

BT Antenna Product Approval

Manufacturer Name:

ShenZhenFENGHUAXIN ELECTRONIC AND TECHNOLOGY Co.,LTD

ManufacturerAddress:

Huitong Industrial Park, Changbu Village, Xinxu Town, Huiyang District, Huizhou City, Guangdong Province, China

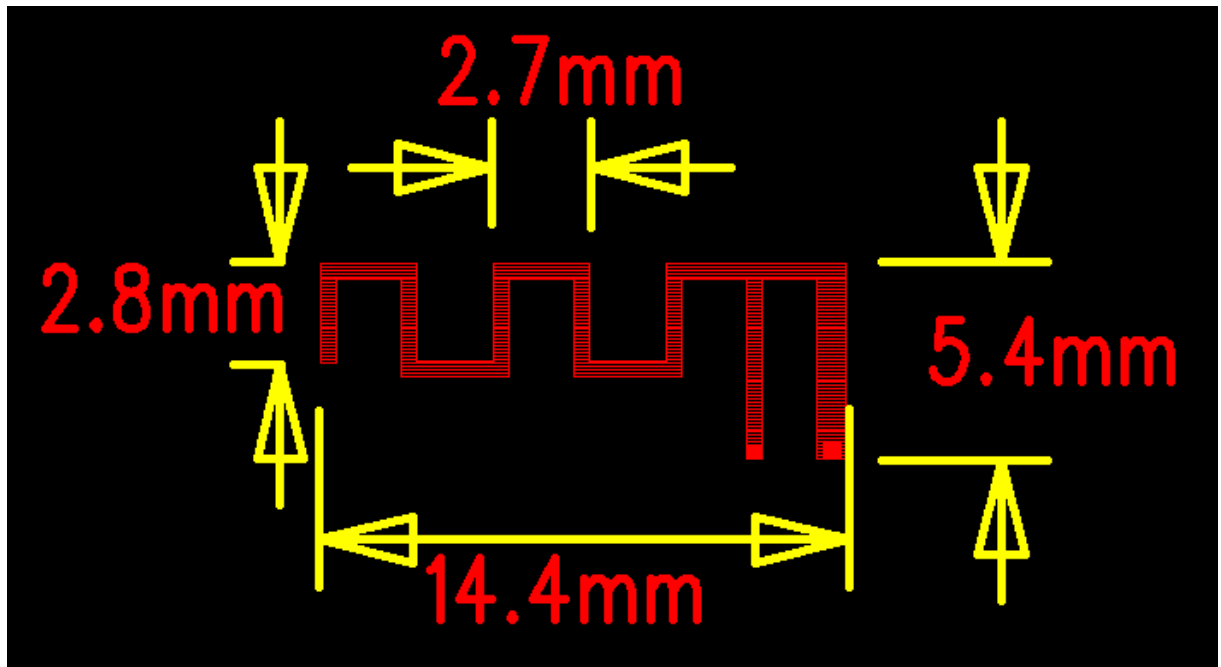
一、Antenna Overview

The Bluetooth antenna in our product is directly integrated onto the PCB. The antenna structure uses a copper foil with a tin-plated process. The copper foil thickness is H/H0Z, and the substrate material is FR-4 with a thickness of 1.6 mm.

Antenna Type: PCB Antenna.

二、Antenna Dimensions

1. Size Diagram : 14.4*5.4mm



2. Physical Diagram:



三、Antenna Parameters

The Bluetooth antenna operates in the frequency range of **2402 - 2480 MHz** and resonates within this band. Key parameters are listed below.

Integrated Bluetooth Antenna	
Frequency (MHz)	2402 ~ 2480 MHz

VSWR	≤ 1.92
Impedance	50 Ohm Nominal
Return Loss	-10 dB Max
Radiation	Omni-directional
Gain (Peak)	-0.35dBi
Polarization	Linear, Vertical
Admitted Power	2W
Connector	Tin

四、Antenna Gain Test Report

Spectrum Detector:

PK

Test Date :

June 8, 2013

Test By:

Andy

Temperature :

28°C

Test Result:

PASS

Humidity :

