



Category 6 U/UTP Cable, Unshielded

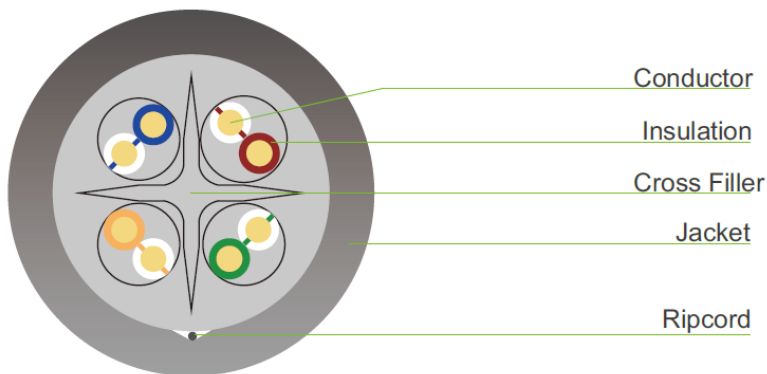
Features & Benefits

- Cross filler inside to offer better crosstalk and impedance performance
- Frequency 1-250MHz, extend to 350Mhz
- Available in a variety of LSZH flame retardant cables
- Durable length markings to reduce waste of cable

Compliance & Standards

- ISO/IEC 11801
- ANSI/TIA/EIA-568.2-D
- IEC 61156-5
- IEC 60332
- EN50399
- EN50574
- EN50173-1

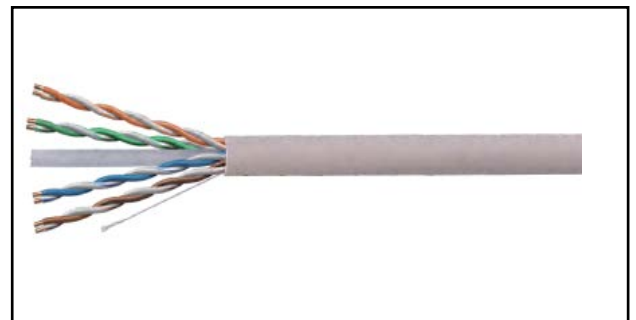
Technical Drawing



Applications

- 1000Base-T applications
- Data cable for structured premises cabling up to Class E and CAT 6 applications
- Digital and analog voice, video and data signal transmission
- Power over Ethernet (PoE) / PoE+ / PoE++

Drawing





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Product Specifications

Product Type			U/UTP CAT6 4x2x23 AWG	
Construction			Dimensions	
Conductor	Structure AWG	AWG	23	
	Material	-	Solid Bare Copper	
Insulation	Material	-	HDPE/FEP	
Twist	Direction	-	S	
Fillers	Material		PE	
Jacket	Material		LSZH/PVC/PE/CM/CMR	CMP
	Diameter (mm)		6.3±0.3	5.6±0.3
Installation Temperature Range			0°C to + 60°C	
Operating Temperature Range			-20°C to + 60°C	

Mechanical Performance

Conductor Elongation		≥15%
Jacket Before Aging (LSZH)	Tensile Strength	≥10Mpa
	Elongation	≥125%
Jacket After Aging (LSZH)	Tensile Strength (100°C ± 2°C, 168h)	≥8Mpa
	Elongation (100°C ± 2°C, 168h)	≥100%
Minimum Bend Radius		8 x Cable Radius

Electrical Performance

DC Resistance Unbalance (%)	≤2.0%
DC Resistance 20°C	≤93.8(Ohms/Km)
Insulation Resistance	>5000MΩ x Km+20°C DC(100-500)V
Dielectric Strength	DC 1000V, 1min No Breaking Down
Mutual Capacitance of a Pair	Max 5.6 nF/100m
NVP	68%



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Transmission Performance

	IL	RL	DOP	SKEW	NEXT	PS NEXT	ACR-F	PS ACR-F
Freq.	dB	dB	ns	ns/100m	dB	dB	dB	dB
MHz	Max.	Min.	Max.	Max.	Min.	Min.	Min.	Min.
1	2	20.0	570	45	75	72	67.8	64.8
4	3.8	23.0	552	45	66	63	55.7	52.7
10	6.0	25.0	545	45	60	57	47.8	44.8
16	7.6	25.0	543	45	57	54	43.7	40.7
20	8.5	25.0	542	45	56	53	41.7	38.7
31.25	10.7	23.6	540	45	54	50	37.9	34.9
62.5	15.4	21.5	538	45	48	45	31.8	28.8
100	19.8	20.1	537	45	45.3	42.3	27.8	24.8
200	29.1	18	536	45	37.3	37.7	21.7	18.7
250	33.0	17.3	535	45	36	36	19.8	16.8

Note: The above transmission performance for the 100M, 20 ± 2 °C under the conditions tested.

Ordering Information

Part No.	Product Name	Description
SP6013P-BL0305MB	CAT 6 U/UTP Unshielded Cable, CMP	305m/Box_ Blue
SP6013R-BL0305MB	CAT 6 U/UTP Unshielded Cable, CMR	305m/Box_ Blue
SP6013M-GY0305MB	CAT 6 U/UTP Unshielded Cable, CM	305m/Box_ Gray
SP6013V-GY0305MB	CAT 6 U/UTP Unshielded Cable, PVC	305m/Box_ Gray
SP6013L-PU0305MB	CAT 6 U/UTP Unshielded Cable, LSZH	305m/Box_ Purple