52768: LAN CAT 7 OUTDOOR SOLID S/FTP CU PIMF 100m

Rev.:V1.0

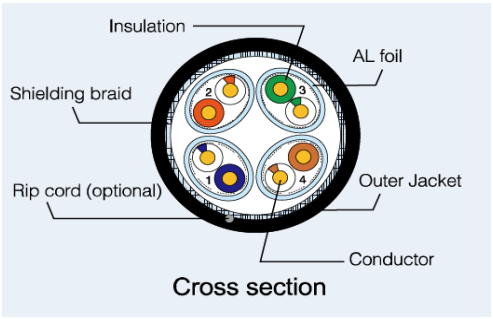
Description

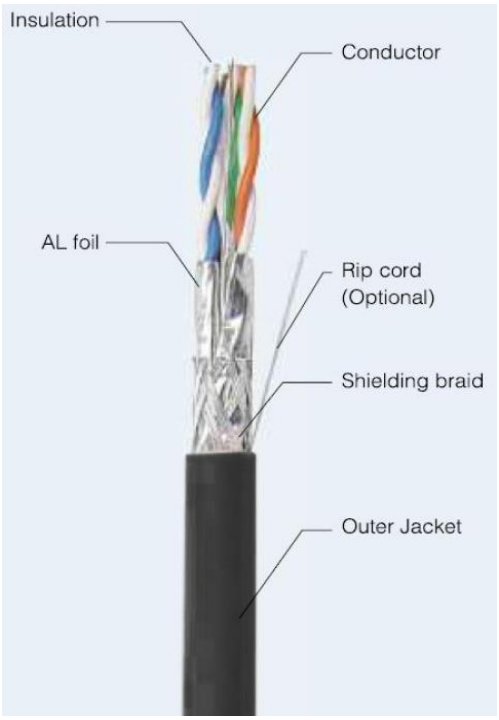
- Rated temperature: 75℃
- Reference standard: UL444, ANSI/TIA-568-C.2, ISO/IEC 11801,IEC 61156-5
- Product standard certification:
- Flame test:N/A
- Oxygen free copper conductor
- Colour-coded PE insulation
- PE(UV Resistant) jacket
- Packaging: Per customer request

Application

- 100Base-T4
- 100Base-TX
- 100VG-AnyLAN
- 1000Base-T
- 1000Base-TX
- 155Mbps ATM
- 622Mbps ATM
- 10 Gb Ethernet

Product figure





Physical characteristics

Structure	Construction	S/FTP
	Number of Pairs	4 Pairs
Conductor	AWG	23 AWG
	Conductor material	Solid bare copper
	Conductor dimension	0.56±0.01 mm
Insulation	Insulation material	Foam PE
	Insulation dimension	1.35 ±0.05mm
	Number colour	1.White/Blue & Blue
	(Stripe or pure marking)	2.White/Orange & Orange
		3.White/Green& Green
		4.White/Brown & Brown
Cabling	Twisting lay length	≦30mm
	Cabling lay length	≦200mm
Filler	Filler material	N/A
Binder	Binder material	N/A
Shield	Individual shield & material	AL-Foil
	Primary overall shield & material	Tinned copper wire braid
	Secondary overall shield & material	N/A
	Construction Shield braid	16/4/(0.08±0.01)mm
	Shield coverage approx	25%
	Drain wire	N/A
Outer jacket	Jacket material	PE
	Jacket thickness nominal	0.60mm
	Overall nominal dimension	7.70 ±0.30 mm
	Jacket rip cord	None
Mechanical characteristics	Operating temperature range	-20 ℃ ~ +75 ℃
	Bulk cable weight approx	52.0 kg/km
	Max. recommended pulling tension	110 N
	Min. bend radius (install)	8 x O.D.
	Outer jacket tensile strength	≧9.7MPa
	Outer jacket elongation	≧350%
	Outer jacket aging condition	100 ℃ x 48 hrs
	After aging,tensile strength	≧75% of Unaging
	After aging,elongation	≧75% of Unaging
	Cold bend (static)	No Crack (@ -20℃ x 4hrs)
Electrical Characteristics	Nom. mutual capacitance	≦5.6 nF/100m (@1kHz)
	Pair to ground capacitance unbalance	≦160 pF/100m
	Nominal velocity of propagation	74%
	Max. delay skew	25 ns/100m
	Max. conductor DC resistance	9.5 Ω/100m (@ 20 ℃)
	Max. conductor resistance unbalance	5% (@ 20 ℃) within a pair
	Min. insulation resistance	5000 MΩ.km
	Max. operating voltage - UL	300 V
	Dielectric strength	2,5 kV d.c. for 2 s
	(Conductor/conductor,	Or 1,0 kV d.c. for 1 min
	conductor/screen)	

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Cable Jacket Marking

conventional printing	

Electrical Characteristics

Frequency	Character impedance upper limit	Character impedance lower limit	RL	ATT	NEXT	PS NEXT	ELFEXT	PS ELFEXT	PD			
(MHz)	(Ω)	(Ω)	(dB Min)	(dB/100m)	(dB Min)	(dB Min)	(dB Min)	(dB Min)	(ns/100m Max)			
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4	115.2	86.8	23.0	3.74	78.0	75.0	78.0	75.0	552.0			
8	112.6	88.8	24.5	5.24	78.0	75.0	75.9	72.9	546.7			
10	11.9	89.4	25.0	5.86	78.0	75.0	74.0	71.0	545.4			
16	111.9	89.4	25.0	7.41	78.0	75.0	69.9	66.9	543.0			
20	111.9	89.4	25.0	8.29	78.0	75.0	68.0	65.0	542.0			
25	112.9	88.5	24.3	9.29	78.0	75.0	66.0	63.0	541.2			
31.25	114.1	87.7	23.6	10.41	78.0	75.0	64.1	61.1	540.4			
62.5	118.3	84.5	21.5	14.88	75.5	72.5	58.1	55.1	538.6			
100	121.9	82.0	20.1	19.02	72.4	69.4	54.0	51.0	537.6			
150	125.7	79.6	18.9	23.56	69.8	66.8	50.5	47.5	536.9			
200	128.8	77.6	18.0	27.47	67.9	64.9	48.0	45.0	536.5			
250	131.5	76.0	17.3	30.97	66.4	63.4	46.0	43.0	536.3			
300	131.6	76.0	17.3	34.19	65.2	62.2	44.5	41.5	536.1			
350	131.6	76.0	17.3	37.19	64.2	61.2	43.1	40.1	535.9			
400	131.6	76.0	17.3	40.01	63.4	60.4	42.0	39.0	535.8			
500	131.6	76.0	17.3	45.26	61.9	58.9	40.0	37.0	535.6			
550	131.6	76.0	17.3	47.72	61.3	58.3	39.2	36.2	535.5			
600	131.6	76.0	17.3	50.1	60.7	57.7	38.4	35.4	535.5			

Remark : Cable that meet the requirements of the template are not required to be measured for return loss; alternately cables that meet the return loss requirements are not required to be measured for characteristic impedance.