

CAT6A Riser Unshielded
Solid Bare Copper

U/UTP Cable | Solid Bare Copper | 750MHz

SKU: ET-CAT6A-RC

23AWG • 4 Twisted Pairs • CMR • U/UTP
750MHz



Packaging Available
1000ft Pull Box

Jacket Colors



Key Features



Bandwidth tested up to
750 MHz



Suitable for 1 and 10-Gigabit
Ethernet



Easily Identified Color
Stripped Pairs



Sequential Footage
Markings Every 2ft



RoHS Compliant



Exceeds ANSI/TIA-568.2-D
CSA, and ISO/IEC 11801
Specifications



Supports PoE, PoE+,
and PoE++ up to 60W
and 300V DC

Print Legend

CAT6A 750MHz CMR RISER UTP 4-PAIR
23AWG EIA/TIA-568-C.2-1
ET-CAT6A-RC-1000FT

Technical Data

Operating Temp. Range75°C/167°F

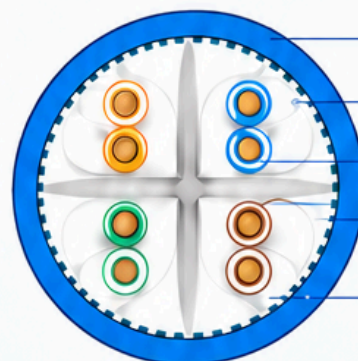
Max. Operating Voltage300V

Bend Radius2in/5mm

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

Jacket	
Average Thickness	0.55 mm
Min. Point Thickness	0.50 Yes
Overall Diameter (±0.1mm)	7.4
Ripcord	Yes

Pair/Assembly	
Twisted Pairs	4
Pair Colors	Blue-Orange/Green/Brown



Jacket

Insulation

Conductor

Separator/Spline

Rip Cord

Color of Pairs

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



965 Highams Ct,
Woodbridge, VA 22191



+1 845 795 3165



www.etekcables.com

Cable ID: ET-CAT6A-RC

Test Limit: TIA Cat 6A 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 6A U/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

Test Summary: PASS

Remote: Versiv

S/N: 1917273

Software Version: V6.7 Build 1

Calibration Date: 11/14/2020

Adapter: DSX-8000R (DSX-PC6A)

S/N: 4716155

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

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)	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	7,8	7,3
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

PASS	MAIN	SR	MAIN	SR
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	1,2	1,2
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

N/A	MAIN	SR	MAIN	SR
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	68.5	-20.0	-18.6

PASS	MAIN	SR	MAIN	SR
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-S1

ATM-155

100VG-AnyLan

TR-16 Passive

TR-6Active

TR-16 Active



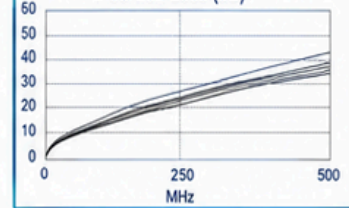
295 ft



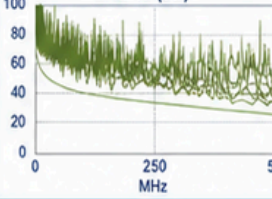
Wire Map (T568B)



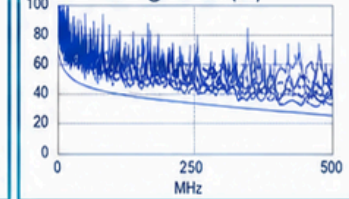
Insertion Loss (dB)



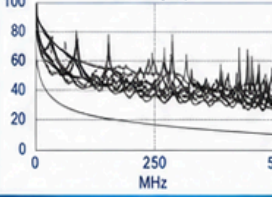
NEXT (dB)



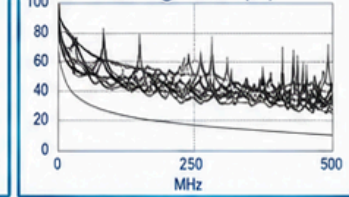
NEXT @ Remote (dB)



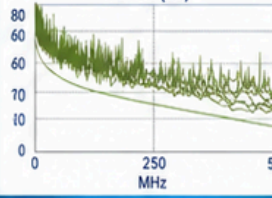
ACR-F (dB)



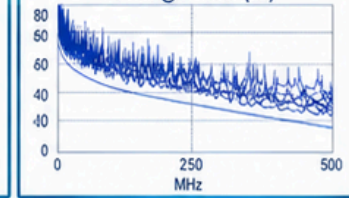
ACR-F @ Remote (dB)



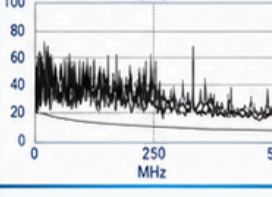
ACR-N (dB)



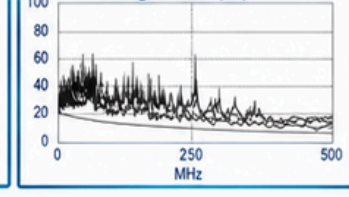
ACR-N @ Remote (dB)



RL (dB)



RL @ Remote (dB)



Electrical Characteristics

PoE Certification Maximum PoE	PoE/PoE+/PoE++ 4PPoE
Wattage PoE Application	100W
Compatibility TIA 568-2.D Cat6A	802.3af/at/bt Type 4
Permanent Link +PoE Maximum	CERTIFIED
Application Speed @ 295ft Nominal	2.5GBASE-T
Velocity of Propagation (NVP)	66.5
Maximum Operating Voltage 1.0 -	300V
750MHz Impedance (Ω) Maximum	100 ± 15
Operating Frequency 1.0 - 750MHz	750MHz
Delay Skew (ns/100m) Pair-to-Ground	≤45
Capacitance Unbalance (pF/km) Max.	≤3300
Conductor DC Resistance 20°C (Ω/km)	86.8



Mechanical & Environmental Operating Parameters

Test Object	Jacket	Aging Condition (°C x hrs)	100 x 168 ≥85% of
Test Material	PVC	After Tensile Strength (Mpa)	unaged ≥50% of
Before- Tensile Strength (Mpa)	≥13.8	Aging Condition - Elongation (%)	unaged
Aging- Elongation (%)	≥100	Cold Bend(-20 ± 2°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

