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Vibration Summary

Cage Code	SIZE	Version			
OUC32	A	#	Description	Date	Approved
Document No.		1.2	Add to Docuware	09/14/22	JCG
051-07130		1.1	Added more part numbers	9/14/22	MZ
Test Summary		1.0	Changed format and to Docuware versioning	10/22/20	MG

1. Purpose and Scope

This test is conducted for the purpose of determining the ability of component parts to withstand the dynamic stress exerted by random vibration applied between upper and lower frequency limits to simulate the vibration experienced in various service field environments. Random vibration is characteristic of modern field environments produced by missiles, high-thrust jets, and rocket engines. In these types of environments, the random vibration provides a more realistic test.

2. Reference

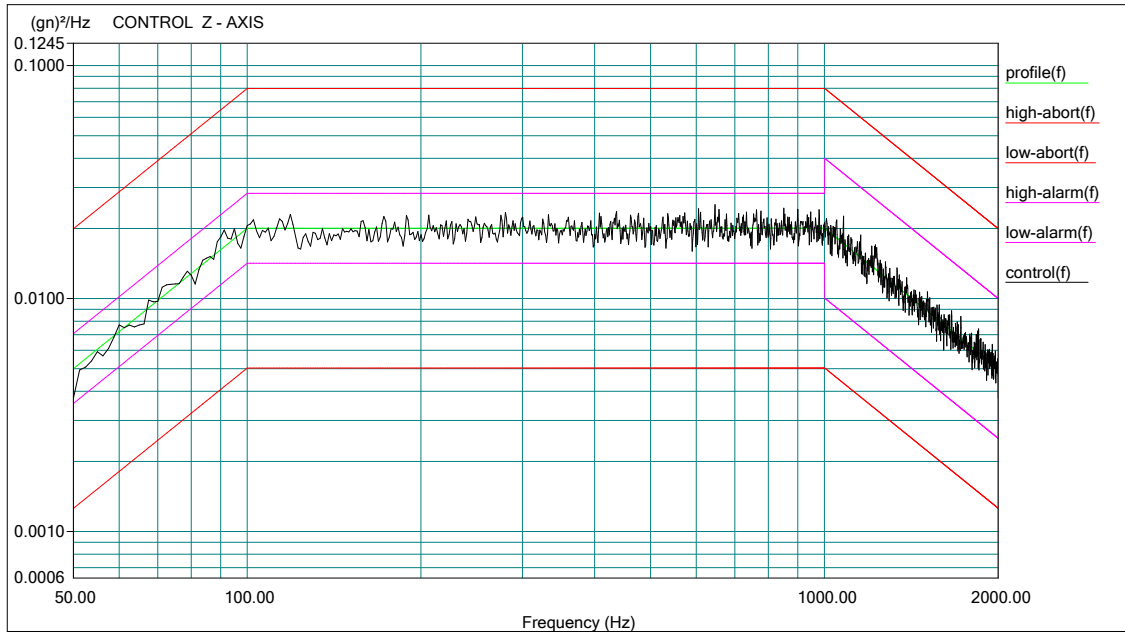
MIL-STD-883, Method 2026

Test Method Standard Microcircuits

3. Test Results

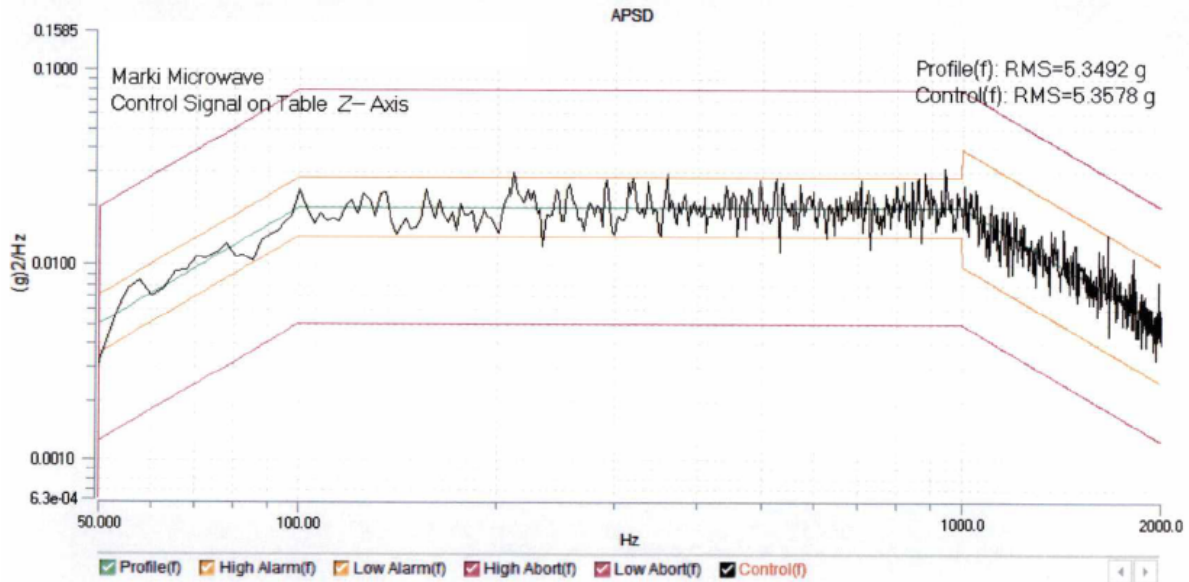
Part Type	Description	Sample Size	Date	Results
BAL-0006SMG	High Power Balun 500 kHz - 6 GHz	9	4/22/21	Pass
BALH-0006SMG	High Power Balun 500 kHz - 6 GHz	7	4/22/21	Pass
BAL-0020SLG	Broadband Balun 10 MHz - 20 GHz	8	10/20/20	Pass
EVAL-AMM6702SM	MMIC Broadband Amplifier	11	3/9/20	Pass
DPXX0246-1	Custom Diplexer	6	7/29/19	Pass
DPXX0246-2	Custom Diplexer	6	7/29/19	Pass
MT3-0113HS	MMIC T3 Mixer RF 1.5 – 13GHz	3	5/10/19	Pass
ML1-0220IS	Microolithic Mixer RF 2 – 20GHz	3	5/10/19	Pass
T3A Mixer	T3 Mixer with integrated amp	29	09/17/16	Pass
