

CAT6



Cat6 Shielded Plenum F/UTP Cable

SKU: RCT-C6P-FUTP-BC-BK
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

CAT6550MHZ CMPPLENUM F/UTP
4-PAIR23AWG EIA/TIA-568-C.2-1
0002FT-1000FT

Technical Data

Operating Temp. Range 75°C/167°F

Max. Operating Voltage 300v

Bend Diameter Min. 4in/10mm

Insulation

HDPE

Average Thickness 0.24

Min Point Thickness 0.228

Conductor Insulation Dia. (±0.01mm) 1.08

Twisted Pair Dia. (±0.02mm) 2.16

Spline PE

PE-Tape Yes

Jacket

CMP-PVC

Average Thickness 0.60

Min. Point Thickness 0.55

Overall Diameter (±0.1mm) 7.00

Ripcord Yes

Shield

FTP

Drain Wire (Solid Tinned Copper) 0.40

AL Foil Shield Yes

Conductor

Insulation

Spline

Drain Wire



Jacket

AL Foil Shield

PE Tape

Ripcord

Twisted Pairs

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



CAT6



Cable ID: F/UTP CAT6

Test Limit: TIA Cat 6Perm.Link
Limits Version: V7.6
Date / Time: 05/18/2023 02:15:41 PM
Operator: LIXIAOHONG
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 Worst	MAIN	SR	MAIN	SR
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				
PS NEXT (dB)	1.2	3.6	1.2	1.2
Freq. (MHz)	230.5	87.0	249.0	2.5
Limit (dB)	33.3	40.3	32.7	208.5

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	200.0
Worst Pair				

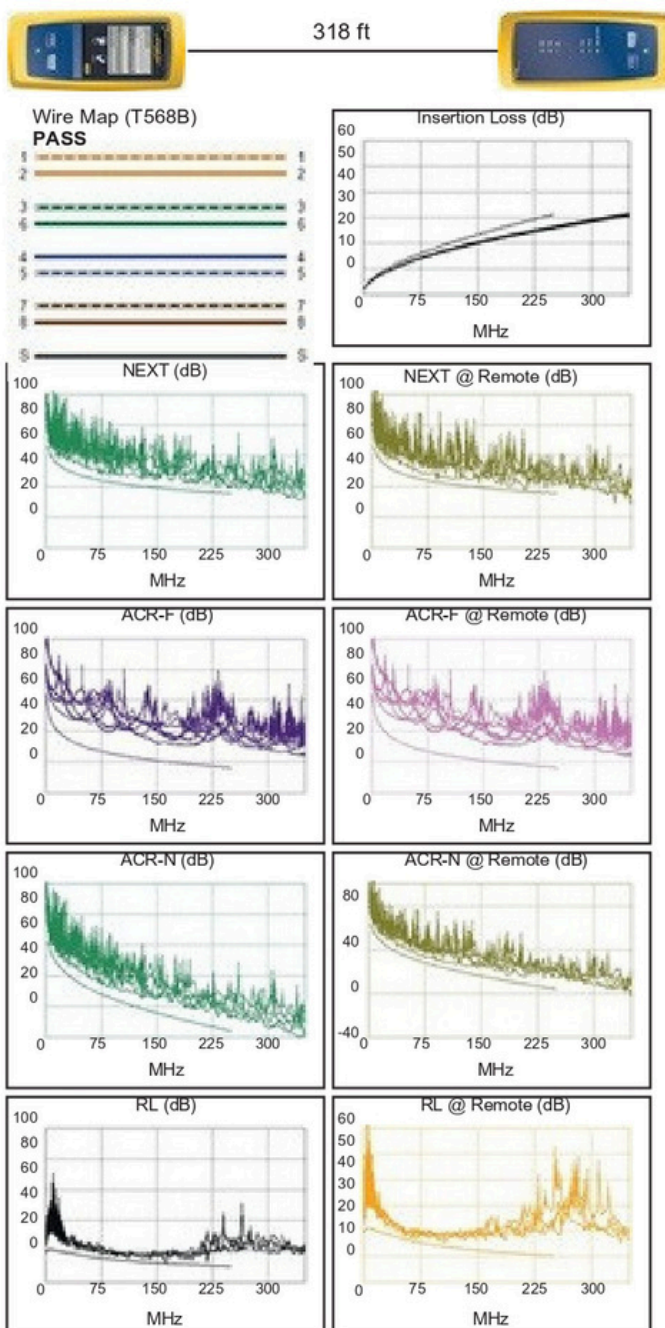
PS ACR-F (dB)	MAIN	SR	MAIN	SR
Worst Pair	4,5	4,5	142,5,1	4,5
ACR-F (dB)	12.0	11.8	175.0	11.8
Freq. (MHz)	174.5	173.0	16.3	173.0
Limit (dB)	16.4	16.4	16.4	16.4

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				

PS ACR-N (dB)	MAIN	SR	MAIN	SR
Worst Pair	3,6	3,6	1,2	1,2
ACR-N (dB)	6.0	4.2	8.3	10.1
Freq. (MHz)	76.0	87.0	249.0	10.1
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:
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.

FLUKE
networks





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

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