

Cat6 Riser Unshielded Solid Bare Copper

SKU: TS-RBC/6-BL

23AWG • 4 Twisted Pairs • CMR

U/UTP • 550MHz • Solid Bare Copper



Lengths Available

• 1000ft

Jacket Colors



Key Features

- Bandwidth tested up to 550 MHz
- Suitable for 1 Gigabit and 5 Gigabit Ethernet up to 328 ft
- In compliance with ANSI/TIA 568.2-D
- RoHS-3 Compliant
- Easily identified color striped pairs
- Supports Power over Ethernet: PoE/PoE+/PoE++ (IEEE 802.3af/at/bt) 4PPoE up to 100W
- Sequential footage markings every 2ft

Technical Data

Insulation

PE

Average Thickness (mm)	0.21
Min Point Thickness (mm)	0.193
Conductor Insulation Dia. (±0.02mm)	0.96
Twisted Pair Dia. (±0.02mm)	1.92
Ripcord	Nylon
Spline	Present
Polyethylene Tape	Not Present
Shielding	U/UTP

Conductor

Solid Bare Copper

Size	23AWG
Conductor Dia. (±0.05mm)	0.54

Color of Pairs

Pair 1	Blue- White/Blue
Pair 2	Orange- White/Orange
Pair 3	Green- White/Green
Pair 4	Brown- White/Brown

Cable Jacket

PVC

Average Thickness (mm)	0.60
Min. Point Thickness (mm)	0.55
Outer Diameter (±0.2mm)	5.90

Standards Reference

ANSI/TIA
568-2.D

ISO/IEC
11801

Conductor
Insulation
Spline



Jacket
Ripcord
Twisted Pairs





Cable ID: CAT6 CMR UTP

Test Limit: TIA Cat 6 MPLT (+PoE)
Limits Version: V7.5 Date / Time:
03/03/2020 01:49:57 PM
Operator: LIXIAOHONG
Headroom 7.2 dB (NEXT 3,6-7,8)
Cable Type: Cat6 CMR U/UTP NVP:
68.2%

Main: Versiv
S/N: 1917273
Software Version: V6.5 Build 5
Calibration Date: 11/08/2019
Adapter: DSX-8000 (DSX-PLA804)
S/N: 4523168

Test Summary: PASS

Remote: Versiv
S/N: 1924100
Software Version: V6.5 Build 5
Calibration Date: 11/08/2019
Adapter: DSX-8000R (DSX-PC6)
S/N: 4716104

Length (ft), Limit 295	[Pair 4,5]	293
Prop. Delay (ns), Limit 498	[Pair 7,8]	461
Delay Skew (ns), Limit 44	[Pair 7,8]	24
Resistance (ohms)	[Pair 7,8]	14.21
Resist. Unbal. (ohms)	[Pair 4,5]	0.036
Resist. P2P Unbal. (ohms)	[Pair 4,5-7,8]	0.144
Insertion Loss Margin (dB)	[Pair 7,8]	1.4
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	3,6-7,8	1,2-4,5	3,6-7,8	1,2-4,5
NEXT (dB)	7.2	10.0	7.3	10.0
Freq. (MHz)	224.5	244.5	246.0	244.5
Limit (dB)	36.1	35.5	35.5	35.5
Worst Pair	7,8	3,6	7,8	3,6
PS NEXT (dB)	6.3	9.7	8.6	9.9
Freq. (MHz)	221.5	234.0	246.5	250.0
Limit (dB)	33.6	33.2	32.8	32.7

PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-1,2	1,2-4,5	4,5-1,2	4,5-1,2
ACR-F (dB)	11.6	11.8	12.5	12.7
Freq. (MHz)	4.4	4.4	246.5	242.0
Limit (dB)	51.4	51.4	16.4	16.5
Worst Pair	1,2	4,5	1,2	1,2
PS ACR-F (dB)	14.1	14.0	14.5	14.4
Freq. (MHz)	3.0	3.9	246.5	241.5
Limit (dB)	51.6	49.4	13.4	13.5

