

Bluetooth antenna of PCB on-board specification

1, Index

Item	Content	Page	Remark
1	Index	1	
2	Spec Drawing	2	
3	Specification	2	
4	Antenna On Test Board	3	
5	Return Loss	3	
6	Radiation Pattern	3	

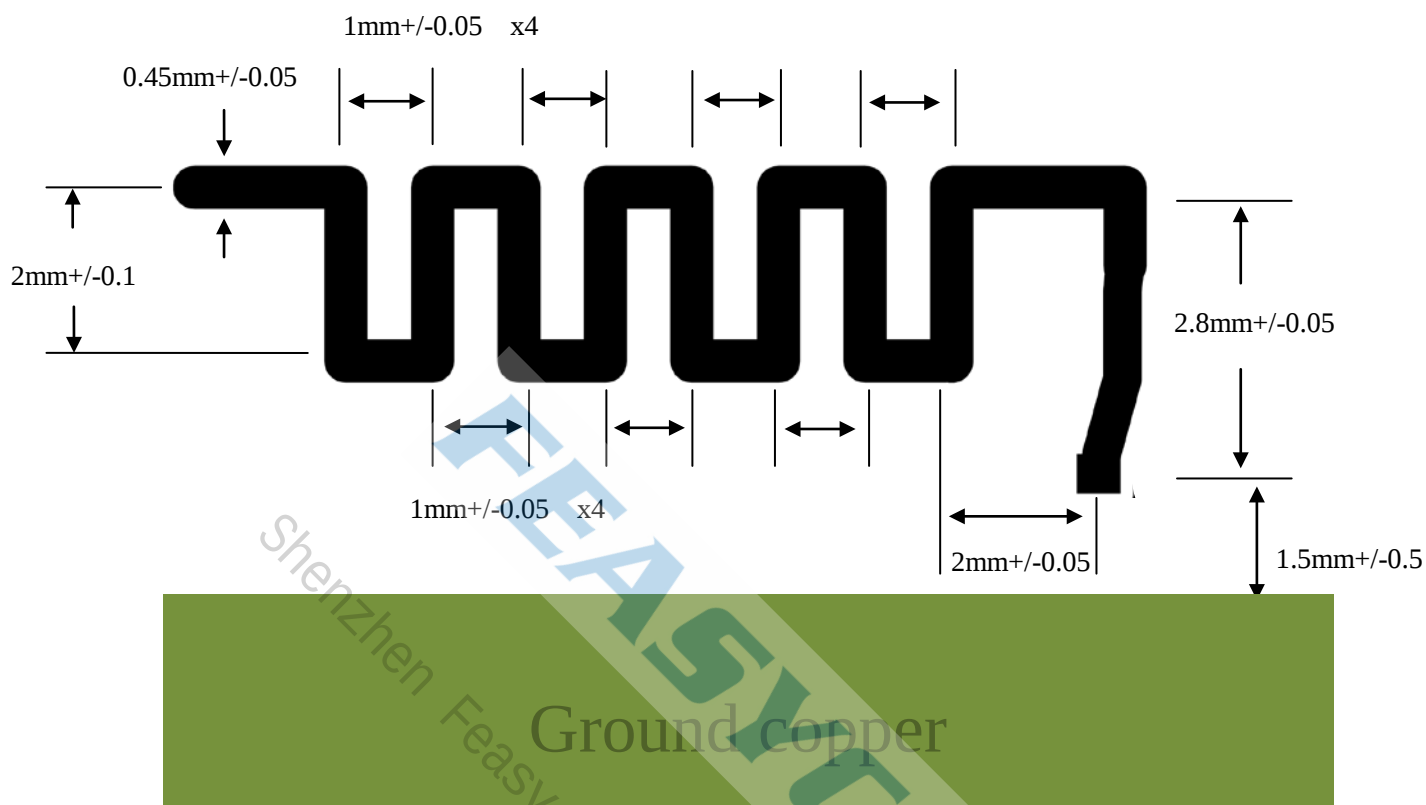
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2, Spec Drawing



3, Specification

Product Number: 2.4GHZ coil antenna

Sample Photo:



A. Electrical Characteristics

Frequency	2400 ~ 2500 MHz
S.W.R.	≤ 2.0
Gain	2.0 dBi
Efficiency	~ 50%
Polarization	Linear
Impedance	50 Ohm

