

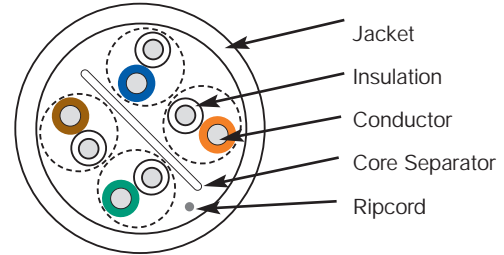
# Category 6 UTP 6 LAN™



Tested to 550 MHz

6 LAN with flat tape core separator is an entry grade Category 6 unshielded twisted pair (UTP) cable. ETL verified to ANSI/TIA-568-C.2 Category 6 and Mohawk internal 6 LAN specification.

- 25-Year Warranty\*
- Sweep tested to 550 MHz – with verified stability
- 24 dB minimum PS-ACR at 100 MHz



This cable and/or its manufacture are covered by US Patent Nos. 7,179,999, 6,998,537, 6,570,095 and 5,424,491.

\* Warranty available with MAC program.

Mohawk Part No.	Cable Type	Dielectric Type	Jacket Type Diameter inch mm	Weight lbs/M' kg/km	Listings
M58291 Riser	4 PAIR 23 AWG UTP	Thermoplastic	White PVC .225 5.72	24 36	C(UL)US or ETL CMR
M58280 Plenum	4 PAIR 23 AWG UTP	Dual Insulation** FEP on all 4 pairs	White ThermoPlen®* Rated for 125°C .225 5.72	29 43	C(UL)US or ETL CMP

\*Plenum rated Thermoplastic. \*\* US Patent No. 5,563,377. For pair colors see chart A on page 50.

### Jacket Colors for 4-Pair Riser

Jacket Color	Mohawk #	Jacket Color	Mohawk #
WHITE	M58291	GREEN	M58296
BLUE	M58292	RED	M58297
PINK	M58293	ORANGE	M58298
YELLOW	M58294	BLACK	M58299
GRAY	M58295	VIOLET	M58300

### Jacket Colors for 4-Pair Plenum

Jacket Color	Mohawk #	Jacket Color	Mohawk #
WHITE	M58280	GREEN	M58286
BLUE	M58281	RED	M58287
PINK	M58282	ORANGE	M58288
YELLOW	M58283	BLACK	M58289
GRAY	M58285	VIOLET	M58290

Custom colors available; please consult the factory.

## Electrical Characteristics

### STANDARDS:

MEETS ANSI/TIA-568-C.2 CAT 6 & ISO/IEC 11801:2002 CAT 6 HORIZONTAL CABLE

### CONDUCTOR DCR:

7.8 Ω/100m (23.8 Ω/Mft) MAX

### DCR UNBALANCE:

3% MAX

### MUTUAL CAPACITANCE:

46 pF/m (14 pF/ft) NOM

### CAPACITANCE UNBALANCE PAIR/GROUND:

66 pF/100m (200 pF/Mft) MAX

### CHARACTERISTIC IMPEDANCE:

100 Ω ± 15% (1-250 MHz)

### INPUT IMPEDANCE:

100 Ω ± 15% (1-100 MHz)  
100 Ω ± 20% (>100-200 MHz)  
100 Ω ± 25% (>200 MHz)

### PROPAGATION DELAY:

534 + 36/√f ns/100m MAX

### DELTA DELAY (SKEW):

45 ns/100m MAX

### NOMINAL VELOCITY OF PROPAGATION (NVP):

PLENUM 72%  
RISER 68%

FREQ (MHz)	INSERTION LOSS (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)	PS-NEXT (dB/100m)		PS-ACR (dB/100m)	ELFEXT (dB/100m)	PS-ELFEXT (dB/100m)	RL (dB)
	avg	max	avg	min	min	avg	min	min	min	min	min
1.0	1.9	2.0	80	74.3	72.3	75	72.3	70.3	67.8	64.8	20.0
4.0	3.6	3.8	71	65.3	61.5	66	63.3	59.5	55.8	52.8	23.0
10.0	5.7	6.0	65	59.3	53.3	60	57.3	51.3	47.8	44.8	25.0
16.0	7.3	7.6	62	56.2	48.6	57	54.2	46.6	43.7	40.7	25.0
20.0	8.1	8.5	61	54.8	46.3	56	52.8	44.3	41.8	38.8	25.0
31.25	10.2	10.7	58	51.9	41.2	53	49.9	39.2	37.9	34.9	23.6
62.5	14.8	15.4	53	47.4	32.0	48	45.4	30.0	31.9	28.9	21.5
100.0	19.0	19.8	50	44.3	24.5	45	42.3	22.5	27.8	24.8	20.1
250.0	31.5	32.8	44	38.3	5.5	39	36.3	3.5	19.8	16.8	17.3
300.0	35.0	36.4	43	37.1	0.7	38	35.1	-	18.3	15.3	16.8
500.0	47.0	48.9	40	33.8	-	35	31.8	-	13.8	10.8	15.2
550.0	49.7	51.8	39	33.2	-	34	31.2	-	-	-	14.9

Values above 250 MHz are for engineering information only.



Safety listed to NEC (NFPA 70)



Verified by ETL to TIA/EIA-568-B.2-1