) | Min.<br>Return Loss<br>Belden** (dB) | Min.<br>Balanced TCL<br>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:   | 50 M-Ohm Minimum                 |  |  |
| Max. Contact Resistance: | 20 m-Ohm                         |  |  |
| Termination Resistance:  | 2.5 m-Ohm                        |  |  |

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### Notes (Overall)

Notes: Please see Installation Guide PX103329

# **Product Family**

### Part Number List:

| Item Number | Color            |
|-------------|------------------|
| AX101044    | Gray             |
| AX101045    | Almond           |
| AX101046    | White            |
| AX101047    | Black            |
| AX101048    | Orange (TIA 606) |
| AX101049    | Red (TIA 606)    |
| AX101050    | Yellow (TIA 606) |
| AX101051    | Green (TIA 606)  |
| AX101052    | Blue (TIA 606)   |
| AX101053    | Purple (TIA 606) |

### **Related Documents:**

No related documents are available for this product

### Put Ups and Colors:

|      | ltem #   | Putup | Ship Weight | Color | Notes | Item Desc                    |
|------|----------|-------|-------------|-------|-------|------------------------------|
| - [- | AX101051 | 1 EA  | 0.024 LB    |       |       | CAT5E JACK MDVO GREEN TIA606 |

Revision Number: 1 Revision Date: 08-11-2010

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