

CAT 6

Cat6 Plenum UTP Pure Copper

SKU: TS-PBC/6 OR

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



Packaging Available

1000ft Pull Box

Jacket Colors



Key Features

- Bandwidth tested up to 550 MHz
- 23 AWG
- Easily Identified Color Striped Pairs
- Sequential Footage Markings Every 2ft

Print Legend

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

Technical Data

Operating Temp. Range 75°C/167°F

Max. Operating Voltage 300v

Bend Radius 2in/5mm

Insulation **HDPE**

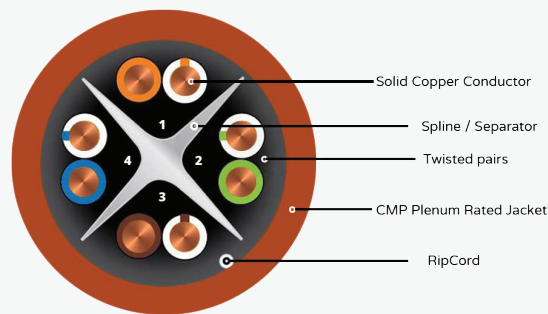
Average Thickness	0.220
Min Point Thickness	0.200
Conductor Insulation Dia. (±0.01mm)	0.95
Twisted Pair Dia. (±0.02mm)	2.02
Spline	PE

Jacket **CMP-PVC**

Average Thickness	0.50
Min. Point Thickness	0.45
Overall Diameter (±0.1mm)	6.00
Ripcord	Yes

Conductor **Solid Bare Copper**

Size	23AWG
Conductor Dia. (±0.05mm)	0.57



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: 225-C UTP4 CAT6 UTP CAT6 BC-TS

Test Limit: TIA Cat 6 Perm. Link

Limits Version: V7.5

Date / Time: 07/09/2021 01:14:46 PM

Operator: LIXIAOHONG

Headroom 3.5 dB (NEXT 1,2-3,6)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

Main: Versiv

S/N: 2034142

Software Version: V6.5 Build 5

Calibration Date: 12/23/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 20475125

Test Summary: PASS

Remote: Versiv

S/N: 2035009

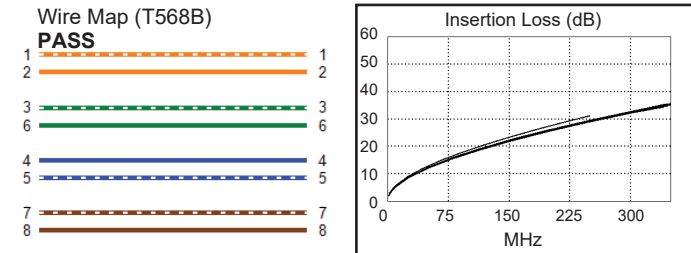
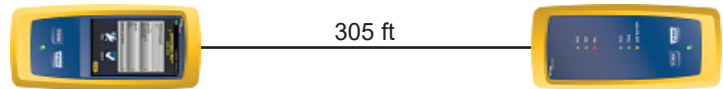
Software Version: V6.5 Build 5

Calibration Date: 12/23/2020

Adapter: DSX-8000R (DSX-PLA804)

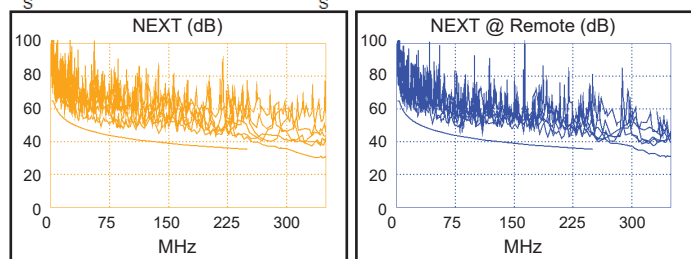
S/N: 20485133

Length (ft), Limit 295	[Pair 3,6]	305
Prop. Delay (ns), Limit 498	[Pair 7,8]	464
Delay Skew (ns), Limit 44	[Pair 7,8]	15
Resistance (ohms)	[Pair 7,8]	15.53
Insertion Loss Margin (dB)	[Pair 7,8]	1.6
Frequency (MHz)	[Pair 7,8]	250.0
Limit (dB)	[Pair 7,8]	31.1

