

SPECIFICATIONS

1. **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.

2. **CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0241" NOM OD) INSULATION: FEP .043" NOM OD, .0094" AVG WALL

3. **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

4. **CABLING:** THE FOUR (4) TWISTED PAIRS ARE CABLED AROUND A STAR OR T-TOP CROSS WEB FILLER WITH A LEFT HAND LAY.

5. **OVERALL JACKET:** LOW SMOKE, FLAME RETARDANT PVC, SEE COLOR TABLE FOR CABLE COLOR .320" - .340" NOM OD A RIPCORD IS PULLED IN UNDER JACKET

6. **MARKING:** THE CABLE IS IDENTIFIED WITH THE FOLLOWING PRINT LEGEND: **OCC (occfiber.com)** CATEGORY 6A --- 4PR/23 c(UL)us CMP - FT6 - COMPLIANT TO TIA/EIA-568-B.2-10 - Z/YY (XXXX) - Mx - R# - NNNN WHERE Z = MONTH OF MFG. YY = YEAR OF MFG. XXXX = JOB NUMBER x = RESPOOL MACHINE # # = MASTER REEL # NNNN = SEQUENTIAL FOOTAGE MARKERS

ALTERNATE MARKING: OCC (www.occfiber.com) -A-# ** FEET CATEGORY 6A 4 PR/23 AWG UTP PLENUM CABLE 4001142 C(ETL)US CMP 75C --- VERIFIED BY UND LAB INC ONLY TO TIA/EIA 568B.2-10 CAT 6A --- ## ## ##### WHERE # = PLANT ID LETTER ("L", "J", OR "F") **** = SEQUENTIAL FOOTAGE MARKING FOLLOWED BY "FEET" ## ## = MONTH - YEAR ##### = TRACEABILITY CODE (eg. 241425J2 WHERE 24 = DAY OF THE MONTH, 1425 = 02:25 PM IN MILITARY TIME, J2 = JACKETING LINE #2)**

7. **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.

8. **TYPICAL CATEGORY 6A ELECTRICAL CHARACTERISTICS*:**

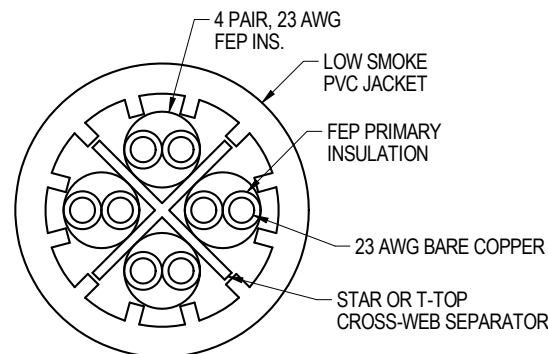
CHARACTERISTIC IMPEDANCE:	100 ± 15 Ω (.772 TO 500 MHz.)
MAXIMUM CONDUCTOR RESISTANCE:	9.38 Ω/100 METERS @ 20°C
MAXIMUM RESISTANCE UNBALANCED:	5%
MAXIMUM MUTUAL CAPACITANCE:	5.6 nF/100 METERS @ 1kHz.
MAXIMUM CAPACITANCE UNBALANCED:	330 pF/100 METERS

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

9. 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	35	67	67
4	3.8	65.3	61.5	59.5	63.3	55.8	52.8	23	552	45	40	23	67	66.2
8	5.3	60.8	55.5	53.5	58.8	49.7	46.7	24.5	547	45	40	16.9	67	60.1
10	5.9	59.3	53.4	51.4	57.3	47.8	44.8	25	545	45	40	15	67	58.2
16	7.5	56.2	48.7	46.7	54.2	43.7	40.7	25	543	45	38	10.9	67	54.1
20	8.4	54.8	46.4	44.4	52.8	41.8	38.8	25	542	45	37	9	67	52.2
25	9.4	53.3	43.9	41.9	51.3	39.8	36.8	24.3	541	45	36	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	-	65.6	42.3
100	19.1	44.3	25.2	23.2	42.3	27.8	24.8	20.1	538	45	30	-	62.5	38.2
200	27.6	39.8	12.2	10.2	37.8	21.8	18.8	18	537	45	27	-	58	32.2
250	31.1	38.3	7.2	5.2	36.3	19.8	16.8	17.3	536	45	26	-	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	-	53.5	26.2
500	45.3	33.8	-	-	31.8	13.8	10.8	15.2	536	45	23	-	52	24.2



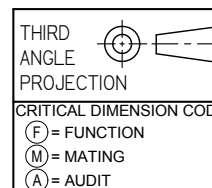
CABLE COLOR TABLE

OCC-U6A4PLM-01	YELLOW
OCC-U6A4PLM-02	BLACK
OCC-U6A4PLM-03	RED
OCC-U6A4PLM-04	GREEN
OCC-U6A4PLM-05	BLUE
OCC-U6A4PLM-06	GRAY
OCC-U6A4PLM-07	WHITE
OCC-U6A4PLM-08	VIOLET
OCC-U6A4PLM-09	ORANGE
OCC PART NUMBER	JACKET COLOR

UNCONTROLLED COPY

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

OCC
OPTICAL CABLE CORPORATION
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MATERIAL SEE NOTES AND TABLES	CHECKED J.MALTAIS	DATE 11/14/08
FINISH SEE NOTES AND TABLES	ENGINEER J.YANIK	DATE 9/23/08
	APPROVED S.VADEN	DATE 5/20/11
	PREVIOUS DWG	
	NEXT DWG	FILENAME C109171D.dwg

DWG TITLE CABLE, CAT6A, 23AWG, 4 PR, UNSHIELDED, PLENUM, CMP		REV D
SIZE B	DWG NO. C109171	
SCALE: NONE	SHEET 1 OF 1	