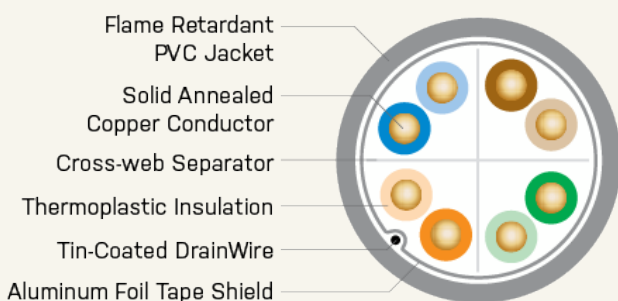
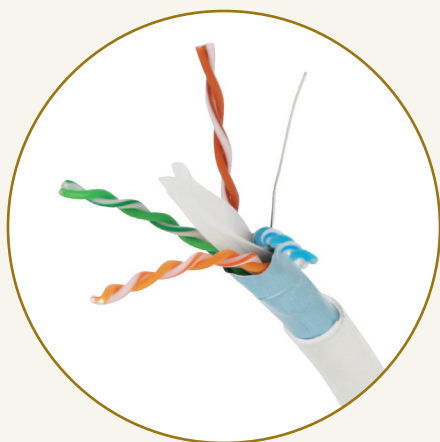


Category 6A 650MHz F/UTP (ScTP)

F6A650-004-xxxx



Description

- Capable of handling full broadband and baseband video signals
- Tight balance requirements improve cable performance
- Overall shielded construction with aluminum foil provides superior RFI and alien crosstalk protection
- Cable is UL Verified CAT 6A and exceeds ANSI/TIA-568.2-D performance requirements
- Tested to 650 MHz to ensure consistent, high-bandwidth performance
- Every master reel is tested for electrical performance compliance

Application

- 10BASE-T through 10GBASE-T Ethernet
- Power over Ethernet (PoE) — IEEE 802.3bt Type 1 to 4
- ATM and token ring
- Horizontal distribution and backbone cabling
- Backward compatible to legacy protocols and applications

Certifications



Part Numbers

JACKET COLOR	DESCRIPTION	
	Category 6A FTP Cable, 4-Pair, Riser Rated	Category 6A FTP Cable, 4-Pair, Plenum Rated
Blue	F6A650-004-RBL4	F6A650-004-PBL4
White	F6A650-004-RWH4	F6A650-004-PWH4
Grey	F6A650-004-RGY4	F6A650-004-PGY4
Black	F6A650-004-RBK4	F6A650-004-PBK4
Yellow	F6A650-004-RYL4	F6A650-004-PYL4
Green	F6A650-004-RGN4	F6A650-004-PGN4
Red	F6A650-004-RRD4	F6A650-004-PRD4
Orange	F6A650-004-ROR4	F6A650-004-POR4
Violet	F6A650-004-RVI4	F6A650-004-PVI4

Performance Characteristics

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

FREQUENCY ¹ (MHZ)	RETURN LOSS MINIMUM dB/100 m		ACRF MINIMUM dB/100 m		PSACRF MINIMUM dB/100 m		PSANEXT MINIMUM dB/100 m		PSAACRF MINIMUM dB/100 m	
	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical	Guaranteed	Typical
1	20.0	20.6	67.8	71.8	64.8	68.8	70.0	72.0	70.0	72.0
4	23.0	23.7	55.8	59.8	52.8	56.8	70.0	72.0	69.2	71.2
8	24.5	25.3	49.7	53.7	46.7	50.7	70.0	72.0	63.1	65.1
10	25.0	25.8	47.8	51.8	44.8	48.8	70.0	72.0	61.2	63.2
16	25.0	25.8	43.7	47.7	40.7	44.7	70.0	72.0	57.1	59.1
20	25.0	25.8	41.8	45.8	38.8	42.8	70.0	72.0	55.2	57.2
25	24.3	25.1	39.8	43.8	36.8	40.8	70.0	72.0	53.2	55.2
31.25	23.6	24.3	37.9	41.9	34.9	38.9	70.0	72.0	51.3	53.3
62.5	21.5	22.2	31.9	35.9	28.9	32.9	68.6	70.6	45.3	47.3
100	20.1	20.7	27.8	31.8	24.8	28.8	65.5	67.5	41.2	43.2
200	18.0	18.5	21.8	25.8	18.8	22.8	61.0	63.0	35.2	37.2
250	17.3	17.8	19.8	23.8	16.8	20.8	59.5	61.5	33.2	35.2
300	16.8	17.3	18.3	22.3	15.3	19.3	58.3	60.3	31.7	33.7
350	16.3	16.8	16.9	20.9	13.9	17.9	57.3	59.3	30.3	32.3
400	15.9	16.4	15.8	19.8	12.8	16.8	56.5	58.5	29.2	31.2
500	15.2	15.7	13.8	17.8	10.8	14.8	55.0	57.0	27.2	29.2
600		15.1	12.2	16.2	9.8	13.8		55.1		28.6

¹Value above 550Mhz are for informational purposes only

Technical Details

ITEM	UNIT	(CMR) RISER	(CMP) PLENUM	
Conductor DC Resistance	Max. Ohms/100 m	9.38	9.38	
Resistance Unbalance	Max. %	5	5	
Mutual Capacitance	Max. nF/100 m	5.6	5.6	
Capacitance Unbalance	Max. pF/100 m	330	330	
Delay Skew	Max. ns	45	45	
Nominal Velocity of Propagation	%	66	71	
Operating Temperature	°F (°C)	-4 to +140 (-20 to +60)	-4 to +167 (-20 to +75)	
Storage Temperature	°F (°C)	-4 to +176 (-20 to +80)	-4 to +194 (-20 to +90)	
Bending Radius		4 x Cable diameter	4 x Cable diameter	
Packaging:	Type	1,000 ft (305 m) Reel or Box	1,000 ft (305 m) Reel or Box	
	Weight	lb/kft (kg/km)	32 (48)	37 (55)
	Packages Per Pallet	12 (Box) / 8 or 12 (Reel, depending on type)	12 (Box) / 8 or 12 (Reel, depending on type)	
Materials:	Conductors	23 AWG, Solid annealed copper	23 AWG, Solid annealed copper	
	Insulation	Thermoplastic (HDPE)	Fluoropolymer (FEP)	
	Separator	Cross-web	Cross-web	
	Shield	Aluminum foil tape	Aluminum foil tape	
	Drain Wire	Stranded tinned copper	Stranded tinned copper	
	Jacket	Flame retardant PVC	Low smoke PVC (Plenum Rated)	
	Nominal Diameter	in (mm)	0.29 (7.3)	0.28 (7.1)
Approvals:	Safety	UL 444, UL 1666, CSA C22.2 No. 214-08	UL 444, NFPA 262, CSA C22.2 No. 214-08	
	Performance	ANSI/TIA-568.2-D, UL Verified CAT 6A		