



Document	Datasheet
Type	PCB Trace Antenna
Application	2.4GHz
Model	DM-N3000D

DATASHEET

Aug , 2014

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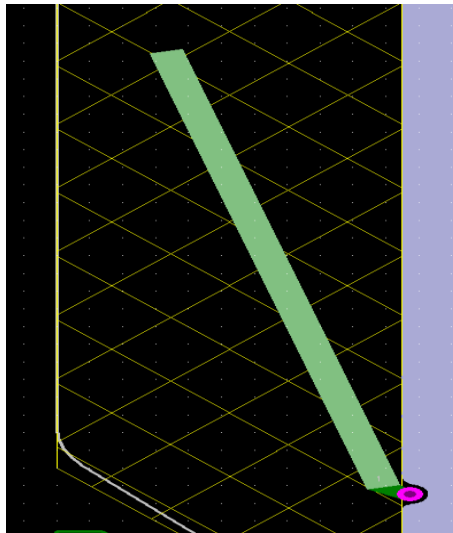
1. Applications

Bluetooth
ZigBee
ISM 2.4GHz Wireless Devices

2. Features

Monopole type PCB trace antenna

Size (22.0 x 1.2mm)



3. Specifications

3.1 Electrical Specifications

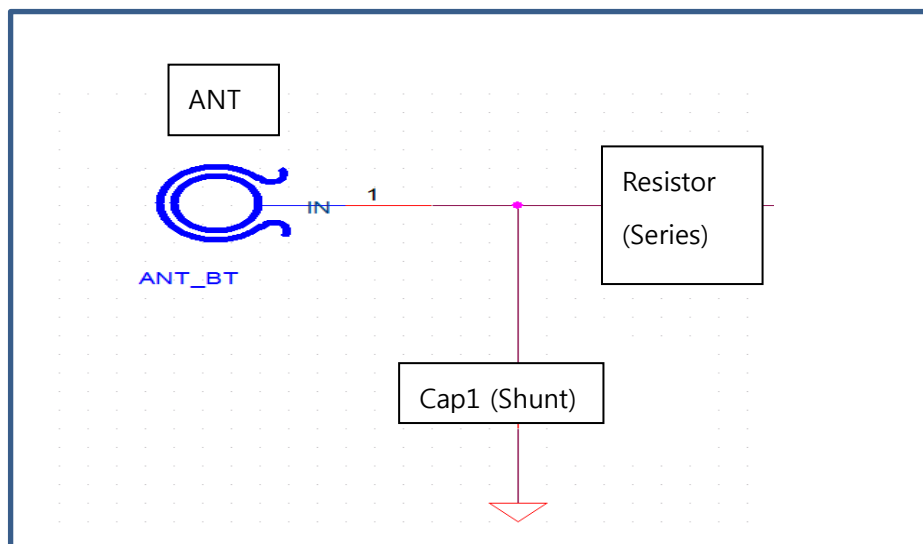
No	Item	Spec	Remark
1	Frequency Range[GHz]	2.4~2.485	
2	Peak Gain [dBi]	Typ 5.41	2.440 [GHz]
3	Total Avg. Gain [dBi]	Typ -2.48	2.440 [GHz]
4	Impedance [Ω]	Nominal 50	

3.2 Mechanical Specification

No	Item	Spec	Remark
1	Dimensions (L x W)	22.0 x 1.2 mm	
2	Operating temperature	- 40 ~ +85 °C	

