## SPECIFICATION CONTROL DRAWING

77 OHM, AWG 24, 19 STRANDS OF AWG 36, DATA BUS CABLE, MIL-STD-1553, OPTIMIZED SHIELD, LOW FLUORIDE,

**OUTER SPACE USE** 

Date 4-11-08 В Revision

7724S1LL4

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

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE DESIGNATED

**CHEMINAX** 

**CONDUCTORS** AWG 24, 19 Strands of AWG 36, Silver-Coated 0250 High Strength Copper Alloy **DIELECTRICS** .048 Low Fluoride, ±.002 Radiation-Crosslinked, Modified ETFE .032 Color - Light Blue/White **FILLERS** Low Fluoride, Radiation-Crosslinked, Modified ETFE SHIELD 113 AWG 38, Silver-Coated Copper Optimized **JACKET** Low Fluoride, .129 Radiation-Crosslinked, Modified ETFE

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 100 milliohms/meter (maximum) (Per MIL-C-85485 at 30 MHz)

## ADDITIONAL REQUIREMENTS

FLUORIDE EXTRACTION  $70 \pm 2$ °C for 168 hours, 20 ppm

(Dielectric and fillers prior to cabling; (maximum) and Jacket - per Raychem Spec 55/)

### COMPONENT WIRE PRIOR TO CABLING (Test Procedures per SAE AS22759)

CROSSLINK PROOF 300 ± 3°C for 1 hour, .625 inch mandrel, .375 lb., 2.5 kV dielectric test

INSULATION (DIELECTRIC)

**ELONGATION** 50% (minimum) TENSILE STRENGTH 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 ± 3°C for 4 hours. .500 inch mandrel.

1.00 lb., 2.5 kV dielectric test SHRINKAGE 200 ± 3°C for 1 hour,

.125 inch (maximum) in 12 inches

#### **FINISHED CABLE**

## (Test Procedures per NEMA WC 27500, unless otherwise specified)

200°C for 6 hours **BLOCKING** 

CABLE LAY LENGTH .75 inch (minimum), 1.25 inches (maximum) **CROSSLINKED VERIFICATION** 300 ± 5°C for 6 hours, 6.00 inch mandrel **FLAMMABILITY** 3 seconds (maximum); 3 inches (maximum);

no flaming of facial tissue (Method B of Spec 1200)

JACKET

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

JACKET FLAWS

SPARK TEST 1.0 kV (rms) **IMPULSE TEST** 6.0 kV (peak) **JACKET THICKNESS** .008 inch (nominal)

LOW TEMPERATURE-COLD BEND

**VOLTAGE WITHSTAND** 

1500 volts (rms)

(DIELECTRIC)

-55 ± 5°C for 4 hours, 6.00 inch mandrel

WEIGHT 14.7 lbs/1000 ft. (nominal)

# **OUTER SPACE REQUIREMENTS**

**RADIATION RESISTANCE** 500 megarads/3.75 inch mandrel

1.0 kV dielectric test

**VACUUM STABILITY** 

TOTAL MASS LOSS (TML) 1.00% (maximum) **VOLATILE CONDENSABLE** 0.10% (maximum) MATERIAL (VCM)

(Per Raychem Spec 55/)

WEIGHT LOSS: 0.45% (maximum)

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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requirements imposed by the purchase order.

Outer jacket color will be white (designated by a "-9" appended

Designate outer jacket color with a dash number in accordance

with MIL-STD-681. Other codes and suffixes may be added to

to the part number, e.g. 7724S1LL4-9) unless otherwise

the part number, as necessary, to capture any additional

specified.