



ETL, UL Verified

Category 6 Compliant • TIA/EIA 568-C.2 • EN50173 • ISO/IEC 11801

RoHS 25 Years Warranty

Features

- Category 6 Compliant • TIA/EIA 568-C.2 • EN50173 • ISO IEC 11801
- Bare Copper
- Carton Packaging/Wooden Reel
- PVC
- Length 100M/305M/500M
- Unscreened Construction Specified to 250Mhz
- ETL, UL, CPR Verified

Construction

Conductor	Size	24AWG	Filler	Material	RIP CORD
	Material	Solid Bare Copper		Construction	3*250D
		Nom. O.D/mm	0.520 ± 0.02 mm	Central Element	O.D
Insulation	Material	HDPE	Jacket	Outer Sheath	PVC
	Nom. O.D/mm	0.90± 0.05 mm		Average Thickness	0.50± 0.05 mm
	Minimum Thickness	0.22 mm(REF)		Overall Diameter	5.80± 0.20 mm
	Color	1P. White & Brown / Brown		Color	Blue/Grey
		2P. White & Blue / Blue	Sheath Printing	Color	Black
		3P. White & Orange / Orange			
		4P. White & Green / Green			

Physical Characters

Sheath Normal Temp Tensile Strength (Mpa)	≥13.5
Sheath Normal Temp Elongation (%)	≥150
Insulation Normal Temp Tensile Strength (Mpa)	≥16
Insulation Normal Temp. Elongation (%)	≥300
Aging condition (°C×hrs)	100°C± 2°C, 24h 7d
Sheath after aging Tensile strength (Mpa)	≥12.5
Sheath after aging Elongation (%)	≥125
Temperature rating (°C)	-20°C — +75°C
Cold bend(-20±2°C×4hours)	8×Cable O.D., No visible cracks

Electric Characters

Characteristic Impedance(Ω)	100 $\pm$ 15
Propagation Delay (ns/100m)	$\leq$ 45
Direct-current resistance (Ω /100m) max	9.5
Direct-current resistance unbalance (%) max	Internal pair:2%, Between pairs:4%
Insulation resistance (M Ω /km)	$\geq$ 5000
Mutual capacitance of a pair (nF/100m)	Not required
Capacitance unbalance (pF/100m)	$\leq$ 160

Typical Applications

- 1000BASE-T Gigabit Ethernet
- 100BASE-TX Fast Ethernet
- 622 Mbps ATM
- 155 Mbps ATM
- Composite Video

Transfer Characters

MHZ	RL $\geq$ dB	ATT $\leq$ dB/100m	NEXT $\geq$ dB /100m	ACRF $\geq$ dB /100m	PS NEXT dB/100m	PS ACRF dB/100m	Delay (ns/100m)
1.00	19.0	2.1	65.0	63.3	62.0	60.3	580
4.00	19.0	4.0	63.0	51.2	60.5	48.2	562
8.00	19.0	5.7	58.2	45.2	55.6	42.2	557
10.00	19.0	6.3	56.6	43.3	54.0	40.3	555
16.00	18.0	8.0	53.2	39.2	50.6	36.2	553
20.00	17.5	9.0	51.6	37.2	49.0	34.2	552
25.00	17.0	10.1	50.0	35.3	47.3	32.3	551
31.25	16.5	11.4	48.4	33.4	45.7	30.4	550
62.50	14.0	16.5	43.4	27.3	40.6	24.3	549
100.00	12.0	21.3	39.9	23.3	37.1	20.3	548
200.00	9.0	31.5	34.8	17.2	31.9	14.2	547
250.00	8.0	35.9	33.1	15.3	30.2	12.3	546

Ordering Information

Part Code	Description
NCB-C6UBLUR-305-24UL	CAT6 UTP 24AWG : 305M (BLUE)
NCB-C6UGRYR-305-24UL	CAT6 UTP 24AWG : 305M (GREY)

