

CA21104002 Cable Assemblies - 10GX Modular Cord



For more Information
please call

1-800-Belden1



General Description:

10GX Patch Cord, Bonded-Pair, 4-Pair, 24 AWG Solid, CMR, T568A/B-T568A/B, Yellow, 2 ft. (0.6 m).

Usage (Overall)

Suitable Applications:	IBDN System 10GX, TIA Category 6A, ISO Class EA, 10GBASE-T
Related Parts:	10GX Modular Jacks, 10GX Patch Panels

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material
4	24	Solid	BC - Bare Copper

Insulation

Insulation Material:

Insulation Material
PO - Polyolefin

Inner Jacket

Inner Jacket Material:

Inner Jacket Material
PVC - Polyvinyl Chloride

Outer Shield

Outer Shield Material:

Outer Shield Trade Name	Type	Outer Shield Material
Floating Screen	Foil	AL - Aluminum

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Color Code Chart:

Color
Yellow

Overall Cabling

Overall Cabling Fillers:	Cross Web
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Overall Diameter

Overall Nominal Diameter:	0.285 in.
Individual Cable Diameter:	0.285 in.

Physical Characteristics (Connectivity)

Materials

Materials:

Description	Type	Material
Plug	RJ45	Polycarbonate
Boot		Rubber
Front Connection	Blades	Phosphor Bronze with 50u inch Gold over Nickel Plating

Color

Boot Color:	Translucent
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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.

Mechanical Characteristics (Connectivity)

Plug / Jack Compatibility: RJ45

Termination Interface:

Termination	Connection	Durabilities
RJ45	Mated Connection	750 Cycles

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

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

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

Max. Recommended Pull Tension: 25 lbs.

Min. Bend Radius (Overall Cable): 1.040 in.

Environmental/Mechanical Characteristics:

Test (Method)	TIA 568-C.3	Belden
Thermal Cycling (FOTP-3)	n/a	-40 to 75°C cycling for 7 days
Temperature Life (FOTP-4)	60°C for 4 days	85°C for 7 days
Humidity (FOTP-5)	90-95% at 40°C for 4 days	95% @ 75°C for 7 days
Durability (FOTP-21)	500 cycles	6 x 200 cycles (3 Elevations)
Cable Retention (FOTP-6)	5.0 kg @ 0 deg., 1.94 kg @ 90 deg.	6.8 kg @ 0 deg., 3.4 kg @ 90 deg.
Flex (FOTP-1)	0.5 kg @ 90° to -90° for 100 cycles	0.9 kg @ 90° to -90° for 100 cycles
Twist (FOTP-36)	1.5 kg for 10 cycles	1.5 kg for 10 cycles

Overall Length Tolerances:

Range	Tolerance	Range	Tolerance	Range	Tolerance
Sx & Dx Patchcord	Sx & Dx Patchcord	MPO Trunk	MPO Trunk	Multi-Fiber Cable Assembly	Multi-Fiber Cable Assembly
0 to 2 meters	+0.2 / -0 meter	0 to 2 meters	+0.2 / -0 meter	0 to 2 meters	+0.2 / -0 meter
2.1 to 5.0 meters	+0.3 / -0 meter	2.1 to 5.0 meters	+0.3 / -0 meter	2.1 to 5.0 meters	+0.3 / -0 meter
5.1 to 40 meters	+0.4 / -0 meter	5.1 to 20 meters	+0.4 / -0 meter	5.1 to 20 meters	+0.4 / -0 meter
Over 40.1 meters	+ 1.0% / -0%	Over 20.1 meters	+ 1.0% / -0%	Over 20.1 meters	+ 1.3 / -0 meter

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

UL Rating:	Riser
Other Standards:	FCC Part 68, Subpart F, IEC 60603-7
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2006
MII Order #39 (China RoHS):	EUP 50
Telecommunications Standards:	Category 6A - TIA 568.B.2-10, ISO/IEC 11801:2002 Amendment 2
Safety Listing:	ACA, Bi-national Standard Listed

Suitability

Suitability - Indoor: Yes

Transmission Characteristics (Connectivity)

Optical Connector Performance:

Description	OM1	OM2	OM3	OM4	OS2 / UPC	OS2 / APC
Maximum Insertion Loss (dB)	0.5 dB	0.5 dB	0.5 dB	0.15 dB	0.5 dB	0.5 dB
Minimum Reflectance (dB)	-20 dB	-20 dB	-20 dB	-20 dB	-50 dB	- 65 dB

Performance Table 1:

