



Product: [1702A](#)

CAT5e+ Horizontal Bonded-Pair, 2x4pr, UTP, PVC Jkt, CMR, Siamese

Product Description

CAT5e+ (350MHz), Siamese 2X4-Bonded-pairs, U/UTP-unshielded, Riser-CMR, Premise Horizontal cable, 24 AWG solid bare copper conductors, polyolefin insulation, ripcord, PVC jacket

Technical Specifications

Product Overview

Suitable Applications:	Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU, Digital Video, RS-422, Noisy Environments US Patent #'s 5, 606, 151; 5, 734, 126
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Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
24	Solid	BC - Bare Copper	8

Conductor Count:	16
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Insulation

Material	Nominal Wall Thickness
PO - Polyolefin	0.009 in

Bonded-Pair:	Yes
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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 Shield

Material
No Shield

Outer Jacket

Material	Ripcord
PVC - Polyvinyl Chloride	Yes

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
90 Ohm/km	3 %

Capacitance

Nom. Mutual Capacitance
15 pF/ft

Delay

Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
510 ns/100m	25 ns/100m	70%

High Frequency

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 dB/100m	65.3 dB	65.3 dB	63.3 dB	63.3 dB	63.8 dB	60.8 dB	20 dB	100 ± 12 Ohm	105 ± 10 Ohm
4 MHz	4 dB/100m	56.3 dB	56.3 dB	52.3 dB	52.3 dB	51.7 dB	48.8 dB	23 dB	100 ± 12 Ohm	100 ± 10 Ohm
8 MHz	5.7 dB/100m	51.8 dB	51.8 dB	46.1 dB	46.1 dB	45.7 dB	42.7 dB	24.5 dB	100 ± 12 Ohm	100 ± 10 Ohm
10 MHz	6.4 dB/100m	50.3 dB	50.3 dB	43.9 dB	43.9 dB	43.8 dB	40.8 dB	25 dB	100 ± 12 Ohm	100 ± 10 Ohm
16 MHz	8.1 dB/100m	47.3 dB	47.3 dB	39.1 dB	39.1 dB	39.7 dB	36.7 dB	25 dB	100 ± 12 Ohm	100 ± 10 Ohm
20 MHz	9.2 dB/100m	45.8 dB	45.8 dB	35.2 dB	35.2 dB	37.7 dB	34.7 dB	25 dB	100 ± 12 Ohm	100 ± 10 Ohm
25 MHz	10.3 dB/100m	44.3 dB	44.3 dB	34.1 dB	34.1 dB	35.8 dB	32.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 10 Ohm
31.25 MHz	11.6 dB/100m	42.9 dB	42.9 dB	31.3 dB	31.3 dB	33.9 dB	30.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 10 Ohm
62.5 MHz	16.8 dB/100m	38.4 dB	38.4 dB	21.6 dB	21.6 dB	27.8 dB	24.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 10 Ohm
100 MHz	21.7 dB/100m	35.3 dB	35.3 dB	17.1 dB	17.1 dB	23.8 dB	20.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 10 Ohm
155 MHz	27.7 dB/100m	32.5 dB	32.5 dB	4.7 dB	4.7 dB	19.9 dB	16.9 dB	19 dB	100 ± 18 Ohm	100 ± 10 Ohm
200 MHz	32 dB/100m	30.8 dB	30.8 dB	3 dB	3 dB	17.7 dB	14.7 dB	19 dB	100 ± 18 Ohm	100 ± 10 Ohm
250 MHz	36.4 dB/100m	29.3 dB	29.3 dB	0 dB	0 dB	15.8 dB	12.8 dB	18 dB	100 ± 20 Ohm	100 ± 10 Ohm
300 MHz	40.5 dB/100m	28.2 dB	28.2 dB			14.2 dB	11.2 dB	18 dB	100 ± 20 Ohm	100 ± 10 Ohm
310 MHz	41.3 dB/100m	27.9 dB	27.9 dB			13.9 dB	10.9 dB	18 dB	100 ± 20 Ohm	100 ± 10 Ohm
350 MHz	44.3 dB/100m	27.2 dB	27.2 dB			12.9 dB	9.9 dB	17 dB	100 ± 22 Ohm	100 ± 10 Ohm

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Operating Temp Range:	-20°C To +80°C
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Mechanical Characteristics

Bulk Cable Weight:	45 lbs/1000ft
Max. Pull Tension:	50 lbs
Min. Bend Radius During Installation:	2.0 in
Min. Bend Radius/Minor Axis:	0.5 in

Standards

NEC/(UL) Compliance:	CM
CEC/C(UL) Compliance:	CMR
ISO/IEC Compliance:	11801 Category 5
Data Category:	Category 5e
TIA/EIA Compliance:	ANSI/TIA/EIA 568 C.2 Category 5e
Other Specification:	NEMA WC-63.1 Category 5e, UL verified to Category 5e

Applicable Environmental and Other Programs

Environmental Space:	Riser
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
MII Order #39 (China RoHS):	Yes

Flammability, LSOH, Toxicity Testing

UL Flammability:	UL1685 UL Loading
CSA Flammability:	FT1
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	1703A

Related Part Numbers

Variants

Item #	Color	Put-Up Type	Length	UPC
1702A 0061000	Blue	Reel	1,000 ft	612825122005
1702A 0061640	Blue	Reel	1,640 ft	612825122012
1702A F2V1000	Gray	Reel	1,000 ft	612825121985
1702A F2V1640	Gray	Reel	1,640 ft	612825121992

Footnote: C - CRATE REEL PUT-UP.

Product Notes

Notes: Jacket sequentially marked at 2 ft. intervals. U.S. Patents 5,606,151 and 5,734,126. Third party verified to TIA/EIA-568-B.2, Category 5e.

History

Update and Revision: Revision Number: 0.302 Revision Date: 12-15-2021

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