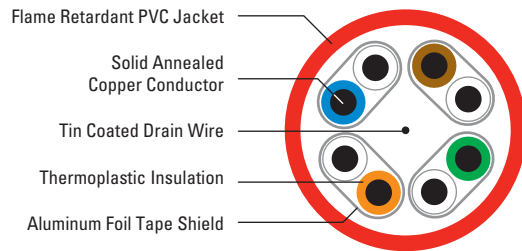


Category 6A STP (U/FTP) CMR/CMP



Specifications

Configuration	Copper pairs each surrounded by aluminum/Mylar [®] foil with center drain wire and jacket
Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	23 (0.57)
Insulation	CMR: Polyolefin CMP: FEP
Insulation Colors	Pair 1: White/Blue Pair 2: White/Orange Pair 3: White/Green Pair 4: White/Brown
Drain Wire	Tinned copper
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Package	1,000' plywood reel
Characteristic Impedance (Ohms)	100 ± 15
Nominal Velocity of Propagation (%)	CMR: 73 CMP: 77
Performance Compliance	UL 444 UL 1666 NFPA 262 ANSI/TIA-568-C.2
NRTL Programs	UL Verified CAT 6A UL or ETL Listed CMR UL or ETL Listed CMP

Product Description

Superior Essex offers Shielded Twisted Pair (STP) Category 6A cables in both plenum and riser versions. The cable has guaranteed performance to 600 MHz and meets or exceeds ANSI/TIA-568-C.2 for CAT 6A cables required for 10GBASE-T applications. The cable consists of four (4) balanced 23 AWG copper pairs. Each pair is wrapped with a Mylar[®] backed aluminum foil with the drain wire in the center of all 4 copper pairs. The wrapped pairs are then jacketed with an appropriate flexible PVC jacket for either plenum or riser applications.

Applications

- 10GBASE-T and legacy applications 10BASE-T through 1000BASE-T ethernet
- ATM and token ring
- Backward compatible to legacy protocols and applications

Features

- Individually foil shielded pairs
- Exceeds specification ANSI/TIA-568-C.2 for CAT 6A cable performance
- Riser and plenum rated designs
- QuickCount[®] marking system in feet and meters

Benefits

- Protects against EMI/RFI and provides exceptional NEXT, PSNEXT, ELFEXT, and Electrical Performance performance
- Meets 10GBASE-T application requirements for both Insertion Loss and Return Loss and exceeds requirements for alien and internal crosstalk performance
- UL 1666 and NFPA 262 fire rating options help to reduce additional expensive materials required to meet building safety codes
- Provides remaining length of cable on reel

Part Numbers and Physical Characteristics

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Packages Per Pallet
CMR	6S-220-xA	0.31 (7.9)	50 (74)	15
CMP	6S-220-xB	0.29 (7.4)	52 (77)	15

Jacket Colors

'Replace "x" with:	Blue = 2	Gray = 3	White = 4	Green = 5	Yellow = 6	Red = 9	Orange = D	Black = E
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Electrical Specifications												
Frequency MHz	Insertion Loss @ 20°C Maximum dB/100 m			NEXT Minimum dB/100 m			ACR Minimum dB/100 m			PSNEXT Minimum dB/100 m		
	TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical
1	2.1	2.1	2.1	65.0	74.2	74.2	62.9	76.2	78.2	72.2	76.2	78.2
4	3.8	3.8	3.7	65.0	69.2	74.2	61.2	65.4	70.5	63.2	67.2	72.2
8	5.3	5.3	5.2	60.7	64.7	74.2	55.4	59.4	69.0	58.7	62.7	72.2
10	5.9	5.9	5.8	59.2	63.2	74.2	53.3	57.3	68.4	57.2	61.2	72.2
16	7.4	7.4	7.4	56.2	60.2	74.2	48.7	52.7	66.8	54.2	58.2	71.2
20	8.3	8.3	8.2	54.7	58.7	72.7	46.4	50.4	64.4	52.7	56.7	69.7
25	9.3	9.3	9.2	53.3	57.3	71.3	43.9	47.9	62.0	51.3	55.3	68.3
31.25	10.5	10.5	10.4	51.8	55.8	69.8	41.3	45.3	59.4	49.8	53.8	66.8
62.5	14.9	14.9	14.8	47.3	51.3	65.3	32.3	36.3	50.5	45.3	49.3	62.3
100	19.1	19.1	18.9	44.2	48.2	62.2	25.1	29.1	43.3	42.2	46.2	59.2
200	27.5	27.5	27.3	39.7	43.7	57.7	12.2	16.2	30.4	37.7	41.7	54.7
250	31.1	31.1	30.7	38.3	42.3	56.3	7.2	11.2	25.5	36.3	40.3	53.3
300	34.2	34.2	33.9	37.1	41.1	55.1	2.8	6.8	21.2	35.1	39.1	52.1
350	37.2	37.2	36.8	36.1	40.1	54.1		2.9	17.2	34.1	38.1	51.1
400	40.1	40.1	39.6	35.2	39.2	53.2			13.6	33.2	37.2	50.2
500	45.2	45.2	44.8	33.8	37.8	51.8			7.0	31.8	35.8	48.8
600		50.1	49.5		36.6	50.6			1.1		34.6	47.6

Frequency MHz	PSACR Minimum dB/100 m			Return Loss Minimum dB/100 m			ELFEXT (ACRF) Minimum dB/100 m			PSELFEXT (PSACRF) Minimum dB/100 m		
	TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
	Calculated	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical	Specified	Guaranteed	Typical
1	70.2	74.2	76.2	20.0	20.0	20.6	67.7	69.7	73.7	64.7	66.7	70.7
4	59.4	63.4	68.5	23.0	23.0	23.7	55.7	57.7	61.7	52.7	54.7	58.7
8	53.4	57.4	67.0	24.5	24.5	25.3	49.7	51.7	55.7	46.7	48.7	52.7
10	51.3	55.3	66.4	25.0	25.0	25.8	47.7	49.7	53.7	44.7	46.7	50.7
16	46.7	50.7	63.8	25.0	25.0	25.8	43.7	45.7	49.7	40.7	42.7	46.7
20	44.4	48.4	61.4	25.0	25.0	25.8	41.7	43.7	47.7	38.7	40.7	44.7
25	41.9	45.9	59.0	24.3	24.3	25.1	39.8	41.8	45.8	36.8	38.8	42.8
31.25	39.3	43.3	56.4	23.6	23.6	24.3	37.8	39.8	43.8	34.8	36.8	40.8
62.5	30.3	34.3	47.5	21.5	21.5	22.2	31.8	33.8	37.8	28.8	30.8	34.8
100	23.1	27.1	40.3	20.1	20.1	20.7	27.8	29.8	33.7	24.8	26.8	30.8
200	10.2	14.2	27.4	18.0	18.0	18.5	21.7	23.7	27.7	18.7	20.7	24.7
250	5.2	9.2	22.5	17.3	17.3	17.8	19.8	21.8	25.8	16.8	18.8	22.8
300	0.8	4.8	18.2	16.8	16.8	17.3	18.2	20.2	24.2	15.2	17.2	21.2
350		0.9	14.2	16.3	16.3	16.8	16.9	18.9	22.9	13.9	15.9	19.9
400			10.6	15.9	15.9	16.4	15.7	17.7	21.7	12.7	14.7	18.7
500			4.0		15.2	15.7	13.8	15.8	19.8	10.8	12.8	16.8
600			-1.9			15.1		14.2	18.2		11.2	15.2

