

**SPECIFICATION CONTROL DRAWING**

**5019D3618**

**CHEMINAX**

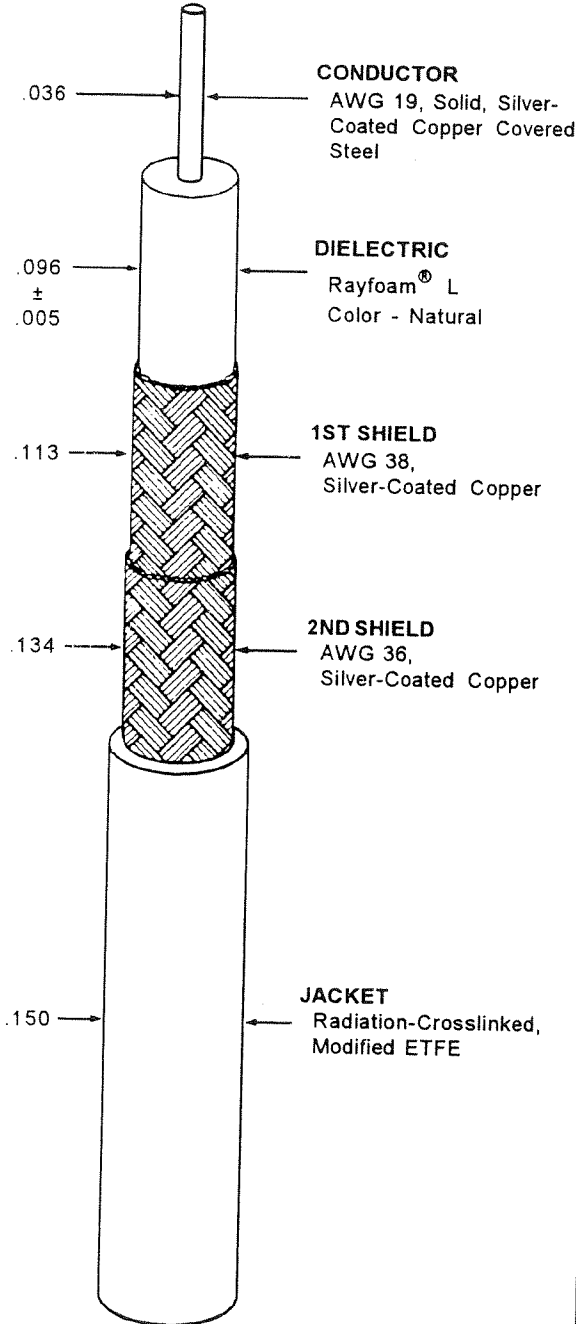
50 OHM, AWG 19, SOLID, COAXIAL CABLE

Date: 9-26-97  
Revision: D

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 | 50 ± 2 ohms, Method A                                                                                            |
| CAPACITANCE              | 26.4 pF/ft. (nominal)                                                                                            |
| VELOCITY OF PROPAGATION  | 77% (nominal)                                                                                                    |
| ATTENUATION              | 4.1 dB/100 ft. (nominal) at 100 MHz<br>9.1 dB/100 ft. (nominal) at 400 MHz<br>32.5 dB/100 ft. (nominal) at 3 GHz |

**ADDITIONAL REQUIREMENTS**

**ELECTRICAL**

|                                |                                       |
|--------------------------------|---------------------------------------|
| CONDUCTOR RESISTANCE           | 20.6 ohms/1000 ft. (nominal)          |
| INSULATION RESISTANCE          | 10,000 megohms (minimum) for 1000 ft. |
| JACKET FLAWS                   |                                       |
| SPARK TEST                     | 1.0 kV (rms), 60 Hz                   |
| IMPULSE TEST                   | 6.0 kV, (peak)                        |
| VOLTAGE WITHSTAND (DIELECTRIC) | 1000 volts (rms), (minimum)           |

**ENVIRONMENTAL**

|                                        |                               |
|----------------------------------------|-------------------------------|
| AGING STABILITY                        | 135°C/-55°C/4.25 inch mandrel |
| FLAMMABILITY                           | Method B                      |
| HEAT SHOCK                             | 225°C                         |
| LOW TEMPERATURE-COLD BEND              | -55°C/4.25 inch mandrel       |
| VOLTAGE WITHSTAND (POST ENVIRONMENTAL) | 1000 volts (rms), 1 minute    |

**PHYSICAL**

|                         |                                    |
|-------------------------|------------------------------------|
| INSULATION (DIELECTRIC) |                                    |
| ELONGATION              | 50% (minimum)                      |
| TENSILE STRENGTH        | 1000 lbf/in <sup>2</sup> (minimum) |
| JACKET                  |                                    |
| ELONGATION              | 50% (minimum)                      |
| TENSILE STRENGTH        | 5000 lbf/in <sup>2</sup> (minimum) |
| JACKET THICKNESS        | .008 inch (nominal)                |
| SHIELD COVERAGE (EACH)  | 90% (minimum)                      |

PRODUCT IDENTIFICATION: The jacket shall be marked in a contrasting color at 12 inch (nominal) intervals between marks as follows: " 5019D3618 06090 "

WEIGHT 21.3 lbs/1000 ft. (nominal)

Outer jacket color will be white (designated by a "-9" appended to the part number, e.g 5019D3618-9) unless otherwise specified.

Designate outer jacket color with a dash number in accordance with MIL-STD-681

**Raychem**

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THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN. REFERENCE DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.