#### SPECIFICATION CONTROL DRAWING

**CHEMINAX** 

100 OHM, AWG 24, 7 STRANDS OF AWG 32, TWINAXIAL CABLE

4-5-10 Date D Revision

0024B0311

THIS SPECIFICATION SHEET FORMS A PART OF THE LATEST ISSUE OF RAYCHEM SPECIFICATION 1200

## **CONSTRUCTION DETAILS**

### **ELECTRICAL CHARACTERISTICS**

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE DESIGNATED

CONDUCTORS AWG 24, 7 Strands of

.0240

.057

.122

.139

.167

AWG 32, Tin-Coated

**DIELECTRICS** Ravfoam L

Colors - White/Tan

Aluminum Polyester

Tin-Coated Copper

Copper

WRAP

**SHIELD** 

**JACKET** 

Thermorad S

AWG 38.

CHARACTERISTIC IMPEDANCE

100 ± 15 ohms, Method D at 1 - 100 MHz

MUTUAL CAPACITANCE 13.6 pF/ft. (nominal) VELOCITY OF PROPAGATION 76% (nominal) ADDITIONAL ELECTRICAL REQUIREMENTS ON PAGE 2

### ADDITIONAL REQUIREMENTS

**ELECTRICAL** 

CONDUCTOR RESISTANCE 26.2 ohms/1000 ft. (nominal) INSULATION RESISTANCE 10,000 megohms (minimum)

for 1000 ft.

JACKET FLAWS

SPARK TEST 1.0 kV (rms) **IMPULSE TEST** 6.0 kV (peak)

VOLTAGE WITHSTAND (DIELECTRIC) 1000 volts (rms) (minimum)

**ENVIRONMENTAL** 

**FLAMMABILITY** Method C 225°C **HEAT SHOCK** 

LOW TEMPERATURE-COLD BEND -55°C/4.50 inch mandrel **VOLTAGE WITHSTAND** 1000 volts (rms),1 minute

(Post Environmental)

**PHYSICAL** 

**INSULATION (DIELECTRIC)** 

(Prior to Cabling)

**ELONGATION** 50% (minimum) TENSILE STRENGTH 1000 lbf/in2 (minimum)

**JACKET** 

**ELONGATION** 200% (minimum) TENSILE STRENGTH 2000 lbf/in2 (minimum) JACKET THICKNESS .014 inch (nominal) SHIELD COVERAGE 90% (minimum)

WRAP .0020 inch thick (nominal)

25% overlap (minimum) Aluminum facing out

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 0024B0311-9) unless otherwise

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

WEIGHT 16.2 lbs/1000 ft. (nominal)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

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TABLE I. ELECTRICAL PARAMETERS		
FREQUENCY (MHz)	INSERTION LOSS dB/100m (maximum)	RETURN LOSS dB/100m (minimum)
1.0	2.4	20.0
4.0	4.9	23.0
8.0	6.9	24.5
10.0	7.8	25.0
16.0	9.9	25.0
20.0	11.1	25.0
25.0	12.5	24.2
31.25	14.1	23.3
62.5	20.4	20.7
100.0	26.4	19.0

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