

Cat 6 FTP LSZH Cable

BATT Part No:	77074
Applications:	Horizontal & building backbone cable to support cat 6 and cat 5e applications, such as 10 Base-T, 100 Base-T, 1000 Base-T, FDDI, ATM
Conductor:	23 awg solid bare copper (0.55mm)
Insulation:	Polyolefine
Pair:	4 twisted pairs: white/blue & blue, white/orange & orange, white/green & green, white/brown & brown Conductor identification according to IEC 60304
Diameter over insulation:	1.15mm
Cross web:	Polyolefine
Shield:	Aluminium/polyester foil
Drain wire:	26 awg solid tinned copper
Sheath:	FRNC compound, violet
Overall diameter:	7.30mm
General Characteristics	
Temperature range – operation:	-20°C to +60°C
Temperature range – installation:	0°C to +50°C
Minimum bending radius – operation:	29 mm
Minimum bending radius – installation:	58mm
Maximum pulling tension:	50N
Flame retardancy:	IEC 60332
Caloric value:	820 kJ/m
Weight	51.0 kg/km
Maximum operating voltage:	48 V rms
Max continuous current per conductor (250C):	1.4 A
Standards:	ISO/IEC 11801 2nd edition (2002), EN 50173 2nd edition (2001), ANSI/TIA/EIA 568-b.2 (2002)
Electrical Characteristics at 20°C	
Nominal mutual capacitance at 1kHz	50 nF/km
Max conductor DCR	91 Ohm/km
Nominal Velocity of Propagation	0.7 c
Mean characteristic impedance 4-100 MHz*:	100 +/- 5 Ohms * according to cable requirements of ISO/IEC 11801 cat 6, sept 2002
SKEW - propagation delay difference (100MHz):	Typical ≤ 15 ns/100m



Attenuation:

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	4	6	7.6	8.5	10.8	15.5	19.9	25.3	29.2	33
Typical dB/100m	(1.9)	3.5	5.5	6.9	7.6	9.7	13.8	17.7	25.2.4	25.1	28.2

NEXT Near end crosstalk

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	66	60	57	56	53	48	45	42	41	39
Typical dB/100m	(1.9)	3.5	5.5	6.9	7.6	9.7	13.8	17.7	22.4	25.1	28.2



Power Sum NEXT

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	63	57	54	53	50	45	42	39	38	36
Typical dB/100m	(80)	76	70	67	66	63	58	55	51	49	45

Power Sum ELFEXT

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	53	45	41	39	35	29	25	21	19	17
Typical dB/100m	(70)	64	57	51	49	45	39	35	31	29	27

ACR

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	62	54	49.4	47.5	42.2	32.5	25.1	16.7	11.8	6.0
Typical dB/100m	(78)	73	65	60	58	53	44	37	29	24	17

Power Sum ACR

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	59	51	46.4	44.5	39.2	29.5	22.1	13.7	8.8	3
Typical dB/100m	(76)	71	63	58	56	51	42	35	27	22	15

Return Loss

Freq MHz	1	4	10	16	20	31.2	62.5	100	155	200	250
Spec (Min(+)* dB/100m	-	23	25	25	25	23.6	21.5	20.1	18.8	18	17.3
Typical dB/100m	(30)	35	40	44	44	44	34	30	25	24	24