SPECIFICATION CONTROL DRAWING

CHEMINAX

.0400

.082

.055

.190

.216

.234

77 OHM, AWG 20, 19 STRANDS OF AWG 32, OPTIMIZED DOUBLE SHIELD, DATA BUS CABLE, MIL-STD-1553

Date: Revision:

7720C3662

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

Modified ETFE

Modified ETFE

1st SHIELD

AWG 34,

Optimized

2nd SHIELD

AWG 34,

Optimized

JACKET

19 Strands of AWG 32,

Silver-Coated Copper

Radiation-Crosslinked.

Radiation-Crosslinked,

Silver-Coated Copper,

Silver-Coated Copper,

Radiation-Crosslinked,

Modified ETFE

Colors - Light Blue/White

AWG 20.

ELECTRICAL CHARACTERISTICS

MUTUAL CAPACITANCE

CHARACTERISTIC IMPEDANCE

30.0 pF/ft. (maximum)

ATTENUATION

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

77 ± 5 ohms. Method C at 1 MHz

SURFACE TRANSFER IMPEDANCE 10 milliohms/meter (maximum) at 30 MHz

ADDITIONAL REQUIREMENTS

COMPONENT WIRE PRIOR TO CABLING

(Test procedures per SAE AS22759)

CONDUCTOR RESISTANCE

8.87 ohms/1000 ft. (nominal)

CROSSLINKING PROOF TEST

 $300 \pm 3^{\circ}$ C for 1 hour, 1.00 inch mandrel,

.625 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)

NSULATION RESISTANCE

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

LOW TEMPERATURE-COLD BEND

1.00 lb. 2.5 kV dielectric test

SHRINKAGE

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

.125 inch (maximum) in 12 inches

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

BLOCKING

200°C for 6 hours

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);

(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

.009 inch (nominal)

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

LOW TEMPERATURE-COLD BEND

1500 volts (rms)

VOLTAGE WITHSTAND

(DIELECTRIC)

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.

7720C3662-9).

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

56.1 lbs/1000 ft. (nominal)

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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