SPECIFICATION CONTROL DRAWING

CHEMINAX

.0250

.048

.032

.113

.125

.142

.158

(nominal)

.162

(maximum)

±.002

77 OHM, AWG 24, 19 STRANDS OF AWG 36, EMP HARDENED. DATA BUS CABLE, MIL-STD-1553

Date:

Revision:

7724C8664

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

CONSTRUCTION DETAILS DIMENSIONS ARE NOMINAL VALUES IN INCHES. UNLESS OTHERWISE

CHARACTERISTIC IMPEDANCE

77 ± 5 ohms. Method C at 1 MHz

MUTUAL CAPACITANCE

30.0 pF/ft. (maximum)

ATTENUATION

1.4 dB/100 ft. (maximum) at 1 MHz

SURFACE TRANSFER IMPEDANCE 2 milliohms/meter (maximum)

(Per SAE AS85485)

from 10 kHz to 100 MHz

Silver-Coated High-Strength Copper Alloy **DIELECTRICS**

19 Strands of AWG 36,

Radiation-Crosslinked,

CONDUCTORS

AWG 24,

Modified ETFE Colors - Light Blue/White

FILLERS

1st SHIELD

AWG 38,

Optimized

Mu-Metal

2nd SHIELD

AWG 38.

Optimized

JACKET

Silver-Coated Copper,

Radiation-Crosslinked.

Modified ETFE

WRAP

Radiation-Crosslinked, Modified ETFE

Silver-Coated Copper,

ELECTRICAL CHARACTERISTICS

COMPONENT WIRE PRIOR TO CABLING (Test procedures per SAE AS22759)

ADDITIONAL REQUIREMENTS

CONDUCTOR RESISTANCE 26.5 ohms/1000 ft. (nominal)

CROSSLINKING PROOF TEST 300 ± 3°C for 1 hour, .625 inch mandrel,

.375 lb, 2.5 kV dielectric test

INSULATION (DIELECTRIC)

ELONGATION TENSILE STRENGTH 50% (minimum) 5000 lbf/in2 (minimum)

INSULATION FLAWS

SPARK TEST

LOW TEMPERATURE-COLD BEND

3.0 kV (rms) 8.0 kV (peak)

IMPULSE TEST INSULATION RESISTANCE

5000 megohms for 1000 ft. (minimum) -65 ± 3°C for 4 hours, .750 inch mandrel,

1.00 lb, 2.5 kV dielectric test

200 ± 3°C for 1 hour, .125 inch (maximum) in 12 inches

SHRINKAGE

FINISHED CABLE

(Test procedures per NEMA WC 27500, unless otherwise specified)

BLOCKING

CABLE LAY LENGTH CROSSLINKED VERIFICATION

FI AMMARII ITY

(Method B of Spec 1200)

200°C for 6 hours

.75 inch (minimum), 1.25 inches (maximum) 300 ± 5 °C for 6 hours, 6.00 inch mandrel

3 seconds (maximum); 3 inches (maximum);

no flaming of facial tissue

ELONGATION TENSILE STRENGTH

50% (minimum) 5000 lbf/in² (minimum)

JACKET FLAWS

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

JACKET THICKNESS

.008 inch (nominal) -55 ± 5°C for 4 hours, 6.00 inch mandrel

LOW TEMPERATURE-COLD BEND VOLTAGE WITHSTAND

1500 volts (rms)

(DIELECTRIC)

.002 inch thick (nominal).

WRAP 25% overlap (minimum)

28.6 lbs/1000 ft. (maximum)

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 7724C8664-9).

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

ENGINEERING REFERENCE

TEMPERATURE RATING 200°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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