



Sheath Printing	Maximum Referenced Frequency
CAT6 UTP EIA/TIA-568-C.2 4PR 23AWG CMR (UL) E502360 75°C ROHS COMPLIANT S1747 xxxx FT	250 MHZ

Reference Standards	Electrical Characteristics		
YD/T1019-2013	20°C Conductor Resistance	Ω / km	≤75
ANSI/TIA-568B-C.2	Pair to Pair Capacitance Unbalance	%	≤2
ISO/IEC11801 IEC61156.5	Pair to Ground Capacitance Unbalance	%	/
UI444, UL1666, CE, RoHS	Coupling Attenuation at 30~100 MHz	dB	/

Cable Construction		Physical Performance (Before Ageing)		Unit
Conductor	Solid Oxygen-free Copper	Elongation at Break of the Sheath	LSZH	%
Number of Pairs	4P		PVC	%
Conductor OD	23AWG 0.56 (+/-0.005)mm	Tensile Strength of the Sheath	LSZH	Mpa
Insulation Material	HDPE		PVC	Mpa

Environmental Characteristics (After Ageing)		Unit				
Elongation at Break of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C)						
Sheath Material	PVC	After Ageing (Average)	LSZH	Elongation at Break	%	≥100
Sheath Thickness	0.55 (+/-0.05)mm			Elongation at Break Change Rate	%	-30~+30
Sheath OD	6.2(+/-0.05)mm	After Ageing (Average)	PVC	Elongation at Break	%	≥125
Operating Temperature	-20°C to 60°C			Elongation at Break Change Rate	%	-30~+30

Tensile Strength of the Sheath after Ageing (Ageing Condition: 7 days at (100 ± 2) °C)		Unit				
Net Weight	12.5kg/305m	After Ageing (Average)	LSZH	Sheath Tensile	%	≥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 Bend Test		No Cracking at -20° C , 8 times of the Sheath OD for 4 hours.		
P4	Brown, White/Brown	Heat Shock Test		No Cracking at 150 ° C 1 hour.		

Performance Parameters: FLUKE Permanent Link Test									
Frequency	Propagation	Attenuation	TCL (Min)	EL TCL (Min)	NEXT (Min)	PS NEXT	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