

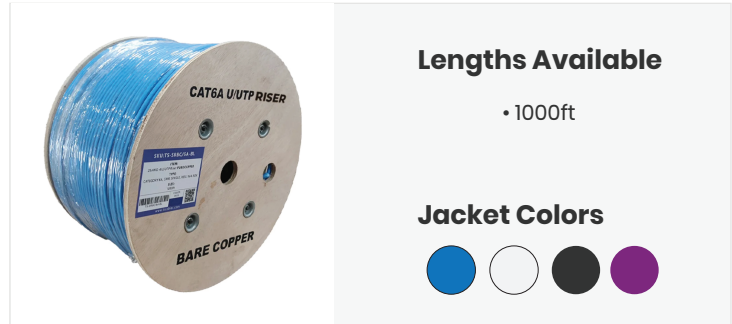
CAT6a



Cat6a Riser Rated Cable | Unshielded

SKU: TS-RBC/6A-BL

24AWG • 4 Twisted Pairs • CMR
UTP • 350MHz • Solid Bare Copper



Lengths Available

• 1000ft

Jacket Colors



Key Features

- Bandwidth tested up to 350 MHz
- Suitable for 1 Gigabit and 2.5 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)	0.228
Min Point Thickness (mm)	0.205
Conductor Insulation Dia. (±0.02mm)	0.97
Twisted Pair Dia. (±0.02mm)	1.94
Ripcord	Nylon
Spline	Not Present
Polyethylene Tape	Present
Shielding	F/UTP
Drain Wire - Solid Tinned Copper (mm)	0.40

Conductor	Solid Bare Copper
Size	24AWG
Conductor Dia. (±0.05mm)	0.515

Color of Pairs

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

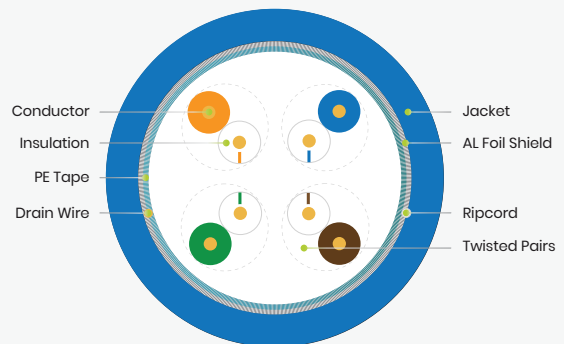
Cable Jacket

Cable Jacket	PVC
Average Thickness (mm)	0.60
Min. Point Thickness (mm)	0.54
Outer Diameter (±0.2mm)	6.15

Standards Reference

ANSI/TIA
568-2.D

ISO/IEC
11801





Cable ID: 5ECMR FUTP JACK

Test Limit: TIA Cat 5e perm. (+PoE)

Limits Version: V7.6

Date / Time: 02/14/2022 11:59:15 AM

Operator: LIXIAOHONG

Headroom 4.7 dB (NEXT 3,6-4,5)

Cable Type: Cat 5e F/UTP

NVP: 68.1%

Main: Versiv

S/N: 1924100

Software Version: V6.7 Build 1

Calibration Date: 11/14/2020

Adapter: DSX-8000 (DSX-PLA804)

S/N: 4523169

Remote: Versiv

S/N: 1917273

Software Version: V6.7 Build 1

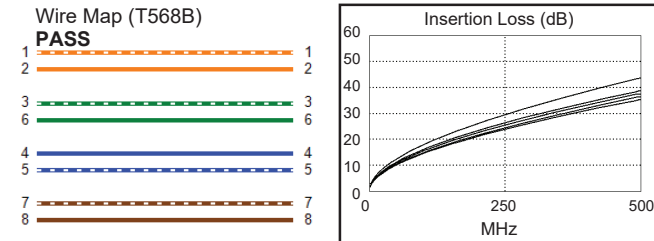
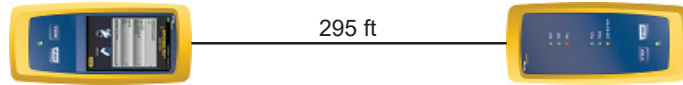
Calibration Date: 11/14/2020

Adapter: DSX-8000R (DSX-PC6A)

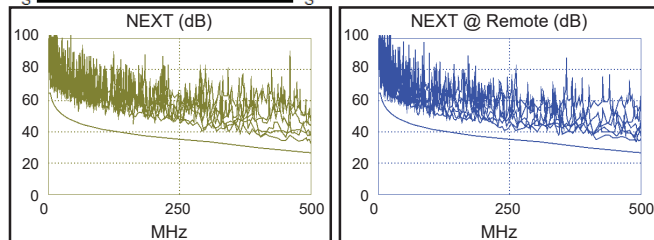
S/N: 4716155

Test Summary: PASS

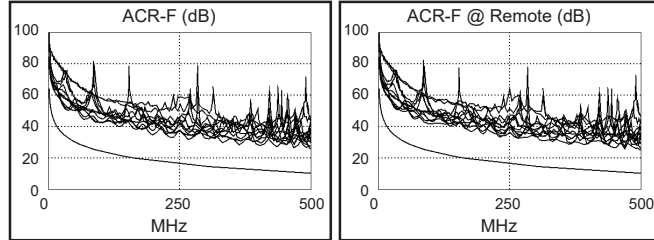
Length (ft), Limit 295	[Pair 4,5]	295
Prop. Delay (ns), Limit 498	[Pair 1,2]	460
Delay Skew (ns), Limit 44	[Pair 1,2]	30
Resistance (ohms), Limit 21.00	[Pair 1,2]	12.84
Resist. Unbal. (ohms)	[Pair 3,6]	0.124
Resist. P2P Unbal. (ohms)	[Pair 1,2-4,5]	0.215
Insertion Loss Margin (dB)	[Pair 1,2]	5.0
Frequency (MHz)	[Pair 1,2]	500.0
Limit (dB)	[Pair 1,2]	43.8