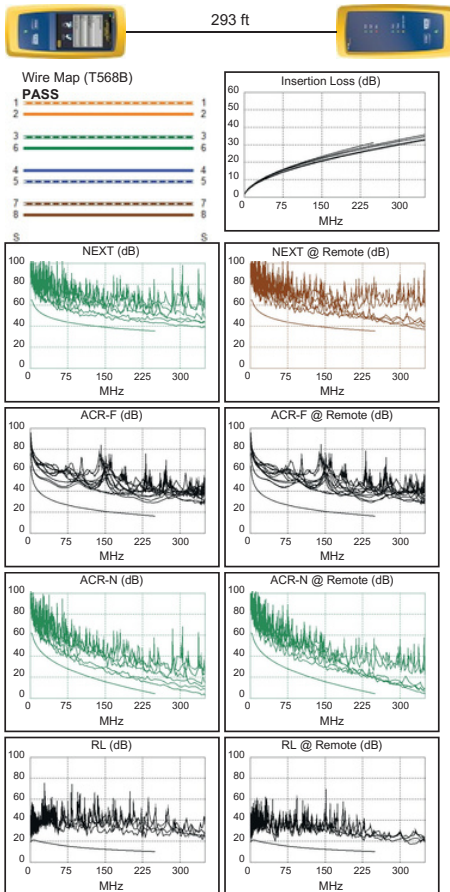
N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-7,8	3,6-7,8	3,6-7,8	3,6-7,8
ACR-N (dB)	8.0	10.5	8.7	13.6
Freq. (MHz)	100.0	89.3	246.0	243.5
Limit (dB)	23.3	25.2	4.6	4.9
Worst Pair	9,2	7,8	9,2	3,6
PS ACR-N (dB)	99.8	10.5	246.5	13.5
Freq. (MHz)	20.8	49.5	2.0	250.0
Limit (dB)				1.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5	4,5	4,5	4,5
RL (dB)	6.5	3.5	13.5	3.5
Freq. (MHz)	3.9	50.0	230.5	50.0
Limit (dB)	21.0	17.0	10.4	17.0

Compliant Network Standards:

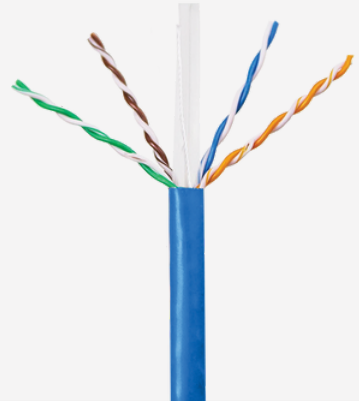
100BASE-T
1000BASE-T
ATM-25
100VG-AnyLan
TR-16 Passive

100BASE-T4
5GBASE-T
ATM-155
TR-16 Active



Electrical Characteristics

PoE Certification	PoE/PoE+/PoE++ 4PPoE
Maximum PoE Wattage	100W
PoE Application Compatibility	802.3af/at/bt Type 4
TIA 568-2.D Cat6 Permanent Link +PoE	CERTIFIED
Maximum Application Speed @ 295ft	5GBASE-T
Nominal Velocity of Propagation (NVP)	68.2
Maximum Operating Voltage	300V
1.0 - 550MHz Impedance (Ω)	100 $\pm$ 15
Maximum Operating Frequency	550MHz
1.0 - 550MHz Delay Skew (ns/100m)	$\leq$ 45
Pair-to-Ground Capacitance Unbalance (pF/km)	$\leq$ 3300
Max. Conductor DC Resistance 20°C (Ω /km)	72.2



Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition (e x hrs)
Test Material	PVC	After Tensile Strength (Mpa)
Before- Tensile Strength (Mpa)	$\geq$ 13.8	Aging Condition - Elongation (%)
Aging- Elongation (%)	$\geq$ 100	Cold Bend (-20 $\pm$ 2°C x 4hrs)
Min. Bend Radius	2.5cm/1.0in	Operating & Storage Temp.
Max. Installation Tension	110N/25lb-ft	Installation Temp.