

BLE Antenna Specifications

Doc Ver : Rev.1

Date : 2023-04-28

Made by H/W R&D Team, R&D Division, BG T&A Co.

*Function : Antenna for Bluetooth communication

*Antenna Structure : PIFA (MIFA)

*Applied Model Name : RAD700i

*PCB : FR-4, KB6160, D/S, 1.0T, 1/2oz (REV.C)

*Frequency Range : 2,400 ~ 2,483MHz

*Impedance : 50ohm nominal

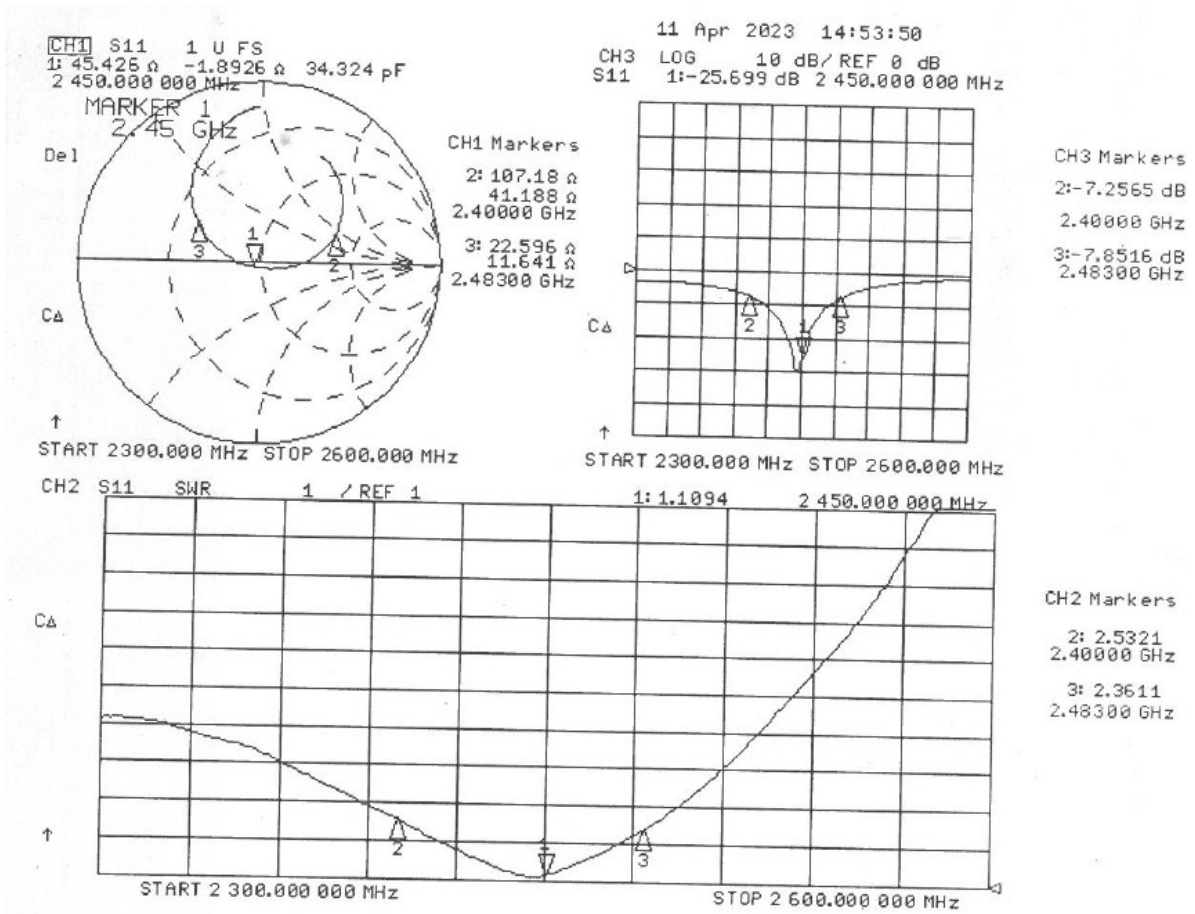
*VSWR : Less than 1:2.6 (1:1.1 @2,450MHz) → Attached #1

