SPECIFICATION CONTROL DRAWING

C6A-24B134XK13B

CAT6a CABLE, AWG 24

Date: 8/18/17
Issue: A

THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPEC: WCD 3301

CONSTRUCTION DETAILS

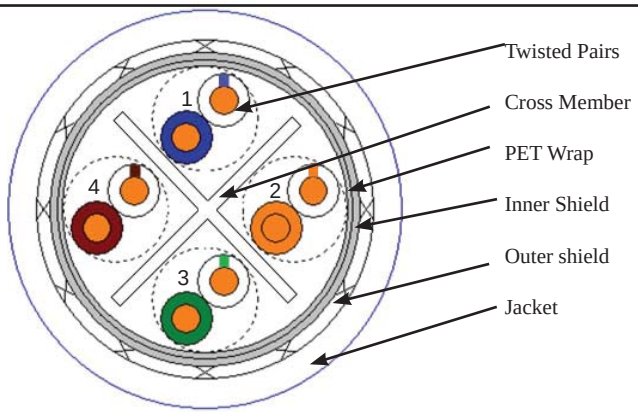

TABLE I - Color Coding

Pair #	Conductor #1	Conductor #2
1	96 (white/blue stripe)	6 (blue)
2	93 (white/orange stripe)	3 (orange)
3	95 (white/green stripe)	5 (green)
4	91 (white/brown stripe)	1 (brown)

TABLE II

Pair Component		Dimensions inches (nom)
Conductor:	AWG 24, 7/32 Tin-coated Copper	.0240
Insulation	HDPE	.0490
Cable Assembly		
Core:	4 Pairs w/crossmember	.251
PET Wrap:	PET tape .001 inch thickness	.255
Inner Shield:	AL/PET .002 inch thickness; facing out	.263
Outer Shield:	AWG 36, tin-coated copper Optimized-Coverage: 92% (min)	.284
Jacket:	Thermorad F Coyote Brown. .025 inch thickness	.334 + .017
Cable Weight:	53.93 lbs/kft	

Color code designators shall be in accordance with MIL-STD-681. An “L” after the number indicates a light color.

ELECTRICAL CHARACTERISTICS

TABLE III

Frequency MHz	Insertion Loss dB/100m (max)	Return Loss dB/100m (min)	NEXT dB/100m (min)	ACRF dB/100m (min)	PS NEXT dB/100m (min)	PSACRF dB/100m (min)	TCL dB/100m (min)	ELTCL dB/100m (min)	Propagation Delay ns/100m (max)
1	2.4	20.0	74.3	67.8	72.3	64.8	40.0	35.0	670
4	4.6	23.0	65.3	55.8	63.3	52.8	40.0	23.0	649
8	6.4	24.5	60.8	49.7	58.8	46.7	40.0	16.9	643
10	7.1	25.0	59.3	47.8	57.3	44.8	40.0	15.0	641
16	9.0	25.0	56.2	43.7	54.2	40.7	38.0	10.9	638
20	10.0	25.0	54.8	41.8	52.8	33.8	37.0	9	637
25	11.3	24..2	53.3	39.8	51.3	36.8	36.0	7	636
31.25	12.6	23.3	51.9	37.9	49.9	34.9	35.1	5.5	635
62.5	18.0	20.7	47.4	31.9	45.4	28.9	32.0	--	634
100	22.9	19.0	44.3	27.8	42.3	24.8	30.0	--	633
200	33.1	16.4	39.8	21.8	37.8	18.8	27.0	--	632
250	37.3	15.6	38.3	19.8	36.3	16.8	26.0	--	631
300	41.2	14.9	37.1	18.3	35.1	15.3	25.2	--	631
400	48.1	13.8	35.3	15.8	33.3	12.8	24.0	--	631
500	54.4	13.0	33.8	13.8	31.8	10.8	23.0	--	631

Note: Values in Table III for RL and NEXT are for reference only. Actual values shall be determined utilizing the formulas in ANSI/TIA-568-C.2.

(Electrical Characteristics continued on Page 2)

TE Connectivity Corporation
Raychem Wire & Cable
501 Oakside Avenue
Redwood City, California 94063-3800
1-800-522-6752

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order. Users should evaluate the suitability of this product for their application. TE Connectivity Corporation also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.
This specification sheet takes precedence over documents referenced herein. Referenced documents shall be of the issue in effect on date of invitation for bid.

ELECTRICAL CHARACTERISTICS (CONTINUED)

Electrical Testing:	In accordance with ANSI/TIA-568-C.2.
Impedance:	100 ohms (nominal) at 1 to 500 MHz.
Capacitance:	Mutual Capacitance: 5.6 nF/100 m (nom) at 1 kHz. Pair to ground capacitance unbalance: 330 pF/100 m (max) at 1 kHz
Optimized shield:	Maximum surface transfer impedance of 100 milli ohms/ meter at 30 Mhz
Shield AWG:	Shield AWG is nominal to allow for changes to meet the surface transfer impedance.
Velocity of Propagation:	67% (nominal)
Insertion Loss Note:	IL values IAW TIA 568-C.2 24 AWG stranded (120% of solid conductor values)
Conductor DC Resistance:	14 ohms/100m (max) (TIA 568C.2) Unbalance: 4% maximum

ADDITIONAL REQUIREMENTS & RATINGS

Voltage Withstand: 1500 volts (rms), conductor to conductor and shield.
500 volts (rms) shield to shield when applicable
Coax components to their own SCD

Specification: Spec 1200 (Electricals Only)

Jacket Wall: .015 inch minimum, .030 inch maximum.

Jacket Identification: RAYCHEM - C6A-24B134XK13B - Year of Manufacture.

Cable will be supplied in 50 ft. minimum lengths unless otherwise specified .

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