

# SPECIFICATIONS

- DESCRIPTION: CAT 6A CABLE, CONSISTING OF 4 PAIRS, 23 AWG, SHIELDED WITH AN OVERALL JACKET. CMR, c(UL)us TYPE FT4 PER UL 444. PACKAGING TYPE: REEL
- CONDUCTOR: 23 AWG SOLID BARE COPPER (.0226" NOM OD) INSULATION: POLYOLEFIN .044" NOM OD, .0122" 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 WHT/GRN
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: PVC LF (SEE CABLE COLOR TABLE)
 

.296" NOM OD  
.020" AVG WALL
- MARKING:** OCC (WWW.OCCFIBER.COM) P/N OCC-FTP6A4R--- ETL VERIFIED CATEGORY 6A 4 PR 23AWG CMR 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 CMR, COMMUNICATIONS RISER CABLE LISTED AS BEING SUITABLE FOR USE IN A VERTICAL RUN IN A SHAFT OR FROM FLOOR TO FLOOR PER UL 444. ALSO LISTED AS HAVING FIRE-RESISTANT CHARACTERISTICS CAPABLE OF PREVENTING THE CARRYING OF FIRE FROM FLOOR TO FLOOR IN ACCORDANCE WITH ARTICLE 800 OF THE NATIONAL ELECTRICAL CODE.
- TYPICAL 10GBASE-T ELECTRICAL CHARACTERISTICS\*:
 

CHARACTERISTIC IMPEDANCE:	100 Ω
MAXIMUM CONDUCTOR RESISTANCE:	8.00 Ω/100 METERS
MAXIMUM RESISTANCE UNBALANCED:	5 %
MAXIMUM MUTUAL CAPACITANCE:	5.6 nF/100 METERS @ 1kHz.
MAXIMUM DELAY SKEW:	45 ns
NOMINAL VELOCITY OF PROPAGATION:	68%
INSTALLATION TEMPERATURE RANGE:	0°C +60°C
OPERATING TEMPERATURE RANGE:	-20°C +60°C

\* DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEEPED FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET CAT 6A ANSI/TIA-568-C.2 PERFORMANCE REQUIREMENTS PER THE VERIFICATION REQUIREMENTS DEFINED IN CABLE MANUFACTURERS UL/ETL FILE.

- PRODUCT APPROVAL REQUIREMENTS: E.U. RoHS DIRECTIVE 2002/95/EC SWEEPED FREQUENCIES GOVERN LIMITS TIA/EIA-568-B.2-10 PERFORMANCE

# ELECTRICAL PERFORMANCE

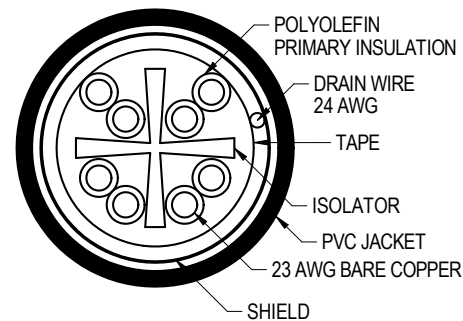
FREQUENCY (MHz.)	INSERTION LOSS MAX (dB/100 m)	NEXT LOSS MIN (dB/100 m)		ELFEXT MIN. (dB/100 m)		RETURN LOSS MIN. (dB/100 m)	DELAY MAX (ns/100 m)
		WP	PS	WP	PS		
0.772	----	76.0	74.0	----	----	----	----
1.0	2.1	74.3	72.3	67.8	64.8	20.0	570
4.0	3.8	65.3	63.3	55.8	52.8	23.0	552
8.0	5.3	60.8	58.8	49.7	46.7	24.5	547
10.0	5.9	59.3	57.3	47.8	44.8	25.0	545
16.0	7.5	56.2	54.2	43.7	40.7	25.0	543
20.0	8.4	54.8	52.8	41.8	38.8	25.0	542
25.0	9.4	53.3	51.3	39.8	36.8	24.3	541
31.25	10.5	51.9	49.9	37.9	34.9	23.6	540
62.5	15.0	47.4	45.4	31.9	28.9	21.5	539
100.0	19.1	44.3	42.3	27.8	24.8	20.1	538
200.0	27.6	39.8	37.8	21.8	18.8	18.0	537
300.0	34.3	37.1	35.1	18.3	15.3	16.8	536
400.0	40.1	35.3	33.3	15.8	12.8	15.9	536
500.0	45.3	33.8	31.8	13.8	10.8	15.2	536

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### CABLE COLOR TABLE

OCC-FTP6A4R-01	YELLOW
OCC-FTP6A4R-02	BLACK
OCC-FTP6A4R-03	RED
OCC-FTP6A4R-04	GREEN
OCC-FTP6A4R-05	BLUE
OCC-FTP6A4R-06	GRAY
OCC-FTP6A4R-07	WHITE
OCC-FTP6A4R-08	VIOLET
OCC-FTP6A4R-09	ORANGE
OCC PART NUMBER	JACKET COLOR

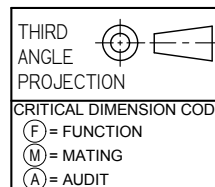


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES: FRACTIONS ±1/32" ANGLES ±1/2" 3 PLACE DECIMALS ±.005" 2 PLACE DECIMALS ±.01"

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MATERIAL	SEE NOTES AND TABLES	DRAWN	J.YANIK	DATE	9/16/08
FINISH	SEE NOTES AND TABLES	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, CAT 6A, 23 AWG, 4 PR, SHIELDED, RISER, CMR	
SIZE	B	DWG NO.	C109154		REV
					D
SCALE:	NONE	SHEET	1 OF 1		

FILENAME C109154D.dft