

MIL-STD-202 Random Vibration Testing

Test Method Standard - Electronic and Electrical Component Parts

MIL-STD-202 Testing is used by the Department of Defense (DoD) for military applications. Component parts refers to items such as capacitors, resistors, switches, relays, transformers, inductors, etc., with a weight less than 300 pounds.

The standard has three sections:

- Environmental Tests (100 class)
- Physical Characteristics Tests (200 class)
- Electrical Characteristics Tests (300 class)

Source: MIL-STD-202G (JUN 2013) | Test Standard is available [here](#).

At RF-Lambda, we are accredited to perform Method 214A, 213B, 204D, and 201A.

Method 214A

Test Method 214A is performed on component parts to determine their ability to withstand the dynamic stress of random vibration applied between upper and lower frequency limits to simulate their service field environments. Some of these dynamic stresses can be quite high, especially for applications such as missiles, high-thrust jets, and rocket engines.

The Test Method describes two (2) test profiles, or PSD curves, which can be performed for 3 minutes, 15 minutes, 1.5 hours, or 8 hours per axis for all three axes.

Test Condition Letter C is used and the duration is 1.5 hours per axis.

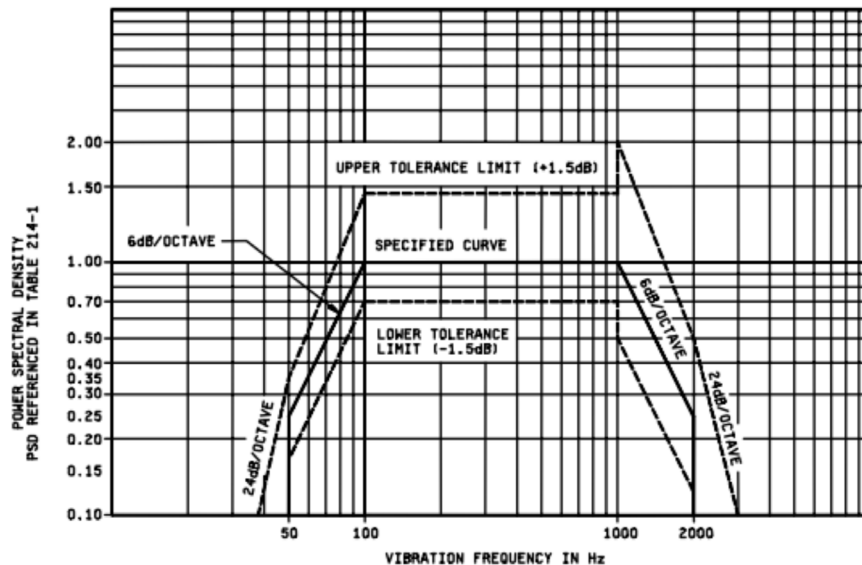


TABLE 214-I. Values for test-condition I. 1/

Characteristics		
Test condition letter	Power spectral density	Overall rms G
A	.02	5.35
B	.04	7.56
C	.06	9.26
D	.1	11.95
E	.2	16.91
F	.3	20.71
G	.4	23.91
H	.6	29.28
J	1.0	37.80
K	1.5	46.30

1/ For duration of test, see 4.