T3A Mixer	T3 Mixer with integrated amp	63	01/11/17	Pass
T3A Mixer	T3 Mixer with integrated amp	73	05/26/17	Pass
T3A Mixer	T3 Mixer with integrated amp	81	10/25/17	Pass
T3A Mixer	T3 Mixer with integrated amp	21	05/11/18	Pass

The T3A Mixer is one of the most complicated devices built at Marki Microwave. By using this device as our qualification vehicle, it effectively qualifies all of the materials and processes used in all of our various products. This T3 Mixer with integrated amp technology utilizes wire bonding, epoxy die attach, PCB soldering and hermetic seal. The T3 Mixer with integrated amp contains 63/37 solder, Ferrite Cores, Bi-filar wires, 100 mil Conical coils, chip capacitors, Integrated chip Amplifier, 0402 capacitors and resistors, Kovar standoff and T3 Mixer diodes. By similarity any product using the same assembly techniques and materials can use these results for qualification.



Level: 100 %
 Control RMS: 5.374419 gn Full Level Elapsed Time: 00:10:00 Lines: 1600 Frame Time: 0.800000 Seconds
 Demand RMS: 5.347739 gn Remaining Time: 00:00:00 DOF: 120 dF: 1.250000 Hz

Test Name: 50-2000Hz 5.3Grms Object name: Object Type:
 Test Type: Random Test Project Name: MIL-SD-883H.ucn



Current Level: 100.00 % Demand RMS: 5.349 g Control RMS: 5.358 g
 Frame Time: 0.4000 (s) Lines: 800 dF: 2.5 Hz
 DOF: 120 Current Level Time: 00:15:00 Remaining Time: 00:00:00
 Data was saved as a file at time: 2018-5-11 AM 10:22:16
 Data saved at 09:19:33 AM, Wednesday, January 11, 2017
 Report created at 09:19:36 AM, Wednesday, January 11, 2017