



Product: [7835ANH](#)

CAT 6 4P23AWG, F/UTP, LSZH Jkt

Product Description

CAT 6 4PR x 23AWG, F/UTP, Solid Bare Copper Conductor, HDPE Insulation, 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 Video, RS-422, 250MHz Category 6 and PoE application
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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	Nominal Diameter
PE - Polyethylene	1.16 mm

Color Chart

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

Outer Shield Material

Material	Drainwire Material	Drainwire AWG
Bi-Laminate (Alum+Poly)	Tinned Copper	26 AWG

Outer Jacket Material

Material	Nominal Diameter	Diameter +/- Tolerance	Ripcord
LSZH - Low Smoke Zero Halogen (Flame Retardant)	7.2 mm	0.2 mm	Yes

Construction and Dimensions

Min Elongation at Breakof Insulation:	100 %
Min Elongation at Breakof Jacket:	100 %
Min Tensile Strength of Jacket:	9 MPa

Electrical Characteristics

Conductor DCR

Max. Conductor DCR	Max. DCR Unbalance
95 Ohm/km	4 %

Capacitance

Max. Capacitance Unbalance	Max. Mutual Capacitance
160 pF/100m	56 pF/m

Dielectric Strength:	2.5 kVdc for 2s
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Impedance

Nominal Characteristic Impedance
100 Ohm

Delay

Max. Delay Skew
45 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]	Min. TCL [dB]	Min. ELTCTL [dB]
1 MHz	2.1 dB/100m	75.3 dB	72.3 dB	73.2 dB	70.2 dB	68.0 dB	65.0 dB	20.0 dB	40.0 dB	35.0 dB
4 MHz	3.8 dB/100m	66.3 dB	63.3 dB	62.5 dB	59.5 dB	56.0 dB	53.0 dB	23.0 dB	34.0 dB	23.0 dB
10 MHz	6.0 dB/100m	60.3 dB	57.3 dB	54.4 dB	51.4 dB	48.0 dB	45.0 dB	25.0 dB	30.0 dB	15.0 dB
16 MHz	7.6 dB/100m	57.2 dB	54.2 dB	49.8 dB	46.8 dB	43.9 dB	40.9 dB	25.0 dB	28.0 dB	10.9 dB
31.25 MHz	10.7 dB/100m	52.9 dB	49.9 dB	42.4 dB	39.4 dB	38.1 dB	35.1 dB	23.6 dB	25.1 dB	5.1 dB
62.5 MHz	15.5 dB/100m	48.4 dB	45.4 dB	33.4 dB	30.4 dB	32.1 dB	29.1 dB	21.5 dB	22.0 dB	
100 MHz	19.9 dB/100m	45.3 dB	42.3 dB	26.2 dB	23.2 dB	28.0 dB	25.0 dB	20.1 dB	20.0 dB	
125 MHz	22.5 dB/100m	43.8 dB	40.8 dB	22.3 dB	19.3 dB	26.1 dB	23.1 dB	19.4 dB	19.0 dB	
200 MHz	29.1 dB/100m	40.8 dB	37.8 dB	13.2 dB	10.2 dB	22.0 dB	19.0 dB	18.0 dB	17.0 dB	
250 MHz	33.0 dB/100m	39.3 dB	36.3 dB	8.3 dB	5.3 dB	20.0 dB	17.0 dB	17.2 dB	16.0 dB	

Table Notes:	Limits below 4MHz are for information only.
Coupling Attenuation Class:	Type II
Segregation class according EN50174-2:	c

Voltage

Voltage Rating [V]
72 Vdc

Temperature Range

Operating Temp Range:	-30°C To +60°C
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Mechanical Characteristics

Bulk Cable Weight:	52 kg/km
Max. Pull Tension:	80 N

Standards

IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5
Data Category:	Category 6
TIA/EIA Compliance:	ANSI/TIA-568-D.2 Category 6

Flammability, LSOH, Toxicity Testing

IEC Flammability:	IEC 60332-1-2
IEC 60754-1 (EN50267-1)- Halogen Amount:	5 mg/g
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Max. Conductivity:	10 µS/mm
IEC 60754-2 (EN50267-2)- Halogen Acid Gas Amount - Min. pH:	4.3
IEC 61034-2 (EN 61034-2) (VDE 0482-1034) - Smoke Density Min. Transmittance:	60%

Part Number

Variants

Item #	Color	Length
7835ANH 006305M	Blue	305 m
7835ANH 008305M	Gray	305 m

History

Update and Revision:

Revision Number: 0.24 Revision Date: 12-17-2020

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