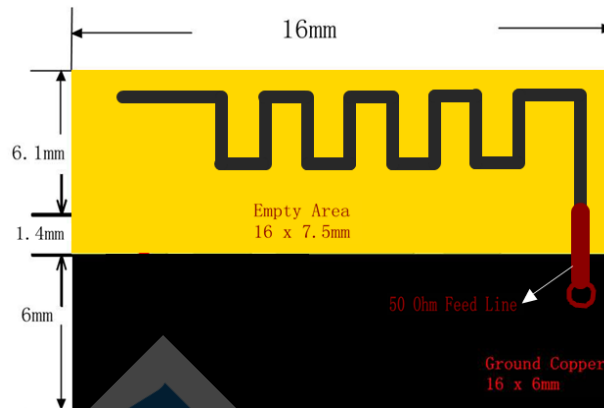
B. Material & Mechanical Characteristics

Material of Radiator	Gold-plated copper
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C. Environmental

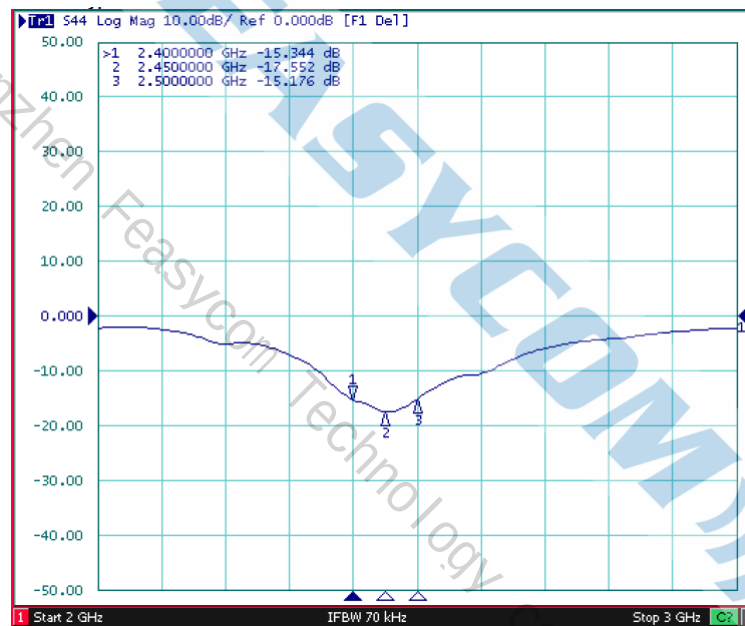
Operation Temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Storage Temperature	$-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$

4, Antenna On Test Board



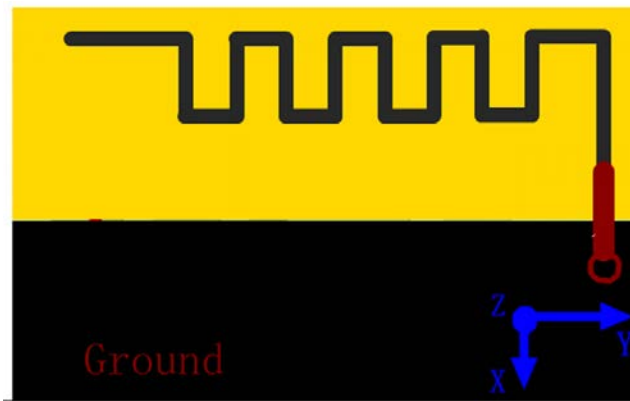
FR4 Thickness 0.8mm

5, Return Loss



6, Radiation Pattern

Radiation Pattern and Gain were dependent on measurement board design. The specification of coil antenna was measured based on the PCB size and installation position as shown in the below figure Test Board.



	Vertical	Horizontal
Y - Z Plane Average Gain=1.19 dBi		
	Peak Gain = 2 dBi Average Gain = 0.75 dBi	Peak Gain= -1.33 dBi Average Gain=-8.7 dBi
X - Z Plane Average Gain=-2.91 dBi		
	Peak Gain= -3.71 dBi Average Gain= -8.76dBi	Peak Gain= -0.29 dBi Average Gain= -4.19dBi

