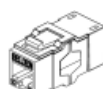


## AX104214 Modular Connectors - CAT6+ KeyConnect RJ45 Coupler



For more Information  
please call

1-800-Belden1



### General Description:

CAT6+ RJ45 Coupler, KeyConnect, Elec. White

### Usage (Overall)

|                        |                                   |
|------------------------|-----------------------------------|
| Suitable Applications: | IBDN System CAT6+, TIA Category 6 |
| Related Parts:         | CAT6+ Coupler Patch Panels        |

### Multi Conductor

#### Physical Characteristics

##### Overall Cabling

##### Overall Diameter

### Physical Characteristics (Connectivity)

#### Dimensions

Dimensions:

| Height (mm) | Width (mm) | Depth (mm) |
|-------------|------------|------------|
| 22.733      | 17.577     | 38.659     |

#### Materials

Materials:

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

#### Color

|        |             |
|--------|-------------|
| Color: | Elec. White |
|--------|-------------|

#### Wiring Scheme

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

#### Weight

|         |          |
|---------|----------|
| Weight: | 0.172 kg |
|---------|----------|

#### Packaging

|            |                                               |
|------------|-----------------------------------------------|
| Packaging: | Individually packaged in a clear plastic bag. |
|------------|-----------------------------------------------|

### Mechanical Characteristics (Connectivity)

|                            |            |
|----------------------------|------------|
| Footprint/Type:            | KeyConnect |
| Plug / Jack Compatibility: | RJ45       |

#### Termination Interface:

| Termination | Connection       | Durabilities |
|-------------|------------------|--------------|
| Front       | Mated Connection | 750 cycles   |
| Rear        | Mated Connection | 750 cycles   |

|                                 |                |
|---------------------------------|----------------|
| Connector/Hardware Retention:   | 88.964 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 |

### 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): | 08/01/2009                          |
| MIL Order #39 (China RoHS):           | EUP 50                              |

## METRIC MEASUREMENT VERSION

## AX104214 Modular Connectors - CAT6+ KeyConnect RJ45 Coupler

Telecommunications Standards:

Category 6 - TIA 568-C.2, ISO/IEC 11801:2002 Ed.2

Safety Listing:

Bi-national Standard Listed

## Suitability

Suitability - Indoor:

Yes

## Plenum/Non-Plenum

## 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                             | 75.000              | 75.000                  | 75.000              | 77.000                  |
| 4.000           | 0.100                         | 0.100                             | 75.000              | 75.000                  | 71.100              | 75.100                  |
| 8.000           | 0.100                         | 0.100                             | 75.000              | 75.000                  | 65.000              | 69.000                  |
| 10.000          | 0.100                         | 0.100                             | 74.000              | 74.000                  | 63.100              | 67.100                  |
| 16.000          | 0.100                         | 0.100                             | 69.900              | 69.900                  | 59.000              | 63.000                  |
| 20.000          | 0.100                         | 0.100                             | 68.000              | 68.000                  | 57.100              | 61.100                  |
| 25.000          | 0.100                         | 0.100                             | 66.000              | 66.000                  | 55.100              | 59.100                  |
| 31.250          | 0.110                         | 0.110                             | 64.100              | 64.100                  | 53.200              | 57.200                  |
| 62.500          | 0.160                         | 0.160                             | 58.100              | 58.100                  | 47.200              | 51.200                  |
| 100.000         | 0.200                         | 0.200                             | 54.000              | 54.000                  | 43.100              | 47.100                  |
| 200.000         | 0.280                         | 0.280                             | 48.000              | 48.000                  | 37.100              | 41.100                  |
| 250.000         | 0.320                         | 0.320                             | 46.000              | 46.000                  | 35.100              | 39.100                  |
| 280.000         |                               | 0.330                             |                     | 44.100                  |                     | 38.200                  |
| 300.000         |                               | 0.350                             |                     | 42.900                  |                     | 37.600                  |

Mated Connection Table - Footnote:

\* TIA/EIA-568-C.2 Category 6 Standard. \*\* Worst-case performance for a CAT6+ mated connection using CAT6+ modular plugs on both sides

Mated Connection Table 2:

| Frequency (MHz) | Min. Return Loss TIA* (dB) | Min. Return Loss Belden** (dB) | Min. Balanced TCL/TCTL TIA* (dB) | Min. Balanced TCL/TCTL Belden** (dB) |
|-----------------|----------------------------|--------------------------------|----------------------------------|--------------------------------------|
| 1.000           | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 4.000           | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 8.000           | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 10.000          | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 16.000          | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 20.000          | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 25.000          | 30.000                     | 32.000                         | 40.000                           | 42.000                               |
| 31.250          | 30.000                     | 32.000                         | 38.100                           | 42.000                               |
| 62.500          | 28.100                     | 32.000                         | 32.100                           | 36.100                               |
| 100.000         | 24.000                     | 28.000                         | 28.000                           | 32.000                               |
| 200.000         | 18.000                     | 22.000                         | 22.000                           | 26.000                               |
| 250.000         | 16.000                     | 20.000                         | 20.000                           | 24.000                               |
| 280.000         |                            | 19.100                         |                                  | 23.100                               |
| 300.000         |                            | 18.500                         |                                  | 22.500                               |

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

## Notes (Overall)

## Product Family

Part Number List:

| Item Number | Color  |
|-------------|--------|
| AX104206    | Orange |
| AX104207    | Red    |
| AX104208    | Yellow |
| AX104209    | Green  |
| AX104210    | Blue   |
| AX104213    | Gray   |
| AX104214    | White  |
| AX104215    | Black  |

## Put Ups and Colors:

| Item # | Putup | Ship Weight | Color | Notes | Item Desc |
|--------|-------|-------------|-------|-------|-----------|
|--------|-------|-------------|-------|-------|-----------|



METRIC MEASUREMENT VERSION

AX104214 Modular Connectors - CAT6+ KeyConnect RJ45 Coupler

|          |      |          |  |  |                             |
|----------|------|----------|--|--|-----------------------------|
| AX104214 | 1 EA | 0.033 LB |  |  | CAT6+ KCONN RJ45 COUPLER,WH |
|----------|------|----------|--|--|-----------------------------|

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