

Cat6 Plenum UTP Solid Conductor Cable

SKU: 52N-PLC6

23AWG • 4 Twisted Pairs • CMP • U/UTP

550MHz • Solid Conductor



Packaging Available

1000ft Pull Box

Jacket Colors



Key Features



Bandwidth tested up to 550 MHz
• 23 AWG



RoHS compliant



Solid Conductor



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

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

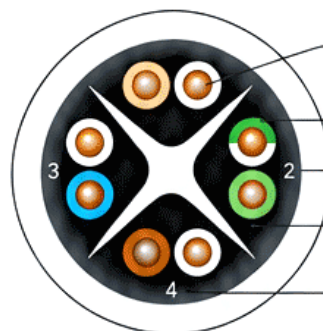
Max. Operating Voltage 300V

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)	6.60
Ripcord	Yes

Conductor	Solid Conductor
Size	23AWG
Conductor Dia. (±0.005mm)	0.57
Conductor Material	Solid Conductor



Solid Conductor

Spline / Separator

Twisted Pairs

CMP Plenum
Rated Jacket

RipCord

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

Test Limit: TIA Cat6Perm.Link

Limits Version: V7.6

Date / Time: 12/04/2021 09:08:44 PM

Operator: LIXIAOHONG

Headroom 0.4 dB (NEXT 1,2-3,6)

Cable Type: Cat 6 U/UTP

NVP: 69.0%

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]	204
Prop. Delay (ns), Limit 498	[Pair 4,5]	311
Delay Skew (ns), Limit 44	[Pair 4,5]	10
Resistance (ohms)	[Pair 4,5]	23.29

Insertion Loss Margin (dB)	[Pair 4,5]	5.2
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	3,6-7,8	1,2-3,6	1,2-4,5	1,2-3,6
NEXT (dB)	5.9	0.4*	6.1	1.8
Freq. (MHz)	123.0	37.0	209.5	249.0
Limit (dB)	40.4	48.8	36.6	35.4
Worst Pair	3,6	3,6	1,2	3,6
PS NEXT (dB)	6.4	2.3	7.6	3.3
Freq. (MHz)	123.0	37.3	249.0	249.5
Limit (dB)	37.8	46.3	32.7	32.7

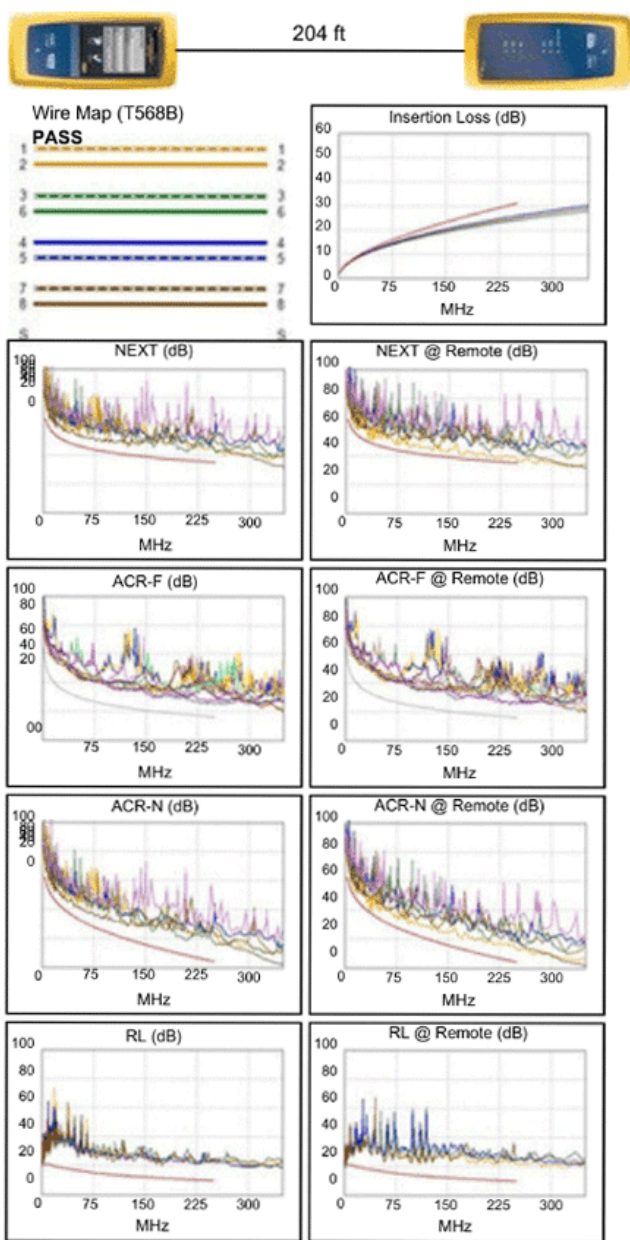
PASS	MAIN	SR	MAIN	SR
Worst Pair	1,2-4,5	1,2-4,5	1,2-4,5	1,2-4,5
ACR-F (dB)	8.7	8.3	9.1	8.8
Freq. (MHz)	232.0	162.5	249.0	239.5
Limit (dB)	16.9	20.0	16.3	16.6
Worst Pair	1,2	4,5	4,5	1,2
PS ACR-F (dB)	10.5	10.6	10.9	11.5
Freq. (MHz)	163.0	166.5	232.0	248.5
Limit (dB)	16.9	16.8	13.9	13.3

