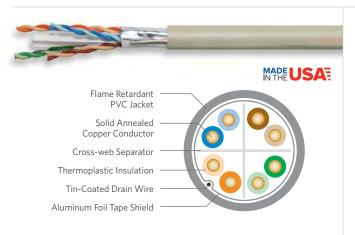
Category 6A F/UTP (ScTP)





SPECIFICATIONS	
Configuration	Copper pairs surrounded by aluminum PET foil with an outer drain wire and jacket
Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	23 (0.57)
Insulation	CMR: Thermoplastic CMP: FEP
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Separator	Cross-web
Shield	Aluminum/PET
Drain Wire	Tinned copper
Jacket	CMR: Flame retardant (FR) PVC CMP: FR, low smoke PVC
Characteristic Impedance Ohms	100 ± 15
Nominal Velocity of Propagation %	CMR: 66 CMP: 71
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1666 NFPA 262 ANSI/TIA-568-C.2 Article 800, NEC (NFPA 70)
NRTL Programs	UL Verified CAT 6A UL Listed CMR-LP (0.5) c(UL) Listed CMR UL Listed CMP-LP (0.6) c(UL) Listed CMP
Sustainability	UL Certified EPD HPD Multi-Attribute Certification USGBC® Member RoHS-compliant/RoHS 2-compliant

PRODUCT DESCRIPTION

FIRST MANUFACTURER IN THE INDUSTRY

Category 6A F/UTP (ScTP) cable, swept out to 650 MHz, meets or exceeds ANSI/TIA-568-C.2 for CAT 6A cables, a requirement for 10GBASE-T applications. The cable is UL® Verified CAT 6A and has a typical Alien Crosstalk margin of 18 dB.

The cable consists of four (4) balanced 23 AWG copper pairs around a flame retardant cross-web. The core is wrapped with a Mylar® backed aluminum foil. A drain wire is applied longitudinally against the tape. The cable is then protected with a flexible riser or plenum rated PVC jacket.

APPLICATIONS

- 10BASE-T through 10GBASE-T Ethernet
- Power over Ethernet (PoE) IEEE 802.3af
- 4PPoE+ IEEE 802.3bt Type 3 and 4 draft D1.2
- ATM and token ring
- Backward compatible to legacy protocols and applications

FEATURES

BENEFITS

- UL Certified Environmental Product Declaration (EPD)
- Health Product Declaration™
- Multi-Attribute Certification by GreenCircle Certified, LLC
- Contributes toward 1 LEED point under the Material and Resources credit (MRc)
- Contributes toward 1 LEED point under the MRc
- Offers an overview of the sustainability of a product, its packaging and manufacturing
- Overall shielded core Protects against EMI/RFI
 - 18 dB typical margin Alien Crosstalk performance Exceeds requirements for Alien

Crosstalk performance

- Exceeds ANSI/TIA-568-C.2 specification for CAT 6A cable performance
- CableID® alpha numeric code printed every 2 feet
- QuickCount® marking system in feet and meters
- ColorTip® circuit identification system
- UL LP listed
- ColorTip® circuit identification system
- Temperature cable rating: 75°C for CMR and 90°C for CMP

- Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
- · Provides remaining length of cable on reel
- Easily identifiable conductor mates even in low-light environments
- · Third-party assurance of product safety in high-heat and high-power applications
- · Easily identify conductor mates even in low-light environments
- Temperature rating of the insulation AND of the jacket provide improved cable lifespan despite high-heat and high-power applications

PART NUMBERS	AND PHYSICAL	CHARACTERISTICS

Listing	Part Number ¹	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
CMR	6F-246-xA	0.29 (7.3)	32 (48)	1,000' BrakeBox®	12
CMR	6F-272-xA	0.29 (7.3)	32 (48)	1,000' Plywood reel	12
CMR	6F-273-xA	0.29 (7.3)	32 (48)	2,500' Plywood reel	8
CMP	6F-246-xB	0.28 (7.1)	37 (55)	1,000' BrakeBox	12
CMP	6F-272-xB	0.28 (7.1)	37 (55)	1,000' Plywood reel	12
CMP	6F-273-xB	0.28 (7.1)	37 (55)	2,500' Plywood reel	8



