

## 7883A Multi-Conductor - Category 6 Nonbonded-Pair Patch Cable

For more Information  
please call

1-800-Belden1



### General Description:

CAT6 (250MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Patch Cable, 24 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Central Filler, PVC Jacket, RG-45 Compatible

### Usage (Overall)

**Suitable Applications:** Premise Patch Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM

### Physical Characteristics (Overall)

#### Conductor

**AWG:**

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

**Total Number of Conductors:** 8

#### Insulation

**Insulation Material:**

Insulation Material
PO - Polyolefin

#### Outer Shield

**Outer Shield Material:**

Outer Shield Material
Unshielded

#### Outer Jacket

**Outer Jacket Material:**

Outer Jacket Material
PVC - Polyvinyl Chloride

**Outer Jacket Diameter:**

Nom. Dia. (mm)
5.207

**Outer Jacket Ripcord:** Yes

#### Overall Cable

**Overall Cabling Separator Material:** Central Filler Member

#### Pair

**Pair Color Code Chart:**

Number	Color
1	White/Blue Stripe and Blue
2	White/Orange Stripe and Orange
3	White/Green Stripe and Green
4	White/Brown Stripe and Brown

### Mechanical Characteristics (Overall)

**Operating Temperature Range:** -20°C To +75°C

**Bulk Cable Weight:** 40.181 Kg/Km

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Max. Recommended Pulling Tension:	177.928 N
Min. Bend Radius/Minor Axis:	25.400 mm
Min. Bend/Installation:	50.800 mm

### Applicable Specifications and Agency Compliance (Overall)

#### Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
EU Directive 2011/65/EU (ROHS II):	Yes
Other Standards:	ISO/IEC 11801 ed 2.1 (2008) Class E
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	01/01/2004
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	Category 6 - TIA 568.C.2

#### Flame Test

UL Flame Test:	UL1666 Vertical Riser
C(UL) Flame Test:	FT4
CSA Flame Test:	FT4
IEEE Flame Test:	1202

#### Suitability

Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Aerial:	No

#### Plenum/Non-Plenum

Plenum (Y/N):	No
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### Electrical Characteristics (Overall)

#### Nom. Mutual Capacitance:

Capacitance (pF/m)	49.215
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Maximum Capacitance Unbalance (pF/100 m):	330
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#### Nominal Velocity of Propagation:

VP (%)	70
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#### Maximum Delay:

Delay (ns/100 m)	537 @ 100MHz
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#### Max. Delay Skew:

Delay Skew (ns/100 m)	45
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#### Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)	
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METRIC MEASUREMENT VERSION

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9.38

### Max. Operating Voltage - UL:

Voltage  
300 V RMS

### Maximum DCR Unbalanced:

DCR Unbalance @ 20°C (%)  
5

## Electrical Characteristics-Premise (Overall)

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. NEXT (dB)	Min. PSNEXT (dB)	Min. ACR (dB)	Min. PSACR (dB)	Min RL (dB)	Min. SRL (dB)
1	2.4	74.3	72.3	71.9	69.9	20.0	na
4	4.5	65.3	63.3	60.7	58.7	23.0	na
8	6.4	60.8	58.8	54.4	52.4	24.5	na
10	7.1	59.3	57.3	52.2	50.2	25.0	na
16	9.1	56.2	54.3	47.2	45.2	25.0	na
20	10.2	54.8	52.8	44.6	42.6	25.0	na
25	11.4	53.3	51.3	41.9	39.9	24.3	na
31.25	12.8	51.9	49.9	39.1	37.1	23.6	na
62.5	18.5	47.4	45.4	28.9	26.9	21.5	na
100	23.8	44.3	42.3	20.5	18.5	20.1	na
155	30.2	41.5	39.5	11.3	9.3	18.8	na
200	34.8	39.8	37.8	5.0	3.0	18.0	na
250	39.4	38.3	36.3			17.3	na

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Fitted Impedance	Min. ELFEXT (dB)	Min. PSELFEXT (dB)
1	100 ± 15	100 ± 15	67.8	64.8
4	100 ± 15	100 ± 15	55.8	52.7
8	100 ± 15	100 ± 15	49.7	46.7
10	100 ± 15	100 ± 15	47.8	44.8
16	100 ± 15	100 ± 15	43.7	40.7
20	100 ± 15	100 ± 15	41.8	38.8
25	100 ± 15	100 ± 15	39.8	36.8
31.25	100 ± 15	100 ± 15	37.9	34.9
62.5	100 ± 15	100 ± 15	31.9	28.9
100	100 ± 15	100 ± 15	27.8	24.8
155	100 ± 22	100 ± 15	23.9	20.9
200	100 ± 22	100 ± 15	21.8	18.8
250	100 ± 32	100 ± 15	19.8	16.8

## Notes (Overall)

**Notes:** Jacket sequentially marked at 2 ft. intervals. Third party verified to ANSI/TIA-568-C.2, Category 6 Patch RJ-45 compatible for either 568 A & B configurations

## Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
7883A F2V1000	1,000 FT	24.000 LB	GRAY, DEC	C	CAT6 PATCH U/UTP CMR REEL
7883A 0021000	1,000 FT	24.000 LB	RED	C	CAT6 PATCH U/UTP CMR REEL
7883A 0031000	1,000 FT	24.000 LB	ORANGE	C	CAT6 PATCH U/UTP CMR REEL
7883A 0041000	1,000 FT	24.000 LB	YELLOW	C	CAT6 PATCH U/UTP CMR REEL
7883A 0051000	1,000 FT	24.000 LB	GREEN, DARK	C	CAT6 PATCH U/UTP CMR REEL
7883A 0061000	1,000 FT	24.000 LB	BLUE, LIGHT	C	CAT6 PATCH U/UTP CMR REEL
7883A 0071000	1,000 FT	24.000 LB	VIOLET	C	CAT6 PATCH U/UTP CMR REEL
7883A 0091000	1,000 FT	24.000 LB	WHITE	C	CAT6 PATCH U/UTP CMR REEL
7883A 0101000	1,000 FT	24.000 LB	BLACK	C	CAT6 PATCH U/UTP CMR REEL

**Notes:**  
C = CRATE REEL PUT-UP.

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