

Part Number: 10GX24

CAT6A 10GX, 4pr, UTP, LSZH Jkt



Product Description

CAT6A (625MHz), 4-Pair, U/UTP-unshielded, Zero Halogen, Premise Horizontal cable, 23 AWG solid bare copper conductors, polyolefin insulation, patented Double-H spline, ripcord, LSZH jacket

Technical Specifications

Product Overview

Environmental Space:	LSZH
Suitable Applications:	Premise Horizontal Cable, 10 Gigabit Ethernet, 100BaseTX, 100BaseVG ANYLAN, 155ATM, 622ATM, NTSC/PAL Component or Composite Video, AES/EBU Digital Audio, AES51, RS-422, Noisy Environments, PoE

Physical Characteristics (Overall)

Conductor

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

Total Number of Conductors:	8
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Insulation

Material
PO - Polyolefin

Color Chart

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

Outer Shield Material

Material
N/A

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter	Ripcord
LSZH - Low Smoke Zero Halogen	Haloarrest®	0.295 in	Yes

Electrical Characteristics

Capacitance

Max. Capacitance Unbalance	Nom.Mutual Capacitance
330 pF/100m	17 pF/ft

Shielding:	UTP - Unshielded
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Construction and Dimensions

Total Number of Pairs:	4
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Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance	Max DCR Unbalanced Between Pairs [%]
7.4 Ohm/100m	3 %	5 %

Delay

Max. Delay	Max. Delay Description	Max. Delay Skew	Nominal Velocity of Propagation (VP) [%]
@ 100 MHz 537.6 ns/100m	537 @ 100MHz	45 ns/100m	64 %

High Freq

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. PSNEXT [dB]	Min. PSACR [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]	Max./Min. Input Impedance (unFitted)	Max./Min. Fitted Impedance	Min. PSANEXT	Min. PSAACRF	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.1 dB/100m	73.3 dB	71.2 dB	68.8 dB	20.0 dB	100 ± 15 Ohm	100 ± 15 Ohm	67.0 dB	67.0 dB	40.0 dB	35.0 dB
4 MHz	3.8 dB/100m	64.3 dB	60.5 dB	56.8 dB	23.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	67.0 dB	40.0 dB	23.0 dB
8 MHz	5.3 dB/100m	59.8 dB	54.4 dB	50.7 dB	24.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	61.1 dB	40.0 dB	16.9 dB
10 MHz	5.9 dB/100m	58.3 dB	52.4 dB	48.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	59.2 dB	40.0 dB	15.0 dB
16 MHz	7.5 dB/100m	55.2 dB	47.8 dB	44.7 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	55.1 dB	40.0 dB	10.9 dB
20 MHz	8.4 dB/100m	53.8 dB	45.4 dB	42.8 dB	25.0 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	53.2 dB	38.0 dB	9.0 dB
25 MHz	9.4 dB/100m	52.3 dB	43.0 dB	40.8 dB	24.3 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	51.2 dB	36.0 dB	7.0 dB
31.25 MHz	10.5 dB/100m	50.9 dB	40.4 dB	38.9 dB	23.6 dB	100 ± 15 Ohm	100 ± 10 Ohm	67.0 dB	49.3 dB	35.1 dB	
62.5 MHz	15.0 dB/100m	46.4 dB	31.4 dB	32.9 dB	21.5 dB	100 ± 15 Ohm	100 ± 10 Ohm	66.6 dB	43.3 dB	32.0 dB	
100 MHz	19.1 dB/100m	43.3 dB	24.2 dB	28.8 dB	20.1 dB	100 ± 15 Ohm	100 ± 10 Ohm	63.5 dB	39.2 dB	30.0 dB	
200 MHz	27.6 dB/100m	38.8 dB	11.2 dB	22.8 dB	18.0 dB	100 ± 22 Ohm	100 ± 10 Ohm	59.0 dB	33.2 dB	27.0 dB	
250 MHz	31.1 dB/100m	37.3 dB	6.3 dB	20.8 dB	17.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	57.5 dB	31.2 dB	26.0 dB	
300 MHz	34.3 dB/100m	36.1 dB	1.9 dB	19.3 dB	16.8 dB	100 ± 32 Ohm	100 ± 10 Ohm	56.3 dB	29.7 dB	25.2 dB	
350 MHz	37.2 dB/100m	35.1 dB		17.9 dB	16.3 dB	100 ± 32 Ohm	100 ± 10 Ohm	55.3 dB	28.3 dB	24.6 dB	
400 MHz	40.1 dB/100m	34.3 dB		16.8 dB	15.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	54.5 dB	27.2 dB	24.0 dB	
450 MHz	42.7 dB/100m	33.5 dB		15.7 dB	15.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	53.7 dB	26.1 dB	23.5 dB	
500 MHz	45.3 dB/100m	32.8 dB		14.8 dB	15.2 dB	100 ± 32 Ohm	100 ± 10 Ohm	53.0 dB	25.2 dB	23.0 dB	
550 MHz	47.7 dB/100m	32.2 dB		14.0 dB	14.9 dB	100 ± 32 Ohm	100 ± 10 Ohm	52.4 dB	24.4 dB		
600 MHz	50.1 dB/100m	31.6 dB		13.2 dB	14.7 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.8 dB	23.6 dB		
625 MHz	51.2 dB/100m	31.4 dB		12.9 dB	14.5 dB	100 ± 32 Ohm	100 ± 10 Ohm	51.6 dB	23.3 dB		
750 MHz	56.7 dB/100m	30.2 dB		11.3 dB	14.0 dB			50.4 dB	21.7 dB		
860 MHz	61.2 dB/100m	29.3 dB		10.1 dB	13.6 dB			49.5 dB	20.5 dB		

