

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.
- CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0224" NOM OD)
INSULATION: POLYETHYLENE OR POLYOLEFIN .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
A RIPCORD IS PULLED IN UNDER JACKET
- MARKING:** THE CABLE IS TO BE MARKED WITH THE FOLLOWING PRINT LEGEND:
OCC (occfiber.com) CATEGORY 6 - 4PR/23 c(UL)us CMR - FT4 - COMPLIANT TO CAT6 TIA/EIA-568-C.2 - ZYY(XXX)-Mx-R#-NNNN
WHERE: Z = MONTH OF MANUFACTURE
YY = YEAR OF MANUFACTURE
XXXX = JOB NUMBER
x = RESPOOL MACHINE #
= MASTER REEL #
NNNN = SEQUENTIAL FOOTAGE MARKERS

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

NOTE: ADDITIONAL ALTERNATE MARKING(S) MAY BE ACCEPTABLE WITH PRIOR OCC ENGINEERING APPROVAL.

- 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.

- CATEGORY 6 WORST CASE ELECTRICAL CHARACTERISTICS*:**
CHARACTERISTIC IMPEDANCE: 100 ± 15 Ω (1 TO 250 MHz.)
MAXIMUM CONDUCTOR RESISTANCE: 8.9 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: 68%

NOTICE: SPECIFICATIONS CONTINUED AT RIGHT.

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

| REVISION HISTORY | | | | |
|------------------|-----|-------------|---------|---------|
| REV | SHT | DESCRIPTION | DATE | CHECKED |
| A | ALL | RELEASE NEW | 7/14/11 | NEW SV |

SPECIFICATIONS (CONTINUED)

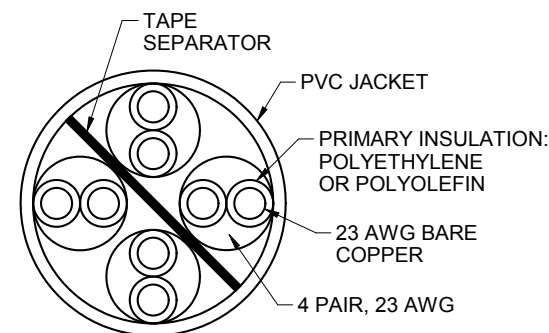
* DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEPT FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET CAT 6 TIA/EIA-568-C.2 PERFORMANCE REQUIREMENTS PER THE VERIFICATION REQUIREMENTS DEFINED IN SUPPLIERS UL/ETL FILE(S).

- 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 | | |
| 0.772 | ---- | 76.0 | 74.0 | ---- | ---- | 70.0 | 67.0 | ---- | ---- |
| 1.0 | 2.0 | 74.3 | 72.3 | 72.3 | 70.3 | 67.8 | 64.8 | 20.0 | 570 |
| 4.0 | 3.8 | 65.3 | 63.3 | 61.5 | 59.3 | 55.7 | 52.8 | 23.0 | 552 |
| 8.0 | 5.3 | 60.8 | 58.8 | 55.4 | 53.4 | 49.7 | 46.7 | 24.5 | 547 |
| 10.0 | 6.0 | 59.3 | 57.3 | 53.3 | 51.3 | 47.8 | 44.8 | 25.0 | 545 |
| 16.0 | 7.6 | 56.2 | 54.2 | 48.7 | 46.7 | 43.7 | 40.7 | 25.0 | 543 |
| 20.0 | 8.5 | 54.8 | 52.8 | 46.3 | 44.3 | 41.7 | 38.8 | 25.0 | 542 |
| 25.0 | 9.5 | 53.3 | 51.3 | 43.8 | 41.8 | 39.8 | 36.8 | 24.3 | 541 |
| 31.25 | 10.7 | 51.9 | 49.9 | 41.2 | 39.2 | 37.9 | 34.8 | 23.6 | 540 |
| 62.5 | 15.4 | 47.4 | 45.4 | 32.0 | 29.9 | 31.8 | 28.9 | 21.5 | 539 |
| 100.0 | 19.8 | 44.3 | 42.3 | 24.5 | 22.5 | 27.8 | 24.8 | 20.1 | 538 |
| 155.0 | 25.2 | 41.4 | 39.4 | 16.3 | 14.3 | 24.0 | 21.0 | 18.8 | 537 |
| 200.0 | 29.0 | 39.8 | 37.8 | 10.8 | 8.8 | 21.8 | 18.8 | 18.0 | 537 |
| 250.0 | 32.8 | 38.3 | 36.3 | 5.5 | 3.5 | 19.8 | 16.8 | 17.3 | 536 |
| 300.0 | 36.4 | 37.1 | 35.1 | ---- | ---- | 18.3 | 15.3 | 16.8 | 536 |
| 350.0 | 39.8 | 36.1 | 34.1 | ---- | ---- | 16.9 | 13.9 | 16.3 | 536 |
| 400.0 | 43.0 | 35.3 | 33.3 | ---- | ---- | 15.8 | 12.8 | 15.9 | 536 |
| 500.0 | 48.9 | 33.8 | 31.8 | ---- | ---- | 13.8 | 10.8 | 15.2 | 536 |

THIS CABLE SHALL BE COMPLIANT TO TIA/EIA-568-C.2 FOR CATEGORY 6.

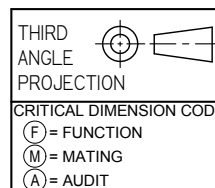


CABLE COLOR TABLE

| | |
|-----------------|--------------|
| OCC-UE64R-01 | YELLOW |
| OCC-UE64R-05 | BLUE |
| OCC-UE64R-07 | WHITE |
| OCC PART NUMBER | JACKET COLOR |

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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

| | |
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| 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 J.YANIK | DATE 7/14/11 |
| CHECKED S.VADEN | DATE 7/14/11 |
| ENGINEER J.YANIK | DATE 7/14/11 |
| APPROVED S.VADEN | DATE 7/14/11 |
| PREVIOUS DWG | |
| NEXT DWG | FILENAME C110783A.DFT |

| | | | |
|---|------------------------|--|--|
| | | 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, RISER, CMR, TAPE FILLER | | | |
| SIZE B | DWG NO. C110783 | REV A | |
| SCALE: NONE | SHEET 1 OF 1 | | |