SPECIFICATION CONTROL DRAWING

2021D0309



.0344

.092 (nominal)

.094

(maximum)

.080

.0344

.234

.294

(nominal)

334

(maximum)

120 OHM, 0.508 mm², 19 STRANDS OF 0.19 mm, TWINAXIAL CABLE, J1939-11 COMPLIANT

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 DESIGNATED.

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC IMPEDANCE

120 ± 12 ohms, Method D at 1 MHz

with wrap grounded

MUTUAL CAPACITANCE

10.5 pF/ft. (nominal) at 1 MHz

VELOCITY OF PROPAGATION

75% (nominal)

SURFACE TRANSFER IMPEDANCE

225 milliohms/meter (maximum)

(per SAE AS85485)

at 0.1 to 1 MHz

DIELECTRICS

Bare Copper

CONDUCTORS

0.508 mm²,

Rayfoam M

FILLERS

Polyolefin

DRAIN WIRE

0.508 mm²

Bare Copper

Aluminum-PET-

(cabled in)

Aluminum

WRAP

JACKET

Thermorad F

Colors - Yellow/Green 1/

19 Strands of 0.19 mm,

19 Strands of 0.19 mm.

ADDITIONAL REQUIREMENTS

ELECTRICAL

CONDUCTOR RESISTANCE

11.3 ohms/1000 ft. (nominal)

(prior to cabling)

INSULATION RESISTANCE

10,000 megohms (minimum) for 1000 ft.

JACKET FLAWS

SPARK TEST

1.0 kV (rms) 6.0 kV (peak)

IMPULSE TEST

1000 volts (rms) (minimum)

VOLTAGE WITHSTAND (DIELECTRIC)

ENVIRONMENTAL

FLAMMABILITY Method C 225°C **HEAT SHOCK**

LOW TEMPERATURE-COLD BEND VOLTAGE WITHSTAND

-55°C/8 00 inch mandrel 1000 volts (rms), 1 minute

(Post Environmental)

PHYSICAL

INSULATION (DIELECTRIC)

ELONGATION TENSILE STRENGTH 100% (minimum)

1000 lbf/in2 (minimum)

JACKET

ELONGATION TENSILE STRENGTH 200% (minimum) 2000 lbf/in2 (minimum)

JACKET THICKNESS

.025 inch (minimum), .030 inch (nominal),

.040 inch (maximum)

WRAP

.003 inch thick (nominal), 10% overlap (minimum)

Designate outer jacket color with a dash number in accordance with MIL-STD-681. Unless otherwise specified, outer jacket color will be black designated by a "-0" appended to the part number,

(e.g. 2021D0309-0).

(e.g. 2021D0309-42/52-0).

1/ Component Wire Stripe Option: Dielectrics striped red will be

CABLE IDENTIFICATION: Outer jacket shall be marked in contrasting color at 12 inch (nominal) intervals as follows:

for product jacketed in USA: "RAYCHEM J1939-11 0.5 mm2" for product jacketed in Mexico: "RAYCHEM J1939/11 0.5 mm2" for product jacketed in UK: "RAYCHEM J1939 11 0.5 mm2"

WEIGHT

34.3 lbs/1000 ft. (nominal)

ENGINEERING REFERENCE

TEMPERATURE RATING

125°C (maximum)

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

designated with a slash separating component wire colors,

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice. TE Connectivity also reserves the

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