

## CATEGORY 5e CABLE (CAT.5E)



**PART NUMBER:** MC5EU3001  
**DESCRIPTION:** 24 AWG / 4Pairs category 5e UTP cable  
**APPLICABLE STANDARD:** ANSI / TIA/ EIA 568-C/B-2  
**UL AWM Style:** UL2835.

### Construction Parameters :

**Conductor:** 24 AWG(1/0.50mm) solid bare copper  
**Insulation Material:** HDPE  
**Nom. Insulation Thickness:** 0.42mm  
**Insulated Conductor Diameter:** 0.95mm  
**Pair Lays:** Each pair has different lay length for cross-talk prevention  
**Shield Coverage:** 84%  
**Jacket Material:** PVC  
**Jacket Thickness:** 0.45mm  
**Nom. Overall Cable Diameter:** 4.80mm

### Electrical Properties :

Frequency (MHz)	Max. Attenuation (dB/100m) @20 ~ C	Min. NEXT (dB/100m)	Min. PS-NEXT (dB/100m)	Min. Structural Return Loss (dB/100m)	Min. Return Loss (dB/100m)	Min. ELFEXT I (dB/100m)	Min. PS-ELFEXT (db/100m)
1	2.0	65.3	62.3	23	20	60.8	60.8
4	4.1	56.3	53.3	23	23	48.7	48.7
8	5.8	51.8	48.8	23	24.5	42.7	42.7
10	6.5	50.3	47.3	23	25	40.8	40.8
16	8.2	47.3	44.4	23	25	36.7	36.7
20	9.3	45.8	42.8	23	25	34.7	34.7
25	10.4	44.3	41.3	22	24.3	32.8	32.8
31.25	11.7	42.9	39.9	21	23.6	30.9	30.9
62.5	17	36.4	35.4	18	21.5	24.6	24.6
100	19.9	35.3	32.3	16	20.1	20.8	20.8

Frequency (MHz)	Propagation Delay Max.(ns/100m)	Propagation Delay Skew Max (ns/100m).
1	570	45
10	545	45
100	538	45

Impedance (Ohms)	Velocity of Propagation (%)	DC Resistance ( $\Omega/100m$ ) @ 20 ~ C	DC Resistance Unbalance (%)	Max. Cap. @1000HZ	Max. Cap. Unbalance
100 $\pm$ 15% (1-100MHZ)	70	9.32	< 3	56pF/m	330 pF/100m

### **Color Code of Insulation :**

Number of Pair	Color Code	
	A Wire	B Wire
1	Blue/White	Blue
2	Orange/White	Orange
3	Green/White	Green
4	Brown/White	Brown

### **Jacket Color :**

Gray