

Category 6A UTP 10G Plenum (CMP) Cable

Cable Detail		
Description		
23 AWG CAT6A Plenum, High-Performance Data Cable		
Applicable Standards		
<ul style="list-style-type: none"> • UL Verified Type CMP • C(UL) listed FT6 • ANSI/TIA-568-C.2 • ISO/IEC 11801 • RoHS Compliant • ATM 155 Mbps • 10/100/1000/10G Base-T (IEEE 802.3) • 4/16 Mbps Token Ring (IEEE 802.5) • 100 Mbps TP-PMD • ISDN, ADSL • ATM LAN 1.2G • Horizontal Distribution & Backbone Cabling 		
Physical Characteristics		
Conductor Material	Solid Bare Copper	
Number of Conductor Pairs	4	
Size	23 AWG	
Stranding	Solid	
Insulation Material	FEP	
Overall Diameter	0.041 in.	
Jacket Material	Flame Retardant PVC	
Jacket Diameter	0.3543 in.	
Jacket Spacer Thickness	0.0393 in.	
Outer Sheath Thickness	0.0177 in.	
Nominal Weight	52 lbs.	
Shield Material	Unshielded	
Ripcord	Yes	
Mechanical Characteristics		
Temperature Rating	Installation	0°C to + 60°C
	Operating	-20°C to + 80°C
Tensile Strength	Before	>= 13.8 Mpa
Elongation	Aging	>= 100%
		100°C x 168 hours
	After	>= 85% of unaged
Aging Condition	Aging	>= 50% of unaged
Insulation Colors		
Pair 1	White / Blue	Blue
Pair 2	White / Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown
Part Numbers	Jacket Color	Package
6A04UPXX2	Blue, White	1000FT / Reel

Electrical Characteristics

Max. Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Max. Pair-to-Pair Ground Capacitance Unbalance	330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Max. Delay Skew	40 nS / 100 Meters
Nominal Velocity of Propagation	65%

Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.1	20.0	74.3	72.3
4	3.8	23.0	65.3	63.3
8	5.3	24.5	60.8	58.8
10	5.9	25.0	59.3	57.3
16	7.5	25.0	56.2	54.2
20	8.4	25.0	54.8	52.8
25	9.4	24.3	53.3	51.3
31.25	10.5	23.6	51.9	49.9
62.5	15.0	21.5	47.4	45.4
100	19.1	20.1	44.3	42.3
200	27.6	18.0	39.8	37.8
250	31.1	17.3	38.3	36.3
300	34.3	16.8	37.1	35.1
400	40.1	15.9	35.3	33.3
500	45.3	15.2	33.8	31.8
600	50.1	14.7	32.6	30.6
625	51.2	14.5	32.4	30.4
650	52.3	14.4	32.1	30.1
700	54.5	14.2	31.6	29.6
750	56.7	14.0	31.2	29.2
Frequency (MHz)	ELFEXT (dB/100m) Min.	PS-ELFEXT (dB) Min.	PS-ANEXT (dB/100m)	PS-AELFEXT (dB/100m)
1	67.8	64.8	67.0	67.0
4	55.8	52.8	67.0	66.2
8	49.7	46.7	67.0	60.1
10	47.8	44.8	67.0	58.2
16	43.7	40.7	67.0	54.1
20	41.8	38.8	67.0	52.2
25	39.8	36.8	67.0	50.2
31.25	37.9	34.9	67.0	48.3
62.5	31.9	28.9	65.6	42.3
100	27.8	24.8	62.5	38.2
200	21.8	18.8	58.0	32.2
250	19.8	16.8	56.5	30.2
300	18.3	15.3	55.3	28.7
400	15.8	12.8	53.5	26.2
500	13.8	10.8	52.0	24.2
600	12.2	9.2	50.8	22.6
625	11.9	8.9	50.6	22.3
650	11.5	8.5	50.3	21.9
700	10.9	7.9	49.8	21.3
750	10.3	7.3	49.4	20.7

*Values above are for reference only.

Cable Marking

EXXXXXX 23AWG 4 PR UTP CMP FT6 75C C(UL)US VERIFIED (UL)
CATEGORY 6A ANSI/TIA-568-C.2 ****FT