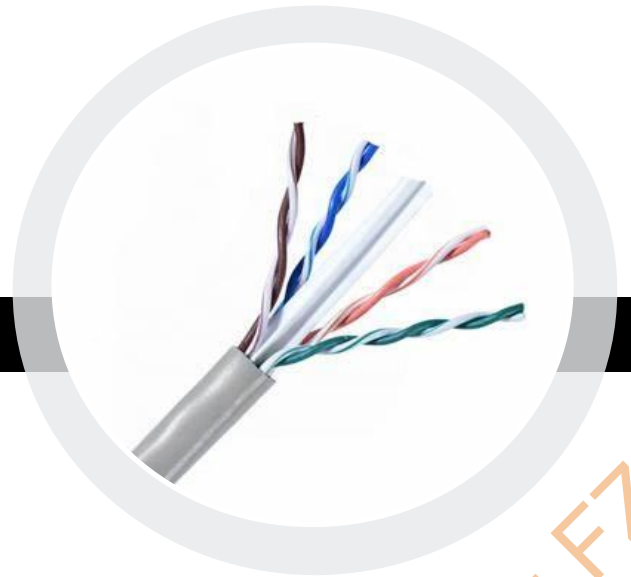


CAT6A U/UTP



LSZH CABLE

DESCRIPTION

METACOM Category 6A 4-pair U/UTP copper cable forms the foundation of 10 Gigabit Ethernet networks. The cable exceeds Category 6A performance ensuring reliability in delivering 10G network speed, low BER and high data throughput. The cable covers the category 6A requirements for twisted pair cables of 100 Ω and is characterized up to 500 MHz suitable for transmitting data over local area networks (LANs). The cable's 8 conductors (4-Pairs) are of solid bare copper with high density polyethylene (HDPE) insulation and a PVC jacket.

STANDARDS

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

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 10G BASE-T

TECHNICAL DATA

Conductor Material		99.99% Solid Bare Copper
Conductor Number		8C(4 pairs)
Cable AWG		23
Separator		PE Cross
Rip Cord		NO
Insulation	Material	PE
	Nom. Thickness(mm)	0.22
	Diameter (± 0.30mm)	1.01
Jacket	Material	LSZH
	Nom. Thickness(mm)	0.65
	Diameter (± 0.30mm)	7.30
Construction(±0.01mm)		1/0.56

ELECTRICAL PERFORMANCE

Max. Conductor DC Resistance (Ω /KM)		93
Min. Insulation Resistance		5000
Dielectric Strength		DC-1KV/1 Min
1.0-250MHZ Characteristic Impedance		100 Ω ±15 Ω
1.0-250MHZ Delay Skew		≤45
Pair to Ground Capacitance Unbalance(PF/100m)		≤330
Resistance Unbalance between pairs(%)		≤4
Before Aging	Tensile Strength(Mpa)	≥13.5
	Elongation(%)	≥100
After Aging	Tensile Strength(Mpa)	≥75%
	Elongation(%)	≥50
Velocity of Propagation NVP		69%

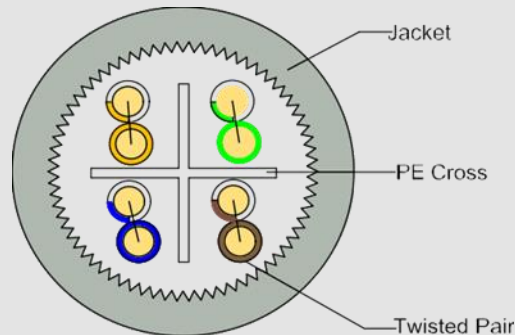
TIA-568-C.2

Freq.	ATTN	RL	NEXT	ELFEXT	PS NEXT	PS ELFEXT
(MHz)	(dB/100m)	(dB)	(dB)	(dB/100m)	(dB/100m)	(dB/100m)
4	3.8	23.0	66.3	56.0	63.3	53.0
8	5.3	24.5	61.8	49.9	58.8	46.0
10	5.9	25.0	60.3	48.0	57.3	45.0
16	7.5	25.0	57.2	43.9	54.2	40.9
20	8.4	25.0	55.8	42.0	52.8	39.0
25	9.4	24.3	54.3	40.0	51.3	37.0
31.25	10.5	23.6	52.9	38.1	49.9	35.1
62.5	15.0	21.5	48.4	32.1	45.4	29.1
100	19.1	20.1	45.3	28.0	42.3	25.0
200	27.6	18.0	40.8	22.0	37.8	19.0
250	31.1	17.3	39.3	20.0	36.3	17.0
300	34.1	17.3	38.1	18.5	35.1	15.5
500	45.3	17.3	34.8	14.0	31.8	11.0

TIA Cat 6A 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	i	90 m	498	44	1	3	65.0	19.1	62.0	64.2	62.0	59.0	61.2
12345678					4	3.5	64.1	21.0	60.5	52.1	61.8	58.3	49.1
					8	5	59.4	21.0	54.4	46.1	57.0	52.1	43.1
12345678S					10	5.5	57.8	21.0	52.3	44.2	55.5	50.0	41.2
12345678S					16	7	54.6	20.0	47.6	40.1	52.2	45.2	37.1
					20	7.8	53.1	19.5	45.2	38.2	50.7	42.8	35.2
					25	8.8	51.5	19.0	42.8	36.2	49.1	40.4	33.2
					31.25	9.8	50.0	18.5	40.2	34.3	47.5	37.7	31.3
					62.5	14	45.1	16.0	31.1	28.3	42.7	28.6	25.3
					100	18	41.8	14.0	23.9	24.2	39.3	21.3	21.2
					200	26.1	36.9	11.0	10.8	18.2	34.3	8.2	15.2
					250	29.5	35.3	10.0	5.8	16.2	32.7	3.2	13.2
					350	35.6	31.8	8.6	-3.8	13.3	29.1	-6.5	10.3
					500	43.8	26.7	8.0	-17.1	10.2	23.8	-20	7.2

Supplied by Digital Signal Innovation & Trading FZE

TECHNICAL DRAWING

ORDERING INFORMATION

PART NUM	DESCRIPTION
	Pg. 2
MCS-C6A-UTP4-PVC-GY	Category 6A Unshielded Twisted 4 Pair (UTP) 23 AWG cable PVC Grey - 305m box
MCS-C6A-UTP4-LSZH-VL	Category 6A Unshielded Twisted 4 Pair (UTP) 23 AWG cable LSZH Voilet - 305m box