REACH-compliant















ELECTRICAL SPECIFICATIONS

	Insertion Loss @ 20°C Maximum dB/100 m			NEXT Minimum dB/100 m			ACR Minimum dB/100 m			PSNEXT Minimum dB/100 m			PSACR Minimum dB/100 m		
Frequency	TIA-568-C.2	Superio	erior Essex TIA-568-C.2		3-C.2 Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex		TIA-568-C.2	Superior Essex	
MHz	Specified	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical	Specified	Guar.	Typical	Calculated	Guar.	Typical
1	2.1	2.1	2.0	74.3	74.3	76.8	72.2	72.2	74.8	72.3	72.3	74.8	70.2	70.2	72.8
4	3.8	3.8	3.7	65.3	65.3	67.8	61.5	61.5	64.1	63.3	63.3	65.8	59.5	59.5	62.1
8	5.3	5.3	5.2	60.8	60.8	63.3	55.5	55.5	58.1	58.8	58.8	61.3	53.5	53.5	56.1
10	5.9	5.9	5.8	59.3	59.3	61.8	53.4	53.4	56.0	57.3	57.3	59.8	51.4	51.4	54.0
16	7.5	7.5	7.3	56.2	56.2	58.7	48.7	48.7	51.4	54.2	54.2	56.7	46.7	46.7	49.4
20	8.4	8.4	8.2	54.8	54.8	57.3	46.4	46.4	49.1	52.8	52.8	55.3	44.4	44.4	47.1
25	9.4	9.4	9.2	53.3	53.3	55.8	43.9	43.9	46.6	51.3	51.3	53.8	41.9	41.9	44.6
31.25	10.5	10.5	10.3	51.9	51.9	54.4	41.4	41.4	44.1	49.9	49.9	52.4	39.4	39.4	42.1
62.5	15.0	15.0	14.7	47.4	47.4	49.9	32.4	32.4	35.2	45.4	45.4	47.9	30.4	30.4	33.2
100	19.1	19.1	18.8	44.3	44.3	46.8	25.2	25.2	28.0	42.3	42.3	44.8	23.2	23.2	26.0
200	27.6	27.6	27.0	39.8	39.8	42.3	12.2	12.2	15.3	37.8	37.8	40.3	10.2	10.2	13.3
250	31.1	31.1	30.4	38.3	38.3	40.8	7.2	7.2	10.4	36.3	36.3	38.8	5.2	5.2	8.4
300	34.3	34.3	33.6	37.1	37.1	39.6	2.8	2.8	6.0	35.1	35.1	37.6	0.8	0.8	4.0
350	37.2	37.2	36.5	36.1	36.1	38.6			2.1	34.1	34.1	36.6			0.1
400	40.1	40.1	39.3	35.3	35.3	37.8				33.3	33.3	35.8			
500	45.3	45.3	44.4	33.8	33.8	36.3				31.8	31.8	34.3			
600		50.1	49.5		32.6	35.1					30.6	33.1			

	Return Loss Minimum dB/100 m				F Minimu B/100 m	m	PSACRF Minimum dB/100 m			PSANEXT Minimum dB/100 m			PSAACRF Minimum dB/100 m		
Frequency	TIA-568-C.2	-568-C.2 Superior Essex TIA-568-C.2		TIA-568-C.2	IA-568-C.2 Superior Essex		TIA-568-C.2 Superior Essex		TIA-568-C.2 Superior Essex			TIA-568-C.2 Superior Essex			
MHz	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical	Specified	Guar.	Typical
1	20.0	20.0	20.6	67.8	67.8	71.8	64.8	64.8	68.8	67.0	70.0	72.0	67.0	70.0	72.0
4	23.0	23.0	23.7	55.8	55.8	59.8	52.8	52.8	56.8	67.0	70.0	72.0	66.2	69.2	71.2
8	24.5	24.5	25.3	49.7	49.7	53.7	46.7	46.7	50.7	67.0	70.0	72.0	60.1	63.1	65.1
10	25.0	25.0	25.8	47.8	47.8	51.8	44.8	44.8	48.8	67.0	70.0	72.0	58.2	61.2	63.2
16	25.0	25.0	25.8	43.7	43.7	47.7	40.7	40.7	44.7	67.0	70.0	72.0	54.1	57.1	59.1
20	25.0	25.0	25.8	41.8	41.8	45.8	38.8	38.8	42.8	67.0	70.0	72.0	52.2	55.2	57.2
25	24.3	24.3	25.1	39.8	39.8	43.8	36.8	36.8	40.8	67.0	70.0	72.0	50.2	53.2	55.2
31.25	23.6	23.6	24.3	37.9	37.9	41.9	34.9	34.9	38.9	67.0	70.0	72.0	48.3	51.3	53.3
62.5	21.5	21.5	22.2	31.9	31.9	35.9	28.9	28.9	32.9	65.6	68.6	70.6	42.3	45.3	47.3
100	20.1	20.1	20.7	27.8	27.8	31.8	24.8	24.8	28.8	62.5	65.5	67.5	38.2	41.2	43.2
200	18.0	18.0	18.5	21.8	21.8	25.8	18.8	18.8	22.8	58.0	61.0	63.0	32.2	35.2	37.2
250	17.3	17.3	17.8	19.8	19.8	23.8	16.8	16.8	20.8	56.5	59.5	61.5	30.2	33.2	35.2
300	16.8	16.8	17.3	18.3	18.3	22.3	15.3	15.3	19.3	55.3	58.3	60.3	28.7	31.7	33.7
350	16.3	16.3	16.8	16.9	16.9	20.9	13.9	13.9	17.9	54.3	57.3	59.3	27.3	30.3	32.3
400	15.9	15.9	16.4	15.8	15.8	19.8	12.8	12.8	16.8	53.5	56.5	58.5	26.2	29.2	31.2
500	15.2	15.2	15.7	13.8	13.8	17.8	10.8	10.8	14.8	52.0	55.0	57.0	24.2	27.2	29.2
600			15.1		12.2	16.2		9.8	13.8			55.1			28.6













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