



3612

Part Number: 3612

Enhanced Category 6 Nonbonded-Pair Cable

Product Description

CAT6+ (350MHz), 4-Pair, U/UTP-Unshielded, Riser-CMR, Premise Horizontal Cable, 23 AWG Solid Bare Copper Conductors, Polyolefin Insulation, Patented X-Spline, Ripcord, PVC jacket

Product Specifications

Technical Specifications

Suitable Applications:

Premise Horizontal Cable, Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments

Construction and Dimensions

Conductor:

AWG	Stranding	Material	No. of Pairs
23	Solid	BC - Bare Copper	4
Total Number of Conductors:		8	

Insulation:

Material	Nominal Wall Thickness
PO - Polyolefin	0.008 in

Color Chart 1:

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

4	White/Brown Stripe & Brown
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Outershield 1:

Material
Unshielded

Outerjacket 1:

Material	Nominal Diameter	Nominal Wall Thickness	Ripcord	Separator Material
PVC - Polyvinyl Chloride	0.234 mm	0.017 mm	Yes	Patented X-Spline Center Member

Electrical Characteristics

Conductor DCR:

Max. Conductor DCR	Max. DCR Unbalance
7.7 Ohm/100m	5 %

Capacitance:

Nominal Mutual Capacitance
15.5 pF/ft

Delay:

Frequency [MHz]	Max. Delay Skew	Nominal Velocity of Propagation (VP)	Typical Delay Skew
100 MHz	70 ns/100m	70 ns/100m	35 ns/100m

High Freq:

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT	Min. PSNEXT	Min. ACR	Min. PSACR	Min. ACRF (ELFEXT)	Min. PSACRF (PSSELFEXT)	Min. RL (Return Loss)	Min. SRL (Structural Return Loss)	Max./Min. Input Impedance (unFitted)	Min. TCL	Min. ELTCL
0.772 MHz	1.8 db/100m	81 dB	79 dB	79.2 dB	77.2 dB	75 dB	72 dB				40 dB	37.2 dB
1 MHz	2 db/100m	79.31 dB	77.31 dB	77.3 dB	75.3 dB	72.8 dB	69.8 dB	20 dB	27 dB	100 ± 15 Ohm	40 dB	35 dB
4 MHz	3.7 db/100m	70.28 dB	68.28 dB	66.6 dB	64.6 dB	60.8 dB	57.8 dB	23 dB	27 dB	100 ± 15 Ohm	40 dB	23 dB

8 MHz	5.2 db/100m	65.77 dB	63.77 dB	60.6 dB	58.6 dB	54.7 dB	51.7 dB	24.5 dB	27 dB	100 ± 15 Ohm	40 dB	16.9 dB
10 MHz	5.8 db/100m	64.31 dB	62.31 dB	58.5 dB	56.5 dB	52.8 dB	49.8 dB	25 dB	27 dB	100 ± 15 Ohm	40 dB	15 dB
16 MHz	7.4 db/100m	61.25 dB	59.25 dB	53.9 dB	51.9 dB	48.7 dB	45.7 dB	25 dB	27 dB	100 ± 15 Ohm	38 dB	10.9 dB
20 MHz	8.3 db/100m	59.8 dB	57.8 dB	51.5 dB	49.5 dB	46.8 dB	43.8 dB	25 dB	27 dB	100 ± 15 Ohm	37 dB	9 dB
25 MHz	9.3 db/100m	58.35 dB	56.35 dB	49.1 dB	47.1 dB	44.8 dB	41.8 dB	24.3 dB	26 dB	100 ± 15 Ohm	36 dB	7 dB
31.25 MHz	10.4 db/100m	56.89 dB	54.89 dB	46.5 dB	44.5 dB	42.9 dB	39.9 dB	23.6 dB	25.1 dB	100 ± 15 Ohm	35.1 dB	
62.5 MHz	15 db/100m	52.38 dB	50.38 dB	37.4 dB	35.4 dB	36.9 dB	33.9 dB	21.5 dB	22.1 dB	100 ± 15 Ohm	32 dB	
100 MHz	19.3 db/100m	49.31 dB	47.31 dB	30 dB	28 dB	32.8 dB	29.8 dB	20.8 dB	20 dB	100 ± 15 Ohm	30 dB	
155 MHz	24.6 db/100m	46.46 dB	44.46 dB	21.9 dB	19.9 dB	28.9 dB	25.9 dB	19.5 dB	18.1 dB	100 ± 22 Ohm	28.1 dB	
200 MHz	28.3 db/100m	44.8 dB	42.8 dB	16.5 dB	14.5 dB	26.8 dB	23.8 dB	18.7 dB	17 dB	100 ± 22 Ohm	27 dB	
250 MHz	32.1 db/100m	43.35 dB	41.35 dB	11.2 dB	9.2 dB	24.8 dB	21.8 dB	18 dB	16 dB	100 ± 32 Ohm	26 dB	
300 MHz	35.6 db/100m	42.16 dB	40.16 dB	6.5 dB	4.5 dB	23.3 dB	20.3 dB	17.5 dB	15.2 dB	100 ± 32 Ohm		
350 MHz	38.9 db/100m	41.15 dB	39.15 dB	2.3 dB	0.3 dB	21.9 dB	18.9 dB	17 dB	14.6 dB	100 ± 32 Ohm		
400 MHz	42 db/100m	40.28 dB	38.28 dB			20.8 dB	17.8 dB	16.6 dB	14 dB	100 ± 32 Ohm		
450 MHz	45 db/100m	39.52 dB	37.52 dB			19.7 dB	16.7 dB	16.2 dB	13.5 dB	100 ± 32 Ohm		
500 MHz	47.9 db/100m	38.83 dB	36.83 dB			18.8 dB	15.8 dB	15.9 dB	13 dB	100 ± 32 Ohm		

550 MHz	50.6 db/100m	38.21 dB	36.21 dB			18 dB	15 dB	15.6 dB	12.6 dB	100 ± 32 Ohm		
600 MHz	53.3 db/100m	37.64 dB	35.64 dB			17.2 dB	14.2 dB	15.4 dB	12.2 dB	100 ± 32 Ohm		
650 MHz	55.9 db/100m	37.12 dB	35.12 dB			16.5 dB	13.5 dB	15.1 dB	11.9 dB			

Voltage:

UL Voltage Rating

300V RMS

Use

Suitability - Aerial:	No
Suitability - Burial:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	No
Suitability - Sunlight Resistance:	No
Max Recommended Pulling Tension:	45 lbs

Safety

C(UL) Flammability:	FT4
UL Flammability:	UL1666 Riser

Temperature Range

Installation Temp Range:	+5°C To +50 °C
Operating Temp Range:	0°C To +75°C
Storage Temp Range:	-30°C To +75 °C
UL Temp Rating:	75°C

Mechanical Characteristics

Min Bend Radius/Minor Axis:	0.9 in
Min Bend Radius/Installation:	2.3 in

Part Number

Plenum (Y/N):	No
Plenum Number:	3613

Standards

ISO/IEC Compliance:	11801 ed 2.1 (2008) Class E
Telecommunications Standards:	ANSI/TIA/EIA 568 C.2 Category 6
CA Prop 65 (CJ for Wire & Cable):	Yes
CEC/C(UL) Specification:	CMR
MII Order #39 (China RoHS):	Yes
NEC/(UL) Specification:	CMR
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes

History

Notes:	Jacket sequentially marked at 2 ft/1m. intervals. Third party verified to ANSI/TIA-568-C.2 Category 6. Values above 350MHz are for engineering information only.
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