

## Data/LAN Cables

### Cat 6 SF/UTP LSOH SWB 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)

#### Cable Construction

- |                  |   |   |
|------------------|---|---|
| 1 - Conductor    | : | Electrolytic solid copper conductor                     |
| 2 - Insulation   | : | Solid polyethylene insulation                           |
| 3 - Stranding    | : | Insulations are stranded into pairs                     |
| 4 - Separator    | : | Pairs are stranded together with star shaped separator  |
| 5 - Screen       | : | Drain wire, Al/PET tape, tinned copper braiding         |
| 6 - Inner Jacket | : | Halogen-free inner jacket, RAL 7035 (Grey)              |
| 7 - Armour       | : | Steel wire braiding                                     |
| 8 - Outer Jacket | : | UV resistant halogen-free outer jacket, RAL 7035 (Grey) |

#### Technical Characteristics

Conductor Resistance $\Omega/\text{km}$ (20 °C)	Insulation Resistance $\text{M}\Omega/\text{km}$ (20 °C)	Mutual Capacitance nF/km	Resistance Unbalance %	Propagation Velocity %	Characteristic Impedance $\Omega$ (1-250 MHz)	Operating Voltage V DC	Test Voltage V (DC. 1 minute)
Max. 94	5000	Max. 56	%2	%67-69	100 $\pm$ 15	250	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 dB/100m (Max.)	Near-end Crosstalk (NEXT) dB (Min.)	Power-sum Near-end Crosstalk (PSNEXT) dB (Min.)	Equal-level Far-end Crosstalk (ELFEXT) dB/100m (Min.)	Power-sum Equal Level Far-end Crosstalk (PSELFEXT) dB/100m (Min.)	Return Loss (RL) dB (Min.)
1	2	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	6	59.3	57.3	47.8	44.8	25
16	7.6	56.2	54.2	43.7	40.7	25
20	8.5	54.8	52.8	41.8	38.8	24.3
25	9.5	53.3	51.3	39.8	36.8	23.6
31.25	10.7	51.9	49.9	37.9	34.9	21.5
62.5	15.4	47.4	45.4	31.9	28.9	20.1
100	19.8	44.3	42.3	27.8	24.8	18
200	29	39.8	37.8	21.8	18.8	17.3
250	32.8	38.3	36.3	19.8	16.8	16.8

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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)
3.4634.02.1.0.3.3 0.A1Db.04	4	23	10.9	25.6	165	500/1000