SPECIFICATION CONTROL DRAWING

CHEMINAX

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

7724C8664 Date:

Revision:

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

CONSTRUCTION DETAILS DIMENSIONS ARE NOMINAL VALUES IN INCHES. UNLESS OTHERWISE

CONDUCTORS

DIELECTRICS

WRAP

Mu-Metal

2nd SHIELD

AWG 38.

Optimized

JACKET

Silver-Coated Copper,

Radiation-Crosslinked,

Modified ETFE

19 Strands of AWG 36,

Silver-Coated High-Strength Copper Alloy

AWG 24,

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

ADDITIONAL REQUIREMENTS

ELECTRICAL CHARACTERISTICS

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

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 3.0 kV (rms)

IMPULSE TEST 8.0 kV (peak) INSULATION RESISTANCE

5000 megohms for 1000 ft. (minimum) LOW TEMPERATURE-COLD BEND $-65 \pm 3^{\circ}$ C for 4 hours, .750 inch mandrel,

1.00 lb, 2.5 kV dielectric test

SHRINKAGE $200 \pm 3^{\circ}$ C for 1 hour,

.125 inch (maximum) in 12 inches

.75 inch (minimum), 1.25 inches (maximum)

300 ± 5°C for 6 hours, 6.00 inch mandrel

Radiation-Crosslinked, .048 Modified ETFE $\pm .002$ Colors - Light Blue/White **FILLERS** .032 Radiation-Crosslinked, Modified ETFE 1st SHIELD AWG 38, .113 Silver-Coated Copper, Optimized

.0250

.125

.142

.158

(nominal)

.162

(maximum)

FINISHED CABLE

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

BLOCKING 200°C for 6 hours

CROSSLINKED VERIFICATION

FI AMMARII ITY

CABLE LAY LENGTH

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

(Method B of Spec 1200) 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)

LOW TEMPERATURE-COLD BEND -55 ± 5°C for 4 hours, 6.00 inch mandrel

VOLTAGE WITHSTAND

1500 volts (rms)

(DIELECTRIC)

WRAP .002 inch thick (nominal). 25% overlap (minimum)

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).

28.6 lbs/1000 ft. (maximum)

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

Cheminax, Raychem, TE Connectivity, TE connectivity (logo), and TE (logo) are trademarks.

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.



Raychem Wire & Cable

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