



Gore-Flight[®] Microwave Assemblies

QUALIFIED PERFORMANCE

Provided is a summary of qualification testing for GORE-FLIGHT[®] Microwave Assemblies versus applicable mil standards. When test results of GORE-FLIGHT[®] Microwave Assemblies exceed the standard, this has also been specified. The test levels should not

be considered the limit of the cable performance, only the limit of testing undertaken. Further specific testing can be conducted depending on a customer's requirements.

Examination or Test	Applicable Standards	Status
Design and construction	MIL-T-81490 paragraph 4.7.1	Compliant
Marking	MIL-T-81490 paragraph 4.7.1	Compliant
Workmanship	MIL-T-81490 paragraph 4.7.2	Compliant
RF insertion loss	MIL-T-81490 paragraph 4.7.3	Compliant
Voltage standing wave ratio	MIL-T-81490 paragraph 4.7.4	Compliant
Impedance	MIL-T-81490 paragraph 4.7.5	Compliant
Vapor leakage	MIL-STD-202F, notice 9, method 112E paragraph 5, condition C, procedure IV	Compliant
Velocity of propagation	MIL-T-81490 paragraph 4.7.7	Compliant
RF leakage	MIL-STD-1344, method 30008	Compliant
Thermal shock	MIL-STD-810D, method 503.2	Compliant
Power handling capability	MIL-T-81490 paragraph 4.7.13	Compliant
Flexure	MIL-T-81490 paragraph 4.7.15	Compliant
Torque	MIL-T-81490 paragraph 4.7.16, torque requirement of 50 in/lbs replaced by $\pm 90^\circ$ angular displacement	Compliant
Tensile load	MIL-T-81490 paragraph 4.7.17	Compliant
Concentrated load	MIL-T-81490 paragraph 4.7.18, 100 \pm 2 lbs force	Compliant. Achieved \geq 400lbs
Abrasion	MIL-T-81490 paragraph 4.7.19	Compliant
Sand and dust	MIL-STD-810D, method 510.2, procedure I	Compliant
High potential withstanding voltage	MIL-STD-202, method 301	Compliant
Explosive atmosphere	MIL-STD-810, method 511	Compliant
Temperature / humidity / altitude / vibration	MIL-STD-810D, method 520.0, procedure III with vibration as per MIL-STD-810D, method 514.3, procedure I	Compliant
Humidity	MIL-STD-810, method 507	Compliant
Vibration	MIL-STD-810D, method 514.3, procedure I	Compliant
Gunfire vibration	MIL-STD-810D, method 519.3 procedure I, test spectra fig. 519.3-1	Compliant
Salt fog	MIL-STD-810D, method 509, exposure \geq 96 hours	Compliant. Achieved \geq 500 hours



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Chemical resistance	BS3G100, part 2, section 3, subsection 3.12, for class A Fluids tested: 1. Avtag F.40 (JP-4) 2. Avtur F.34 (JP-8) 3. Hydraulic fluid OM 15 4. Cabin seal compound 5. Engine & gearbox oil 156.000 6. De-icing fluid S737 7. De-icing fluid (windscreen) 8. De-icing fluid (aircraft) S1746 9. De-icing fluid (runway) 10. Sea water 11. Heat transfer liquid 12. Engine corrosion inhibiting fluid OM 13 13. Aircraft washing agent(s) 14. Corrosion preventive compound 15. Aircraft cleaning compound	Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant Compliant
Icing freezing rain	MIL-STD-810D, method 521.0	Compliant
Fungus resistance	MIL-STD-810D, method 508.3	Compliant
Acoustic noise	MIL-STD-810D, method 515.3, procedure II	Compliant
Mechanical shock	MIL-STD-810D, method 516.3, procedures I, V & VI	Compliant
Drip	MIL-STD-810D, method 506.2, procedure II	Compliant
Rain	MIL-STD-810D, method 506.2 procedure I	Compliant
Fire resistance	MIL-STD-202F, method 111 and MIL-C-17F, paragraphs 3.7.22 and 4.8.23	Compliant
Corona extinction voltage	MIL-C-17, paragraphs 3.7.5 and 4.8.6	Compliant
Endurance	MIL-C-39012, paragraphs 3.15 and 4.6.12	Compliant
Acceleration	MIL-STD-810D, method 513.3 procedures I and II	Compliant
Flammability	FAR25.853 (a) appendix F part 1 (b)(7)	Compliant
Toxicity	FAR25.853 (a) appendix F part 1 (b)(7)	Compliant
Smoke	FAR25.853 (a) appendix F part 1 (b)(7)	Compliant

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