

## AX104210 Modular Connectors - CAT6+ KeyConnect RJ45 Coupler



For more Information  
please call

1-800-Belden1



### General Description:

CAT6+ RJ45 Coupler, KeyConnect, Blue

### 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 (in.)	Width (in.)	Depth (in.)
0.895	0.692	1.522

#### 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:	Blue
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#### Wiring Scheme

Wiring Scheme:	T568A/B-T568A/B
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#### Weight

Weight:	0.380 lbs.
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#### Packaging

Packaging:	Individually packaged in a clear plastic bag.
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### Mechanical Characteristics (Connectivity)

Footprint/Type:	KeyConnect
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Plug / Jack Compatibility:	RJ45
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#### Termination Interface:

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

Connector/Hardware Retention:	20 lbs.
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Storage Temperature Range:	-40°C To +70°C
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Installation Temperature Range:	-10°C To +60°C
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Operating Temperature Range:	-10°C To +60°C
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### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

Other Standards:	FCC Part 68, Subpart F, IEC 60603-7
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EU Directive 2002/95/EC (RoHS):	Yes
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EU RoHS Compliance Date (mm/dd/yyyy):	08/01/2009
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MII Order #39 (China RoHS):	EUP 50
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## AX104210 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
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## ENGLISH MEASUREMENT VERSION

### AX104210 Modular Connectors - CAT6+ KeyConnect RJ45 Coupler

AX104210	1 EA	0.033 LB		CAT6+ KCONN RJ45 COUPLER,BL
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