

Product: 3624

CAT6+ Horizontal, 4pr, UTP, LSZH Jkt

Product Description

CAT6+ (400MHz), 4-Pair, U/UTP-unshielded, Zero Halogen, Premise Horizontal cable, 23 AWG solid bare copper conductors, polyolefin insulation, X-spline, ripcord, LSZH 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 Audio, AES51, RS-422, Noisy Environments

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	No. of Pairs
23	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	Material Trade Name	Nominal Diameter	Nominal Wall Thickness	Ripcord	Separator Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)	Haloarrest®	0.247 in	0.025 in	Yes	Center Member (Patented X-Spline®)

Electrical Characteristics

Conductor DCR

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

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/HUNm	15.5 pF/ft

Delay

Frequency [MHz]	Max. Delay	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]	Typical Delay Skew
100 MHz	537.6 ns/100m	35 ns/100m	70%	35 ns/100m

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)
1 MHz	2.0 dB/100m	84.3 dB	82.3 dB	80.3 dB	80.3 dB	76.8 dB	73.8 dB	20.0 dB	100 ± 15
4 MHz	3.7 dB/100m	75.3 dB	73.3 dB	69.5 dB	69.5 dB	64.8 dB	61.8 dB	23.6 dB	100 ± 15
8 MHz	5.3 dB/100m	70.8 dB	68.8 dB	63.5 dB	63.5 dB	58.7 dB	55.7 dB	25.3 dB	100 ± 15
10 MHz	5.9 dB/100m	69.3 dB	67.3 dB	61.4 dB	61.4 dB	56.8 dB	53.8 dB	26.0 dB	100 ± 15
16 MHz	7.4 dB/100m	66.2 dB	64.2 dB	56.8 dB	56.8 dB	52.7 dB	49.7 dB	26.0 dB	100 ± 15
20 MHz	8.3 dB/100m	64.8 dB	62.8 dB	54.4 dB	54.4 dB	50.8 dB	47.8 dB	26.0 dB	100 ± 15
25 MHz	9.4 dB/100m	63.3 dB	61.3 dB	52.0 dB	52.0 dB	48.8 dB	45.8 dB	25.5 dB	100 ± 15
31.25 MHz	10.5 dB/100m	61.9 dB	59.9 dB	49.4 dB	49.4 dB	46.9 dB	43.9 dB	25.0 dB	100 ± 15
62.5 MHz	15.1 dB/100m	57.4 dB	55.4 dB	40.3 dB	40.3 dB	40.9 dB	37.9 dB	23.5 dB	100 ± 15
100 MHz	19.3 dB/100m	54.3 dB	52.3 dB	33.0 dB	33.0 dB	36.8 dB	33.8 dB	22.5 dB	100 ± 15
155 MHz	24.5 dB/100m	51.4 dB	49.4 dB	24.9 dB	24.9 dB	33.0 dB	30.0 dB	21.6 dB	100 ± 22
200 MHz	28.2 dB/100m	49.8 dB	47.8 dB	19.6 dB	19.6 dB	30.8 dB	27.8 dB	21.0 dB	100 ± 22
250 MHz	31.8 dB/100m	48.3 dB	46.3 dB	14.5 dB	14.5 dB	28.8 dB	25.8 dB	20.5 dB	100 ± 32
300 MHz	35.2 dB/100m	47.1 dB	45.1 dB	9.9 dB	9.9 dB	27.3 dB	24.3 dB	20.1 dB	100 ± 32
350 MHz	38.4 dB/100m	46.1 dB	44.1 dB	5.7 dB	5.7 dB	25.9 dB	22.9 dB	19.8 dB	100 ± 32
400 MHz	41.5 dB/100m	45.3 dB	43.3 dB	1.8 dB	1.8 dB	24.8 dB	21.8 dB	19.5 dB	100 ± 32
450 MHz	44.3 dB/100m	44.5 dB	42.5 dB			23.7 dB	20.7 dB	19.2 dB	100 ± 32
500 MHz	47.1 dB/100m	43.8 dB	41.8 dB			22.8 dB	19.8 dB	19.0 dB	100 ± 32
550 MHz	49.7 dB/100m	43.2 dB	41.2 dB			22.0 dB	19.0 dB	18.8 dB	100 ± 32
600 MHz	52.3 dB/100m	42.6 dB	40.6 dB			21.2 dB	18.2 dB	18.7 dB	100 ± 32
650 MHz	54.8 dB/100m	42.1 dB	40.1 dB			20.5 dB	17.5 dB	18.5 dB	100 ± 32

Segregation class according EN50174-2:	a

Voltage

UL Voltage Rating
300 V RMS

Temperature Range

Installation Temp Range:	+5°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:	29 lbs/1000ft
Max. Pull Tension:	25 lbs
Min. Bend Radius During Installation:	2.5 in
Min. Bend Radius/Minor Axis:	1.0 in

Standards

NEC Articles:	Article 800
NEC/(UL) Compliance:	CM-LS
CEC/C(UL) Compliance:	CM-LS
ISO/IEC Compliance:	11801 ed 2.2 (2011) Class E
Data Category:	Category 6
ANSI Compliance:	S-116-732-2013 Category 6, ANSI/NEMA WC-66 Category 6
TIA/EIA Compliance:	ANSI/TIA-568-C.2 Category 6
IEEE Compliance:	IEEE 802.3bt Type 1, Type 2, Type 3, Type 4
Third Party Performance Verification:	Category 6

Applicable Environmental and Other Programs

Environmental Space:	LSZH
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	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 2):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU (RoHS 2 amendment):	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):	2012-02-08
MII Order #39 (China RoHS):	Yes

Suitability

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

Flammability, LS0H, Toxicity Testing

UL Flammability:	UL 1685 (UL Loading-Limited Smoke)
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

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

Part Number

Variants

Item #	Color	Put-Up Type	Length	UPC
3624 006A1000	Blue	Reel-in-Box	1,000 ft	612825146056
3624 007A1000	Purple	Reel-in-Box	1,000 ft	612825146063
3624 009A1000	White	Reel-in-Box	1,000 ft	612825146070

Product Notes

Notes:	Electrical values are expected performance based on cable testing and representative performance within a typical Belden system. Values above 400 MHz are for Engineering Information Only. Print Includes Descending Footage/Meter Markings from Max. Put-Up Length to 0.

History

Update and Revision:	Revision Number: 0.463 Revision Date: 09-08-2021

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