

# SPECIFICATIONS

- DESCRIPTION:** CATEGORY 6 CABLE, CONSISTING OF 4 PAIRS, 23 AWG, UNSHIELDED WITH A PVC JKT. CMR, c(UL)us TYPE FT4 PER UL 444. PACKAGING TYPE: BOX
- CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0224" NOM OD)  
**INSULATION:** POLYETHYLENE .039" NOM OD, .0085" AVG WALL
- PAIRING:** COLOR CODED CONDUCTORS ARE TWISTED INTO PAIRS WITH VARYING 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 TOGETHER WITH A VARYING LAYS WITHIN THE OUTER JACKET WITH A TAPE SEPARATOR.
- OVERALL JACKET:** LOW SMOKE PVC, SEE COLOR TABLE FOR CABLE COLOR. .220" NOM OD  
.020" AVG WALL THICKNESS
- MARKING:** THE CABLE IS TO BE MARKED WITH THE FOLLOWING PRINT LEGEND:  
OCC (WWW.OCCFIBER.COM) P/N OCC-UE64R --- ETL VERIFIED CATEGORY 6 4 PR 23 AWG CMR C(UL)US OCCV E322888 MADE IN USA MYLLDDS XXXXX FT

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

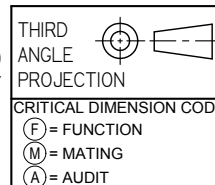
**7. AGENCY APPROVAL:** UNDERWRITERS LABORATORIES, INC. TYPE CMR, COMMUNICATIONS RISER CABLE, LISTED AS BEING SUITABLE FOR USE IN VERTICLE RUN IN A SHAFT OR FROM FLOOR TO FLOOR PER UL 444. ALSO LISTED AS HAVING ADEQUATE FIRE-RESISTANT CHARACTERISTICS CAPABLE OF PREVENTING THE CARRYING OF FIRE FROM FLOOR TO FLOOR, 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: 6.6 Ω/100 METERS @ 20°C
  - MAXIMUM RESISTANCE UNBALANCED: 5%
  - MAXIMUM MUTUAL CAPACITANCE: 4.6 nF/100 METERS @ 1kHz.
  - MAXIMUM CAPACITANCE UNBALANCED: 330 pF/100 METERS
  - MAXIMUM DELAY SKEW: 45 ns/100 METERS
  - NOMINAL VELOCITY OF PROPAGATION: 70%
  - STORAGE TEMPERATURE RANGE: N/A
  - 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 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**

"OPTICAL CABLE CORPORATION (OCC) RESERVES THE RIGHT TO REVISE ANY AND ALL DESIGN SPECIFICATIONS."  
**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	FINISH SEE NOTES AND TABLES
CHECKED J.HOWE DATE 7/14/11	APPROVED J.CALLOWAY DATE 12/10/20
ENGINEER J.YANIK DATE 7/14/11	PREVIOUS DWG
DRAWN D.A.HOLBERT DATE 7/14/11	NEXT DWG
FILENAME C110783E.dft	SCALE: NONE

**OCC**  
OPTICAL CABLE CORPORATION

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

DWG TITLE  
**CABLE, CAT 6+,  
23 AWG, 4 PR, UTP, CMR**

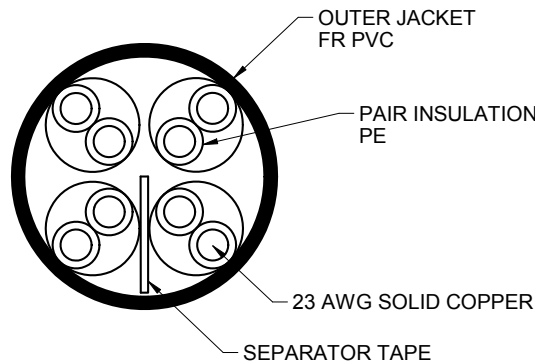
SIZE **B** DWG NO. **C110783** REV **E**

FILENAME C110783E.dft SCALE: NONE SHEET 1 OF 1

# ELECTRICAL PERFORMANCE

Frequency (MHz.)	INSERTION LOSS MAX. (dB/100 m)		NEXT LOSS MIN. (dB)		ACR MIN. (dB)		PSNEXT LOSS MIN. (dB)		PSACR MIN. (dB)		ACRF MIN. (dB)		PSACRF MIN. (dB)		RL MIN. (dB)	
	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical	TIA Std	Typical
1	2	1.8	74.3	89	72.3	87.2	72.3	87	70.3	85.2	67.8	83.1	64.8	81.1	20	31
4	3.8	3.6	65.3	79.3	61.5	75.7	63.3	77.3	59.5	73.7	55.8	70.6	52.8	68.6	23	29
8	5.3	5.1	60.8	74.5	55.4	69.4	58.8	72.5	53.4	67.4	49.7	64.4	46.7	62.4	24.5	33.3
10	6	5.8	59.3	72.9	53.3	67.1	57.3	70.9	51.3	65.1	47.8	62.4	44.8	60.4	25	33.9
16	7.6	7.4	56.2	69.6	48.7	62.2	54.2	67.6	46.7	60.2	43.7	58.2	40.7	56.2	25	34.2
20	8.5	8.3	54.8	68.1	46.3	59.8	52.8	66.1	44.3	57.8	41.8	56.2	38.8	54.2	25	34
25	9.5	9.3	53.3	66.5	43.8	57.2	51.3	64.5	41.8	55.2	39.8	54.1	36.8	52.1	24.3	35.1
31.25	10.7	10.4	51.9	64.9	41.2	54.5	49.9	62.9	39.2	52.5	37.9	52.1	34.9	50.1	23.6	34.5
62.5	15.4	15	47.4	60.1	32	45.1	45.4	58.1	30	43.1	31.9	45.9	28.9	43.9	21.5	32.2
100	19.8	19.1	44.3	56.8	24.5	37.7	42.3	54.8	22.5	35.7	27.8	41.7	24.8	39.7	20.1	30.6
155	25.2	24	41.4	53.7	16.3	29.7	39.4	51.7	14.3	27.7	24	37.7	21	35.7	18.8	29.2
200	29	27.3	39.8	52	10.8	24.7	37.8	50	8.8	22.7	21.8	35.4	18.8	33.4	18	28.3
250	32.8	30.7	38.3	50.4	5.5	19.7	36.3	48.4	3.5	17.7	19.8	33.4	16.8	31.4	17.3	27.6
300		33.7		49.1		15.4		47.1		13.4		31.8		29.8		27
350		36.6		48		11.4		46		9.4		30.4		28.4		26.5
400		39.2		47.1		7.9		45.1		5.9		29.2		27.2		26.1
500		44		45.5		1.5		43.5		NS		27.2		25.2		25.3

THIS CABLE SHALL BE COMPLIANT TO TIA-568.2 FOR CATEGORY 6.



OCC-UE64R-09	ORANGE
OCC-UE64R-08	VIOLET
OCC-UE64R-07	WHITE
OCC-UE64R-06	GRAY
OCC-UE64R-05	BLUE
OCC-UE64R-04	GREEN
OCC-UE64R-03	RED
OCC-UE64R-02	BLACK
OCC-UE64R-01	YELLOW
OCC PART NUMBER	JACKET COLOR
CABLE COLOR TABLE	