

23 AWG /4 Pair CAT6E CMR Cable

75°C, 300V 550MHz RISER RATED; 4 UNSHIELDED TWISTED PAIRS

CONSTRUCTION:

1. **Conductors:** 23 AWG SOLID BARE COPPER
2. **Insulation:** HIGH DENSITY POLYETHYLENE
COLORS: 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:** PVC, Color : Consult factory for jacket color options.

APPLICATIONS AND FEATURES:

Southwire Cat 6E unshielded twisted pair cable is a high performance data communication cable. This ethernet cable is designed for indoor and riser network installations type CMR (Riser 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 CMR
- UL 1666 RISER FLAME TEST
- Directive (EU) 2015/863 – RoHS 3

SAMPLE PRINT LEGEND:

6EP SOUTHWIRE® TAPPAN(TM) CAT6E 23 AWG 4PR UTP E118871 C(UL)US CMR 75C -- TYPE CMR ETL VERIFIED TO TIA/EIA-568-C.2 CATEGORY 6E 550MHZ 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 (%)	Characteristic Impedance (Ω @ 1-100 MHz)	Nominal OD (Inchs)	Nominal OD (mm)	Nominal Weight (Lbs/Mft)	Nominal Weight (kg/km)
I99998	3.3	9.38	45.0	68.0	100 +/- 15%	0.236	5.994	28.0	41.7

Freq. (MHz)	NEXT (dB/100m)		ACR (dB/100m)		PSNEXT (dB/100m)		PSACR (dB/100m)		ACRF (dB/100m)		PS ACRF (dB/100m)		RL (dB)			
	Std.	Avg.	Std.	Avg.	Min.	Avg.	Std.	Avg.	Min.	Avg.	Min.	Avg.	Min.	Avg.		
1	2	1.6	74.3	97.7	72.3	96.1	72.3	90.1	70.3	88.5	67.8	91.9	64.8	82.8	20.0	33.2
4	3.8	3.5	65.1	86.5	61.3	83.0	63.1	79.9	59.3	76.4	55.5	79.7	52.5	71.3	23.1	37.7
8	5.3	5.0	60.9	81.7	56.6	76.7	58.9	75.1	53.6	70.1	49.9	73.1	46.9	65.2	24.5	37.6
10	6.1	5.7	59.1	80.9	53.0	75.2	57.1	73.9	51	68.2	47.5	71.2	44.5	63.4	25.0	37.4
16	7.5	7.2	56.3	77.5	48.8	70.3	54.3	70.6	46.8	63.4	43.7	66.7	40.7	59.4	25.0	37.6
20	8.5	8.1	54.7	77.1	46.2	70.0	52.7	69.7	44.2	61.5	41.6	64.5	38.6	57.0	25.0	38.8
25	9.6	9.1	53.2	74.7	43.6	66.6	51.2	67.9	41.6	58.8	39.7	62.8	36.7	54.9	24.3	37.2
31.25	10.7	10.3	51.8	73.5	41.1	63.2	49.8	66.4	39.1	56.1	37.8	60.5	34.8	53.0	23.6	38.1
62.5	15.4	14.6	47.3	75.9	31.9	61.3	45.3	62.1	29.9	47.5	31.8	55.2	28.8	46.3	21.5	36.6
100	19.8	18.9	44.3	66.3	24.5	47.4	42.3	58.9	22.5	40.0	27.8	49.3	24.8	41.4	20.1	33.3
200	29.0	27.3	39.8	61.8	10.8	34.5	37.8	54.7	8.8	27.4	21.8	42.3	18.8	34.3	18.0	28.9
250	32.8	30.7	38.3	60.3	5.5	29.6	36.3	53.3	3.5	22.6	19.8	39.5	16.8	30.7	17.3	28.8
300	--	33.8	--	58.7	--	24.9	--	51.4	--	17.5	--	35.8	--	25.5	--	28.2
400	--	39.6	--	56.3	--	16.7	--	49.9	--	10.3	--	29.0	--	20.4	--	25.5
500	--	44.7	--	54.8	--	10.1	--	46.7	--	2.0	--	21.9	--	13.3	--	25.4
550	--	46.8	--	54.4	--	7.6	--	46.3	--	0.0	--	19.5	--	11.1	--	24.2
600	--	48.8	--	53.9	--	5.1	--	45.8	--	(2.5)	--	17.1	--	8.8	--	22.9

Attenuation: Std. is a TIA 568C.2 Maximum (also called "Insertion Loss") Lower is better.
 NEXT: Std. is a TIA 568C.2 Minimum. (Near End Crosstalk) Higher is better.
 ACR: NEXT minus Attenuation ; ("Attenuation to Crosstalk Ratio") Higher 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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