



## Category 5 Multipair Cables

### Applications:

10Base-T, 100Base-T4, 100Base-TX, 100Base-VG-ANYLAN, 155Mbps ATM, 622Mbps ATM

### Standards:

ISO/IEC 11801, ANSI/TIA/EIA-568-B

### Product Construction Matrix:

		U/UTP	F/UTP	SF/UTP
Conductor	Material	Solid Plain Copper	Solid Plain Copper	Solid Plain Copper
	Stranding( No./mm )	1/0.5	1/0.5	1/0.5
	Gauge	24AWG	24AWG	24AWG
Insulation	Material	PE	PE	PE
	Diameter	0.86 mm	0.86 mm	0.86 mm
Screen	Material	Nil	Overall Aluminum Tape Screen	Overall Aluminum Tape Screen & Copper Wire Braid
Drain Wire	Material	Nil	1/0.5 mm	1/0.5 mm
Assembly	No of Pairs	25/50/100	25/50/100	25/50/100
Jacket	Material	PE/PVC/LSF/LSZH	PE/PVC/LSF/LSZH	PE/PVC/LSF/LSZH

Remark: PE-Polyethylene; PVC-Polyvinyl Chloride; LSF-Low Smoke & Fume; LSZH-Low Smoke Zero Halogen; LSFROH-Low Smoke Flame Retardant Zero Halogen (to IEC60332-3C); PVC can be classified as CMX, CM, CMR and CMP

### Working Frequency:

1-100MHz

### Product Certification:

E222756



### Technical Parameters:

- ☆ Characteristic Impedance:  $100 \pm 15\Omega$
- ☆ Nominal Velocity of Propagation(NVP): 69%
- ☆ Maximum DC Resistance:  $9.38\Omega/100m$
- ☆ Maximum Mutual Capacitance:  $5.6 nF/100m$
- ☆ Maximum Capacitance Unbalance:  $330 pF/100m$
- ☆ Maximum Resistance Unbalance: 5%
- ☆ Maximum Propagation Delay Skew:  $30 ns/100m$
- ☆ Maximum Propagation Delay:  $536 ns/100m@100 MHz$
- ☆ Minimum Bending radius: 10 x Overall Diameter
- ☆ Voltage Rating: 60V rms
- ☆ Maximum Pulling load: 80N
- ☆ Working Temperature:  $-20^{\circ}C \sim +60^{\circ}C$
- ☆ Storage Temperature:  $-5^{\circ}C \sim +50^{\circ}C$
- ☆ Flame Retardancy: UL 1581 (CM Jacket); UL 1666 (CMR Jacket); UL 910 (CMP Jacket); IEC 60332-1 (FRPVC & LSZH Jacket); IEC 60332-1 & IEC 60332-3C (LSFROH Jacket)



### Product Highlights:

- ☆ Provide excellent bandwidth beyond 100 MHz.
- ☆ Designed for use in data and voice backbone application.
- ☆ Meet the strict flame retardancy and environmental requirements in Europe and US.
- ☆ Easily identifiable color code for ease of installation.

## ◎ Transmission Properties:

FREQ (MHz)	NEXT(dB/100m)	IL (dB/100m)	SRL (dB/100m)
	Minimum Value/Typical Value/Standard Value		Minimum Value/Typical Value/Standard Value
1	64.0/71.0/62.0	2.0	24.5/26.0/23.0
4	55.0/62.0/53.0	4.0	24.5/26.0/23.0
8	49.5/57.0/48.0	5.7	24.5/26.0/23.0
10	49.0/56.0/47.0	6.4	24.5/26.0/23.0
16	44.9/52.0/44.0	8.2	24.5/26.0/23.0
20	42.5/48.0/42.0	9.2	24.5/26.0/23.0
25	42.0/48.0/41.0	10.3	24.5/26.0/23.0
31.25	40.6/48.0/39.0	11.6	22.5/24.0/21.0
62.5	36.1/43.0/35.0	16.9	19.5/22.0/18.0
100	34.0/40.0/32.0	21.8	17.5/20.0/16.0

## ◎ Ordering Information:

Model	Product Description
AD-BC-CAT5UTP25PCM24	U/UTP Cat5 25 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5UTP50PCM24	U/UTP Cat5 50 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5UTP100PCM24	U/UTP Cat5 100 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5UTP25PLH24	U/UTP Cat5 25 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5UTP50PLH24	U/UTP Cat5 50 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5UTP100PLH24	U/UTP Cat5 100 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5UTP25PPE24	Outdoor U/UTP Cat5 25 Pairs (Water-blocking /UV Resistant)
AD-BC-CAT5UTP50PPE24	Outdoor U/UTP Cat5 50 Pairs (Water-blocking /UV Resistant)
AD-BC-CAT5UTP100PPE24	Outdoor U/UTP Cat5 100 Pairs (Water-blocking /UV Resistant)
AD-BC-CAT5FTP25PCM24	F/UTP Cat5 25 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5FTP50PCM24	F/UTP Cat5 50 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5FTP100PCM24	F/UTP Cat5 100 Pairs, CM Grade (Non-Plenum)
AD-BC-CAT5FTP25PLH24	F/UTP Cat5 25 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5FTP50PLH24	F/UTP Cat5 50 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5FTP100PLH24	F/UTP Cat5 100 Pairs, LSZH Grade (IEC60332-1)
AD-BC-CAT5FTP25PPE24	Outdoor F/UTP Cat5 25 Pairs (Water-blocking /UV Resistant)
AD-BC-CAT5FTP50PPE24	Outdoor F/UTP Cat5 50 Pairs (Water-blocking /UV Resistant)
AD-BC-CAT5FTP100PPE24	Outdoor F/UTP Cat5 100 Pairs (Water-blocking /UV Resistant)

