

SPECIFICATIONS

1. **DESCRIPTION:**CATEGORY 5e POWER SUM CABLE , CONSISTING OF 4 PAIRS, 24 AWG, UNSHIELDED WITH A PVC JACKET. FT4 c(UL)US CMR PER UL 444.

2. **CONDUCTOR:**24 AWG SOLID BARE COPPER (.0201" NOM OD)
INSULATION: POLYOLEFIN .035" - .036" NOM OD, .0069" - .0075" AVG WALL

3. **PAIRING:** COMPONENTS ARE TWISTED INTO PAIRS WITH VARYING LEFT HAND LAYS TO MINIMIZE CROSSTALK. FOUR PAIRS ARE THEN CABLED TOGETHER USING A LEFT HAND LAY.

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. **OVERALL JACKET:** PVC LF, SEE COLOR TABLE FOR CABLE COLOR
.179" - .200" NOM OD
A RIPCORD IS PULLED IN UNDER JACKET

5. **MARKING:** THE CABLE MUST INCLUDE THE FOLLOWING PRINT
LEGEND: CATEGORY 5e --- 4PR/24 FT4 c(UL)us CMR - (UL)
VERIFIED TO CAT 5e 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 MARKINGS

ALTERNATE MARKING: -A# **** FEET CAT 5e 4001142 CMR C(ETL)US 4 PR 24 AWG 75C --- VERIFIED BY UND LAB INC ONLY TO TIA 568-C.2 CAT 5e --- ### #####
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 = 02:25PM IN MILITARY TIME, J2 = JACKETING LINE #2)

6. **AGENCY APPROVAL:** UNDERWRITERS LABORATORIES, INC. TYPE CMR COMMUNICATIONS RISER CABLE LISTED AS BEING SUITABLE FOR USE IN A VERTICAL RUN IN A SHAFT OR FROM FLOOR TO FLOOR PER UL 444. ALSO LISTED AS HAVING FIRE-RESISTANT CHARACTERISTICS CAPABLE OF PREVENTING THE CARRYING OF FIRE FROM FLOOR TO FLOOR, IN ACCORDANCE WITH ARTICLE 800 OF THE NATIONAL ELECTRICAL CODE.

7. **CATEGORY 5e WORST CASE ELECTRICAL CHARACTERISTICS*:**
CHARACTERISTIC IMPEDANCE: 100 ± 15 Ω (1 TO 100 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: 68%

* FREQUENCIES BEYOND TIA AND ISO REQUIREMENTS ARE FOR INFORMATION ONLY. DISCRETE VALUES ARE FOR INFORMATION ONLY. EQUATIONS FOR SWEEP FREQUENCIES GOVERN LIMITS. VERIFIED TO MEET CAT 5e TIA-568-C.2 PERFORMANCE REQUIREMENTS PER THE VERIFICATION REQUIREMENTS DEFINED IN SUPPLIERS UL/ETL FILE(S).

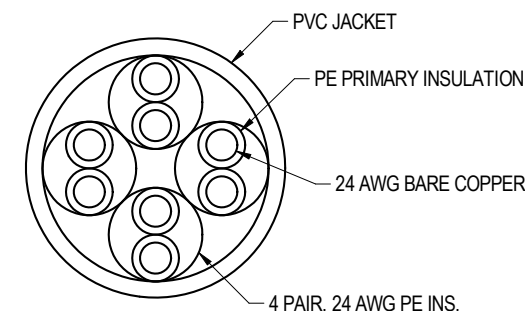
8. PRODUCT APPROVAL REQUIRES CERTIFICATION OF COMPLIANCE TO E.U. RoHS DIRECTIVE 2002/95/EC

REVISION HISTORY				
REV	SHT	DESCRIPTION	DATE	CHECKED
A	ALL	RELEASE NEW	3/10/08	JFM
B	-	CHG'D TO OCC IN PRINT LEGEND AND UPDATED SPECIFICATIONS	7/03/09	-
C	-	UPDATE OCC LEGEND AND CHANGED TO OCC P/N'S	3/26/10	DFS
D	-	UPDATED SPECIFICATIONS	7/2/10	SV

ELECTRICAL PERFORMANCE

FREQUENCY (MHz.)	INSERTION LOSS MAX (dB/100 m)	NEXT LOSS MIN (dB)		ACR MIN. (dB)		ELFEXT MIN. (dB)		RETURN LOSS MIN. (dB)	DELAY MAX (ns)
		WP	PS	WP	PS	WP	PS		
1.0	2.0	65.3	62.3	63.3	60.3	63.8	60.8	20.0	570
4.0	4.1	56.3	53.3	52.2	49.2	51.8	48.8	23.0	552
8.0	5.8	51.8	48.8	46.0	43.0	45.7	42.7	24.5	547
10.0	6.5	50.3	47.3	43.8	40.8	43.8	40.8	25.0	545
16.0	8.2	47.2	44.2	39.0	36.0	39.7	36.7	25.0	543
20.0	9.2	45.8	42.8	36.5	33.5	37.8	34.8	25.0	542
25.0	10.3	44.3	41.3	33.9	30.9	35.8	32.8	24.3	541
31.25	11.7	45.8	39.9	31.2	28.2	33.9	30.9	23.6	540
62.5	17.0	44.3	35.4	21.4	18.4	27.9	24.9	21.5	539
100.0	22.0	35.3	32.3	13.3	10.3	23.8	20.8	20.1	538
155.0	28.1	33.4	29.4	4.3	1.3	20.0	17.0	18.8	537
200.0	32.4	31.8	27.8	-	-	17.8	14.8	18.0	537
250.0	36.9	30.3	26.3	-	-	15.8	12.8	17.3	536
300.0	40.5	29.1	28.1	-	-	19.3	11.3	16.8	536
350.0	44.3	28.1	27.1	-	-	12.9	9.9	16.3	536

THIS CABLE MEETS INTERNATIONAL REQUIREMENTS FOR NON-FITTED INPUT IMPEDANCE. THIS CABLE SHALL BE COMPLIANT TO TIA-568-C.2 FOR CATEGORY 5e AND IS SWEPT TESTED THROUGH 350 MHz.



CABLE COLOR TABLE

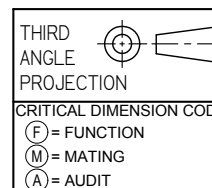
OCC-U5E4R-01	YELLOW
OCC-U5E4R-02	BLACK
OCC-U5E4R-03	RED
OCC-U5E4R-04	GREEN
OCC-U5E4R-05	BLUE
OCC-U5E4R-06	GRAY
OCC-U5E4R-07	WHITE
OCC-U5E4R-08	VIOLET
OCC-U5E4R-09	ORANGE
OCC PART NUMBER	JACKET COLOR

UNCONTROLLED COPY

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



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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 3/10/08
	APPROVED S.VADEN	DATE 5/20/11
	PREVIOUS DWG	
	NEXT DWG	FILENAME C108651D.dwg

DWG TITLE CABLE, CAT 5e, 24 AWG, 4 PR, UNSHIELDED, RISER, CMR		
SIZE B	DWG NO. C108651	REV D
SCALE: NONE	SHEET 1 OF 1	