

MPE Calculation

KDB 447498 - 4.3.1 b)

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following (also illustrated in Appendix B):

- 1) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·(f(MHz)/150)]} mW,
for 100 MHz to 1500 MHz
- 2) {[Power allowed at numeric threshold for 50 mm in step a)] + [(test separation distance – 50 mm)·10]} mW,
for > 1500 MHz and ≤ 6 GHz

KDB 447498 - Appendix B

Frequency (MHz)	Distance (mm)
	50
1900	109
2450	96
3600	79

Model Name : **SHARK BT**

FCC ID : **S7A-SP167**

Separation distance : **50.6 mm**

Modulation	Frequency (MHz)	Min. Test separation distance	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance		SAR Test exclusion thresholds for 100MHz to 6GHz at test separation distance ≥ 50 mm	Limit	Result
		(mm)	(dBm)	(dB)	(dBm)	(mW)			
GFSK	2402	50.00	15.79	± 1.00	16.79	47.75	1.4802	97.13	PASS
	2442		14.30		15.30	33.88	1.0590	96.19	PASS
	2480		14.16		15.16	32.81	1.0334	95.56	PASS
π/4DQPSK	2402	50.00	6.71	± 1.00	7.71	5.90	0.1829	97.13	PASS
	2442		6.59		7.59	5.74	0.1794	96.19	PASS
	2480		6.27		7.27	5.33	0.1680	95.56	PASS
8DPSK	2402	50.00	7.29	± 1.00	8.29	6.75	0.2091	97.13	PASS
	2442		7.10		8.10	6.46	0.2018	96.19	PASS
	2480		6.82		7.82	6.05	0.1907	95.56	PASS
BT LE	2402	50.00	2.86	± 1.00	3.86	2.43	0.0754	97.13	PASS
	2442		2.63		3.63	2.31	0.0721	96.19	PASS
	2480		2.48		3.48	2.23	0.0702	95.56	PASS