

Cat6 Plenum UTP

Pure Copper Cable

SKU: 52N-PLC6-BC

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



RoHS compliant



Solid Bare Copper



Exceeds EIA/TIA 568 C.2-1,
CSA, and ISO/IEC 11801
specifications



Easily Identified Color
Striped Pairs



Sequential Footage
Markings Every 2ft



Sequential Footage
Markings Every 2ft



Sequential Footage
Markings Every 2ft

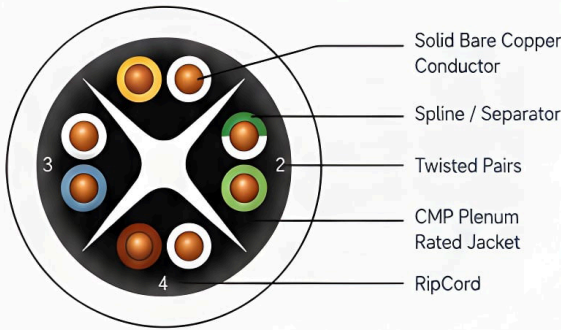
Print Legend

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	0.60 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





Cable ID: 52N-PLC6-BC

Test Limit: TIA Cat 6 Perm. Link

Limits Version: V7.5 Date / Time:

07/09/2021 01:14:46 PM Operator:

LXIAOHONG 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

Remote: Versiv

S/N: 2035009

Software Version: V6.5 Build 5

Calibration Date: 12/23/2020

Adapter: DSX-8000R (DSX-PLA804)

S/N: 20485133

Test Summary: PASS

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	3,6
PS NEXT (dB)	5.2	4.4	6.2	6.0
Freq. (MHz)	59.6	40.6	33.1	33.6
Limit (dB)				

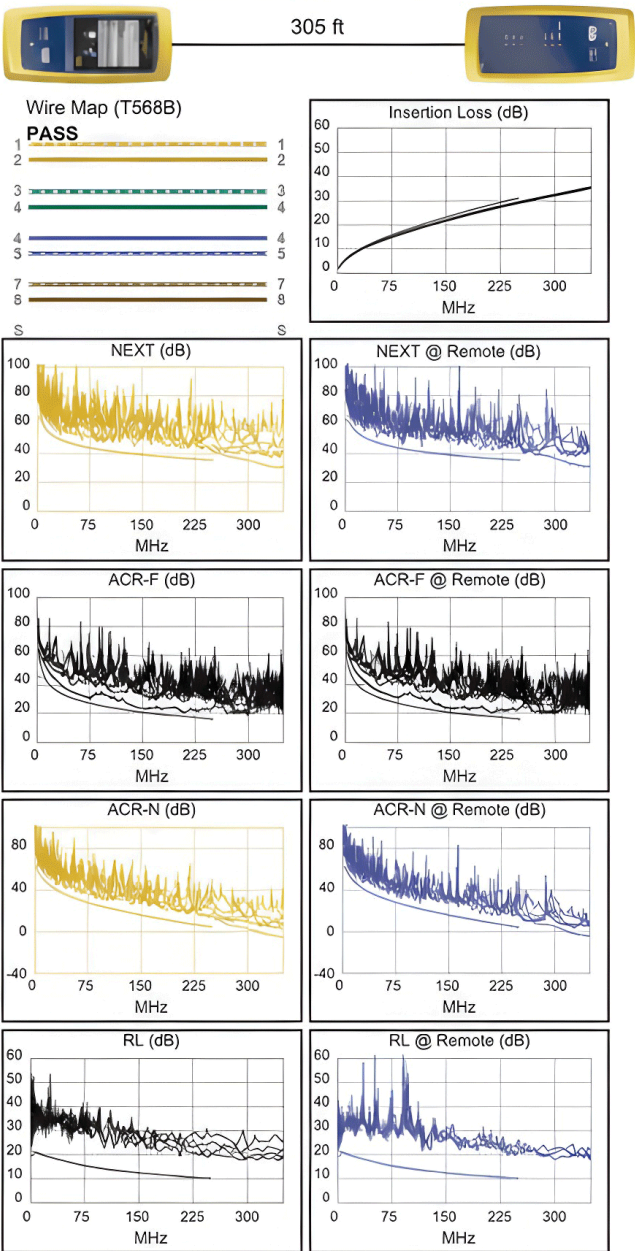
PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-1,2	3,6-1,2	3,6-1,2	3,6-1,2
ACR-F (dB)	2.0	1.8	2.0	1.9
Freq. (MHz)	209.5	151.0	209.5	208.5
Limit (dB)	17.8	20.6	17.8	17.8
Worst Pair	1,2	1,2	1,2	1,2
PS ACR-F (dB)	4.3	4.3	4.3	4.3
Freq. (MHz)	209.0	208.5	209.0	208.5
Limit (dB)	14.8	14.8	14.8	14.8

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)	55.5	23.7	1.6	1.9
Limit (dB)				

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
100BASE-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 /



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)		

Returns? No problem.
Guarantee? Of course

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