

Data/LAN Cables

Cat 6A S/FTP LSOH



Application

- ISDN
- 4/6 Mbps Token Ring (IEEE 802.5)
- 100 Mbps CDDI
- 250 Mbps ATM Power over Ethernet (PoE)
- 10 BASE-T Ethernet (IEEE 802.3j)
- 100 BASE-VG AnyLAN (IEEE 802.12)
- 1000 BASE-T 1 Gigabit Ethernet (IEEE 802.3 ab)
- 10 GBASE-T 10 Gigabit Ethernet (IEEE 802.3 an)
- In places where human life, valuable materials and equipments need to be protected.

Cable Construction

- 1 - Conductor : Electrolytic solid copper conductor
- 2 - Insulation : Foamed polyethylene clad with solid polyethylene
- 3 - Indv. Stranding : Insulations are stranded into pairs
- 4 - Indv. Screen : Al/PET tape
- 5 - Screen Wire : A tinned copper earthing wire between screened pairs
- 6 - Ovrl. Stranding : In layers
- 7 - Ovrl. Screen : Tinned copper braiding
- 8 - Outer Jacket : UV resistant, halogen-free outer jacket, RAL 7035 (Grey)

Technical Characteristics

Conductor Resistance Ω/km (20 °C)	Insulation Resistance $\text{M}\Omega/\text{km}$ (20 °C)	Mutual Capacitance nF/km	Capacitance Unbalance %	Propagation Velocity %	Characteristic Impedance Ω (1-500 MHz)	Operating Voltage V DC	Test Voltage V (DC. 1 minute)
75	5000	42	%2	%78-80	100 $\pm$ %5	125	1200

Mechanical Characteristics

Bending Radius	Temperature Range Operating
8.0xD mm	-20°C ~ +60°C

Standards

Manufacturing	Smoke Density Test	Flame Propagation Test	Corrosive Gas Test	Halogen-free Test
ANSI/TIA-568-C.2, IEC-61156-5, IEC-11801	IEC 61034-2, VDE 0482-1034-2, BS EN 61034-2	IEC 60332-3-24, VDE 0482-332-3-31, BS EN 60332-3-24	IEC 60754-2, VDE 0482-267-2-3, BS EN 50267-2-3	IEC 60754-1, VDE 0482-267-2-1, BS EN 50267-2-1

Electrical Properties

Frequency MHz	Insertion Loss $\text{dB}/100\text{m}$ (Max.)	Near-end Crosstalk (NEXT) dB (Min.)	Power-sum Near-end Crosstalk (PSNEXT) dB (Min.)	Equal-level Far-end Crosstalk (ELFEXT) $\text{dB}/100\text{m}$ (Min.)	Power-sum Equal Level Far-end Crosstalk (PSELFEXT) $\text{dB}/100\text{m}$ (Min.)	Return Loss (RL) dB (Min.)
1	2.1	74.3	72.3	67.8	64.8	20
4	3.8	65.3	63.3	55.8	52.8	23
8	5.3	60.8	58.8	49.7	46.7	24.5
10	5.9	59.3	57.3	47.8	44.8	25
16	7.5	56.2	54.2	43.7	40.7	25
20	8.4	54.8	52.8	41.8	38.8	25
25	9.4	53.3	51.3	39.8	36.8	24.3
31.25	10.5	51.9	49.9	37.9	34.9	23.6
62.5	15	47.4	45.4	31.9	28.9	21.5
100	19.1	44.3	42.3	27.8	24.8	20.1
200	27.6	39.8	37.8	21.8	18.8	18
250	31.1	38.3	36.3	19.8	16.8	17.3
300	34.3	37.1	35.1	18.3	15.3	16.8
400	40.1	35.3	33.3	15.8	12.8	15.9
500	45.3	33.8	31.8	13.8	10.8	15.2

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Part Number	Pair Count	Conductor Diameter (AWG)	Approx. Cable Diameter (mm)	Copper Weight (kg/km)	Approx. Weight (kg/km)	Packing Lengths (m)
3.46A20.12.5.0.0.3 35.A1Db.04	4	23	7.2	25.9	58	500/1000