

# Category 6A UTP 10G (CMX) UV Rated Outdoor Cable

Cable Detail		
		
Description		
23 AWG CAT 6A 4-Pairs UTP CMX, High-Performance Data Cable		
Applicable Standards		
<ul style="list-style-type: none"> <li>• ETL Listed</li> <li>• ANSI/TIA-568-C.2</li> <li>• RoHS Compliant</li> <li>• ATM 155 Mbps</li> <li>• 10/100/1000/10G Base-T (IEEE 802.3)</li> <li>• 4/16 Mbps Token Ring (IEEE 802.5)</li> <li>• 100 Mbps TP-PMD</li> <li>• ISDN, ADSL</li> <li>• ATM LAN 1.2G</li> <li>• Horizontal Distribution &amp; Backbone Cabling</li> </ul>		
		
Physical Characteristics		
Conductor Material	Solid Bare Copper	
Number of Conductor Pairs	4	
Size	23 AWG	
Stranding	Solid Bare Copper	
Shield Material	N/A	
Insulation Material	HDPE	
Overall Diameter	0.316 in	
Jacket Material	UV PVC	
Average Thickness	0.24 mm	
Min. Point Thickness	0.22 mm.	
Twisted Pair Diameter	2.24 (± 0.02 mm).	
Nominal Weight	48 lbs.	
Ripcord	Yes	
Mechanical Characteristics		
Test Object Jacket	Cold Bend (-20±2°C x4hr)	
Test Material PVC		
Tensile Strength	Before ≥ 13.8 Mpa	
Elongation	Aging ≥ 100%	
Aging Condition	100°C x 168 hours	
	After ≥ 85% of unaged	
	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
C6A-026BK	Black	1000FT / Spool

## Electrical Characteristics

1.0-250.0MHz Impedance	100 ± 15 (ohms)
250-550.0MHz Impedance	100 ± 20 (ohms)
1.0-250MHz Delay Skew	≤45 (ns/100m)
Pair-to-Ground Capacitance Unbalance	≤330 Max. Conductor (pF/100m)
DC Resistance 20°C (ohms/km)	95 Resistance Unbalance (%) ≤5

## Electrical Performance

Frequency (MHz)	Attenuation (dB/100m) Max.	Return loss (dB) Min.	NEXT (dB) Min.	PS-NEXT (dB) Min.
1	2.1	20.0	75.3	72.3
4	3.8	23.0	66.3	63.3
8	5.3	24.5	61.8	58.8
10	5.9	25.0	60.3	57.3
16	7.5	25.0	57.2	54.2
20	8.4	25.0	55.8	52.8
25	9.4	25.0	54.3	51.3
31.25	10.5	25.0	52.9	49.9
62.5	15.0	24.3	48.4	45.4
100	15.0	23.6	45.3	42.3
200	19.1	20.1	40.8	37.8
250	27.6	18.0	38.1	36.6
300	31.1	15.6	39.3	35.1
400	34.3	16.8	38.1	31.5
500	40.1	15.2	34.8	31.5
625	51.2	14.5	32.4	30.4
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	68.0	65.0	67.0	67.0
4	56.0	53.0	67.0	66.2
8	49.9	46.9	67.0	60.1
10	48.0	45.0	67.0	56.2
16	43.9	40.9	67.0	54.1
20	42.0	40.9	67.0	52.2
25	40.0	39.0	67.0	50.2
31.25	38.1	37.0	67.0	48.3
62.5	32.1	35.1	65.6	42.3
100	32.1	29.1	62.5	38.2
200	28.0	25.0	58.0	32.2
250	22.0	19.0	56.5	30.2
300	20.0	17.0	55.3	28.7
400	18.5	15.5	53.5	26.2
500	14.0	11.0	52.0	24.2
625	-	-	-	-
750	-	-	-	-

\*Values above are for reference only.

## Cable Marking

CATEGORY 6A 23AWG 4 PR UTP \*\*\*\*\*CMX OUTDOOR UV C(ETL)  
VERIFIED CATEGORY 6A ANSI/TIA-568-C.2 \*\*\*\*FT