

# SPECIFICATIONS

- DESCRIPTION:** CATEGORY 6A CABLE, CONSISTING OF 4 PAIRS, 23 AWG, UNSHIELDED WITH A LOW SMOKE PVC JACKET. CMP, c(UL)us TYPE FT6 PER UL 444. PACKAGING TYPE: REEL
- CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0241" NOM OD) INSULATION: FEP .043" NOM OD, .0094" 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 A TAPE BISECTOR WITH A LEFT HAND LAY.
- OVERALL JACKET:** LOW SMOKE, FLAME RETARDANT PVC, SEE COLOR TABLE FOR CABLE COLOR  
.300" NOM OD  
.053" AVG WALL THICKNESS
- MARKING:** OCC (WWW.OCCFIBER.COM) P/N OCC-U6A4PLM --- ETL VERIFIED CATEGORY 6A 4 PR 23 AWG CMP C(UL)US OCCV E322888 MADE IN USA MYLLDDS XXXXX FT

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

- AGENCY APPROVAL:** UNDERWRITERS LABORATORIES, INC. TYPE CMP, COMMUNICATIONS PLENUM CABLE, LISTED AS BEING SUITABLE FOR USE 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 CATEGORY 6A ELECTRICAL CHARACTERISTICS\*:**

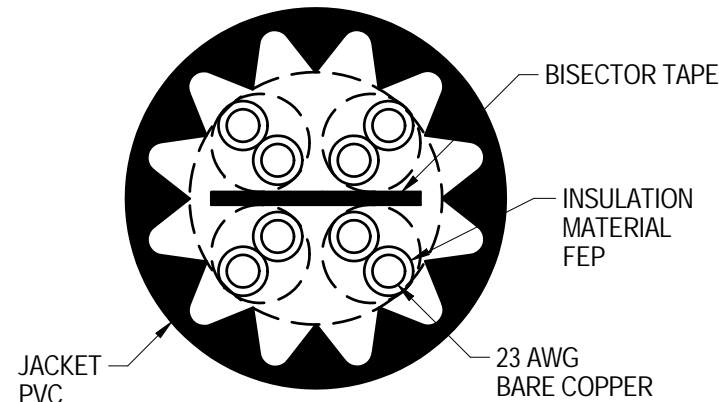
CHARACTERISTIC IMPEDANCE:	100 Ω
MAXIMUM CONDUCTOR RESISTANCE:	7.61Ω/100 METERS @ 20°C
MAXIMUM RESISTANCE UNBALANCED:	4%
MAXIMUM MUTUAL CAPACITANCE:	6.0 nF/100 METERS @ 1kHz.
NOMINAL VELOCITY OF PROPAGATION:	66%
STORAGE TEMPERATURE RANGE:	N/A
INSTALLATION TEMPERATURE RANGE:	0°C +60°C
OPERATING TEMPERATURE RANGE:	-20°C +75°C

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

- PRODUCT APPROVAL REQUIRES CERTIFICATION OF COMPLIANCE TO E.U. RoHS DIRECTIVE 2002/95/EC

# ELECTRICAL PERFORMANCE

Frequency (MHz.)	Insertion Loss max dB/100 meters	NEXT Loss Min. (dB)	ACR Min. (dB)	PSACR Min. (dB)	PSNEXT Loss Min. (dB)	ACR-F Min. (dB)	PSACRF Min. (dB)	Return Loss Min. (dB)	Propagation Delay Max. (ns)	Delay Skew Max. (ns)	*TCL Min. (dB)	*ELTCTL Min. (dB)	PSANEXT Loss Min. (dB)	PSAACRF Loss Min. (dB)
1	2.1	74.3	72.2	70.2	72.3	67.8	64.8	20	570	45	40.0	35	67	67
4	3.8	65.3	61.5	59.5	63.3	55.8	52.8	23	552	45	40.0	23	67	66.2
8	5.3	60.8	55.5	53.5	58.8	49.7	46.7	24.5	547	45	40.0	16.9	67	60.1
10	5.9	59.3	53.4	51.4	57.3	47.8	44.8	25	545	45	40.0	15	67	58.2
16	7.5	56.2	48.7	46.7	54.2	43.7	40.7	25	543	45	38.0	10.9	67	54.1
20	8.4	54.8	46.4	44.4	52.8	41.8	38.8	25	542	45	37.0	9	67	52.2
25	9.4	53.3	43.9	41.9	51.3	39.8	36.8	24.3	541	45	36.0	7	67	50.2
31.25	10.5	51.9	41.4	39.4	49.9	37.9	34.9	23.6	540	45	35.1	5.5	67	48.3
62.5	15.0	47.4	32.4	30.4	45.4	31.9	28.9	21.5	539	45	32.0	-	65.6	42.3
100	19.1	44.3	25.2	23.2	42.3	27.8	24.8	20.1	538	45	30.0	-	62.5	38.2
200	27.6	39.8	12.2	10.2	37.8	21.8	18.8	18	537	45	27.0	-	58	32.2
250	31.1	38.3	7.2	5.2	36.3	19.8	16.8	17.3	536	45	26.0	-	56.5	30.2
300	34.3	37.1	2.8	0.8	35.1	18.3	15.3	16.8	536	45	25.2	-	55.3	28.7
400	40.1	35.3	-	-	33.3	15.8	12.8	15.9	536	45	24.0	-	53.5	26.2
500	45.3	33.8	-	-	31.8	13.8	10.8	15.2	536	45	23.0	-	52	24.2



"OPTICAL CABLE CORPORATION (OCC) RESERVES THE RIGHT TO REVISE ANY CABLE SPECIFICATIONS."

**UNCONTROLLED COPY**

## CABLE COLOR TABLE

OCC-U6A4PLM-01	YELLOW
OCC-U6A4PLM-05	BLUE
OCC-U6A4PLM-07	WHITE
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"

THIRD ANGLE PROJECTION

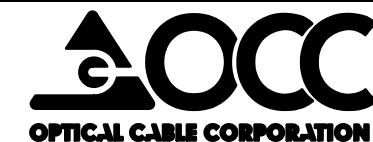
CRITICAL DIMENSION CODE  
 (F) = FUNCTION  
 (M) = MATING  
 (A) = AUDIT

MATERIAL SEE NOTES AND TABLES

FINISH SEE NOTES AND TABLES

THIS DRAWING AND THE DESIGN SHOWN ARE THE PROPERTY OF OPTICAL CABLE CORPORATION AND MAY NOT BE USED AS THE BASIS FOR MANUFACTURE OR SALE WITHOUT SPECIFIC WRITTEN PERMISSION OF OPTICAL CABLE CORPORATION.

DRAWN	D.A.HOLBERT	DATE	9/23/08
CHECKED	J.MALTAIS	DATE	11/14/08
ENGINEER	J.YANIK	DATE	9/23/08
APPROVED	J.CALLOWAY	DATE	7/17/15
PREVIOUS DWG			
NEXT DWG		FILENAME	C109171E.dwg



33 Superior Way  
Swannanoa, NC 28778  
Phone: 828-298-2260  
Fax: 828-298-2487  
www.occfiber.com

DWG TITLE: **CABLE, CAT6A, 23AWG, 4 PR, UNSHIELDED, PLENUM, CMP**

SIZE: **B** DWG NO.: **C109171** REV: **E**

SCALE: NONE SHEET: 1 OF 1