

BC-500-UU6-OD

CAT6 UTP 23AWG 4PAIR LSZH

beek

STANDARDS

ANSI/TIA-568-C.2 IEC 61156-5
EN 50288-5-1
EN 50173
ISO/IEC 11801
EN 50575
EN 13501-6

APPLICATIONS

10BASE-T (IEEE 802.3)
4/16 Mbps TOKEN RING (IEEE 802.5)
100BASE-VG-AnyLAN
100 Mbps TP-PMD (ANSI X3T9.5)
100BASE-T (IEEE 802.3)
55/155 Mbps ATM
1000BASE-T (Gigabit Ethernet)
1.2 Gbps ATM

CERTIFICATION



COLOR CODES

Insulation Color:
P1: White & Blue / Blue
P2: White & Orange / Orange
P3: White & Green / Green
P4: White & Brown / Brown
Jacket Color:
Option

CABLE PRINTING

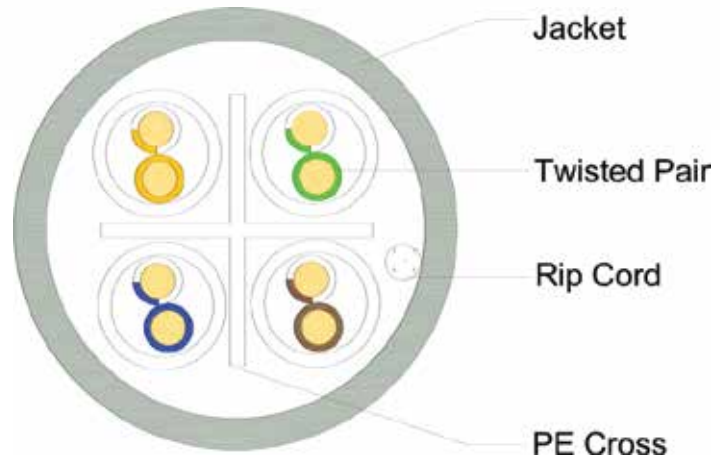
Option

PACKAGING

1.Easy Pull Box/ 305m
2.Reel/ 305m
3.Reel/ 500m

TEST REQUIREMENT

Pass fluke 90m permanent link test
TIA-568-C.2



CONSTRUCTION

Conductor Material		Pure Solid Bare Copper
Conductor Number		8C(4 pairs)
Cable AWG		23
Construction($\pm 0.05\text{mm}$)		1/0.55
Separator		PE Cross
Rip Cord		Yes
Insulation	Material	PE
	Nom. Thickness(mm)	0.20
	Diameter($\pm 0.05\text{mm}$)	1.0
Jacket	Material	LSZH
	Nom. Thickness(mm)	0.50
	Diameter($\pm 0.30\text{mm}$)	6.30

ELECTRICAL PERFORMANCE

Max. Conductor DC Resistance (Ω/km)		93
Min. Insulation Resistance ($\Omega\text{M-KM}$)		500
Dielectric Strength		DC-1KV/1 Min
1.0-250MHZ Characteristic Impedance(ohms)		$100\Omega \pm 15\Omega$
1.0-250MHZ Delay Skew(ns/100m)		≤ 45
Pair to Ground Capacitance Unbalance(Pf/100m)		≤ 330
Resistance Unbalance between pairs (%)		≤ 4
Max Mutual Capacitance		5.6nF/100m
Max DC Loop Resistance		19.2 Ω /100m
Before Aging	Tensile Strength(Mpa)	≥ 9
	Elongation(%)	≥ 100
After Aging 100°C*24h*7d	Tensile Strength(Mpa)	≥ 75
	Elongation(%)	≥ 50
Velocity of Propagation NVP		69%

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Freq.	ATTN	RL	NEXT	ELFEXT	PS NEXT	PS ELFEXT
(MHz)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)
1	2.0	20.0	74.3	67.8	72.3	64.8
4	3.8	23.0	65.3	55.8	63.3	52.8
8	5.3	24.5	60.8	49.7	58.8	46.7
10	6.0	25.0	59.3	47.8	57.3	44.8
16	7.6	25.0	56.2	43.7	54.2	40.7
20	8.5	25.0	54.8	41.8	52.8	38.8
25	9.5	24.3	53.3	39.8	51.3	36.8
31.25	10.7	23.6	51.9	37.9	49.9	34.9
62.5	15.4	21.5	47.4	31.9	45.4	28.9
100	19.8	20.1	44.3	27.8	42.3	24.8
200	29.0	18.0	39.8	21.8	37.8	18.8
250	32.8	17.3	38.3	19.8	36.3	16.8

TIA Cat 6 Perm. Link

Wire Map	Res.	Length	Prop. Delay	Delay Skew	Freq.	Insertion Loss	NEXT	RL	ACR-N	ACR-F	PS NEXT	PS ACR-N	PS ACR-F
	Ω	Max.	nS	nS	MHz	dB	dB	dB	dB	dB	dB	dB	dB
12345678 12345678 12345678S 12345678S	i	90 m	498	44	1	3	65.0	19.1	62.0	64.2	62.0	59.0	61.2
					4	3.5	64.1	21.0	60.6	52.1	61.8	58.3	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.1	43.1
					10	5.5	57.8	21.0	52.3	44.2	55.5	49.9	41.2
					16	7	54.6	20.0	47.6	40.1	52.2	45.2	37.1
					20	7.9	53.1	19.5	45.2	38.2	50.7	42.8	35.2
					25	8.9	51.5	19.0	42.7	36.2	49.1	40.2	33.2
					31.25	10	50.0	18.5	40.0	34.3	47.5	37.6	31.3
					62.5	14.4	45.1	16.0	30.8	28.3	42.7	28.3	25.3
					100	18.6	41.8	14.0	23.3	24.2	39.3	20.7	21.2
					200	27.4	36.9	11.0	9.6	18.2	34.3	7.0	15.2
					250	31.1	35.3	10.0	4.2	16.2	32.7	1.6	13.2

