

# SPECIFICATIONS

- DESCRIPTION:** CATEGORY 6A CABLE, CONSISTING OF 4 PAIRS, 23 AWG, SHIELDED WITH AN OVERALL JACKET. CMP, c(UL)us TYPE FT6 PER UL 444 PACKAGING TYPE: REEL
- CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0224" NOM OD) INSULATION: FEP .044" NOM OD, .0108" AVG WALL
- PAIRING:** COMPONENTS ARE TWISTED INTO PAIRS WITH VARYING LEFT HAND LAYS TO MINIMIZE CROSSTALK.
 

PAIR #	COLOR
1	BLU PAIRED WITH WHT/BLU
2	ORG PAIRED WITH WHT/ORG
3	GRN PAIRED WITH WHTGRN
4	BRN PAIRED WITH WHT/BRN
- CABLING:** THE FOUR (4) TWISTED PAIRS ARE CABLED AROUND AN ISOLATOR WITH A LEFT HAND LAY AND WRAPPED WITH A POLYESTER TAPE. AN ALUMINUM/POLYESTER TAPE IS APPLIED OVERALL (ALUMINUM SIDE IN) AND A 24 AWG SOLID TC DRAIN WIRE IS PULLED IN UNDER THE ALUMINUM/POLYESTER TAPE. 25% MIN OVERLAP ON TAPES.
- OVERALL JACKET:** LOW SMOKE PVC (SEE CABLE COLOR TABLE) .276" NOM OD .018" AVG WALL
- MARKING:** OCC (WWW.OCCFIBER.COM) P/N OCC-FTP6A4PLM--- ETL VERIFIED CATEGORY 6A 4 PR 23AWG CMP C(UL)US OCCV E322888 MADE IN USA MYLLDDS XXXXX FT

WHERE: MYLLDDS = TRACEABILITY CODE  
XXXXX FT = SEQUENTIAL FOOTAGE MARKINGS

- AGENCY APPROVAL:** UNDERWRITERS LABORATORIES, INC. TYPE CMP, COMMUNICATIONS PLENUM CABLE, LISTED AS BEING SUITABLE FOR USE IN DUCTS, PLENUMS, AND OTHER SPACES USED FOR ENVIRONMENTAL AIR PER UL 444. ALSO LISTED AS HAVING ADEQUATE FIRE-RESISTANT AND LOW-SMOKE-PRODUCING CHARACTERISTICS IN ACCORDANCE WITH ARTICLE 800 OF THE NATIONAL ELECTRICAL CODE.

- TYPICAL 10GBASE-T ELECTRICAL CHARACTERISTICS\*:**

CHARACTERISTIC IMPEDANCE:	100 Ω
MAXIMUM CONDUCTOR RESISTANCE:	8.0Ω/100 METER
MAXIMUM RESISTANCE UNBALANCED:	4%
MAXIMUM DELAY SKEW:	45 nS
MUTUAL CAPACITANCE:	5.6 nF/100 METERS @1 kHz.
NOMINAL VELOCITY OF PROPAGATION:	70%
INSTALLATION TEMPERATURE RANGE:	0°C TO +60°C
OPERATING TEMPERATURE RANGE:	-20°C TO +60°C

\* DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEEP FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET CAT 6A TIA 568-B.2-10 PERFORMANCE REQUIREMENTS PER THE VERIFICATION REQUIREMENTS DEFINED IN E108971.

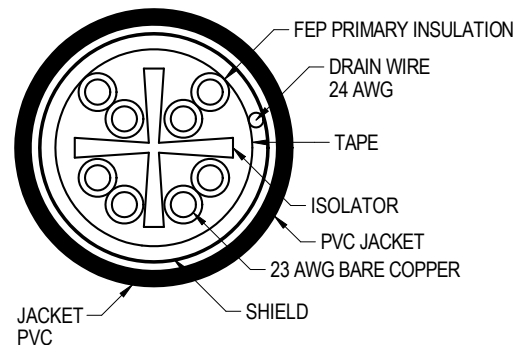
- PRODUCT APPROVAL REQUIREMENTS: E.U. RoHS DIRECTIVE 2002/95/EC

# ELECTRICAL PERFORMANCE

FREQUENCY (MHz.)	INSERTION LOSS MAX (dB/100 m)	NEXT LOSS MIN (dB/100 m)		ELFEXT MIN. (dB/100 m)		RETURN LOSS MIN. (dB/100 m)	DELAY MAX (ns/100 m)
		WP	PS	WP	PS		
0.772	----	76.0	74.0	----	----	----	----
1.0	2.10	74.3	72.3	67.8	64.8	20.0	570
4.0	3.80	65.3	63.3	55.8	52.8	23.0	552
8.0	5.30	60.8	58.8	49.7	46.7	24.5	547
10.0	5.90	59.3	57.3	47.8	44.8	25.0	545
16.0	7.50	56.2	54.2	43.7	40.7	25.0	543
20.0	8.40	54.8	52.8	41.8	38.8	25.0	542
25.0	9.40	53.3	51.3	39.8	36.8	24.3	541
31.25	10.50	51.9	49.9	37.9	34.9	23.6	540
62.5	15.00	47.4	45.4	31.9	28.9	21.5	539
100.0	19.10	44.3	42.3	27.8	24.8	20.1	538
200.0	27.60	39.8	37.8	21.8	18.8	18.0	537
300.0	34.30	37.1	35.1	18.3	15.3	16.8	536
400.0	40.10	35.3	33.3	15.8	12.8	15.9	536
500.0	45.30	33.8	31.8	13.8	10.8	15.2	536

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4 PR, 23 AWG FEP INSULATION

## CABLE COLOR TABLE

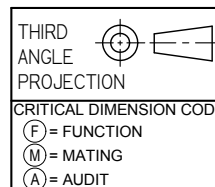
OCC-FTP6A4PLM-01	YELLOW
OCC-FTP6A4PLM-02	BLACK
OCC-FTP6A4PLM-03	RED
OCC-FTP6A4PLM-04	GREEN
OCC-FTP6A4PLM-05	BLUE
OCC-FTP6A4PLM-06	GRAY
OCC-FTP6A4PLM-07	WHITE
OCC-FTP6A4PLM-08	VIOLET
OCC-FTP6A4PLM-09	ORANGE
OCC PART NUMBER	JACKET COLOR

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS ± 1/32" ANGLES ± 1/2" 3 PLACE DECIMALS ± .005" 2 PLACE DECIMALS ± .01"

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MATERIAL SEE NOTES AND TABLES  
FINISH SEE NOTES AND TABLES

DRAWN	J. YANIK	DATE	9/16/08
CHECKED	J. MALTAIS	DATE	9/16/08
ENGINEER	J. YANIK	DATE	9/16/08
APPROVED	J. CALLOWAY	DATE	7/21/15
PREVIOUS DWG			
NEXT DWG			

DWG TITLE			CABLE, CAT6A, 23AWG, 4 PR, SHIELDED, PLENUM, CMP		
SIZE	B	DWG NO.	<b>C109153</b>	REV	F
FILENAME	C109153F.dft	SCALE:	NONE	SHEET	1 OF 1