

CAT5e



Cat5e Plenum Shielded

SKU: RCT-C5ES-FUTP-BC-BL
 24AWG • 4 Twisted Pairs • CMP
 F/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

FEP

Average Thickness (mm) 0.218

Min Point Thickness (mm) 0.207

Conductor Insulation Dia. (±0.02mm) 0.96

Twisted Pair Dia. (±0.02mm) 1.92

Ripcord Kevlar

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

FR-PVC

Average Thickness (mm) 0.55

Min. Point Thickness (mm) 0.50

Outer Diameter (±0.2mm) 6.10

Standards Reference

ANSI/TIA
568-2.D

ISO/IEC
11801

Conductor
Insulation
PE Tape
Drain Wire



Jacket
AL Foil Shield
Ripcord
Twisted Pairs



CAT5e



Cable ID: 5ECMP FUTP JACK

Test Limit: TIA Cat 5e Perm. Link (+PoE)
Limits Version: V7.6 Date / Time:
04/11/2022 09:37:18 AM
Operator: LIXIAOHONG
Headroom 8.1 dB (NEXT 3,6-4,5) Cable
Type: Cat 5e F/UTP NVP: 70.5%

Main: Versiv
S/N: 1924100
Software Version: V6.7 Build 1
Calibration Date: 11/14/2020
Adapter: DSX-8000 (DSX-PLA804)
S/N: 4523169

Test Summary: PASS
Remote: Versiv
S/N: 1917273
Software Version: V6.7 Build 1
Calibration Date: 11/14/2020
Adapter: DSX-8000R (DSX-PLA804)
S/N: 4523168

Length (ft), Limit 295	[Pair 4,5]	295
Prop. Delay (ns), Limit 498	[Pair 1,2]	451
Delay Skew (ns), Limit 44	[Pair 1,2]	25
Resistance (ohms), Limit 21.00	[Pair 7,8]	16.52
Resist. Unbal. (ohms), Limit 0.500	[Pair 7,8]	0.145
Resist. P2P Unbal. (ohms), Limit 0.570	[Pair 4,5-7,8]	0.170
Insertion Loss Margin (dB)	[Pair 1,2]	2.4
Frequency (MHz)	[Pair 1,2]	100.0
Limit (dB)	[Pair 1,2]	21.0

Worst Case Margin Worst Case Value

PASS	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
NEXT (dB)	10.1	8.1	14.0	12.8
Freq. (MHz)	25.5	20.3	84.8	93.5
Limit (dB)	42.0	43.6	33.5	32.8
Worst Pair	3,6	3,6	3,6	3,6
PS NEXT (dB)	12.0	10.9	15.8	14.7
Freq. (MHz)	25.5	20.3	84.8	93.5
Limit (dB)	39.0	40.6	30.5	29.8

PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5-1,2	4,5-1,2	4,5-1,2	4,5-1,2
ACR-F (dB)	21.8	22.2	21.9	22.2
Freq. (MHz)	81.8	84.5	82.5	84.5
Limit (dB)	20.4	20.1	20.3	20.1
Worst Pair	1,2	1,2	1,2	1,2
PS ACR-F (dB)	23.6	23.7	23.9	23.8
Freq. (MHz)	81.8	83.3	84.5	84.0
Limit (dB)	17.4	17.2	17.1	17.1

N/A	MAIN	SR	MAIN	SR
Worst Pair	3,6-4,5	3,6-4,5	3,6-4,5	3,6-4,5
ACR-N (dB)	11.6	9.4	17.2	17.1
Freq. (MHz)	25.5	20.1	84.8	98.8
Limit (dB)	31.9	34.7	14.3	11.6
Worst Pair	3,6	3,6	3,6	3,6
PS ACR-N (dB)	13.5	12.2	19.0	18.0
Freq. (MHz)	25.5	20.3	84.8	93.5
Limit (dB)	28.9	31.6	11.3	9.6

PASS	MAIN	SR	MAIN	SR
Worst Pair	4,5	3,6	4,5	4,5
RL (dB)	8.6	9.2	8.8	9.7
Freq. (MHz)	2.9	67.3	81.5	87.5
Limit (dB)	19.0	13.7	12.9	12.6

Compliant Network Standards:

10BASE-T
100BASE-TX
1000BASE-T
ATM-51
TR-4

100BASE-T4
ATM-25
100VGAnyLan
TR-16 Passive

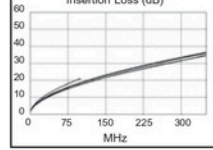


Wire Map (T568B)

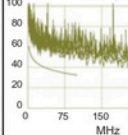
PASS



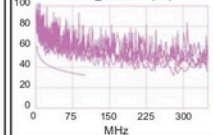
Insertion Loss (dB)



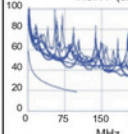
NEXT (dB)



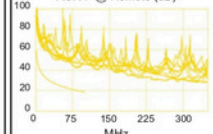
NEXT @ Remote (dB)



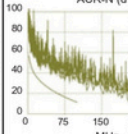
ACR-F (dB)



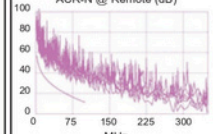
ACR-F @ Remote (dB)



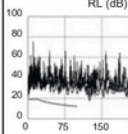
ACR-N (dB)



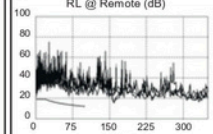
ACR-N @ Remote (dB)



RL (dB)



RL @ Remote (dB)



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 @ 295 ft	2.5GBASE-T
Nominal Velocity of Propagation (NVP)	71.0
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 (E x hrs)	100 x 168 $\geq$ 85% of
Test Material	FR-PVC	After Tensile Strength (Mpa)	unaged $\geq$ 50% of
Before- Tensile Strength (Mpa)	$\geq$ 13.8	Aging Condition - Elongation (%)	unaged
Aging- Elongation (%)	$\geq$ 100	Cold Bend(-20 $\pm$ 2°C x 4hrs)	No Crack
Min. Bend Radius	4.25cm/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

