

# Cat6 Shielded Plenum

23AWG • 4 Twisted Pairs • CMP • F/UTP 550MHz • Solid Copper



## Key Features

- Bandwidth tested up to 550 MHz
- Easily Identified Color Striped Pairs
- Sequential Footage Markings Every 2ft
- In compliance with ANSI/TIA 568.2-D
- RoHS-3 compliant
- Supports PoE, PoE+, and PoE++ (IEEE 802.3af/at/bt) up to 60W & 300V DC

## Print Legend

CAT6 550MHz CMP PLENUM STP 4-PAIR  
23AWG EIA/TIA-568-C.2-1  
0002FT-1000FT

## Technical Data

<b>Operating Temp. Range</b>	75°C/167°F
<b>Max. Operating Voltage</b>	300v
<b>Bend Diameter Min.</b>	4in/10mm

Insulation	HDPE
Average Thickness	0.248
Min Point Thickness	0.228
<b>Conductor Insulation Dia. (±0.01mm)</b>	<b>1.08</b>
Twisted Pair Dia. (±0.02mm)	2.16
Spline	PE
PE-Tape	Yes

Jacket	CMP-PLENUM
Average Thickness	0.60
Min. Point Thickness	0.55
<b>Overall Diameter (±0.1mm)</b>	<b>7.00</b>
Ripcord	Yes

Shield	FTP
Drain Wire (Solid Tinned Copper)	0.40
AL Foil Shield	Yes



Conductor	Solid Bare Copper
Size	23AWG
Conductor Dia. (±0.05mm)	0.585

Color of Pairs	
Pair 1	Blue- White/Blue
Pair 2	Orange- White/Orange
Pair 3	Green- White/Green
Pair 4	Brown- White/Brown

# Electrical Characteristics

Frequency MHz	Return Loss Min (dB)	Attenuation Max (dB/100m)	Next (Min dB)
1	21.0	1.9	65.0
4	23.4	3.5	64.1
8	24.6	5.0	59.4
16	25.0	7.0	54.6
20	25.0	7.8	53.1
62.5	21.5	14.0	45.1
100	20.1	18.0	41.8
200	18.0	26.1	36.9
250	17.3	29.5	36.1
350	16.3	39.8	35.3
400	15.9	43.0	34.5
550	14.9	51.8	33.2

Frequency MHz	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1	62.0	64.2	61.2	520.5
4	61.8	52.1	49.1	504.3
8	57.0	46.1	43.1	499.6
16	55.5	40.1	37.1	496.2
20	50.7	38.2	35.2	495.3
62.5	42.7	28.3	25.3	492.2
100	39.3	24.2	21.2	491.3
200	34.3	18.2	15.2	490.4
250	32.7	16.2	13.2	490.1
350	32.5	16.0	13.0	490.0
400	32.0	15.8	12.8	490.0
550	31.2	13.0	10.0	490.0

**1.0-500.0MHz Impedance (ohms)** 100 ± 15

**1.0-500.0MHz Delay Skew (ns/100m)** ≤45

**Pair-to-Ground Capacitance Unbalance (pF/100m)** ≤3300

**Max. Conductor DC Resistance 20°C (ohms/km)** 68

**Resistance Unbalance (%)** ≤5

## Mechanical Characteristics

Test Object	Jacket
Test Material	PVC
Before Tensile Strength (Mpa)	≥13.8
Aging Elongation (%)	≥100
Aging Condition (°Cxhrs)	100x168
After Tensile Strength (Mpa)	≥85% of unaged
Aging Elongation (%)	≥50% of unaged
Cold Bend (-20+2° Cx4hrs)	No Crack

**Returns? No problem.  
Guarantee? Of course**

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