

Cypress Industries

SPECIFICATION

STYLE	75° 300V COMMUNICATION CABLE	DOCUMENT NO RCUTP6PSO1000FX
SIZE	UTP 23AWG×4P	ESTABLISHED DATE 2005/10/4
STANDARD - UL444,910 - ISO/IEC11801 - TIA/EIA-568-B CAT 6		
APPLICATION-ULTRA HIGH PERFORMANCE LAN CABLE ARE SUITABLE FOR PERFECT AUDIO DATA AND VIDEO OF TRANSFER FOR HORIZONTAL NETWORK		
CONSTRUCTION		
CONDUCTOR	SIZE	23AWG × 4P
	CONSTRUCTION	SOLID BARE COPPER
	COND. DIAM.	1.0/0.550±0.008
INSULATION	AVG. THICK.	0.190
	MIN. THICK.	0.175
	DIAMETER	0.930 ± 0.020
	MATERIAL	FEP
	COLOR CODES	1.BLUE × WHITE/BLUE STRIPE 2.ORANGE × WHITE/ORANGE STRIPE 3.GREEN × WHITE/GREEN STRIPE 4.BROWN × WHITE/BROWN STRIPE
SHIELDED	PAIR STRANDED	2 CORES STRANDED
	FILLER(SLOT)	FRPE ISOLATOR SEPARATOR
	ASSEMBLY STRANDED	4 PAIR STRANDED
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JACKETED	AVG. THICK.	0.42
	MIN. THICK.	0.38
	DIAMETER	6.30 ± 0.20
	MATERIAL	PVC
	COLOR	GRAY OR OTHER COLOR

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ELECTRICAL - PHYSICAL PROPERTIES			
ITEM		23AWG × 4P	
RATING TEMP VOLTAGE		75° 300V	
CONDUCTOR RESISTANCE		93.8 OHM/Km/20 MAX.	
MUTUAL CAPACITANCE		56 pF/M MAX.	
DIELECTRIC STRENGTH		AC 1.5 KV/MIN.	
SPARK TEST		2.5 KV	
INSULATION	UNAGED	TENSILE TRENGTH	2500 PSI MIN. (1.76 Kg/m)
		ELONGATION	200% MIN.
	AGED	TENSILE TRENGTH	UNAGED MIN. 75%(232□×168HRS)
		ELONGATION	UNAGED MIN. 75%(232□×168HRS)
JACKETED	UNAGED	TENSILE TRENGTH	2000 PSI MIN.(1.41 Kg/m)
		ELONGATION	100% MIN.
	AGED	TENSILE TRENGTH	UNAGED MIN. 85%(100×240HRS)
		ELONGATION	UNAGED MIN. 50%(100×240HRS)
INSULATION SHRINKBACK		150m/m, 121±1×1HR 9.5m/m	
COLD BEND TEST		-20×4HRS NO.CRACK	
FLAME RETARDANT TEST		CMP	
AC LEAKAGE CURRENT THROUGHT OVERALL JACKET		AC 1500V 10 mA	
DC RESISTANCE UNBALANCE		5% MAX.	
PAIR-TO-GROUND CAPACITANCE UNBALANCE		3300 pF/Km MAX.	
CHARACTERISTIC IMPEDANCE		1 ~ 550 MHz 100±15 OHMS	
STRUCTURAL RETURN LOSS		550 MHz 8.6dB MIN.	
PROPAGATION DELAY		550 MHz 536nS/100m MAX.	
DELAY SKEW		1 ~ 550 MHz 30nS/100m MAX.	
MARKING			
ELITE 1000X CAT 6 GIGASYSTEM E142890 (UL) CMP 75° UTP 4PR 23AWG CSA CMP LL43774 ETL VERIFIED TO ISO/IEC 11801 XXXXXXFT			

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Electrical Performance

ITEM(d B)	ATT	NEX T	ACR	PS. NEX T	PS. ACR	ELFEXT	PS. ELFEXT	R.L.
Frequency (MHz)	MAX. (dB/100m)	MIN. (d B)	MIN. (dB)	MIN. (dB)	MIN. (dB)	MIN. (dB)/100m)	MIN. (dB/100m)	MIN. (d B)
1	2.0	75.3	73.3	73.3	71.3	67.8	64.8	20.0
4	3.8	66.3	62.5	64.3	60.5	55.7	52.7	23.0
8	5.4	61.8	56.4	59.8	54.4	49.7	46.7	24.5
10	6.0	60.3	54.3	58.3	52.3	47.8	44.8	25.0
16	7.6	57.3	49.7	55.3	47.7	43.7	40.7	25.0
20	8.5	55.8	47.3	53.8	45.3	41.7	38.7	25.0
25	9.6	54.3	44.8	52.3	42.7	39.8	36.8	24.3
31.25	10.7	52.9	42.2	50.9	40.2	37.9	34.9	23.6
62.5	15.5	48.4	32.9	46.4	30.9	31.8	28.8	21.5
100	19.9	45.3	25.4	43.3	23.4	27.8	24.8	20.1
155	25.3	42.5	17.2	40.5	15.2	23.9	20.9	18.8
200	29.2	40.8	11.6	38.8	9.6	21.7	18.7	18.0
250	33.0	39.3	6.3	37.3	4.3	19.8	16.8	17.3
300	36.6	38.2	1.6	36.2	0	18.2	15.2	16.8
400	43.2	36.3	N.A	34.3	N.A	15.7	12.7	15.9
550	52.0	34.2	N.A	32.2	N.A	12.9	9.9	14.9

