



Part Number: 1583A

CAT5e Horizontal, 4pr, UTP, PVC Jkt, CMR

Product Description

CAT5e (200MHz), 4-Pair, U/UTP-unshielded, Riser-CMR, Premise Horizontal cable, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, PVC jacket.

Technical Specifications

Product Overview

Environmental Space:	Riser
Suitable Applications:	Horizontal, 1000BaseT, Gigabit Ethernet, 100BaseTX, Fast Ethernet, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Video, RS-422

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	
PO - 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
PVC - Polyvinyl Chloride	0.190 in	Yes

Electrical Characteristics

Conductor DCR

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

Capacitance

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

Delay

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

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACR [dB]	Min. PSACR [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance
1 MHz	2.0 dB/100m	65.3 dB	62.3 dB	63.3 dB	60.3 dB	63.8 dB	60.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
4 MHz	4.1 dB/100m	56.3 dB	53.3 dB	52.2 dB	49.2 dB	51.8 dB	48.8 dB	23.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
8 MHz	5.8 dB/100m	51.8 dB	48.8 dB	46.0 dB	43.0 dB	45.7 dB	42.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
10 MHz	6.5 dB/100m	50.3 dB	47.3 dB	43.8 dB	40.8 dB	43.8 dB	40.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
16 MHz	8.2 dB/100m	47.2 dB	44.2 dB	39.0 dB	36.0 dB	39.7 dB	36.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
20 MHz	9.3 dB/100m	45.8 dB	42.8 dB	36.5 dB	33.5 dB	37.8 dB	34.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 15 Ohm
25 MHz	10.4 dB/100m	44.3 dB	41.3 dB	33.9 dB	30.9 dB	35.8 dB	32.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 15 Ohm
31.25 MHz	11.7 dB/100m	42.9 dB	39.9 dB	31.2 dB	28.2 dB	33.9 dB	30.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 15 Ohm
62.5 MHz	17.0 dB/100m	38.4 dB	35.4 dB	21.4 dB	18.4 dB	27.9 dB	24.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 15 Ohm
100 MHz	22.0 dB/100m	35.3 dB	32.3 dB	13.3 dB	10.3 dB	23.8 dB	20.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 15 Ohm
155 MHz	28.1 dB/100m	32.4 dB	29.4 dB	4.4 dB	1.4 dB	20.0 dB	17.0 dB	18.8 dB		
200 MHz	32.4 dB/100m	30.8 dB	27.8 dB			17.8 dB	14.8 dB	18.0 dB		

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:	18 lbs/1000ft
Max Recommended Pulling Tension:	25 lbs
Min Bend Radius During Installation:	2.0 in
Min Bend Radius/Minor Axis:	1.0 in

Standards

NEC Articles:	800
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class D
CPR Euroclass:	Eca
Data Category:	Category 5e
ANSI Compliance:	S-90-661-2012 Category 5e, ANSI/NEMA WC-63.1 Category 5e
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 5e
IEEE Specification:	IEEE 802.3bt Type 1, Type 2, Type 3
Third Party Performance Verification:	Category 5e

Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/96/EC (WEEE):	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
CA Prop 65 (CJ for Wire & Cable):	Yes

MII Order #39 (China RoHS):	Yes
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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, LSOH, Toxicity Testing

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

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1585A

Part Number

Variants

Item #	Color	UPC	Length	Footnote
1583A 0101000	Black	612825317661	1,000 ft	C
1583A 010U1000	Black	612825118145	1,000 ft	
1583A 0061000	Blue	612825117940	1,000 ft	C
1583A 0061640	Blue	612825117964	1,640 ft	
1583A 0063000	Blue	612825117988	3,000 ft	
1583A 006U1000	Blue	612825117926	1,000 ft	
1583A 0081000	Gray	612825118022	1,000 ft	C
1583A 0081640	Gray	612825118046	1,640 ft	C
1583A 0083000	Gray	612825118060	3,000 ft	C
1583A 008U1000	Gray	612825118008	1,000 ft	C
1583A.00305	Gray, Dark Pearl		305 m	
1583A.00U305	Gray, Dark Pearl		305 m	
1583A 0051000	Green	612825117902	1,000 ft	C
1583A 005U1000	Green	612825317654	1,000 ft	
1583A 0031000	Orange	612825117834	1,000 ft	C
1583A 003U1000	Orange	612825117810	1,000 ft	
1583A 0121000	Pink	612825118176	1,000 ft	C
1583A 012U1000	Pink	612825118152	1,000 ft	
1583A 002U1000	Red	612825117780	1,000 ft	
1583A 0021000	Red	612825317647	1,000 ft	C
1583A 0091000	White	612825118107	1,000 ft	C
1583A 0093000	White	612825118121	3,000 ft	C
1583A 009U1000	White	612825118084	1,000 ft	
1583A 0041000	Yellow	612825117872	1,000 ft	C
1583A 004U1000	Yellow	612825117858	1,000 ft	

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

Product Notes

Notes:	Values above 100 MHz are for Engineering Information Only. Print Includes Descending Footage Markings from Max. Put-Up Length to 0.
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History

Update and Revision:	Revision Number: 0.380 Revision Date: 08-22-2019
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