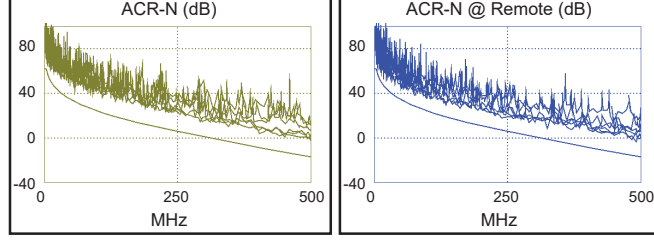
	Worst Case Margin		Worst Case Value	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
NEXT (dB)	5.9	4.7	6.1	5.9
Freq. (MHz)	440.0	3.8	500.0	484.0
Limit (dB)	28.5	64.5	26.7	27.1
Worst Pair	3,6	4,5	3,6	4,5
PS NEXT (dB)	6.3	5.7	7.3	7.3
Freq. (MHz)	405.0	261.0	499.0	484.0
Limit (dB)	26.9	32.4	23.8	24.2



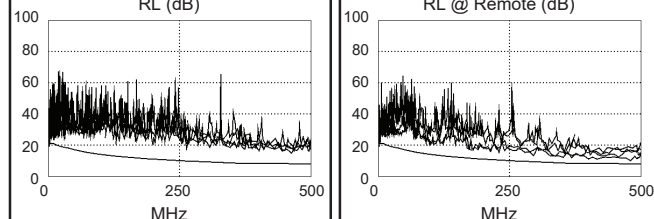
	MAIN		SR	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	4,5-1,2	4,5-1,2	4,5-1,2	4,5-7,8
ACR-F (dB)	15.2	14.8	15.6	15.0
Freq. (MHz)	401.0	468.0	500.0	499.0
Limit (dB)	12.1	10.8	10.2	10.2
Worst Pair	1,2	1,2	7,8	7,8
PS ACR-F (dB)	16.6	16.7	17.5	17.3
Freq. (MHz)	401.0	436.0	491.0	489.0
Limit (dB)	9.1	8.4	7.4	7.4



	MAIN		SR	
	MAIN	SR	MAIN	SR
N/A				
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-7,8
ACR-N (dB)	7.1	5.3	14.6	12.8
Freq. (MHz)	3.6	3.8	500.0	491.0
Limit (dB)	61.4	61.1	-17.1	-16.4
Worst Pair	3,6	3,6	3,6	3,6
PS ACR-N (dB)	8.9	7.1	14.8	14.3
Freq. (MHz)	4.9	3.9	500.0	483.0
Limit (dB)	56.6	58.5	-20.0	-18.6



	MAIN		SR	
	MAIN	SR	MAIN	SR
PASS				
Worst Pair	4,5	3,6	4,5	3,6
RL (dB)	4.8	2.0	6.8	2.0
Freq. (MHz)	6.3	480.0	463.0	480.0
Limit (dB)	21.0	8.0	8.0	8.0



Compliant Network Standards:

10BASE-T	100BASE-TX	100BASE-T4
1000BASE-T	2.5GBASE-T	5GBASE-T
10GBASE-T	ATM-25	ATM-51
ATM-155	100VG-AnyLan	TR-4
TR-16 Active	TR-16 Passive	

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 Cat5e Permanent Link +PoE	CERTIFIED
Maximum Application Speed @ 295ft	2.5GBASE-T
Nominal Velocity of Propagation (NVP)	66.5
Maximum Operating Voltage	300V
1.0 - 350MHz Impedance (Ω)	100 \pm 15
Maximum Operating Frequency	350MHz
1.0 - 350MHz Delay Skew (ns/100m)	\leq 45
Pair-to-Ground Capacitance Unbalance (pF/km)	\leq 3300
Max. Conductor DC Resistance 20°C (Ω /km)	86.8



Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition ($^{\circ}$ C x hrs)	100 x 168
Test Material	PVC	After Tensile Strength (Mpa)	\geq 85% of unaged
Before- Tensile Strength (Mpa)	\geq 13.8	Aging Condition - Elongation (%)	\geq 50% of unaged
Aging- Elongation (%)	\geq 100	Cold Bend($-20 \pm 2^{\circ}$ C x 4hrs)	No Crack
Min. Bend Radius	4.5cm/1.75in	Operating & Storage Temp.	-40° C to 75° C -40° F to 167° F
Max. Installation Tension	110N/25lb-ft	Installation Temp.	-20° C to 75° C -4° F to 167° F