4. Matching Component

4.1 Ant Circuit.



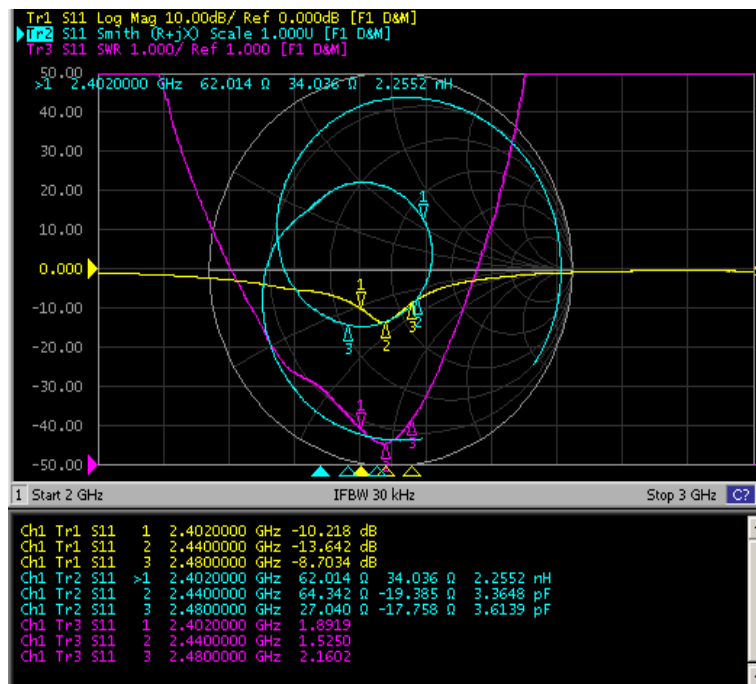
4.2 Matching value

Resistor (Series)	0 ohm
Cap1 (Shunt)	1.8PF

5. Measurement Result

5.1 Typical Measurement Result (Smith Chart & Return Loss)

- Smith Chart : Blue line, Return Loss : Yellow line

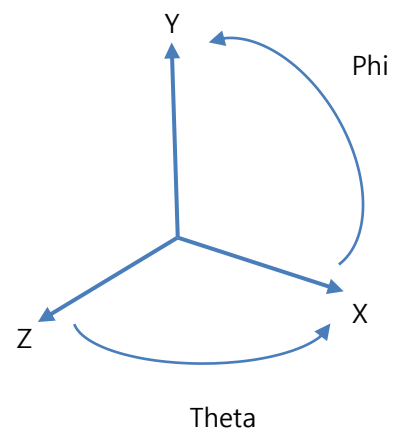
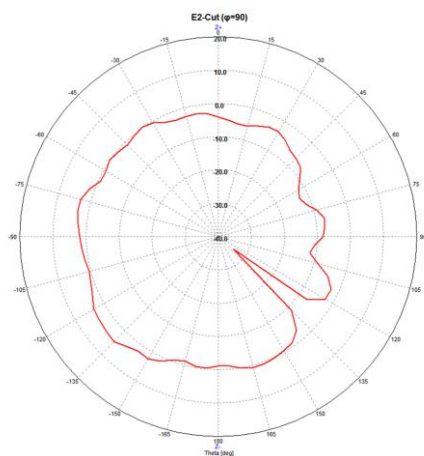
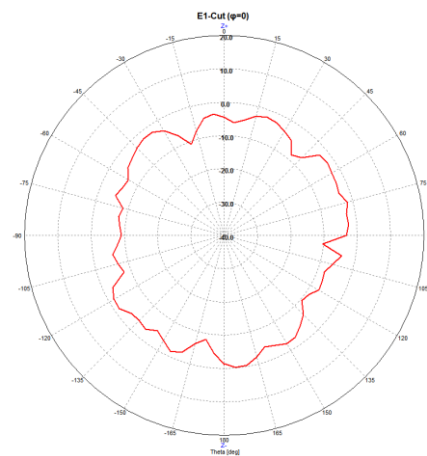
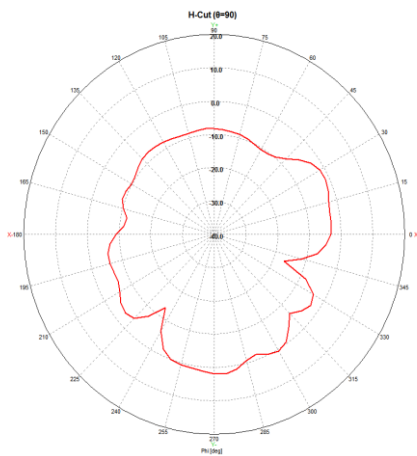


5.2 Typical Measurement Result (Gain)

Frequency [GHz]	Avg.[dBi]	Peak[dBi]
2.400	-2.48	6.47
2.440	-2.48	5.41
2.480	-3.46	4.22

5.3 Typical Measurement Result (Radiation pattern, 2.44GHz)

	Peak Gain [dBi]	Avg. Gain [dBi]	Total Avg. Gain [dBi]
Phi	2.0	-4.03	-2.48
Theta 1	-0.17	-4.14	
Theta 2	4.59	-0.80	



6 Revision History

Revision No	Date	Change	page
1	14.08.25	Initial revision	