



Category 6 F/UTP Cable, Shielded

Features & Benefits

- Cross filler inside to offer better crosstalk and impedance performance
- Aluminum foil shielded
- 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

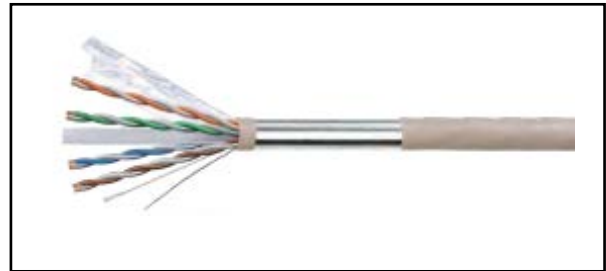
Applications

- 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+

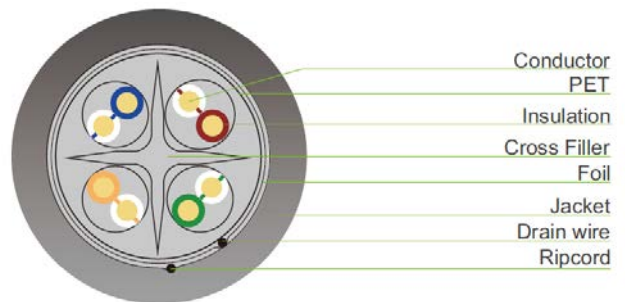
Physical Performance

Cable Under the Minimum Tension		≥100N
Conductor Elongation		≥15%
Jacket Before Aging (LSZH)	Tensile Strength	≥10Mpa
	Elongation	≥125%
Jacket After Aging (LSZH)	Tensile Strength	≥8Mpa
	Elongation	≥100%
Minimum Bend Radius		8x Cable Radius

Drawing



Technical Drawing





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Product Specifications

Product Type		F/UTP CAT 6 4x2x23 AWG
Conductor	AWG	23
	Material	Solid Bare Copper
	Diameter(mm)	0.56 ± 0.008
Insulation	Material	HDPE
	Diameter(mm)	1.06 ± 0.05
Twist	Direction	S
	No. of Pairs	4
Jacket	Material	CM, LSZH, PVC, PE, CMR
	Diameter(mm)	7.4 ± 0.3
	Average Thickness(mm)	0.6 ± 0.1
Installation Temperature Range		0°C to + 60°C
Operating Temperature Range		-20°C to + 60°C (LSZH/PVC/CM/CMR); -20°C to + 70°C (PE)

Electrical Performance

DC Resistance Unbalance (%)	≤ 2.0%
DC Resistance 20°C	≤ 93.8 (Ohms/Km)
Insulation Resistance	> 5000 MΩ × Km
Dielectric Strength	DC 1000V 1min
Mutual Capacitance	≤ 5.6 nF/100m
NVP	67%



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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
in MHz	Max.	Min.	Max.	Max.	Min.	Min.	Min.	Min.
1	2.1	20	570	45	75	72	67.8	64.8
4	3.8	23	552	45	66	63	55.7	52.7
10	6.0	25	545	45	60	57	47.8	44.8
16	7.6	25	543	45	57	54	43.7	40.7
20	8.5	25	542	45	56	53	41.7	38.7
31.25	10.7	23.6	540	45	53	50	37.9	34.9
62.5	15.5	21.5	538	45	48	45	31.8	28.8
100	19.9	20.1	537	45	45.3	42.3	27.8	24.8
200	29.1	18	536	45	40.7	37.7	21.7	18.7
250	33.0	17.3	535	45	39	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
SP6023V-GY0305MD	Category 6 F/UTP 4 Pairs Shielded Cable, PVC	305m/Drum_ Gray
SP6023M-GY0305MD	Category 6 F/UTP 4 Pairs Shielded Cable, CM	305m/Drum_ Gray
SP6023R-BL0305MD	Category 6 F/UTP 4 Pairs Shielded Cable, CMR	305m/Drum_ Blue
SP6023L-PU0305MD	Category 6 F/UTP 4 Pairs Shielded Cable, LSZH	305m/Drum_ Purple
SP6023E-BK0305MD	Category 6 F/UTP 4 Pairs Shielded Cable, PE	305m/Drum_ Black