RF Exposure Requirements

Product Description: Bluetooth module

Model No.: BS003B

FCC ID: 2A5RA-BS003B

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 calculation
- The result is rounded to one decimal place for comparison

Calculation Result:

Tx frequency range: 2402-2480MHz Min. test separation distance: 5mm

Maximum Conducted Output Power: 5.20dBm

Tune-Up output power: 5.5dBm

RF channel transmit frequency: 2402MHz

Result: 1.1 Limit: 3.0

The exclusion thresholds is 1.1 < 3, so the transmitter complies with the RF exposure requirements and the SAR is not required.