

Category 6 Cabling Solutions



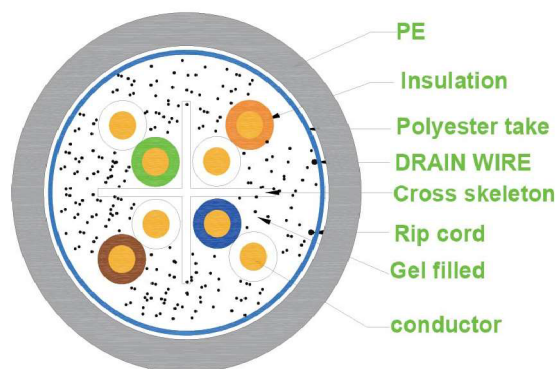
Category 6 Outdoor Unshielded Cable (Gel-Filled)

Applicable Standards

ETL Verified to TIA/EIA 568-B.2, and ISO/IEC 11801
ROHS Compliant
ATM 155 Mbps
Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)

Physical Characteristics

Number of Conductor Pairs: 4
Size: 23AWG
Conductor Diameter: 0.565± 0.003mm
Conductor Material: BC Copper
Shield Material: Unshielded gel
Rip Cord: Yes
Insulation Material: HDPE
Insulation Overall Diameter: 1.15/1.18 ± 0.005mm
Insulation Average Thickness: 0.270-0.250mm
Jacket: PE(UV)
Outer Jacket Average Wall Thickness: 0.55±0.05mm
Outer Jacket Nom. O.D.: 7.8±0.5 mm
Color Jacket: Black



Mechanical Characteristics

Temperature Rating Installation: -40°C to + 60°C
Temperature Rating Operating: -40°C to + 60°C
Tensile Strength: Before ≥ 19 Mpa
Elongation: Aging ≥ 300%
Aging Condition: 100°C x 168 hours
After ≥ 80% of unaged
Aging ≥ 50% of unaged
Rated Temperature / Voltage: 5000M Ω/km
Elongation: ≥300%

Electrical Characteristics

Maximum Conductor DC Resistance @ 20°: ≤9.5 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20: ≤2.5%
Maximum Pair-to-Pair Ground Capacitance: ≤330 pF / 100 Meters
Characteristic Impedance: 100 ± 15 Ω
Mutual Capacitance: ≤5.6 nF / 100 Meters
Maximum Delay Skew: ≤45 nS / 100 Meters

Electrical Performance

Freq. (MHz)	Attenuation (dB/100m)	Return Loss (dB)	NEXT (dB)	PS NEXT (dB)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	Delay (ns/100m)	ACR (dB)
	Max.	Min.	Min.	Min.	Min.	Min.	Max.	
1	2.03	20.00	74.30	72.30	67.80	64.80	570.00	72.70
4	3.87	23.01	65.27	63.27	55.76	52.76	552.00	61.40
10	5.95	25.00	59.30	57.30	47.80	44.80	545.38	53.35
16	7.55	25.00	56.24	54.24	43.72	40.72	543.00	48.69
20	8.47	25.00	54.78	52.78	41.78	38.78	542.05	46.31
25	9.51	24.32	53.33	51.33	39.84	36.84	541.20	43.82
31.25	10.67	23.64	51.88	49.88	37.90	34.90	540.44	41.21
62.5	15.38	21.54	47.36	45.36	31.88	28.88	538.55	31.98
100	19.80	20.11	44.30	51.30	27.80	24.80	537.60	24.50
200	28.98	18.00	39.78	37.78	21.78	18.78	536.55	10.80
250	32.85	17.32	38.33	36.33	19.84	16.84	536.28	5.48