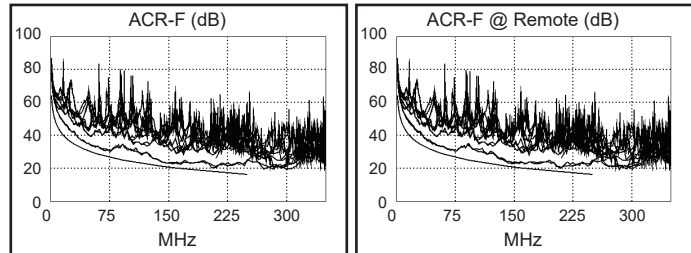


Worst Case Margin Worst Case Value

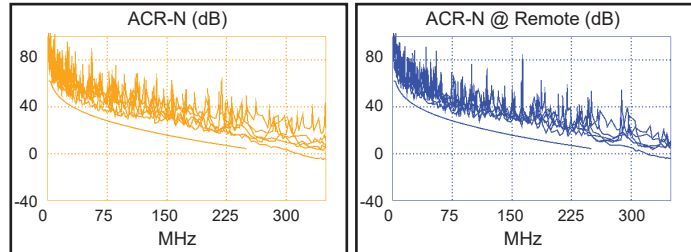
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	1,2-3,6	3,6-4,5	1,2-4,5
NEXT (dB)	3.9	3.5	6.0	5.5
Freq. (MHz)	35.5	80.8	246.0	210.5
Limit (dB)	49.1	43.3	35.5	36.6
Worst Pair	3,6	3,6	3,6	1,2
PS NEXT (dB)	5.2	4.4	6.2	6.0
Freq. (MHz)	5.5	83.8	236.0	220.5
Limit (dB)	59.6	40.6	33.1	33.6



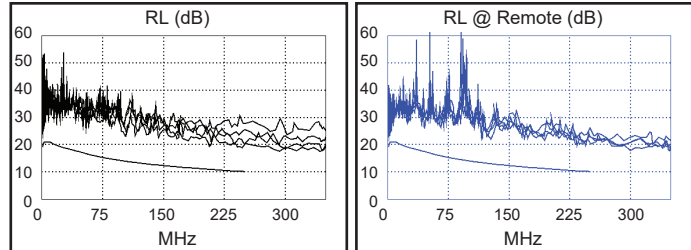
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-1,2	3,6-1,2	3,6-1,2	3,6-1,2
ACR-F (dB)	2.0	1.8	2.0	1.9
Freq. (MHz)	209.5	151.0	209.5	208.5
Limit (dB)	17.8	20.6	17.8	17.8
Worst Pair	1,2	1,2	1,2	1,2
PS ACR-F (dB)	4.3	4.3	4.3	4.3
Freq. (MHz)	209.0	208.5	209.0	208.5
Limit (dB)	14.8	14.8	14.8	14.8



N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	1,2-3,6	3,6-4,5	1,2-3,6
ACR-N (dB)	4.5	4.5	7.9	10.1
Freq. (MHz)	35.5	80.8	246.0	247.0
Limit (dB)	38.4	26.8	4.6	4.5
Worst Pair	3,6	3,6	3,6	1,2
PS ACR-N (dB)	5.5	5.5	9.4	10.2
Freq. (MHz)	5.5	83.8	250.0	247.5
Limit (dB)	55.5	23.7	1.6	1.9



PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6	3,6	4,5	3,6
RL (dB)	6.6	4.3	8.7	8.8
Freq. (MHz)	3.8	3.8	247.5	234.5
Limit (dB)	21.0	21.0	10.1	10.3



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	2.5GBASE-T	5GBASE-T
ATM-25	ATM-51	ATM-155
100VG-AnyLan	TR-4	TR-16 Active
TR-16 Passive		

Electrical Characteristics

Frequency MHz	Return Loss Min (dB)	Attenuation Max (dB/100m)	Next (Min dB)
1	20.0	2.0	65.3
4	23.0	4.1	56.3
8	24.5	5.8	51.8
16	26.0	8.2	47.3
20	26.5	9.3	45.8
62.5	25.0	17.0	38.4
100	25.0	22.0	35.3
200	18.0	32.4	30.8
250	17.3	36.9	29.3
300	16.8	41.0	28.2
400	15.9	48.5	26.3
550	14.9	58.8	24.2

Frequency MHz	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1	62.3	63.8	60.8	570.0
4	53.3	51.7	48.7	552.0
8	48.8	45.7	42.7	546.7
16	44.3	39.7	36.7	543.0
20	42.8	37.7	34.7	542.0
62.5	35.4	27.8	24.8	538.6
100	32.3	23.8	20.8	537.6
200	27.8	17.7	14.7	536.5
250	26.3	15.8	12.8	536.3
300	25.2	14.2	11.2	536.1
400	23.3	11.7	8.7	535.8
550	21.2	8.9	5.9	535.5

1.0-100.0MHz Impedance (ohms) 100 ± 15

1.0-100.0MHz Delay Skew (ns/100m) ≤45

Pair-to-Ground Capacitance ≤3300

Unbalance (pF/100m)

Max. Conductor DC Resistance 72.2

20oC (ohms/km)

Resistance Unbalance (%) ≤5

Mechanical Characteristics

Test Object	Jacket
Test Material	PVC
Before Tensile Strength (Mpa)	>=13.8
Aging Elongation (%)	>=150
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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