

## AX100648 Modular Connectors - CAT5E EZ-MDVO Modular Jack - MDVO style



For more Information  
please call

1-800-Belden1



### General Description:

CAT5E EZ-MDVO Modular Jack, RJ45, MDVO-style, Black

### Usage (Overall)

|                               |  |
|-------------------------------|--|
| <b>Suitable Applications:</b> | IBDN System 1200, TIA Category 5e, ISO Class D, 1000BASE-T                             |
| <b>Related Parts:</b>         | Compatible with Interface and MDVO Style Faceplates, Adapters, Boxes and Patch Panels, |

### Physical Characteristics (Connectivity)

#### Dimensions

Dimensions:

| Height (in.) | Width (in.) | Depth (in.) |
|--------------|-------------|-------------|
| 0.710        | 0.750       | 1.250       |

#### 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: Black

#### Wiring Scheme

Wiring Scheme: T568A/B

#### Weight

Weight: 0.013 lbs.

#### Included Parts

Included Parts: Center Stuffercap Coded A/B

#### Packaging

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

### Mechanical Characteristics (Connectivity)

Footprint/Type: MDVO-Style

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: 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

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

|  |   |
|--|---|
| <b>Other Standards:</b>                      | FCC Part 68, Subpart F, IEC 60603-7                             |
| <b>EU Directive 2002/95/EC (RoHS):</b>       | Yes   |
| <b>EU RoHS Compliance Date (mm/dd/yyyy):</b> | 01/01/2006  |
| <b>MII Order #39 (China RoHS):</b>           | EUP 50  |
| <b>Telecommunications Standards:</b>         | Category 5e - TIA 568.B.2, Category 5 - ISO/IEC 11801:2002 Ed.2 |

## AX100648 Modular Connectors - CAT5E EZ-MDVO Modular Jack - MDVO style

**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              | 67.000                  |
| 4.000           | 0.100                         | 0.100                             | 65.000              | 72.300                  | 63.100              | 65.000                  |
| 8.000           | 0.100                         | 0.100                             | 64.900              | 66.200                  | 57.000              | 58.900                  |
| 10.000          | 0.100                         | 0.100                             | 63.000              | 64.300                  | 55.100              | 57.000                  |
| 16.000          | 0.100                         | 0.100                             | 58.900              | 60.200                  | 51.000              | 52.900                  |
| 20.000          | 0.100                         | 0.100                             | 57.000              | 58.300                  | 49.100              | 51.000                  |
| 25.000          | 0.100                         | 0.100                             | 55.000              | 56.300                  | 47.100              | 49.000                  |
| 31.250          | 0.110                         | 0.100                             | 53.100              | 54.400                  | 45.200              | 47.100                  |
| 62.500          | 0.160                         | 0.120                             | 47.100              | 48.400                  | 39.200              | 41.100                  |
| 100.000         | 0.200                         | 0.160                             | 43.000              | 44.300                  | 35.100              | 37.000                  |
| 160.000         |                               | 0.210                             |                     | 40.200                  |                     | 32.900                  |

**Mated Connection Table - Footnote:**

\* TIA/EIA-568-B.2-2001 Category 5E Standard.

\*\* 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) |
|-----------------|----------------------------|--------------------------------|
| 1.000           | 30.000                     | 32.000                         |
| 4.000           | 30.000                     | 32.000                         |
| 8.000           | 30.000                     | 32.000                         |
| 10.000          | 30.000                     | 32.000                         |
| 16.000          | 30.000                     | 32.000                         |
| 20.000          | 30.000                     | 32.000                         |
| 25.000          | 30.000                     | 32.000                         |
| 31.250          | 30.000                     | 32.000                         |
| 62.500          | 24.100                     | 28.100                         |
| 100.000         | 20.000                     | 24.000                         |
| 160.000         |                            | 19.900                         |

**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 PX102753

### Product Family

**Part Number List:**

| Item Number | Color            |
|-------------|------------------|
| AX100645    | Gray             |
| AX100646    | Almond           |
| AX100647    | White            |
| AX100648    | Black            |
| AX100649    | Orange (TIA 606) |
| AX100650    | Red (TIA 606)    |
| AX100651    | Yellow (TIA 606) |
| AX100652    | Green (TIA 606)  |
| AX100653    | Blue (TIA 606)   |
| AX100654    | Purple (TIA 606) |
| AX100655    | Brown (TIA 606)  |

### Put Ups and Colors:

| Item #   | Putup | Ship Weight | Color | Notes | Item Desc                  |
|----------|-------|-------------|-------|-------|----------------------------|
| AX100648 | 1 EA  | 0.024 LB    |       |       | EZ-MDVO UTP MODULE, CAT5E, |

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