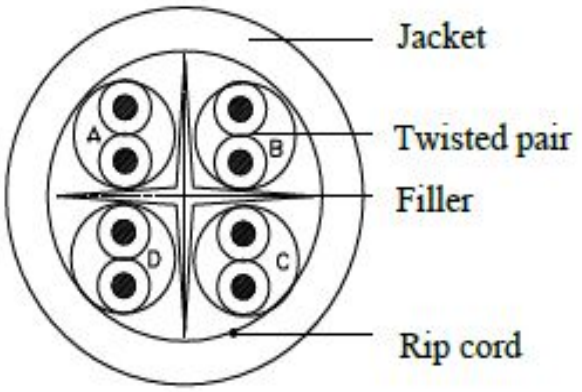
4Pairs Cat6 UTP Cable Specification

Cross Section



Marking

Description

Rated Temperature (°C)	75
Application	
Horizontal Wiring in LAN	
Reference Standard	
cETLus(UL Subject 444)	
EIA/TIA568 & ISO/IEC 11801	

Construction

Conductor	**Solid Bare Copper**
AWG	23
Conductor Dia. (±0.005mmmm)	**0.57**
Insulation	**PE**
Average Thickness(mm)	0.225
Min. Point Thickness(mm)	0.207
Insulation Dia.(±0.01mm)	**1.02**
Twisted Pair Dia.(±0.02mm)	2.02
Filler	PE
Assembly Dia.(±0.2mm)	4.8
Jacket	**PVC**
Average Thickness(mm)	0.60
Min. Point Thickness(mm)	0.55
Outer Dia.(±0.1mm)	**6.10**
Rip Cord	Nylon

Color

Insulation colors are:

Blue,White/Blue
Orange,White/Orange
Green,White/Green
Brown,White/Brown

Jacket colors:

Performance

Electrical Characteristics:

Frequency (MHz)	Return loss (Min dB)	Attenuation Max (dB/100m)	NEXT (Min dB)
1	20	2	74.3
4	23	3.8	65.3
8	24.5	5.3	60.8
10	25	6	59.3
16	25	7.6	56.2
20	25	8.5	54.8
25	24.3	9.5	53.3
31.25	23.6	10.7	51.9
62.5	21.5	15.4	47.4
100	20.1	19.8	44.3
200	18	29	39.8
250	17.3	32.8	38.3

Frequency (MHz)	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT Min (dB/100m)	Delay Max (ns/100m)
1	72.3	67.8	64.8	570.0
4	63.3	55.8	52.8	552.0
8	58.8	49.7	46.7	546.7
10	57.3	47.8	44.8	545.4
16	54.2	43.7	40.7	543.0
20	52.8	41.8	38.8	542.0
25	51.3	39.8	36.8	541.2
31.25	49.9	37.9	34.9	540.4
62.5	45.4	31.9	28.9	538.6
100	42.3	27.8	24.8	537.6
200	37.8	21.8	18.8	536.5
250	36.3	19.8	16.8	536.3

1.0-100.0MHz Impedance (ohms)	100 ± 15
1.0-100.0MHz Delay Skew (ns/100m)	<=45
Pair-to-Ground Capacitance Unbalance (pF/100m)	<=330
Max. Conductor DC Resistance 20°C (ohms/km)	72.2
Resistance Unbalance (%)	<=5

Mechanical Characteristics:

Test Object		Jacket
Test Material		PVC
Before Aging	Tensile Strength (Mpa)	>=13.8
	Elongation (%)	>=150
Aging Condition (°Cxhrs)		100x168
After Aging	Tensile Strength (Mpa)	>=85% of unaged
	Elongation (%)	>=50% of unaged
Cold Bend(-20±2°Cx4hrs)		No crack

Packaging: