

CAT6



Cat6 Plenum UTP Pure Copper

SKU: RCT-C6P-BC-WH

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
- Solid Bare Copper
- Easily Identified Color Striped Pairs
- Sequential Footage Markings Every 2ft
- RoHS compliant
- Exceeds EIA/TIA 568 C.2-1, CSA, and ISO/IEC 11801 specifications
- 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

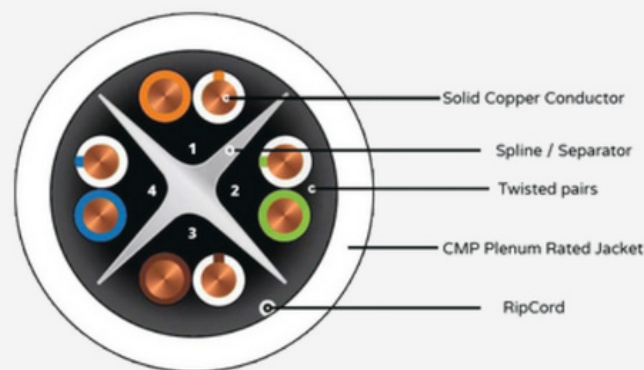
Max. Operating Voltage 300v

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

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



CAT6



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

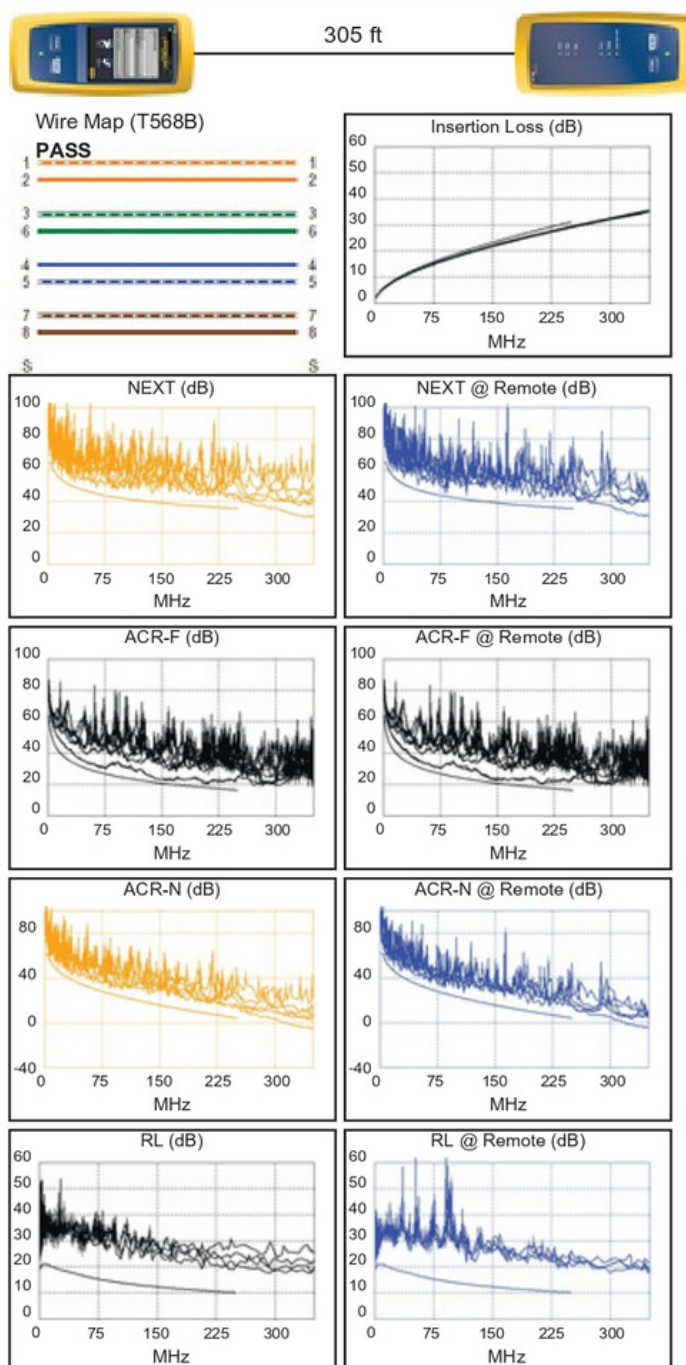
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	1,2-3,6	3,6-4,5	1,2-3,6
NEXT (dB)	3.9	3.5	6.0	5.5
Freq. (MHz)	49.1	43.3	35.5	36.6
Limit (dB)	3.6	3.6	3.6	3.6
Worst Pair	5.2	4.4	6.2	1.2
PS NEXT (dB)	5.5	83.8	236.0	6.0
Freq. (MHz)	59.6	40.6	33.1	220.5
Limit (dB)				33.6

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)	38.4	26.8	4.6	4.5
Limit (dB)	3.6	3.6	3.6	3.6
Worst Pair	5.5	5.5	9.4	1.2
PS ACR-N (dB)	5.5	83.8	250.0	10.2
Freq. (MHz)	55.5	23.7	1.6	247.5
Limit (dB)				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



LinkWare™ PC Version 10.7



CAT6



Electrical Characteristics

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

Frequency MHz	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1 4 8	62.3	63.8	60.8	570.0
16	53.3	51.7	48.7	552.0
20	48.8	45.7	42.7	546.7
62.5	44.3	39.7	36.7	543.0
100	42.8	37.7	34.7	542.0
200	35.4	27.8	24.8	538.6
250	32.3	23.8	20.8	537.6
300	27.8	17.7	14.7	536.5
400	26.3	15.8	12.8	536.3
550	25.2	14.2	11.2	536.1
	23.3	11.7	8.7	535.8
	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
Unbalance (pF/100m)** ≤ 3300

**Max. Conductor DC Resistance
20oC (ohms/km)** 72.2

Resistance Unbalance (%) ≤ 5

Mechanical Characteristics

Test Object	Jacket	PVC
Test Material	>=13.8	>=150
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)		

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