

SPECIFICATIONS

1. **DESCRIPTION:** CATEGORY 6 CABLE, CONSISTING OF 4 PAIRS, 23 AWG, UNSHIELDED WITH A LOW SMOKE PVC JKT. CMP, c(UL)us TYPE FT6 PER UL 444.

2. **CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0224" NOM OD)
INSULATION: FEP .039" NOM OD, .0081" 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	OR 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 FILLER WITH A LEFT HAND LAY.

5. **OVERALL JACKET:** LOW SMOKE, FLAME RETARDANT PVC, SEE COLOR TABLE FOR CABLE COLOR.
 .200" - .225" NOM OD
 A RIPCORD IS PULLED IN UNDER JACKET

6. **MARKING:** THE CABLE IS IDENTIFIED WITH THE FOLLOWING PRINT LEGEND:
OCC (www.occfiber.com) CATEGORY 6 --- 4PR/23 c(UL)us CMP - FT6 - VERIFIED (UL) CAT 6 TIA-568-C.2 - 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

ALTERNATE MARKING: OCC (occfiber.com) -A-# ** FEET CAT 6 CMP (UL) C(UL) 4 PR 23 AWG PLENUM --- VERIFIED (UL) TIA 568-C.2 CAT 6 --- ## ## #####**
 WHERE # = PLANT ID LETTER ("L", "J", OR "F")
 **** = SEQUENTIAL FOOTAGE MARKERS FOLLOWED BY "FEET"
 ## ## = MONTH - YEAR
 ##### = TRACEABILITY CODE (eg. 241425J2 WHERE 24 = DAY OF THE MONTH, 1425 = 02:25PM IN MILITARY TIME, J2 = JACKETING LINE #2)

7. **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.

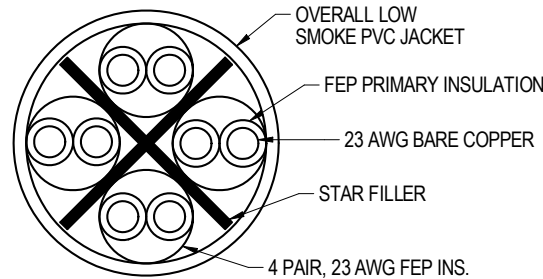
8. **CATEGORY 6 WORST CASE ELECTRICAL CHARACTERISTICS*:**
 CHARACTERISTIC IMPEDANCE: 100 ± 15 Ω (1 TO 250 MHz.)
 MAXIMUM CONDUCTOR RESISTANCE: 9.38 Ω/100 METERS @ 20°C
 MAXIMUM RESISTANCE UNBALANCED: 5%
 MAXIMUM MUTUAL CAPACITANCE: 5.6 nF/100 METERS @ 1kHz.
 MAXIMUM CAPACITANCE UNBALANCED: 330 pF/100 METERS
 MAXIMUM DELAY SKEW: 45 ns/100 METERS
 NOMINAL VELOCITY OF PROPAGATION: 70%

* DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEEPED FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET CAT 6 TIA/EIA-568-C.2 PERFORMANCE REQUIREMENTS PER THE VERIFICATION REQUIREMENTS DEFINED IN SUPPLIERS 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 m)	NEXT LOSS MIN (dB/100 m)		ACR MIN. (dB/100 m)		ACRF MIN. (dB/100 m)		RETURN LOSS MIN. (dB/100 m)	DELAY MAX (ns/100 m)
		WP	PS	WP	PS	WP	PS		
1.0	2.0	79.3	77.3	77.3	75.3	72.8	69.8	20.0	570
4.0	3.8	70.3	68.3	66.5	64.5	60.7	57.7	23.0	552
10.0	5.9	64.3	62.3	58.4	56.4	52.8	49.8	25.0	545
16.0	7.5	61.3	59.3	53.8	51.7	48.7	45.7	25.0	543
20.0	8.4	59.8	57.8	51.4	49.4	46.7	43.7	25.0	542
31.25	10.6	56.9	54.9	46.3	44.3	42.9	39.9	23.6	540
62.5	15.3	52.4	50.4	37.1	35.1	36.8	33.8	21.5	539
100.0	19.7	49.3	47.3	29.6	27.6	32.8	29.8	20.1	538
150	24.7	46.7	44.7	22.0	20.0	29.3	26.3	18.8	537
200	29.0	44.8	42.8	15.8	13.8	26.8	23.8	18.0	537
250	32.6	43.3	41.3	10.7	8.7	24.8	21.8	17.3	536
350	39.5	41.2	39.2	1.7	-----	21.9	18.9	16.3	536
500	48.6	38.8	36.8	-----	-----	18.8	15.8	15.2	536

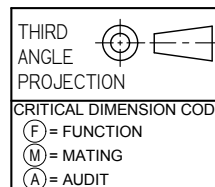


CABLE COLOR TABLE

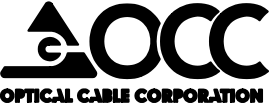
OCC-U64PLM-01	YELLOW
OCC-U64PLM-02	BLACK
OCC-U64PLM-03	RED
OCC-U64PLM-04	GREEN
OCC-U64PLM-05	BLUE
OCC-U64PLM-06	GRAY
OCC-U64PLM-07	WHITE
OCC-U64PLM-08	VIOLET
OCC-U64PLM-09	ORANGE
OCC PART NUMBER	JACKET COLOR

UNCONTROLLED COPY

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



MATERIAL SEE NOTES AND TABLES	CHECKED J.MALTAIS	DATE 11/14/08
FINISH SEE NOTES AND TABLES	ENGINEER J.YANIK	DATE 3/4/08
	APPROVED S.VADEN	DATE 5/20/11
	PREVIOUS DWG	
	NEXT DWG	FILENAME C108644D.dwg



OPTICAL CABLE CORPORATION

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

DWG TITLE **CABLE, CAT6, 23AWG, PLENUM, 4PR, UNSHIELDED, CMP, STAR FILLER**

SIZE B	DWG NO. C108644	REV D
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SCALE: NONE SHEET 1 OF 1

REVISION HISTORY				
REV	SHT	DESCRIPTION	DATE	CHECKED
A	ALL	RELEASE NEW	3/4/08	JFM
B	-	CHG'D TO OCC IN PRINT LEGEND AND UPDATED SPECIFICATIONS	7/3/09	JFM
C	-	UPDATED OCC LEGEND AND CHANGED TO OCC P/N'S	3/26/10	DFS
D	-	UPDATED FOR COMPLIANCE TO RoHS	7/7/10	SV