

# Antenna Datasheet

# Remote on/off - Antenna Approval sheet

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- PCB Overview & Matching Value
- VSWR & Smith Chart / 3D Gain data
- 2D Radiation Pattern & Gain
- 3D Radiation pattern

By designed	By checked	By approved
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# Specification

## 1. Features and Application :

This product is for BT band ( 2402 ~ 2480 MHz )

# Measurement Process

## SWR / Return Loss

Use Network Analyzer when measuring SWR/Return loss and selecting standard SPL.

### **E5071B Agilent Network Analyzer**

Additional Features:

300 kHz to 8.5 GHz

125 dB dynamic range at test port (typical)

9.6 us/point sweep speed

0.001 dB RMS trace noise

Integrated 2-, 3- and 4-ports with balanced measurements

Fixture embedding/de-embedding and port characteristic impedance conversion

Frequency-offset mode for frequency translated devices.

Built-in Visual Basic for Applications (VBA)

Measurement Wizard Assistant (MWA) software

# Measurement Process

## Gain

Antenna gain is measured in the Anechoic Chamber



- o Size: 5.5(L) m × 5.5(W) m × 5.0(H) m
- o Frequency range: 700 MHz to 8.0 GHz (Far Field)



# Electrical Characteristics

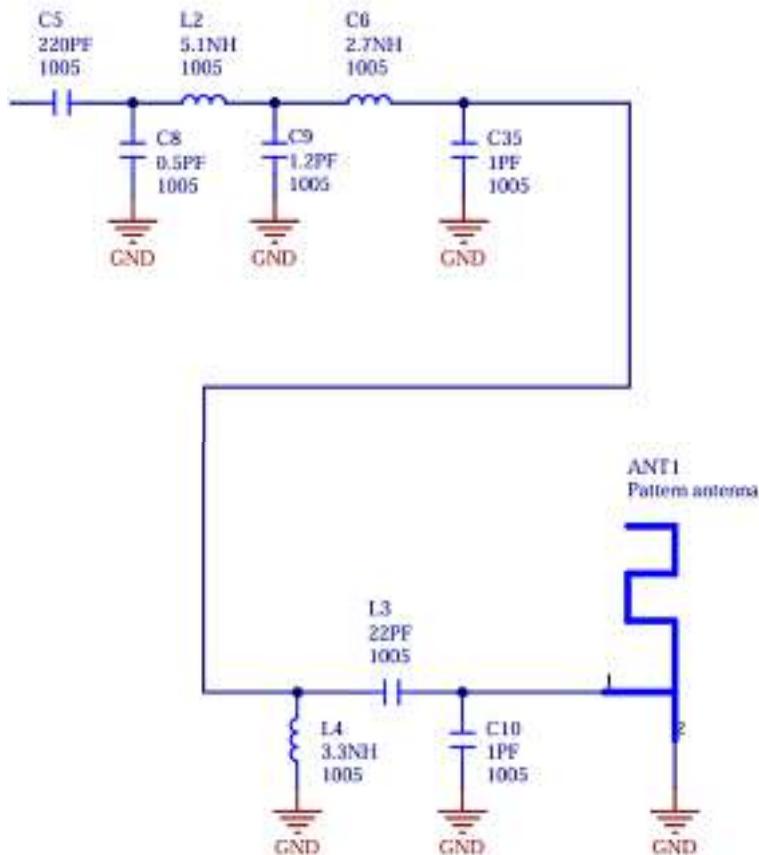
This specification covers the dielectric pattern antenna **Remote on/off** used in Bluetooth

