## SPECIFICATION CONTROL DRAWING

**CHEMINAX** 

040

.086

.193

243

78 OHM, AWG 20, 19 STRANDS OF AWG 32, TWINAXIAL CABLE

Date: Revision: D

7820D0831

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

## CONSTRUCTION DETAILS

## **ELECTRICAL CHARACTERISTICS**

ADDITIONAL REQUIREMENTS

DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE DESIGNATED.

CHARACTERISTIC IMPEDANCE

78 ± 7 ohms, Method C at 1 MHz

CAPACITANCE

CONDUCTOR TO CONDUCTOR

18.8 pF/ft. (nominal)

VELOCITY OF PROPAGATION

67% (nominal)

**CONDUCTORS** AWG 20

19 Strands of AWG 32,

**Tin-Coated Copper** 

**DIELECTRICS** Rayolin F Colors - White/Tan

SHIELD AWG 36,

**JACKET** 

**7**erohal

**Tin-Coated Copper** 

**ELECTRICAL** 

CONDUCTOR RESISTANCE

10.4 ohms/1000 ft. (nominal)

(prior to cabling)

INSULATION RESISTANCE

10,000 megohms (minimum)

for 1000 ft.

1.0 kV (rms)

6.0 kV (peak)

JACKET FLAWS

SPARK TEST IMPULSE TEST

1000 volts (rms) (minimum)

VOLTAGE WITHSTAND (DIELECTRIC)

**ENVIRONMENTAL** 

**FLAMMABILITY** 

Method B, 60 seconds (maximum)

Afterburn: 3 inch (maximum)

burn length

225°C

**HEAT SHOCK** 

LOW TEMPERATURE-COLD BEND

-30°C/7.00 inch mandrel

**VOLTAGE WITHSTAND** (Post Environmental)

1000 volts (rms), 1 minute

PHYSICAL

INSULATION (DIELECTRIC)

(prior to cabling)

**ELONGATION** TENSILE STRENGTH 200% (minimum)

1800 lbf/in<sup>2</sup> (minimum)

**ELONGATION** TENSILE STRENGTH 150% (minimum) 1200 lbf/in<sup>2</sup> (minimum)

JACKET THICKNESS .025 inch (nominal) SHIELD COVERAGE 90% (minimum)

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be black designated by a "-0" appended to the part number, e.g. 7820D0831-0.

Other codes and suffixes may be added to the part number, as necessary, to capture any additional requirements imposed by the purchase order.

WEIGHT

33.7 lbs/1000 ft. (nominal)

**ENGINEERING REFERENCE** 

TEMPERATURE RATING

105°C (maximum)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. Tyco Electronics Corporation 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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