

SPECIFICATIONS

- DESCRIPTION:** INDOOR/OUTDOOR CATEGORY 6A CABLE, CONSISTING OF 4 PAIRS, 23 AWG, UNSHIELDED WITH A POLYVINYLIDENE FLUORIDE JACKET. c(ETL)us, CMP PER UL 444
- CONDUCTOR:** 23 AWG SOLID BARE COPPER (.0226" NOM OD) INSULATION: FEP .0439"
- PAIRING:** COMPONENTS ARE TWISTED INTO PAIRS:
 - 1 BLU PAIRED WITH WHT/BLU
 - 2 ORG PAIRED WITH WHT/ORG
 - 3 GRN PAIRED WITH WHTGRN
 - 4 BRN PAIRED WITH WHT/BRN
- CABLING:** THE FOUR (4) TWISTED PAIRS ARE CABLED AROUND AN ISOLATOR WITH A LEFT HAND LAY AND WRAPPED WITH A POLYESTER TAPE. TAPE IS APPLIED OVERALL (ALUMINUM SIDE IN) AND A 24 AWG, 25% ± 10% OVERLAP ON TAPE.
- OVERALL JACKET:** BLACK PVDF
.27" NOM OD
.018" AVG WALL
- MARKING:** OCC (WWW.OCCFIBER.COM) P/N OCC-U6A4PIO--- CATEGORY 6A 4 PR 23 AWG INDOOR/OUTDOOR U/UTP C(ETL)US CMP 75C & CMX OUTDOOR SUN RESISTANT MADE IN USA MYLLDDS XXXXX FT WHERE: MYLLDDS = TRACEABILITY CODE XXXXX FT = SEQUENTIAL FOOTAGE MARKINGS
- 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.

- TYPICAL CATEGORY 6A ELECTRICAL CHARACTERISTICS*:**

CHARACTERISTIC IMPEDANCE: 100 ± 15 Ω (1 TO 100 MHz.)
100 ± 20 Ω (101 TO 250 MHz.)
100 ± 25 Ω (251 TO 500 MHz.)

MAXIMUM CONDUCTOR RESISTANCE: 8.0 Ω/100 METERS

MAXIMUM RESISTANCE UNBALANCED: 4%

MAXIMUM MUTUAL CAPACITANCE: 5.6 nF/100 METERS @ 1kHz.

MAXIMUM CAPACITANCE UNBALANCED: 330 pF/100 METERS

NOMINAL VELOCITY OF PROPOGATION: 70%

DELAY SKEW: 45 ns

MAXIMUM DIELECTRIC STRENGTH: 1500 VAC / 2500 Vdc

LIMITED POWER RATING: 0.7 A

OPERATING FREQUENCY MAXIMUM: 500 MHz.

* DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEEP FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET ANSI/TIA 568.2 CAT 6A REQUIREMENTS.

- MECHANICAL SPECIFICATIONS:**

MAXIMUM PULLING TENSION: 11.34 kg (25 lbs)

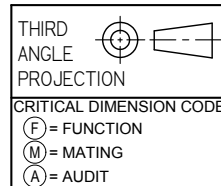
INSTALLATION TEMPERATURE: -25°C TO 75°C (-13°F TO 167°F)

OPERATING TEMPERATURE: -40°C TO 75°C (-40°F TO 167°F)

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

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

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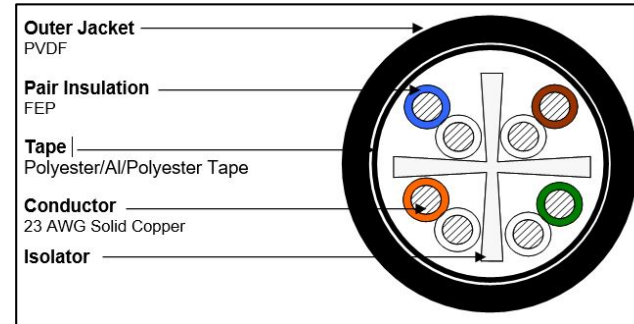


