

# Data/LAN Cables

## Cat 6A U/UTP PVC



### 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 : Solid polyethylene insulation
- 3 - Stranding : Insulations are stranded into pairs
- 4 - Separator : Pairs are stranded together with star shaped separator
- 5 - Outer Jacket : UV resistant PVC 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 $\text{nF}/\text{km}$	Capacitance Unbalance %	Propagation Velocity %	Characteristic Impedance $\Omega$ (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	Flame Retardancy Test
ANSI/TIA-568-C.2, IEC-61156-5, IEC-11801	IEC 60332-1-2, VDE 0482-332-1-2, EN 60332-1-2

### 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)
3.46A00.02.1.0.0.2 0.A1Db.04	4	23	6.0	18.9	43	305/500/1000