Manufacturer : Remote Solution

Name : RS ANT1

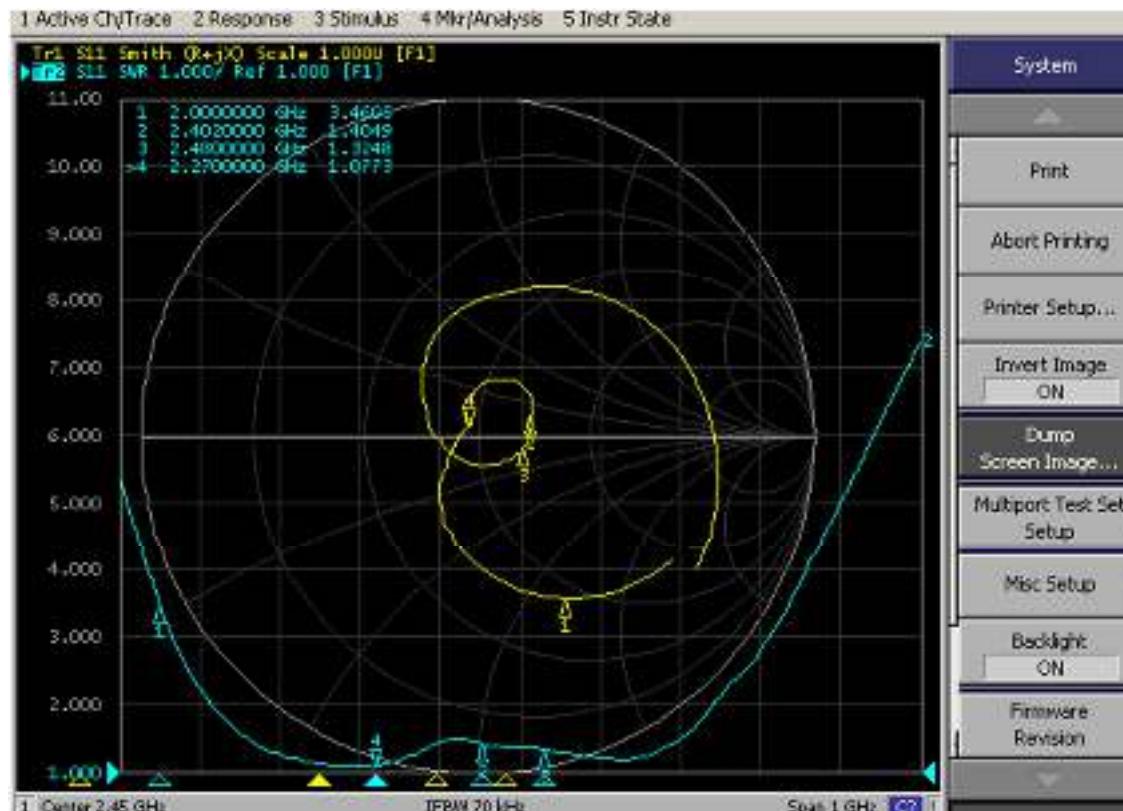
ITEM		SPECIFICATION				
Frequency Range		2402 ~ 2480 MHz				
VSWR		2.5:1 Max				
Polarization		Linear				
Frequency [MHz]		2410	2430	2450	2470	2480
Gain [dBi]	Peak	5.35	5.28	5.21	5.23	4.73
	Average	-0.9	-1.07	-1.23	-1.13	-1.4
Efficiency [%]		81.24	78.15	75.37	77.02	72.41

