

Data/LAN Cables

Cat 7 S/FTP PE



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)

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 polyethylene outer jacket, RAL 9005 (Black)

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 (1-600 MHz)	Operating Voltage V DC	Test Voltage V (DC. 1 minute)
67	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
ANSI/TIA-568-C.2, IEC-61156-5, IEC-11801

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 (PSSELFEXT) $\text{dB}/100\text{m}$ (Min.)	Return Loss (RL) dB (Min.)
1	NS	78.0	75.0	78.0	75.0	20.0
4	3.74	78.0	75.0	78.0	75.0	23.0
10	5.86	78.0	75.0	74.0	71.0	25.0
20	8.29	78.0	75.0	68.0	65.0	25.0
25	9.29	78.0	75.0	66.0	63.0	24.3
31.25	10.41	78.0	75.0	64.1	61.1	23.6
62.5	14.88	75.5	72.5	58.0	55.1	21.5
100	18.02	72.4	69.4	54.0	51.0	20.1
200	23.56	69.8	66.8	50.0	47.5	18.9
250	27.47	67.9	64.9	48.0	45.0	18.0
300	30.97	66.4	63.4	46.0	43.0	17.3
400	34.19	65.2	62.2	44.5	41.5	17.3
450	40.01	63.4	60.4	42.0	39.0	17.3
500	45.26	61.9	58.9	40.0	37.0	17.3
600	50.10	60.7	57.7	38.4	35.4	17.3

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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)
3.4720.12.5.0.0.1 35.A1Db.04	4	23	7.6	27.0	53	500/1000