*Peak(Max) Gain : -4dBi → Attached #2

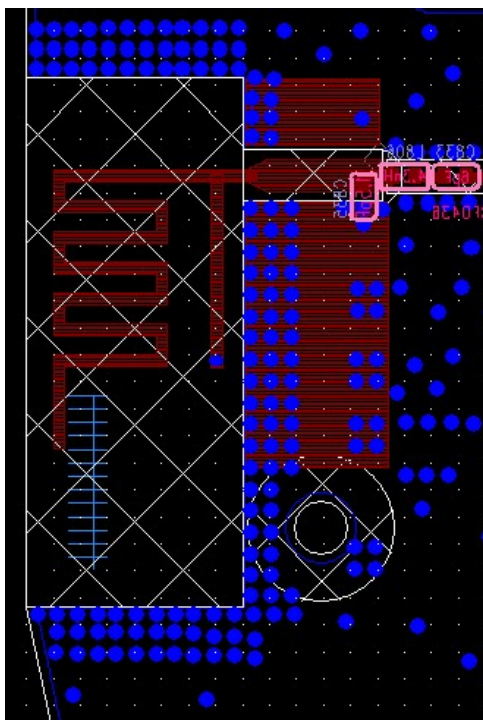
*Radiation Pattern : Omni-directional

*Polarization : Linear

Attached #1 : VSWR

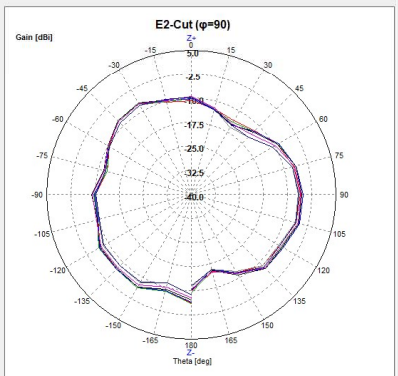
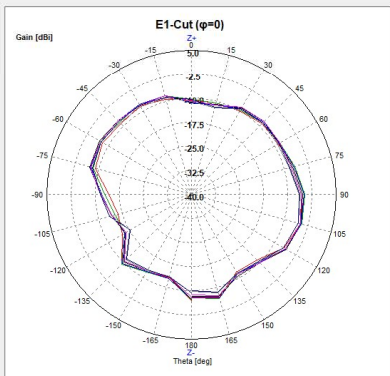
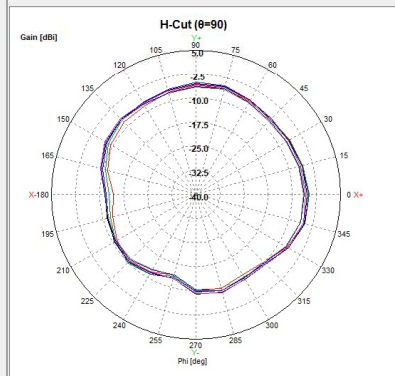


Passive Matching Values : Series 6pF – Series 4.3nH – Shunt 1.5pF – Antenna



Attached #2 : Gain & Radiation Pattern

No.	Freq.	PwrSum	Eff[%]	Avg[dB]	Peak[dB]	θ[deg]	φ[deg]	H(θ=90)	Peak[dB]	φ[deg]	BW[deg]	F1(φ=0)	Peak[dB]	θ[deg]	BW[deg]	F2(φ=90)	Peak[dB]	θ[deg]	BW[deg]
1	2.412	12.75	-8.94	-4.56	105.00	15.00	-8.24	-4.89	345.00	999.00	-8.87	-4.87	105.00	56.63	-8.75	-6.15	105.00	76.21	
2	2.424	13.96	-8.55	-4.24	105.00	15.00	-7.75	-4.79	345.00	999.00	-8.47	-4.52	105.00	58.27	-8.46	-5.49	105.00	76.62	
3	2.436	14.24	-8.47	-4.58	105.00	0.00	-7.63	-4.80	345.00	999.00	-8.47	-4.58	105.00	56.73	-8.40	-5.12	90.00	74.66	
4	2.448	14.12	-8.50	-4.82	105.00	0.00	-7.65	-5.02	345.00	999.00	-8.51	-4.62	105.00	58.38	-8.46	-5.30	105.00	74.95	
5	2.460	13.36	-8.74	-4.90	105.00	0.00	-7.86	-5.41	345.00	999.00	-8.68	-4.90	105.00	54.93	-8.82	-5.66	105.00	73.13	
6	2.472	11.52	-9.38	-5.68	105.00	0.00	-8.48	-6.29	345.00	999.00	-9.30	-5.88	105.00	58.77	-9.57	-6.38	105.00	71.42	
7	2.484	11.70	-9.32	-5.62	105.00	0.00	-8.33	-6.11	75.00	999.00	-9.19	-5.82	105.00	66.64	-9.51	-6.31	105.00	72.78	



.The End.