

Description: 23AWG Non-Plenum, shielded 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 category 6 applications including Ethernet 1BASE-TX, 100BASE-VG and 155 ATM. Particularly suited for high bandwidth application such as 622 ATM, Wideband, Ethernet 1000BASE-T and emerging applications with anticipated data rates to 3.2 Gbps.

CONSTRUCTION

Conductor:	23 AWG Solid Bare Copper
Number of Conductors or Pairs:	4 Pair
Tape:	Clear Mylar Tape
Drain:	Solid Tin Copper
Shield:	Aluminum/Polyester Tape (100% Coverage)
Jacket Material:	Polyvinyl Chloride
Nominal Overall Cable Diameter:	0.305 in. (7.747 mm)
Approximate Cable Weight:	49 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	



ELECTRICAL CHARACTERISTICS

Frequency	Return Loss	Attenuation	NEXT	PS-NEXT	ELFEXT	PS-ELFEXT	ACR	PS-ACR
MHz	dB	dB(100m)	dB	dB	dB	dB	dB	dB
	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	---	---

*Values above 250 MHz are for engineering information only