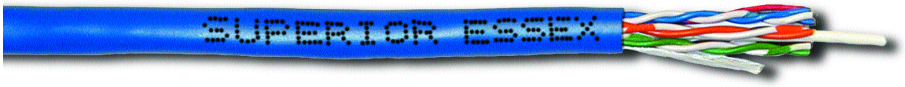
6 Pair Category 5e – CMR



Product Description

• 6-pair UTP cable, with Category 5e (TIA/EIA 568-B.2) performance, is the solution to a growing number of special installation needs. More customers are demanding two additional pairs above the standard 4-pair cable for high-bandwidth applications. Two additional pairs provide the flexibility for utility metering and other telemetry needs without the expense of adding a separate cable and without additional space. The SUPERIOR ESSEX 6-pair Category 5e cable delivers the performance expected, while offering the many features and user advantages of all our high performance premises products.

Features

• 2 additional pairs in excess of the standard 4 pair construction

• TIA/EIA 568-B.2 compliance
• Positive identification striping on 100% of conductor length
• QuickCount® marking system
• Warranted with all leading connectivity manufacturers

Benefits

• Eliminates expense of additional cable when 6 pairs are required, reduces cabling space requirements; speeds installation time
• Any of 6 pairs can be used for CAT 5e applications
• Easily identifiable conductor mates
• Eliminates guesswork of footage on reel and reduces scrap
• Offers flexibility in selection of connectivity solutions

Applications

• 10BASE-T through 1000BASE-T Ethernet, ATM and Token Ring

Part Numbers and Physical Characteristics

Part #	Pair Count	Gauge	Jacket Color	Nom. Dia.	Approx. Weight	Packaging
CMR						
51-347-25	6	24 AWG (0.5 mm)	blue	0.26 in (6.7 mm)	32 lbs/kft (47 kg/km)	1000' Reel PAK® II

Specifications 6 Pair Category 5e – CMR

Physical Description

• Conductor: 24 AWG (0.5 mm) Solid Annealed Bare Copper • Insulation: Polyolefin • Round Filler • Jacket: Flame Retardant PVC (Polyvinyl Chloride)

Electrical

Frequency MHz	Max Attenuation (dB/100m) @ 20°C			Min NEXT (dB/100m)			ACR (dB/100m)			Min PS-NEXT (dB/100m)		
	TIA 568-B.2 Specified Maximum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Specified Minimum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Calculated Minimum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Specified Minimum	**SUPERIOR ESSEX** Guaranteed	Typical
0.772	1.8	1.8	1.5	67.0	67.0	79.5	65.2	65.2	77.9	64.0	64.0	76.9
1	2.0	2.0	1.8	65.3	65.3	77.7	63.3	63.3	75.9	62.3	62.3	75.2
4	4.1	4.1	3.7	56.3	56.3	68.7	52.2	52.2	64.9	53.3	53.3	66.0
8	5.8	5.8	5.4	51.8	51.8	61.3	46.0	46.0	55.8	48.8	48.8	58.7
10	6.5	6.5	6.0	50.3	50.3	60.7	43.8	43.8	54.5	47.3	47.3	58.3
16	8.2	8.2	7.7	47.3	47.3	56.1	39.1	39.1	48.3	44.3	44.3	53.7
20	9.3	9.3	8.6	45.8	45.8	55.3	36.5	36.5	46.5	42.8	42.8	52.9
25	10.4	10.4	9.6	44.3	44.3	53.8	33.9	33.9	44.0	41.3	41.3	51.4
31.25	11.7	11.7	10.8	42.9	42.9	52.7	31.2	31.2	41.6	39.9	39.9	50.0
62.5	17.0	17.0	15.5	38.4	38.4	48.0	21.4	21.4	32.2	35.4	35.4	45.5
100	22.0	22.0	19.8	35.3	35.3	44.5	13.3	13.3	24.2	32.3	32.3	42.2

Frequency MHz	PS-ACR (dB/100m)			Min Return Loss (dB/100m)			Min ELFEXT (dB/100m)			Min PS-ELFEXT (dB/100m)		
	TIA 568-B.2 Calculated Minimum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Specified Minimum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Selected Minimum	**SUPERIOR ESSEX** Guaranteed	Typical	**TIA 568-B.2** Specified Minimum	**SUPERIOR ESSEX** Guaranteed	Typical
0.772	62.2	62.2	75.4	19.4	19.4	32.4	66.0	66.0	71.1	63.0	63.0	70.5
1	60.3	60.3	73.3	20.0	20.0	40.1	63.8	63.8	69.2	60.8	60.8	68.5
4	49.2	49.2	62.2	23.0	23.0	40.1	51.7	51.7	57.7	48.7	48.7	57.0
8	43.0	43.0	53.2	24.5	24.5	39.8	45.7	45.7	51.6	42.7	42.7	49.5
10	40.8	40.8	52.2	25.0	25.0	37.3	43.8	43.8	49.0	40.8	40.8	48.2
16	36.1	36.1	46.0	25.0	25.0	36.7	39.7	39.7	45.6	36.7	36.7	43.8
20	33.5	33.5	44.2	25.0	25.0	36.0	37.7	37.7	43.6	34.7	34.7	42.8
25	30.9	30.9	41.7	24.3	24.3	34.5	35.8	35.8	42.0	32.8	32.8	40.7
31.25	28.2	28.2	39.0	23.6	23.6	32.6	33.9	33.9	40.1	30.9	30.9	39.3
62.5	18.4	18.4	29.9	21.5	21.5	31.6	27.8	27.8	34.7	24.8	24.8	33.5
100	10.3	10.3	22.1	20.1	20.1	31.7	23.8	23.8	30.4	20.8	20.8	29.4

Impedance (Ohms) guaranteed	**Delay Skew (ns/100m)** maximum	typical	**Velocity of Propagation (%)** nominal	**DCResistance (Ohms/100m)** maximum	typical	**Resistance Unbalance (%)** maximum	typical
100+/-15 @ 1-100MHz	45.0	21.0	69.0	9.4	9.0	5.0	0.7

Standards Compliance:
UL 444, Listed as CMR (UL 1666), ISO/IEC 11801, ANSI/TIA/EIA 568-B.2, FCC PART 68