Voltage

UL Voltage Rating
300V RMS

Applicable Standards & Environmental Programs

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 II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	Yes
EU CE Mark:	No
EU REACH SVHC Compliance (yyyy-mm-dd):	2017-07-10
EU RoHS Compliance Date (yyyy-mm-dd):	2009-06-11
CPR Euroclass:	Eca

CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes
Telecommunications Standards:	ANSI/TIA-568-C.2 Category 6A
Other Specification:	Verified Channel/Category 6A
Patent:	http://www.belden.com/p

Standards

ISO/IEC Compliance:	11801 ed 2.2 (2011) Class EA
ANSI/TIA Category:	Category 6A
ANSI Compliance:	S-116-732-2013 Category 6A, ANSI/NEMA WC-66 Category 6A
IEEE Specification:	POE per 802.3af & POE+ per 802.3at-2009
NEC/(UL) Specification:	N/A

Safety

UL Voltage Rating:	300 V RMS
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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

Mechanical Characteristics

Storage Temp Range:	-20°C To +75°C
Installation Temp Range:	+5°C To +50°C
Operating Temp Range:	-20°C To +75°C
Bulk Cable Weight:	35(lbs/1000ft)
Max Recommended Pulling Tension:	25(lbs)
Min Bend Radius/Minor Axis:	1.25(in)
Min Bend Radius/Installation:	3.0(in)

Temperature Range

Non-UL Temp Rating:	+75°C
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Plenum/Non-Plenum

Plenum (Y/N):	No
Plenum Number:	10GX13

Part Number

Non-Plenum Number:	10GX12
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History

Variants

Item #	Color
10GX24.10305	BLACK
10GX24.06305	BLUE
10GX24 0061000	BLUE
10GX24.08305	GRAY

10GX24.08500	GRAY
10GX24.071000	PURPLE
10GX24.07305	PURPLE
10GX24 0071000	PURPLE
10GX24.07500	purple
10GX24.09305	WHITE
10GX24 0091000	WHITE
10GX24.09500	WHITE
10GX24.04305	YELLOW
10GX24 0041000	YELLOW

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