

UTP Category 6 LSZH Cable

Cross-sectional view		Packing Choices							
									
Sheath Printing		Maximum Referenced Frequency							
As per Request		250 MHz							
Reference Standards		Electrical Characteristics							
YD/T1019-2013		20°C Conductor Resistance		Ω/km	≤93.5				
ANSI/TIA-568B-C.2		Pair to Pair Capacitance Unbalance		%	≤2				
ISO/IEC11801 IEC61156.5		Pair to Ground Capacitance Unbalance		%	≤4				
UL444, UL1666, CE, RoHS		Coupling Attenuation at 30~100 MHz		dB	/				
		Coupling Attenuation at 100~250 MHz		dB	/				
Cable Construction		Physical Performance (Before Ageing)		Unit					
Conductor	Solid Oxygen-free Copper	Elongation at Break of the Sheath	LSZH	%	≥125				
Number of Pairs	4P		PVC	%	≥150				
Conductor OD	23AWG 0.54 (+/-0.005)mm	Tensile Strength of the Sheath	LSZH	MPa	≥10.0				
Insulation material	HDPE		PVC	MPa	≥13.5				
Insulation OD	0.98 (+/-0.03)mm	Environmental Characteristics (After Ageing)							
Sheath material	PVC	Elongation at Break of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C)							
Sheath thickness	0.55 (+/-0.05)mm	After Ageing (Average)	LSZH	Elongation at Break	% ≥100				
Sheath OD	6.2 (+/-0.05)mm			Elongation at Break Change Rate	% -30~+30				
Operating temperature	-20°C to 60°C	After Ageing (Average)	PVC	Elongation at Break	% ≥125				
Twisted pitch (mm)	≤20			Elongation at Break Change Rate	% -30~+30				
Cable pitch (mm)	≤100	Tensile Strength of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C)							
Weight	11.8kg/305m	After Ageing (Average)	LSZH	Sheath Tensile Strength	% ≥8.0				
Pair Colors				Sheath Tensile Strength Change Rate	% -30~+30				
P1	Blue, White/Blue	After Ageing (Average)	PVC	Sheath Tensile Strength	% ≥12.5				
P2	Orange, White/Orange			Sheath Tensile Strength Change Rate	% -30~+30				
P3	Green, White/Green	Cold Bending No Cracking at -20 °C, 8 times of the Sheath OD for 4 hours.							
P4	Brown, White/Brown	High Temperature Impact No Cracking at 150 °C 1 hour.							
Performance Parameters									
Frequency Point	Propagation Velocity	Attenuation (Max) at 20 °C	TCL (Min)	EL TCL (Min)	NEXT (Min)	PS NEXT (Min)	EL FEXT (Min)	PS EL FEXT	RL (Min)
MHz	m/s	dB	dB	dB	dB	dB	dB/100m	dB/100m	dB
4	≥0.604C	3.8	44	23	66.3	63.3	56	53	23
8	≥0.610C	5.3	41	16.9	61.8	58.8	49.9	46.9	24.5
10	≥0.612C	6	40	15	60.3	57.3	48	45	25
16	≥0.614C	7.6	38	10.9	57.2	54.2	43.9	40.9	25
20	≥0.615C	8.5	37	9	55.8	52.8	42	39	25
25	≥0.616C	9.5	36	7	54.3	51.3	40	37	24.3
31.25	≥0.617C	10.7	35.1	/	52.9	49.9	38.1	35.1	23.6
62.5	≥0.618C	15.4	32	/	48.4	45.4	32.1	29.1	21.5
100	≥0.619C	19.8	30	/	45.3	42.3	28	25	20.1
200	≥0.620C	29	27	/	40.8	37.8	22	19	18
250	≥0.622C	32.8	26	/	39.3	36.3	20	17	17.3