SPECIFICATION CONTROL DRAWING

7724S3LL4

CHEMINAX

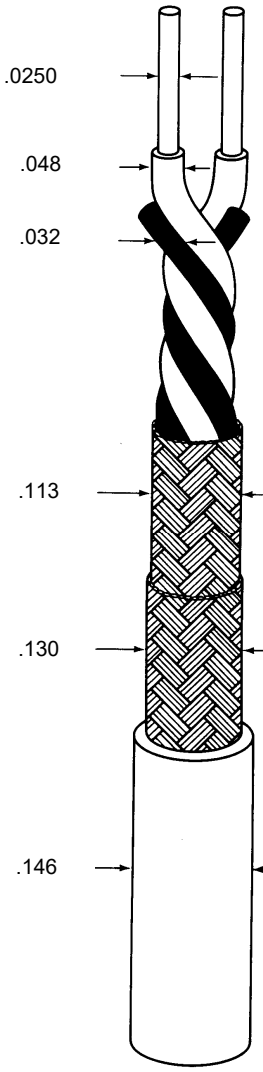
77 OHM, AWG 24, 19 STRANDS OF AWG 36, DOUBLE OPTIMIZED SHIELDS, LOW FLUORIDE, DATA BUS CABLE, MIL-STD-1553, OUTER SPACE USE

Date: 8-8-18
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.



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

DIELECTRICS
Low Fluoride,
Radiation-Crosslinked,
Modified ETFE
Colors - Light Blue/White

FILLERS
Low Fluoride,
Radiation-Crosslinked,
Modified ETFE

1st SHIELD - Optimized
AWG 38,
Silver-Coated Copper

2nd SHIELD - Optimized
AWG 38,
Silver-Coated Copper

JACKET
Low Fluoride,
Radiation-Crosslinked,
Modified ETFE

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. 7724S3LL4-9.

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

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC IMPEDANCE	77 ± 5 ohms, Method C at 1 MHz
MUTUAL CAPACITANCE	30.0 pF/ft. (maximum)
ATTENUATION	1.4 dB/100 ft. (maximum) at 1 MHz
SURFACE TRANSFER IMPEDANCE (Per SAE AS85485)	10 milliohms/meter (maximum) at 30 MHz

ADDITIONAL REQUIREMENTS

FLUORIDE EXTRACTION (Dielectrics and Fillers prior to cabling, and Jacket per Raychem Spec 55/)	70 ± 2°C for 168 hours, 20 ppm (maximum)

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

CONDUCTOR RESISTANCE	26.5 ohms/1000 ft. (nominal)
CROSSLINKING PROOF TEST	300 ± 3°C for 1 hour, .500 inch mandrel, .375 lb, 2.5 kV dielectric test
INSULATION (DIELECTRIC)	
ELONGATION	50% (minimum)
TENSILE STRENGTH	5000 lbf/in^2 (minimum)
INSULATION FLAWS	
SPARK TEST	3.0 kV (rms)
IMPULSE TEST	8.0 kV (peak)
INSULATION RESISTANCE	5000 megohms for 1000 ft. (minimum)
LOW TEMPERATURE-COLD BEND	-65 ± 3°C for 4 hours, .750 inch mandrel, 1.00 lb, 2.5 kV dielectric test
SHRINKAGE	200 ± 3°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 (Method B of Spec 1200)	3 seconds (maximum), 3 inches (maximum); no flaming of facial tissue
JACKET	
ELONGATION	50% (minimum)
TENSILE STRENGTH	5000 lbf/in^2 (minimum)
JACKET FLAWS	
SPARK TEST	1.0 kV (rms)
IMPULSE TEST	6.0 kV (peak)
JACKET THICKNESS	.008 inch (nominal)
LOW TEMPERATURE-COLD BEND	-55 ± 5°C for 4 hours, 6.00 inch mandrel
VOLTAGE WITHSTAND (DIELECTRIC)	1000 volts (rms) (minimum)
WEIGHT	21.7 lbs/1000 ft. (nominal)

OUTER SPACE REQUIREMENTS

RADIATION RESISTANCE	500 megarads/4.25 inch mandrel
VACUUM STABILITY	
TOTAL MASS LOSS (TML)	1.00% (maximum)
VOLATILE CONDENSABLE MATERIAL (VCM)	0.10% (maximum)
WEIGHT LOSS	0.45% (maximum)

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. 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.

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