# PCB Overview & Matching Value



Manufacturer : Remote Solution  
Name : RS ANT1

# VSWR & Smith Chart / 3D Gain data



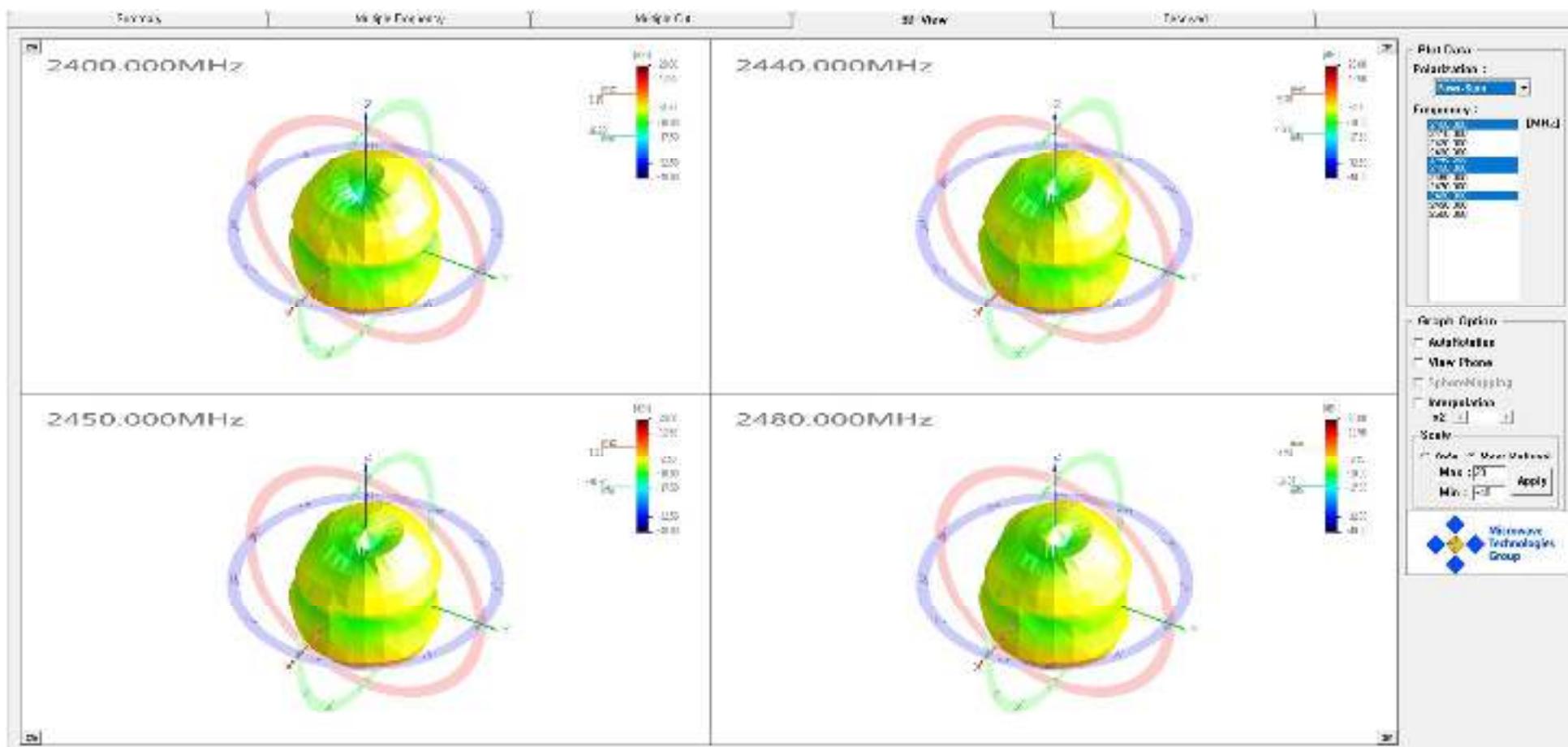
[ RS ANT1 ]

## 2D Radiation Pattern & Gain ( RS ANT1)

3D Result Summary :

No	Freq.[MHz]	Theta-Pt				Phi-Pol(\				PwrSum							
		Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de]	Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de]	Eff.[%]	Avg.[dBi]	Peak[dBi]	Theta	Phi[de]	
1	2400.000	67.52	-1.71	5.06	135.00	240.00	10.48	-9.80	2.27	180.00	90.00	78.01	-1.08	5.15	150.00	240.00	
2	2410.000	70.02	-1.55	5.26	135.00	240.00	11.22	-9.50	2.49	180.00	90.00	81.24	-0.90	5.35	150.00	240.00	
3	2420.000	67.05	-1.74	5.16	135.00	240.00	11.04	-9.57	2.29	180.00	90.00	78.09	-1.07	5.21	135.00	240.00	
4	2430.000	66.89	-1.75	5.23	135.00	240.00	11.27	-9.48	2.32	180.00	90.00	78.15	-1.07	5.28	135.00	240.00	
5	2440.000	65.68	-1.83	5.25	135.00	240.00	11.38	-9.44	2.20	180.00	90.00	77.07	-1.13	5.30	135.00	240.00	
6	2450.000	63.78	-1.95	5.15	135.00	240.00	11.59	-9.36	2.15	180.00	90.00	75.37	-1.23	5.21	135.00	240.00	
7	2460.000	64.64	-1.89	5.17	135.00	240.00	12.42	-9.06	2.14	180.00	90.00	77.06	-1.13	5.23	135.00	240.00	
8	2470.000	64.18	-1.93	5.05	135.00	240.00	12.84	-8.92	2.00	180.00	75.00	77.02	-1.13	5.11	135.00	240.00	
9	2480.000	60.00	-2.22	4.66	135.00	240.00	12.41	-9.06	1.59	180.00	75.00	72.41	-1.40	4.73	135.00	240.00	
10	2490.000	61.17	-2.13	4.72	135.00	240.00	13.15	-8.81	1.74	180.00	75.00	74.32	-1.29	4.81	135.00	240.00	
11	2500.000	55.78	-2.54	4.34	135.00	240.00	12.20	-9.14	1.47	180.00	75.00	67.98	-1.68	4.46	135.00	240.00	

## 3D Radiation pattern ( RS ANT1 )



# Thank you