## SPECIFICATION CONTROL DRAWING

7724S0664

**CHEMINAX** 

.0230

.047

.101

.111 (nominal)

.116 (maximum)

±.002

77 OHM, AWG 24, 7 STRANDS OF .0076, DATA BUS. OPTIMIZED SINGLE SHIELD, OUTER SPACE USE

9-2-08 Date С Revision

77 ± 7 Ohms, Method C at 1 MHz

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

CHARACTERISTIC IMPEDANCE

## CONSTRUCTION DETAILS

ELECTRICAL CHARACTERISTICS

DIMENSIONS ARE NOMINAL VALUES IN INCHES UNLESS OTHERWISE

MUTUAL CAPACITANCE 30.0 pF/ft. (maximum)

**CONDUCTORS** AWG 24, 7 x .0076,

**ATTENUATION** 2.0 dB/100 ft. (nominal) at 1 MHz

Strength Copper Alloy

Silver-Coated High

SURFACE TRANSFER IMPEDANCE 250 milliohms/meter (nominal) at 10 MHz

**DIELECTRICS** Radiation-Crosslinked, Modified ETFE Color - Light Blue/White

Flat, .0015 strand thickness

Radiation-Crosslinked,

Modified ETFE

Silver-Coated Copper

SHIELD

Optimized

JACKET

ADDITIONAL REQUIREMENTS

**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) 5000 lbf/in2 (minimum) TENSILE STRENGTH

**INSULATION FLAWS** 

SPARK TEST 3.0 kV (rms) IMPULSE TEST 8.0 kV (peak)

**INSULATION RESISTANCE** LOW TEMPERATURE-COLD BEND

5000 megohms for 1000 ft. (minimum) -65 ± 3°C for 4 hours, .500 inch mandrel,

1.00 lb., 2.5 kV dielectric test

200 ± 3°C for 1 hour, **SHRINKAGE** 

.125 inch (maximum) in 12 inches

**FINISHED CABLE** (Test Procedures per NEMA WC 27500, unless otherwise specified)

**BLOCKING** 

CABLE LAY LENGTH .75 inch (minimum), 1.25 inches (maximum) CROSSLINKED VERIFICATION 300 ± 5°C for 6 hours, 3.00 inch mandrel **FLAMMABILITY** 3 seconds (maximum); 3 inch (maximum);

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

JACKET

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

JACKET FLAWS

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

JACKET THICKNESS LOW TEMPERATURE-COLD BEND

.0050 inch (nominal), .0045 inch (minimum) -55 ± 5°C for 4 hours, 3.00 inch mandrel

**VOLTAGE WITHSTAND** (DIELECTRIC)

WEIGHT

7.86 lbs/1000 ft. (nominal)

1500 volts (rms)

**OUTER SPACE REQUIREMENTS** 

RADIATION RESISTANCE 500 megarads/3.25 inch mandrel

1.0 kV dielectric test

**VACUUM STABILITY** 

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

MATERIAL (VCM)

WEIGHT LOSS: (Test per Spec 55/)

0.45% (maximum)

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g. 7724S0664-9) unless otherwise specified.

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.

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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