SPECIFICATION CONTROL DRAWING

CHEMINAX

CONDUCTORS

DIELECTRICS

FILLERS

1st SHIELD

AWG 38.

Optimized

2nd SHIFLD

AWG 38,

Optimized

JACKET

The conductor AWG size and outer jacket color will be appended to

the part number. Unless otherwise specified, outer jacket color will be white designated by a "-9" 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

Tin-Coated Copper,

Tin-Coated Copper,

Radiation-Crosslinked,

Modified ETFE

Modified ETFE

Modified ETFE

19 Strands of AWG 36,

Strength Copper Alloy

Radiation-Crosslinked,

Colors - Light Blue/White

Radiation-Crosslinked,

Silver-Coated High-

AWG 24,

77 OHM, AWG 24, 19 STRANDS OF AWG 36, OPTIMIZED DOUBLE SHIELDS, DATA BUS CABLE, MIL-STD-1553

2-13-18 Date: Т

10613

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

CONSTRUCTION DETAILS DIMENSIONS ARE NOMINAL VALUES IN INCHES, UNLESS OTHERWISE

.0250

(.635 mm)

.048 ± .002

 $(1.22 \pm .05 \, mm)$

.032

(.813 mm)

113

(2.87 mm)

.130

(3.30 mm)

.146 (3.71 mm)

(nominal)

.154 (3.91 mm)

(maximum)

(e.g. 10613-24-9).

purchase order.

CHARACTERISTIC IMPEDANCE MUTUAL CAPACITANCE ATTENUATION

77 ± 5 ohms, Method C at 1 MHz 30.0 pF/ft. (98.4 pF/m) (maximum) 1.4 dB/100 ft. (4.59 dB/100 m) (maximum)

Revision:

at 1 MHz

SURFACE TRANSFER IMPEDANCE 10 milliohms/meter (maximum)

(Per SAE AS85485) at 30 MHz

ADDITIONAL REQUIREMENTS

ELECTRICAL CHARACTERISTICS

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

CONDUCTOR RESISTANCE 26.5 ohms/1000 ft. (86.9 ohms/km) (nominal)

CROSSLINKING PROOF TEST 300 ± 3°C for 1 hour,

> .500 inch (12.7 mm) mandrel, .375 lb (170 g), 2.5 kV dielectric test

INSULATION (DIELECTRIC)

ELONGATION 50% (minimum)

5000 lbf/in² (34.5 N/mm²) (minimum) TENSILE STRENGTH

NSULATION FLAWS

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

INSULATION RESISTANCE 5000 megohms for 1000 ft. (1524 megohms-km) (minimum)

LOW TEMPERATURE-COLD BEND -65 \pm 3°C for 4 hours,

.750 inch (19.1 mm) mandrel, 1.00 lb (454 g), 2.5 kV dielectric test

SHRINKAGE 200 ± 3°C for 1 hour,

.125 inch (3.18 mm) (maximum)

in 12 inches (305 mm)

no flaming of facial tissue

FINISHED CABLE

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

BLOCKING 200°C for 6 hours

CABLE LAY LENGTH .75 inch (19.1 mm) (minimum), 1.25 inches (31.8 mm) (maximum)

CROSSLINKED VERIFICATION 300 ± 5°C for 6 hours, 6.00 inch (152 mm) mandrel

3 seconds (maximum): FI AMMABII ITY 3 inches (76.2 mm) (maximum); (Method B of Spec 1200)

ELONGATION 50% (minimum)

5000 lbf/in² (34.5 N/mm²) (minimum) TENSILE STRENGTH

JACKET FLAWS SPARK TEST 1.0 kV (rms)

IMPULSE TEST 6.0 kV (peak)

.008 inch (.203 mm) (nominal) JACKET THICKNESS

LOW TEMPERATURE-COLD BEND -55 ± 5 °C for 4 hours. 6.00 inch (152 mm) mandrel

1000 volts (rms) (minimum)

VOLTAGE WITHSTAND (DIELECTRIC)

WEIGHT 26.2 lbs/1000 ft. (39.0 kg/km) (maximum)

CABLE IDENTIFICATION: Outer jacket shall be marked in contrasting color at 12 inch (305 mm) (nominal) intervals between marks as follows: "10613 RAYCHEM"

ENGINEERING REFERENCE

TEMPERATURE RATING 150°C (maximum)

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. TE Connectivity also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

Page 1 of 2 (Page 2 is for internal use only)

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