Frequency (MHz)	Max. Insertion Loss TIA* (dB)	Max. Insertion Loss Belden (dB)	Min. PSNEXT TIA* (dB)	Min PSNEXT Belden (dB)	Min. PSACRF TIA* (dB)	Min. PSACRF Belden (dB)
1.000	2.500	2.400	72.300	72.300	64.800	64.800
4.000	4.600	4.500	63.300	63.300	52.800	52.800
8.000	6.400	6.300	58.800	58.800	46.700	46.700
10.000	7.100	7.000	57.300	57.300	44.800	44.800
16.000	9.000	8.900	54.200	54.300	40.700	40.700
20.000	10.100	10.000	52.800	52.800	38.800	38.800
25.000	11.300	11.100	51.300	51.300	36.800	36.800
31.250	12.600	12.500	49.900	49.900	34.900	34.900
62.500	18.000	17.900	45.400	45.400	28.900	28.900
100.000	22.900	22.800	42.300	42.300	24.800	24.800

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200.000	33.100	33.000	37.800	37.800	18.800	20.900
250.000	37.300	37.200	36.300	36.300	16.800	16.800
300.000	41.200	41.000	35.100	35.200	15.300	15.300
400.000	48.100	48.000	33.300	33.300	12.800	13.900
500.000	54.400	54.300	31.800	31.800	10.800	11.700
625.000		61.500		30.400		8.800

Performance Table - Footnote:

100 Meter Cable Specifications - * TIA/EIA-568-B.2-10-2008 Category 6A Standard

Performance Table 2:

Frequency (MHz)	Min. Return Loss TIA* (dB)	Min. Return Loss Belden (dB)	Min. PSANEXT TIA* (dB)	Min. PSANEXT Belden (dB)	Min. PSAACR-F TIA* (dB)	Min. PSAACR-F Belden (dB)	Min. Balanced TCL TIA* (dB)	Min. Balanced TCL Belden (dB)
1.000	20.000	20.000	67.000	87.000	67.000	75.000	40.000	48.000
4.000	23.000	23.000	67.000	87.000	66.200	75.000	40.000	48.000
8.000	24.500	24.500	67.000	87.000	60.100	75.000	40.000	48.000
10.000	25.000	25.000	67.000	87.000	58.200	75.000	40.000	48.000
16.000	25.000	25.000	67.000	87.000	54.100	70.900	38.000	46.000
20.000	25.000	25.000	67.000	87.000	52.200	69.000	37.000	45.000
25.000	24.200	25.000	67.000	87.000	50.200	67.000	36.000	44.000
31.250	23.300	25.000	67.000	87.000	48.300	65.100	35.100	43.100
62.500	20.700	25.000	65.600	85.600	42.300	59.100	32.000	40.000
100.000	19.000	25.000	62.500	82.500	38.200	55.000	30.000	38.000
200.000	16.400	21.000	58.000	78.000	32.200	49.000	27.000	35.000
250.000	15.600	20.500	56.500	76.500	30.200	47.000	26.000	34.000
300.000	14.900	20.100	55.300	75.300	28.700	43.800	25.200	33.200
400.000	13.800	19.500	53.500	73.500	26.200	38.800	24.000	32.000
500.000	13.000	18.400	52.000	72.000	24.200	35.000	23.000	31.000
625.000		17.400		65.000		31.100		

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

Notes (Overall)

Product Family

Product List:

Length	Yellow	Green	Blue	Gray	White	Black
2 ft. (0.6 m)	CA21104002	CA21105002	CA21106002	CA21108002	CA21109002	CA21100002
3 ft. (0.9 m)	CA21104003	CA21105003	CA21106003	CA21108003	CA21109003	CA21100003
4 ft. (1.2 m)	CA21104004	CA21105004	CA21106004	CA21108004	CA21109004	CA21100004
5 ft. (1.5 m)	CA21104005	CA21105005	CA21106005	CA21108005	CA21109005	CA21100005
6 ft. (1.8 m)	CA21104006	CA21105006	CA21106006	CA21108006	CA21109006	CA21100006
7 ft. (2.1 m)	CA21104007	CA21105007	CA21106007	CA21108007	CA21109007	CA21100007
8 ft. (2.4 m)	CA21104008	CA21105008	CA21106008	CA21108008	CA21109008	CA21100008
9 ft. (2.7 m)	CA21104009	CA21105009	CA21106009	CA21108009	CA21109009	CA21100009
10 ft. (3.0 m)	CA21104010	CA21105010	CA21106010	CA21108010	CA21109010	CA21100010
12 ft. (3.6 m)	CA21104012	CA21105012	CA21106012	CA21108012	CA21109012	CA21100012
15 ft. (4.6 m)	CA21104015	CA21105015	CA21106015	CA21108015	CA21109015	CA21100015
25 ft. (7.6 m)	CA21104025	CA21105025	CA21106025	CA21108025	CA21109025	CA21100025

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
CA21104002	1 EA	0.115 LB			PATCHCORD B10GX CMR YEL 2FT

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