ELECTRICAL PERFORMANCE

Freq (MHz)	IL (dB/100m)		NEXT (dB/100m)		ACR (dB/100m)		PSNEXT (dB/100m)		PSACR (dB/100m)		ACRF (dB/100m)		PSACRF (dB/100m)		RL (dB)	
	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ	Std	Typ
1	2.1	1.8	74.3	90.6	72.2	88.8	72.3	88.3	70.2	86.5	67.8	82.1	64.8	80.3	20.0	32.2
4	3.8	3.6	65.3	82.4	61.5	78.8	63.3	80.2	59.5	76.6	55.8	70.1	52.8	68.4	23.0	33.9
8	5.3	5.1	60.8	77.6	55.4	72.5	58.8	75.8	53.4	70.7	49.7	64.1	46.7	62.3	24.5	36.7
10	5.9	5.7	59.3	76.4	53.4	70.7	57.3	74.4	51.4	68.7	47.8	62.2	44.8	60.4	25.0	37.7
16	7.5	7.3	56.2	73.1	48.8	65.9	54.2	71.3	46.8	64.0	43.7	58.2	40.7	56.4	25.0	38.7
20	8.4	8.1	54.8	71.5	46.4	63.4	52.8	69.7	44.4	61.6	41.8	56.4	38.8	54.5	25.0	38.7
25	9.4	9.1	53.3	70.2	44.0	61.1	51.3	68.3	42.0	59.2	39.8	54.5	36.8	52.6	24.3	35.5
31.25	10.5	10.2	51.9	68.6	41.4	58.4	49.9	66.7	39.4	56.5	37.9	52.7	34.9	50.7	23.6	37.2
62.5	15.0	14.6	47.4	64.2	32.4	49.6	45.4	62.3	30.4	47.7	31.9	46.6	28.9	44.7	21.5	34.6
100	19.1	18.6	44.3	60.8	25.2	42.1	42.3	59.0	23.2	40.3	27.8	42.5	24.8	40.5	20.1	30.3
155	24.1	23.4	41.4	58.4	17.4	35.0	39.4	56.4	15.4	33.0	24.0	38.9	21.0	37.0	18.8	30.8
200	27.6	26.8	39.8	56.0	12.2	29.2	37.8	54.2	10.2	27.4	21.8	36.6	18.8	34.6	18.0	30.0
250	31.1	30.1	38.3	54.3	7.3	24.2	36.3	52.5	5.3	22.3	19.8	34.6	16.8	32.6	17.3	30.5
300	34.3	33.1	37.1	53.1	2.9	19.9	35.1	51.2	0.9	18.1	18.3	33.1	15.3	31.2	16.8	31.1
350	37.2	36.0	36.1	51.8	-1.1	15.8	34.1	49.9	-3.1	13.9	16.9	31.9	13.9	29.9	16.3	31.7
400	40.1	38.8	35.3	50.8	-4.8	12.0	33.3	48.8	-6.8	10.0	15.8	30.6	12.8	28.6	15.9	31.5
500	45.3	43.6	33.8	47.9	-11.4	4.3	31.8	45.8	-13.4	2.2	13.8	28.7	10.8	26.7	15.2	32.0
550		43.8		48.0		4.1		45.9		2.0		28.6		26.7		31.9
650		50.2		43.5		-6.7		41.5		-8.8		25.7		23.5		25.3

Std = Standard value listed under Transmission Standards in the Electrical Specifications | Typ = Typical

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



CABLE COLOR TABLE

OCC-U6A4PIO	BLACK
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"

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DRAWN	D.A.HOLBERT	DATE	5/05/20
CHECKED	D.Stikeleather	DATE	5/29/20
ENGINEER	J.YANIK	DATE	5/05/20
APPROVED	J.HOWE	DATE	5/29/20
PREVIOUS DWG			
NEXT DWG			

DWG TITLE		
CABLE, CAT 6A, 23 AWG, 4 PR, U/UTP, PLENUM, INDOOR/OUTDOOR, BLACK		
SIZE	DWG NO.	REV
B	C113443	A
SCALE:	NONE	SHEET
		1 OF 1

MATERIAL	SEE NOTES AND TABLES
FINISH	SEE NOTES AND TABLES