



Product: [7883A](#)

CAT6 Patch, 4pr, UTP, PVC Jkt, CMR

Product 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

Technical Specifications

Product Overview

Suitable Applications:	Premise Patch Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	4

Conductor Count:	8
Total Number of Pairs:	4

Insulation

Material	
Polyolefin	
Bonded-Pair:	N/A

Color Chart

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

Outer Jacket Material

Material	Nominal Diameter	Ripcord	Separator Material
PVC - Polyvinyl Chloride	0.205 in	No	Central Filler

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
93.8 Ohm/km	5 %

Capacitance

Max. Capacitance Unbalance	Nom. Mutual Capacitance
160 pF/100m	15 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
100 MHz	537.6 ns/100m	45 ns/100m	70 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.4 dB/100m	74.3 dB	72.3 dB	67.8 dB	64.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	35.0 dB
4 MHz	4.5 dB/100m	65.3 dB	63.3 dB	55.8 dB	52.7 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	23.0 dB
8 MHz	6.4 dB/100m	60.8 dB	58.8 dB	49.7 dB	46.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	16.9 dB
10 MHz	7.1 dB/100m	59.3 dB	57.3 dB	47.8 dB	44.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	40.0 dB	15.0 dB
16 MHz	9.1 dB/100m	56.2 dB	54.3 dB	43.7 dB	40.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	38.0 dB	10.9 dB
20 MHz	10.2 dB/100m	54.8 dB	52.8 dB	41.8 dB	38.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	37.0 dB	9.0 dB
25 MHz	11.4 dB/100m	53.3 dB	51.3 dB	39.8 dB	36.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm	36.0 dB	7.0 dB
31.25 MHz	12.8 dB/100m	51.9 dB	49.9 dB	37.9 dB	34.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm	35.1 dB	5.1 dB
62.5 MHz	18.5 dB/100m	47.4 dB	45.4 dB	31.9 dB	28.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm	32.0 dB	
100 MHz	23.8 dB/100m	44.3 dB	42.3 dB	27.8 dB	24.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm	30.0 dB	
155 MHz	30.2 dB/100m	41.5 dB	39.5 dB	23.9 dB	20.9 dB	18.8 dB	100 ± 22 Ohm	100 ± 15 Ohm	28.1 dB	
200 MHz	34.8 dB/100m	39.8 dB	37.8 dB	21.8 dB	18.8 dB	18.0 dB	100 ± 22 Ohm	100 ± 15 Ohm	27.0 dB	
250 MHz	39.4 dB/100m	38.3 dB	36.3 dB	19.8 dB	16.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 15 Ohm	26.0 dB	

Segregation class according EN50174-2: a

Voltage

UL Voltage Rating

300 V RMS

Temperature Range

Installation Temp Range:	0°C To +50°C
UL Temp Rating:	75°C
Storage Temp Range:	-20°C To +75°C
Operating Temp Range:	-20°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	20 lbs/1000ft
Max Recommended Pulling Tension:	25 lbs
Min Bend Radius During Installation:	2.25 in
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class E Patch
CPR Euroclass:	Eca
Data Category:	Category 6
ANSI Compliance:	S-116-732-2013 Category 6 Patch, ANSI/NEMA WC-66 Category 6 Patch
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 6 Patch
IEEE Specification:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Third Party Performance Verification:	Category 6 Patch

Applicable Environmental and Other Programs

Environmental Space:	Riser
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	Yes
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2004-01-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Non-Halogenated:	No
Suitability - Oil Resistance:	No
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

C(UL) Flammability:	FT4
UL Flammability:	UL 1666 Riser
ISO/IEC Flammability:	IEC 60332-1-2
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
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Part Number

Variants

Item #	Color	Putup Type	Length	UPC
7883A 0101000	Black	Reel	1,000 ft	612825190660
7883A 0101000	Black	Reel	1,000 ft	612825190660
7883A 0061000	Blue	Reel	1,000 ft	612825190639
7883A 0061000	Blue	Reel	1,000 ft	612825190639
7883A F2V1000	Gray	Reel	1,000 ft	612825190585
7883A F2V1000	Gray	Reel	1,000 ft	612825190585
7883A 0051000	Green	Reel	1,000 ft	612825190622
7883A 0051000	Green	Reel	1,000 ft	612825190622
7883A 0031000	Orange	Reel	1,000 ft	612825190608
7883A 0031000	Orange	Reel	1,000 ft	612825190608
7883A 0071000	Purple	Reel	1,000 ft	612825190646
7883A 0071000	Purple	Reel	1,000 ft	612825190646
7883A 0021000	Red	Reel	1,000 ft	612825190592
7883A 0021000	Red	Reel	1,000 ft	612825190592
7883A 0091000	White	Reel	1,000 ft	612825190653
7883A 0091000	White	Reel	1,000 ft	612825190653
7883A 0041000	Yellow	Reel	1,000 ft	612825190615
7883A 0041000	Yellow	Reel	1,000 ft	612825190615

Footnote:	C - CRATE REEL PUT-UP.
Patent:	https://www.belden.com/resources/patents

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Print Includes Descending Footage Markings.
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History

Update and Revision:	Revision Number: 0.340 Revision Date: 04-28-2020
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