RF Exposure Requirements

Product Description: MINI BLUETOOTH AMPLIFIER PEDAL FOR GUITAR

Model No.: JAM BUDDY FCC ID: 2AIN7JAMBUDDY

According to the KDB 447498 D01 v06 section 4.3.1, for 100 MHz to 6 GHz and test separation distances \leq 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation17
- The result is rounded to one decimal place for comparison

For GFSK

Channel	Frequency MHz	Measured Value dBm	Output Power mW	Limit mW
Low Channel	2402	6.27	4.24	1000
Middle Channel	2441	6.15	4.12	1000
High Channel	2480	6.03	4.01	1000

For Pi/4 QDPSK

Channel	Frequency MHz	Measured Value dBm	Output Power mW	Limit mW
Low Channel	2402	5.25	3.35	125
Middle Channel	2441	5.09	3.23	125
High Channel	2480	5.27	3.37	125

For 8DPSK

Channel	Frequency	Measured Value	Output Power	Limit
	MHz	dBm	\mathbf{mW}	mW
Low Channel	2402	4.32	2.70	125
Middle Channel	2441	4.20	2.63	125
High Channel	2480	4.12	2.58	125

For BLE

Channel	Frequency MHz	Measured Value dBm	Output Power mW	Limit mW
Low Channel	2402	-1.86	0.65	1000
Middle Channel	2442	-2.57	0.55	1000
High Channel	2480	-3.19	0.48	1000

Bluetooth:

Tx frequency range: 2402~2480MHz

Device category: Portable device (Distance: 5mm) Maximum Conducted Output Power: 6.27dBm

Tune-Up output power: 7.0dBm

RF channel transmit frequency: 2402MHz

Result: 1.55 Limit: 3.0

So the transmitter complies with the RF exposure requirements and the SAR is not required.