SPECIFICATION CONTROL DRAWING 10602

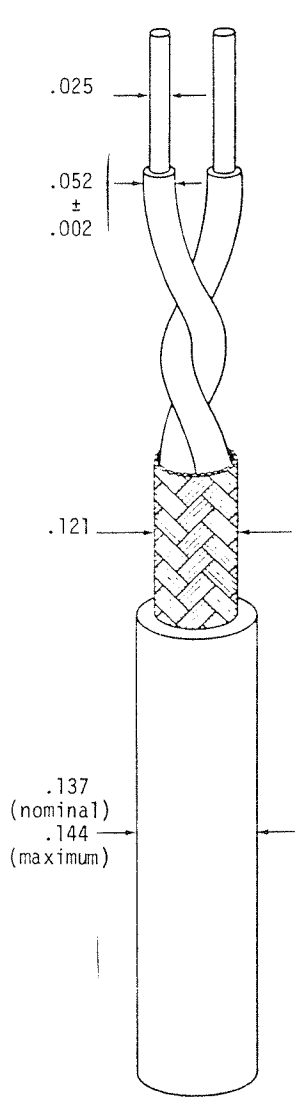
CHEMINAX RADIO FREQUENCY MULTIPLEX, DATA BUS MIL-STD-1553, 77 - OHM TWIN, AWG 24

Date: 2-11-83
Revision: C

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. METRIC UNITS SHOWN IN PARENTHESES ARE APPROXIMATE EQUIVALENTS IN MILLIMETERS AND ARE FOR INFORMATION ONLY.



CONDUCTORS
AWG 24, 19 Strands of AWG 36, Silver-Coated High Strength Copper Alloy

DIELECTRICS
Radiation-Crosslinked Modified ETFE
Light Blue/White
Permitivitty - 2.7 (nominal)

SHIELD
AWG 38, Tin-Coated Copper

JACKET
Radiation-Crosslinked Modified ETFE
White

(†) Designate outer jacket color with a dash number in accordance with MIL-STD-681.

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC IMPEDANCE	77 ± 5 ohms, Method C at 1 MHz
CAPACITANCE, MUTUAL	30 pF/ft (maximum)
ATTENUATION	1.0 db/100 ft. (nominal) at 1 MHz 1.4 db/100 ft. (maximum) at 1 MHz

ADDITIONAL REQUIREMENTS

COMPONENT WIRE PRIOR TO CABLING (Per MIL-W-22759)

ACCELERATED AGING (Per MIL-W-22759 Life Cycle Procedure)	300 ± 3°C for 7 hours, .500 in. mandrel, .375 lb 2.5 kV dielectric test
COLD BEND	-65 ± 2°C for 4 hours, .750 in. mandrel, 1.00 lb 2.5 kV dielectric test
SHRINKAGE	200 ± 3°C for 6 hours, .125 in. (maximum) in 12 in.
INSULATION RESISTANCE	5000 MΩ for 1000 ft. (minimum)
TENSILE STRENGTH	5000 psi (minimum)
ELONGATION	50% (minimum)
IMPULSE DIELECTRIC TEST	8.0 kV (peak), 100% test

FINISHED CABLE (Per MIL-C-27500)

BLOCKING	200°C for 6 hours
COLD BEND	-65 ± 2°C for 4 hours, 3 in. mandrel
THERMAL SHOCK	300 ± 5°C for 6 hours, 1.25 in. mandrel
FLAMMABILITY (Per Raychem Spec 55A, Procedure 1)	3 seconds (maximum); 3 in. (maximum); no flaming of facial tissue
WEIGHT	14.2 lbs/1000 ft. (maximum)
SHIELD COVERAGE	90% (minimum)
JACKET FLAWS	1000 volts, 60 Hz, 100% test
VOLTAGE WITHSTAND (DIELECTRIC)	1000 volts (rms)(minimum)
WALL THICKNESS	.008 inch (nominal)
TENSILE STRENGTH	5000 psi (minimum)
ELONGATION	50% (minimum)

The length of lay shall be .75 inches (minimum) to 1.25 inches (maximum).

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