



## STANDARD

- ANSI/TIA-568-C.2 Category 6
- ISO/IEC 11801:2002 Class E
- EN 50173-1 Category 6
- ICEA S-102-700 Category 6
- EN 50288-6-1, NEMA WC 66
- IEC 81156-5, ASTM D4566-98, IEC 60332-1
- UL/CSA Listed CMX, CM, CMR, CMP and LSZH
- ETL and 3P Verified to TIA-568-C.2 CAT 6
- UL E197771, RoHS Compliant

## APPLICATION

- 10GBASE-T (IEEE 802.3an 10Gigabit Ethernet)
- 1000 BASE-T (IEEE 802.3ab Gigabit Ethernet)
- 100 BASE-TX (IEEE 802.3u Fast Ethernet)
- 10 BASE-T (IEEE 802.3 Ethernet)
- 155/622Mbps and 1.2Gbps ATM
- 4/16 Mbps Token Ring
- POE, POE+ (IEEE 802.3af, IEEE 802.3at)
- TP-PMD, TPDDI, ISDN, VoIP
- Analog & Digital Voice, Digital & Analog Video

## ELECTRICAL CHARACTERISTICS

<b>Impedance</b>	: 100±5Ω, 1 MHz to 600 MHz
<b>Mutual Capacitance</b>	: 5.6 nFMax / 100m
<b>Capacitance, Unbalance</b>	: 160 pF Max / 100m
<b>DC Resistance</b>	: 6.65 ohm Max/100m
<b>DC Resistance, Unbalance</b>	: 5% Max.
<b>Insulated Resistance</b>	: 5000 MQ/Km
<b>Dielectric Strength</b>	: 1kV/min
<b>Propagation Delay</b>	: 536 ns/100m Max @600MHz
<b>Delay Skew</b>	: 30 ns Max



US-9136



US-9136PE

## CONSTRUCTION / MATERIAL

<b>Conductor</b>	: 23AWG Solid/Stranded Bare Copper
<b>Insulation</b>	CM, CMR, LSZH, CMX : HDPE CMP : FEP
<b>Filler Slot</b>	: FRPE
<b>Mylar</b>	: Mylar Tape
<b>Drain Wire</b>	: Tinned Copper
<b>Shielded</b>	: AL-Mylar Tape
<b>Ripcord</b>	: Under Jacket
<b>Jacket</b>	CM, CMR : FRPVC CMP : FRPVC (Low Smoke) LSZH : LSZH CMX : PE

FREQUENCY (MHZ)	INSERTION LOSS (dB/100m)	NEXT MIN.(dB)	ACR MIN.(dB)	PS.NEXT MIN.(dB)	PS.ACR MIN.(dB)	ELFEXT MIN.(dB/100m)	PS.ELFEXT MIN.(dB/100m)	RL MIN.(dB)
1	2.0	78.0	76.0	76.0	73.5	69.0	66.0	20.0
31.25	10.7	56.0	45.3	54.0	42.8	36.5	35.6	23.6
62.5	15.4	50.5	35.1	52.2	33.0	33.0	29.5	21.5
100	19.8	47.5	27.7	49.8	25.6	28.5	25.8	20.1
155	25.1	45.0	19.7	47.2	17.2	25.0	23.0	18.8
200	29.0	44.4	15.4	45.0	12.3	22.5	21.7	18.0
250	32.0	42.9	10.8	43.2	6.5	21.2	18.0	17.3
300	36.4	41.5	4.9	40.7	1.9	18.5	15.6	16.8
400	43.0	38.5	-	37.5	-	16.5	13.7	15.9
550	51.8	36.7	-	34.5	-	13.5	10.7	14.9
600	54.5	36.5	-	34.5	-	13.0	10.0	14.7

## MECHANICAL PROPERTIES

Minimum Bending Radius

Install 8 X Cable Diameter

After Install 4 X Cable Diameter

Tensile Strength

110 N (25lbf)

Ultimate Breaking Strength

>400 N (90lbf)

Installation / Operating temperature

-20°C to 60°C (-40°C to 75°C for US-9136PE)

Storage Temperature

-20°C to 80°C (-40°C to 80°C for US-9136PE)

Part No.	UL/NEC Flame Rating	Conductor	Jacket	Diameter (mm.)	Color	Packaging
US-9136	CMR	23AWG Solid Bare Copper	FRPVC	7.2	White	305m/Reel
US-9136LSZH	LSZH	23AWG Solid Bare Copper	LSZH	7.2	White	305m/Reel
US-9136P	CMP	23AWG Solid Bare Copper	FRPVC(LS)	7.2	White	305m/Reel
US-9136PE	CMX	23AWG Solid Bare Copper	PE	7.2	Black	305m/Reel
US-9165	CM	26AWG Stranded Bare Copper	FRPVC	5.7	White	305m/Pull Box