# 23 AWG /4 Pair CAT6 CMP Cable

## 75°C, 300V 250MHz PLENUM RATED; 4 UNSHIELDED TWISTED PAIRS

### **CONSTRUCTION:**

- 1. Conductors: 23 AWG SOLID BARE COPPER
- 2. Insulation: FEP BLUE & WHITE/BLUE STRIPE; ORANGE & WHITE/ORANGE STRIPE; GREEN & WHITE/GREEN STRIPE; BROWN & WHITE/BROWN STRIPE
- 3. Assembly: 4 PAIRS INDIVIDUALLY TWISTED, CABLED; UNSHIELDED; AND JACKETED
- 4. Jacket: LS-PVC, Color : Consult factory for jacket color options.

### **APPLICATIONS AND FEATURES:**

Southwire Cat 6 unshielded twisted pair cable is a high performance data communication cable. This ethernet cable is designed for indoor and plenum network installations type CMP (Plenum rated communication cable), may be used in Ethernet Networking system, PoE applications, Video MPEG4 / M-JPEG / Digital / Analog / Baseband / Broadband and other Multimedia Voice applications.

### SPECIFICATIONS:

Meets or exceeds TIA/EIA 568-C.2

- NEC ARTICLE 800
- Passes IEEE 802.3af
- UL 444 CMP
- NFPA 262 (UL 910) / CSA FT6
- Directive (EU) 2015/863 RoHS 3

#### SAMPLE PRINT LEGEND:

6P SOUTHWIRE® TAPPAN(TM) CAT6 23 AWG 4PR UTP E118871 C(UL)US CMP 75C -- TYPE CMP-LP(0.5A) FT6 ETL VERIFIED TO TIA/EIA-568-C.2 CATEGORY 6 250MHZ ROHS-3 COMPLIANT -- SEQ FTG -- XX/XX/XX(MONTH/DAY/YEAR) HH:MM(HOUR/MINUTE)

PACKAGING Standard lengths 1000 FT. Consult factory for packaging options.

 TABLE 1 - Product Electrical Characteristics

	Stock Code			Max Capacitance (nF/100m @ 1 kHz) (AWG)			Max DC Resistance (Ω/100m @ 68°F)			Max Delay Skew (ns/100m)			Nom Velocity of Propagation (%)		3	Characteristic Impedance (Ω @ 1-100 MHz)		Nominal OD (Inchs)	Nominal OD (mm)	Nominal Weight (Lbs/Mft)	Nominal Weight (kg/km)
	1999	93			3.3			9.38		4	5.0		68	3.0		100 +	/- 15%	0.210	5.334	26.0	38.7
Freq.	Atten	uation	NE	EXT	AC	R	PSN	IEXT	PS	ACR	AC	RF	PS A	CRF		RL					
(MHz)	(dB/1			100m)	(dB/1			00m)		100m)	(dB/1			00m)		dB)					
	Std.	Avg.	Std.	Avg.	"Std"	Avg.	Min.	Avg.	"Std"	Avg	Std.	Avg.	Min.	Avg.	Min.	Avg.					
1 4	2	1.9	74.3 65.1	82 75	72.3 61.3	80.1 71.3	72.3 63.1	80 73	70.3 59.3	78.1 69.3	67.8 55.5	76 64	64.8 52.5	75 63	20.0	28 34					
8	5.3	5.1	60.9	70	55.6	64.9	58.9	68	53.6	62.9	49.9	59	46.9	58	24.5						
10	6.1	5.9	59.1	69	53.0	63.1	57.1	67	51	61.1	47.5	56	44.5	55	25.0						
16	7.5	7.4	56.3	67	48.8	59.6	54.3	64	46.8	56.6	43.7	53	40.7	52	25.0	34					
20	8.5	8.4	54.7	66	46.2	57.6	52.7	63	44.2	54.6	41.6	51	38.6	50	25.0	35					
25	9.6	9.4	53.2	63	43.6	53.6	51.2	61	41.6	51.6	39.7	49	36.7	48	24.3	33					
31.25	10.7	10.6	51.8	62	41.1	51.4	49.8	60	39.1	49.4	37.8	48	34.8	47	23.6	32					
62.5	15.4	15.2	47.3	58	31.9	42.8	45.3	56	29.9	40.8	31.8	41	28.8	40	21.5	29					
100	19.8	19.5	44.3	55	24.5	35.5	42.3	53	22.5	33.5	27.8	37	24.8	36	20.1	28					
200	29.0	28.0	39.8	50	10.8	22.0	37.8	48	8.8	20.0	21.8	30	18.8	29	18.0	25					
250	32.8	31.6	38.3	48	5.5	16.4	36.3	46	3.5	14.4	19.8	27	16.8	26	17.3	24					
300		34.8		47		12.2		45		10.2		25		23		24					
400		40.7		42		1.3		40		(0.7)		19		18		23					
ACR:		Std. is NEXT	a TIA 5 minus /	68C.2 M Attenuat	/laximur /linimum ion ; ("A	n. (Near ttenuati	End Cr	osstalk rosstalk	) ( Ratio")	)	Hi Hi	gher is gher is	better. better. better.								
NEXT: ACR: PSNEXT PSACR:	-:	Std. is NEXT Std. is	a TIA 5 minus / a TIA 5 (T minu	68C.2 M Attenuat 68C.2 M us Atten	Ainimum	n. (Near ttenuati n. (Powe ("Atter	End Cr ion to C er Sum nuation	osstalk rosstalk Near Ei to PSN	) ( Ratio") nd Cros EXT Ra	) istalk) atio")	Hi Hi Hi	gher is gher is gher is	better.								

PSNEXT:	Std. is a TIA 568C.2 Minimum. (Power Sum Near End Crosstalk)	Higher is better.
PSACR:	PSNEXT minus Attenuation ; ("Attenuation to PSNEXT Ratio")	Higher is better.
ACRF:	Std. is a TIA 568C.2 Minimum. (Attenuation Crosstalk Ratio at Far End)	Higher is better.
PSACRF:	Std. is a TIA 568C.2 Minimum. (Power Sum Atten.' to Crosstalk Ratio)	Higher is better.
RL:	Std. is a TIA 568C.2 Minimum. (Return Loss)	Higher is better.

All dimensions are nominal and subject to nominal manufacturing tolerances. The customer will accept all factory lengths and +/- 10 percent of total order requested.

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