



**Product:** [7834BNC](#)

Category 6+ Cable, 4 Bonded-Pairs, U/UTP, LSZH Jkt, Indoor

### Product Description

Category 6+ Premise Horizontal Cable (650MHz), 4 Bonded-Pairs, 23 AWG Solid Bare Copper Conductors, U/UTP, LSZH Jacket, Indoor

### Technical Specifications

#### Product Overview

Suitable Applications:	Horizontal and building backbone cable; Support current and future Category 6 and 5e applications, such as: 1000Base - T (Gigabit Ethernet), 100 Base - T, 10Base - T, FDDI, ATM
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#### Construction Details

##### Conductor

Size	Stranding	Material	Number of Pairs
23 AWG	Solid	BC - Bare Copper	4

##### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene	1.15 mm (0.0453 in)	Blue & White with Blue Strip, Orange & White with Orange Strip, Green & White with Green Strip, Brown & White with Brown Strip

Bonded-Pair:	Yes
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##### Outer Jacket

Material	Nom. Diameter
LSZH - Low Smoke Zero Halogen (Flame Retardant)	6.3 mm (0.25 in)

#### Electrical Characteristics

##### Electricals

Max. Conductor DCR	Max. Mutual Capacitance	Max. Capacitance Unbalance	Nom. Characteristic Impedance
95 Ohm/km	56 pF/m (17 pF/ft)	160 pF/100m	100 Ohm

##### Delay

Max. Delay Skew	Nom. Velocity of Prop.
40 ns/100m	67%

##### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation) [dB/100m]	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	80.3	78.3	78.3	76.3	74	71	23	40	35
4	3.7	71.3	69.3	67.6	65.6	62	59	26	34	23
10	5.7	65.3	63.3	59.6	57.6	54	51	28	30	15
16	7.2	62.2	60.2	55.0	53.0	49.9	46.9	28	28	10.9
31.3	10.2	57.9	55.9	47.7	45.7	44.1	41.1	26.6	25.1	5.1
62.5	14.6	53.4	51.4	38.8	36.8	38.1	35.1	24.5	22	
100	18.8	50.3	48.3	31.5	29.5	34	31	23.1	20	
125	21.2	48.8	46.8	27.6	25.6	32.1	29.1	22.4	19	
200	27.4	45.8	43.8	18.4	16.4	28	25	21	17	
250	31.1	44.3	42.3	13.2	11.2	26	23	20.3	16	
350	37.6	42.1	40.1			23.1	20.1	19.3		

500	46.3	39.8	37.8		20	17	19.3		
650	54.0	38.1	36.1		17.7	14.7	19.3		

Table Notes:	The cable performance between 1 MHz and 4 MHz, Frequency range exceeding 250MHz is achieved by design only and it is therefore not necessary to test for this performance below 4 MHz. Reference standard: ISO/IEC 61156-5 ed. 2.0 (2009) The value of transmission performance is typical.
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## Mechanical Characteristics

### Temperature

<b>Operating</b>
-30°C To +60°C

### Bend Radius

<b>Installation Min.</b>
8"D

Bulk Cable Weight:	46 kg/km (31 lbs/1000ft)
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## Standards and Compliance

Flammability / Reaction to Fire:	60332-1, 60332-3-22 (Category A)
ISO/IEC Compliance:	IEC 61156-5, ISO/IEC 11801, IEC 61034-2 - Smoke Density Min Transmittance = 60%
GENELEC Compliance:	EN 50173-1
European Halogen Free Standards:	IEC 60754-1 - Halogen Amount = HCL+HBr ≤ 0.5%, IEC 60754-2 - Halogen Acid Gas Amount - Max. Conductivity = 10 μS/mm, IEC 60754-2 - Halogen Acid Gas Amount - Min. pH = 4.3

## History

Update and Revision:	Revision Number: 0.14 Revision Date: 04-08-2022
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## Part Numbers

### Variants

Item #	Color	Putup Type	Length
7834BNC 006A1000	Blue	Reel in Box	1,000 ft
7834BNC 006U1000	Blue	Unreel	1,000 ft
7834BNC 008U1000	Gray	Unreel	1,000 ft
7834BNC 008A1000	Gray	Reel in Box	1,000 ft

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