

**CAT 6A** 

# Cat6A Shielded Plenum

SKU TS-SPBC/6A-BL

23AWG • 4 Twisted Pairs • CMP • F/UTP  
750MHz • Solid Copper



## Key Features

- Bandwidth tested up to 750 MHz
- Suitable for 1 and 10-Gigabit Ethernet
- 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

CAT6A 750MHz 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	FEP
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-PVC
Average Thickness	0.55
Min. Point Thickness	0.50
<b>Overall Diameter (±0.1mm)</b>	<b>7.40</b>
Ripcord	Yes

Shield	F/UTP
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	20.0	2.1	74.3
4	23.0	3.8	65.3
8	24.5	5.3	60.8
16	25.0	7.5	56.2
20	25.0	8.4	54.8
62.5	21.5	15.0	47.4
100	20.1	19.1	44.3
200	18.0	27.6	39.8
250	17.3	31.1	38.3
300	16.8	34.3	37.1
500	15.2	45.3	33.8
750	14.0	62.3	31.1

Frequency MHz	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1	72.3	67.8	64.8	570.0
4	63.3	55.8	52.8	552.0
8	58.8	49.7	46.7	546.7
16	54.2	43.7	40.7	543.0
20	52.8	41.8	38.8	542.0
62.5	45.4	31.9	28.9	538.6
100	42.3	27.8	24.8	537.6
200	37.8	21.8	18.8	536.5
250	36.3	19.8	16.8	536.3
300	35.1	18.3	15.3	536.1
500	31.8	13.8	10.8	535.6
750	29.1	10.3	7.3	535.3

**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

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