



Product: <u>7834A</u> ☑

CAT 6 4P 23AWG, U/UTP, PVC Jkt, Indoor,CM

Product Description

CAT 6 4PR x 23AWG U/UTP, Solid Bare Copper Conductor, PE Insulation, CM, PVC Jacket, Indoor

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. PHYSICAL

Construction Details

Conductor

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

Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.01 mm (0.0398 in)	Blue & White with Blue Stripe, Orange & White with Orange Stripe, Green & White with Green Stripe, Brown & White with Brown Stripe

Outer Jacket

Material	Nom. Diameter	Ripcord
PVC - Polyvinyl Chloride	6.2 mm (0.24 in)	Yes

Electrical Characteristics

Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
93.8 Ohm/km (28.6 Ohm/1000ft)	56 pF/m (17 pF/ft)	330 pF/100m	100 Ohm

Delay

Frequency	Max. Delay	Max. Delay Skew	Nom. Velocity of Prop.
100 MHz	538 ns/100m	45 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]	Min. TCL [dB]	Min. ELTCTL [dB]
1	2.0 dB/100m	74.3	72.3	72.3	70.3	67.8	64.8	20.0	40.0	35.0
4	3.8 dB/100m	65.3	63.3	61.5	59.5	55.8	52.8	23.0	40.0	23.0
8	5.3 dB/100m	60.8	58.8	55.5	54.5	49.7	46.7	24.5	40.0	16.9
10	6.0 dB/100m	59.3	57.3	53.3	50.3	47.8	44.8	25.0	40.0	15.0
16	7.6 dB/100m	56.2	54.2	48.7	46.7	43.7	40.7	25.0	38.0	10.9
20	8.5 dB/100m	54.8	52.8	46.3	44.3	41.8	38.8	25.0	37.0	9.0
25	9.5 dB/100m	53.3	51.3	43.8	41.8	39.8	36.8	24.3	36.0	7.0
31.25	10.7 dB/100m	51.9	49.9	41.4	39.4	37.9	34.9	23.6	35.1	
62.5	15.4 dB/100m	47.4	45.4	32.0	30.0	31.9	28.9	21.5	32.0	
100	19.8 dB/100m	44.3	42.3	24.5	22.5	27.8	24.8	20.1	30.0	
155	25.2 dB/100m	41.4	39.4	16.3	14.3	24.0	21.0	18.8	27.0	

Table Notes: Third party verified to TIA -568-C.2. Category 6										
250	32.8 dB/100m	38.3	36.3			19.8	16.8	17.3		
200	29.0 dB/100m	39.8	37.8	10.8	8.8	21.8	18.8	18.0	27.0	

Mechanical Characteristics

Temperature

Operating -20°C To +75°C

Bend Radius

Installation Min.
13.0 mm (0.512 in

Max. Pull Tension: 110 N (25 lbf) Bulk Cable Weight: 40 kg/km (27 lbs/1000ft)

Standards and Compliance

Environmental Suitability:	Indoor, Indoor			
Flammability / Reaction to Fire:	UL 1685			
NEC / UL Compliance:	CM			
CEC / C(UL) Compliance:	M			
IEEE Compliance:	PoE: IEEE 802.3bt Type 1, Type 2, Type 3, Type 4			
Data Category:	Category 6			
TIA/EIA Compliance:	ANSI/TIA 568.2-D			
ISO/IEC Compliance:	ISO/IEC 11801-1, IEC 61156-5			
European Directive Compliance:	EU Directive 2015/863/EU (RoHS 2 amendment), EU Directive 2011/65/EU (RoHS 2)			
APAC Compliance:	China RoHS II (GB/T 26572-2011)			

Product Notes

Notes:

History

Update and Revision:	Revision Number: 0.68 Revision Date: 04-29-2024
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Part Numbers

Variants

Item #	Color	Putup Type	Length
7834A 006A1000	Blue	Reel in Box	1,000 ft
7834A 006U1000	Blue	Unreel	1,000 ft
7834A 008A1000	Grey	Reel in Box	1,000 ft
7834A 008U1000	Grey	Unreel	1,000 ft
7834A 004A1000	Yellow	Reel in Box	1,000 ft

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