

PRODUCT SPECIFICATIONS

CAT6



Description:	23AWG Non-Plenum, unshielded four twisted pairs, Category 6 Horizontal Cable. Extended testing to 550 MHz
Ratings/Approvals:	NEC Article 800, UL 1666:CMR Rating FT4, ETL Electrically Verified to ANSI/TIA/EIA 568C.2 Category 6, C(ETL)US, RoHS Compliant
Applications:	Supports all Gigabit Ethernet/1000BASE-T/IEEE 802.3ab, ATM up to 155 Mbps, 100 Mbps Fast Ethernet 100BASE-T/IEEE 802.3, ANSI.X3.263 FDDI TP-PMD, Ethernet 10BASE-T/IEEE 802.3, 4 & 16 Mbps Token Ring/IEEE 802.5, T1/E1, xDSL, ISDN, 550 MHz Broadband Video and standards under development such as ATM at 622 Mbps, 1.2, 2.4 and 4.8 Gbps

CONSTRUCTION

Conductor:	23 AWG Solid Bare Copper
Number of Conductors or Pairs:	4 Pair
Jacket Material:	Polyvinyl Chloride
Nominal Overall Cable Diameter:	0.240 in.
Approximate Cable Weight:	34 lb/1,000 ft.

ELECTRICAL & PHYSICAL PROPERTIES

Temperature Rating:	Installation: 0°C to 50°C Operation: -2°C to 60°C
Velocity of Propagation:	70%
Mutual Capacitance:	14 pF/ft Nominal
Capacitance Unbalance:	330 pF/ft maximum
Maximum Conductor D.C.R.:	28.6Ω/1,000 ft
Maximum D.C.R. Unbalance:	3%
Maximum Delay Skew:	18 ns/100m
Characteristic Impedance:	From 0.772 MHz - 100 MHz 100 ± 15% From 100 MHz - 250 MHz 100 ± 22% From 201 MHz - 550 MHz 100 ± 32%
Minimum bend radius:	1.0 in.
Insulation Colors:	Blue paired with White/Blue Orange paired with White/Orange Green paired with White/Green Brown paired with White/Brown

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ELECTRICAL CHARACTERISTICS

Frequency	Return Loss	Insertion Loss	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	ACR	PS-ACR
MHz	dB(100M)	dB(100M)	dB(100M)	dB(100M)	dB(100M)	dB(100M)	dB(100M)	dB(100M)
	Minimum	Maximum	Minimum	Minimum	Minimum	Minimum	Minimum	Minimum
1	20.0	2.0	80.3	78.3	73.8	70.8	78.3	76.3
4	23.0	3.8	71.3	69.3	61.8	58.8	67.5	65.5
10	25.0	6.0	65.3	63.3	53.8	50.8	59.3	57.3
16	25.0	7.6	62.2	60.2	49.7	46.7	54.6	52.6
20	25.0	8.5	60.8	58.8	47.8	44.8	52.3	50.3
31.25	23.6	10.7	57.9	55.9	43.9	40.9	47.2	45.2
62.5	21.5	15.4	53.4	51.4	37.9	34.9	38.0	36.0
100	20.1	19.8	50.3	48.3	33.8	30.8	30.5	28.5
200	18.0	29.0	45.8	43.8	27.8	24.8	16.8	14.9
250	17.3	32.8	44.3	42.3	25.8	22.8	11.5	9.5
300	16.8	36.4	43.1	41.1	24.3	21.3		
350	16.3	39.8	42.1	40.1	22.9	19.9		
400	15.9	43.0	41.3	39.3	21.8	18.8		
500	14.8	49.5	40.2	38.2	20.0	17.0		
550	14.4	53.1	39.5	37.5	18.9	15.9		