



Category 6A U/FTP Cable, Shielded

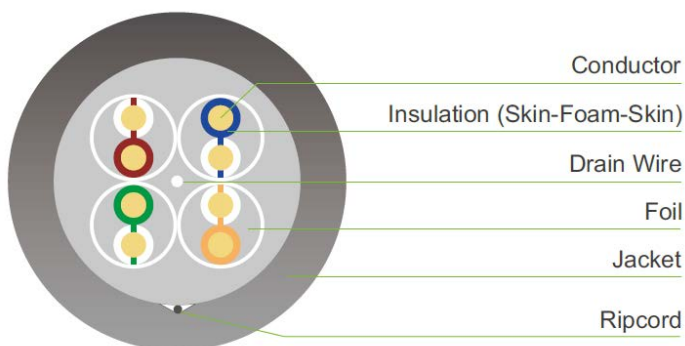
Features & Benefits

- Excellent electrical performance with skin-foam-skin design
- Individually shielded pair to offer good NEXT and ANEXT performance
- Frequency 1-500MHz, extend to 600MHz
- Available in a variety of LSZH flame retardant cables
- Durable length markings to reduce waste of cable
- Zero halogen, no corrosive gases IEC 60754-1(LSZH)
- Flame propagation IEC 60332-1(LSZH)
- Smoke density IEC 61034-1(LSZH)

Applications

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

Technical Drawing



Compliance & Standards

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

Drawing





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Product Specifications

Product Type		U/FTP CAT 6A 4x2x23 AWG
Conductor	AWG	23
	Material	Solid Bare Copper
Insulation	Material	Physical Foamed PE
	Diameter	1.38±0.10
Twist	Direction	S
	No. of Pairs	4
Jacket	Material	LSZH/PVC/CM/CMR/PE
	Diameter (mm)	7.9±0.3
	Average Thickness (mm)	0.60±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)

Mechanical Performance

Product Type		U/FTP CAT 6A 4X2X23AWG LSZH	U/FTP CAT 6A 4X2X23AWG PVC	U/FTP CAT 6A 4X2X23AWG PE
Minimum Tension		≥100N		
Conductor Elongation		≥15%		
Jacket Before Aging	Tensile Strength	≥10Mpa	≥13.5Mpa	≥17.5Mpa
	Elongation	≥125%	≥150%	≥150%
Jacket After Aging	Tensile Strength	≥8Mpa	≥12.5Mpa	≥14.5Mpa
	Elongation	≥100%	≥125%	≥125%



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Electrical Performance

Impedance	1-100MHz	$100 \pm 15 \text{ Ohms}$
	100MHz-250MHz	$100 \pm 22 \text{ Ohms}$
	250MHz-500MHz	$100 \pm 25 \text{ Ohms}$
Rated Temperature		75°C
DC Resistance Unbalance (%)		Max 2.0
DC Resistance 20°C		$\leq 93.8 \text{ (Ohms/Km)}$
Pair-to-Ground Capacitance Unbalance		160 (pF/100m)
Insulation Resistance		$> 5000 \text{ M}\Omega \times \text{Km}$
Dielectric Strength		DC 2500V, 2 S

Transmission Performance

Freq.	IL	RL	DOP	SKEW	NEXT	PS NEXT	EL FEXT	PS EL FEXT	PSANEXT	PS AACR-F
	dB/100M	dB	ns/100m	Ns/100m	dB	dB	dB	dB	dB	dB
MHz	Max.	Min.	Max.	Max.	Min.	Min.	Min.	Min.	Min.	Min.
1	2.1	20	570	45	75.3	72.3	68	65	67	67
4	3.8	23	552	45	66.3	63.3	56	53	67	66.2
16	7.5	25	543	45	57.2	54.2	44	41	67	54.1
20	8.1	25	542	45	55.8	52.8	42	39	67	52.2
31.25	10.5	23.6	540	45	52.9	49.9	38	35	67	48.3
62.5	15.0	21.5	539	45	48.4	45.4	32	29	65.6	42.3
100	19.1	20.1	538	45	45.3	42.3	28	25	62.5	38.2
250	31.1	17.3	536	45	39.3	36.3	20	17	56.5	30.2
400	36.4	17.3	535.6	45	35.3	33.3	15.8	12.8	53.5	26.2
500	45.3	17.3	536	45	34.8	31.8	14	11	52	24.2

Note: The above transmission performance is tested in 100 meters, $20 \pm 2^\circ\text{C}$.



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Ordering Information

Part No.	Product Name	Description
SP6653V-GY0305MD	Category 6A U/FTP 4 Pairs Shielded Cable, PVC	305m/Drum_ Gray
SP6653M-GY0305MD	Category 6A U/FTP 4 Pairs Shielded Cable, CM	305m/Drum_ Gray
SP6653R-BL0305MD	Category 6A U/FTP 4 Pairs Shielded Cable, CMR	305m/Drum_ Blue
SP6653L-PU0305MD	Category 6A U/FTP 4 Pairs Shielded Cable, LSZH	305m/Drum_ Purple
SP6653E-BK0305MD	Category 6A U/FTP 4 Pairs Shielded Cable, PE	305m/Drum_ Black