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	1,2-3,6	1,2-4,5	1,2-3,6
ACR-N (dB)	6.7	1.4	12.7	8.9
Freq. (MHz)	45.5	37.0	249.0	249.0
Limit (dB)	35.2	37.9	4.3	4.3
Worst Pair	3,6	3,6	1,2	1,2
PS ACR-N (dB)	6.8	3.3	13.6	9.8
Freq. (MHz)	11.4	37.3	249.0	250.0
Limit (dB)	48.7	35.4	1.7	1.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6	3,6	7,8	1,2
RL (dB)	5.3	2.7	9.1	11.2
Freq. (MHz)	3.8	3.8	175.0	250.0
Limit (dB)	21.0	21.0	11.6	10.0

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		



* Measurement is within the accuracy limits of the instrument.

LinkWare™ PC Version 10.7

Electrical Performance

Frequency (MHz)	Return Loss (dB)	Attenuation (Max dB)	NEXT (Min dB)	PSNEXT (Min dB)	FEXT (dB/100m)	PSELFEXT (dB/100m)	DELAY (dB/100m)
1	20.0	1.8	74.3	72.3	67.8	64.8	570.0
4	23.0	3.7	65.3	63.3	55.7	52.7	552.0
8	24.5	5.3	60.8	58.8	49.7	46.7	546.7
16	25.0	7.5	56.3	54.3	43.7	40.7	543.0
20	25.0	8.4	54.8	52.8	41.7	38.7	542.0
62.5	21.5	15.4	47.4	45.4	31.8	28.8	538.6
100	20.1	19.8	44.3	42.3	27.8	24.8	537.6
200	18.0	29.0	39.8	37.8	21.7	18.7	536.5
250	17.3	32.8	38.3	36.3	19.8	16.8	536.3
300	16.8	36.4	37.2	35.2	18.2	15.2	536.1
400	15.9	43.0	35.3	33.3	15.7	12.7	535.8

1.0-100.0MHz Impedance (ohms)	100±15
1.0-100.0MHz Delay Skew (ns/100m)	≤45
Pair-to-Ground Capacitance Unbalance (pF/100m)	≤330
Max. Conductor DC Resistance 20°C (ohms/km)	72.2
Resistance Unbalance (%)	≤5



High Performance



Reliable Transmission



Low Signal Loss



Stable & Durable



Ideal for LAN Networks

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