



Cat6 Shielded Plenum F/UTP Cable

SKU: TS-SPBC/6-BL

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



Packaging Available

• 1000ft Reel

Jacket Colors



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 F/UTP
4-PAIR 23AWG EIA/TIA-568-C.2-1
0002FT-1000FT

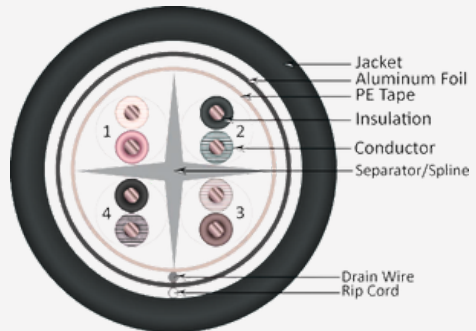
Technical Data

Operating Temp. Range

Max. Operating Voltage

Bend Diameter Min.

Insulation		HDPE
Average Thickness		0.24
Min Point Thickness		8
Conductor Insulation Dia. (±0.01mm)		0.228
Twisted Pair Dia. (±0.02mm)		1.08
Spline		2.16
PE-Tape		PE
		Yes
Jacket		CMP-PVC
Average Thickness		0.60 0.55
Min. Point Thickness		7.00 Yes
Overall Diameter (±0.1mm)		
Ripcord		
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





Cable ID: F/UTP CAT6

Test Limit: TIA Cat 6 Perm. Link

Limits Version: V7.6

Date / Time: 05/19/2023 02:15:41 PM

Operator: LIXIAOCHONG

Headroom 0.6 dB (NEXT 1.2-4.5)

Cable Type: Cat 6 F/UTP NVP: 70.0%

-1

Main: Versiv

S/N: 2034142

Software Version: V6.6 Build 2

Calibration Date: 12/23/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 20475125

Test Summary: PASS

Remote: Versiv

S/N: 2035009

Software Version: V6.6 Build 2

Calibration Date: 12/23/2020

Adapter: DSX-8000R (DSX-PLA804)

S/N: 20485133

Length (ft), Limit 295	[Pair 7,8]	318
Prop. Delay (ns), Limit 498	[Pair 4,5]	486
Delay Skew (ns), Limit 44	[Pair 4,5]	24
Resistance (ohms)	[Pair 4,5]	14.65
Insertion Loss Margin (dB)	[Pair 4,5]	4.7
Frequency (MHz)	[Pair 4,5]	250.0
Limit (dB)	[Pair 4,5]	31.1

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	1.2-4.5	1.2-4.5	1.2-4.5	1.2-4.5
NEXT (dB)	2.3	0.6*	2.3	0.7
Freq. (MHz)	233.5	207.5	233.5	208.0
Limit (dB)	35.8	36.7	35.8	36.6
Worst Pair	1.2	3.6	1.2	1.2
PS NEXT (dB)	3.1	2.1	3.2	2.5
Freq. (MHz)	230.5	87.0	249.0	208.5
Limit (dB)	33.3	40.3	32.7	34.0

PASS	MAIN	SR	MAIN	SR
Worst Pair	3.6-4.5	3.6-4.5	3.6-4.5	3.6-4.5
ACR-F (dB)	11.4	11.2	12.2	12.2
Freq. (MHz)	152.0	152.0	198.0	200.0
Limit (dB)	20.6	20.6	18.3	18.2
Worst Pair	4.5	4.5	12.1	4.5
PS ACR-F (dB)	12.0	11.8	175.0	11.8
Freq. (MHz)	174.5	173.0	16.3	173.0
Limit (dB)	16.4	16.4		16.4

N/A	MAIN	SR	MAIN	SR
Worst Pair	3.6-4.5	3.6-7.8	1.2-4.5	1.2-4.5
ACR-N (dB)	5.9	4.3	8.3	4.4
Freq. (MHz)	72.0	87.0	249.0	208.0
Limit (dB)	28.6	25.6	4.3	8.7
Worst Pair	3.6	3.6	1.2	1.2
PS ACR-N (dB)	6.0	4.2	8.3	10.1
Freq. (MHz)	76.0	87.0	249.0	
Limit (dB)	25.3	23.1	1.7	245.0

PASS	MAIN	SR	MAIN	SR
Worst Pair	7.8	7.8	7.8	7.8
RL (dB)	0.2*	0.4*	0.2	1.8
Freq. (MHz)	162.5	67.0	162.5	105.5
Limit (dB)	11.9	15.7	11.9	13.8

Compliant Network Standards:

100BASE-T 100BASE-TX

1000BASE-T 2.5GBASE-T

ATM-25 ATM-51

100VG-AnyLan TR-4

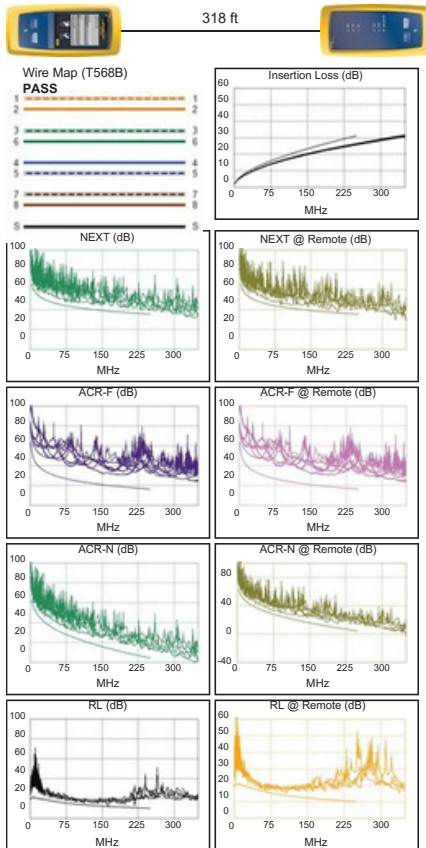
TR-16 Passive

100BASE-T4

5GBASE-T

ATM-155

TR-16 Active



* Measurement is within the accuracy limits of the instrument.



Electrical Characteristics

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

Frequency MHz	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1 4 8	62.0	64.2	61.2	520.5
16	61.8	52.1	49.1	504.3
20	57.0	46.1	43.1	499.6
62.5	55.5	40.1	37.1	496.2
100	50.7	38.2	35.2	495.3
200	42.7	28.3	25.3	492.2
250	39.3	24.2	21.2	491.3
350	34.3	18.2	15.2	490.4
400	32.7	16.2	13.2	490.1
550	32.5	16.0	13.0	490.0
	32.0	15.8	12.8	490.0
	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 20oC (ohms/km)	68
Resistance Unbalance (%)	<=5

Mechanical Characteristics

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

Returns? No problem.
Guarantee? Of course

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