55 %

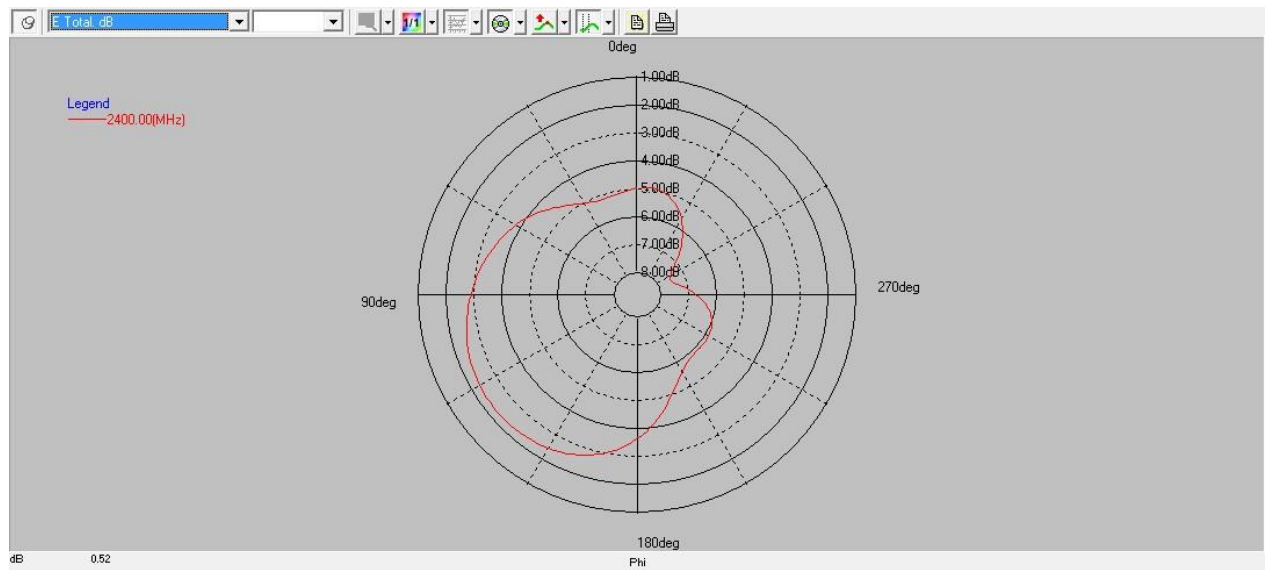
Modulation:

GFSK

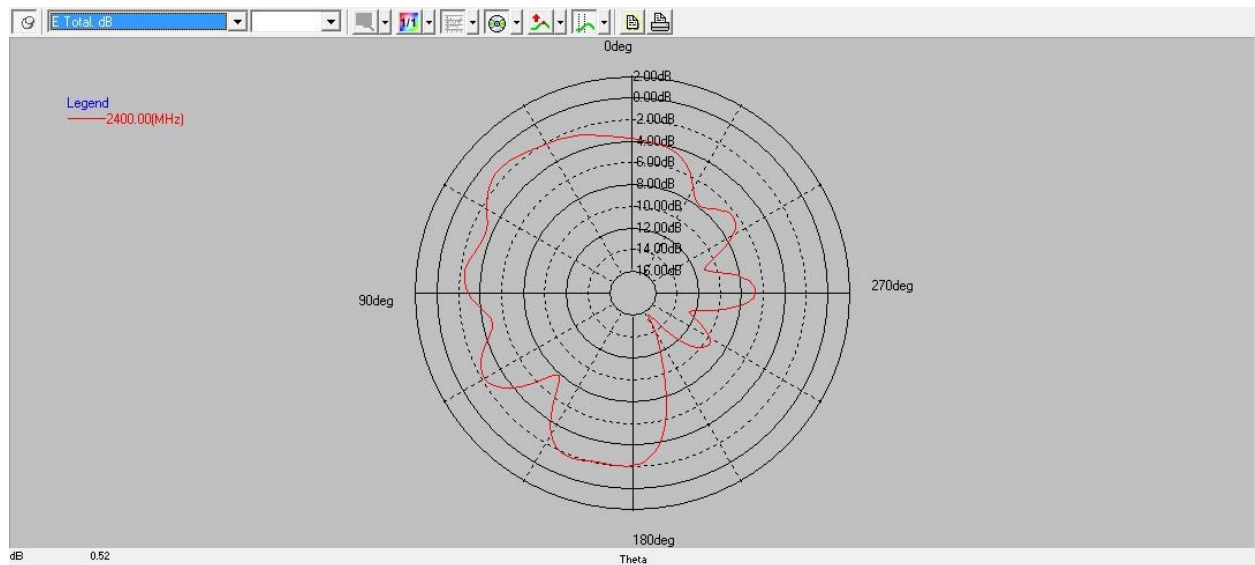
Peak Gain

Frequency VNA (MHz)	E Total. dB(dBi)
2400MHz	-0.347483
2410MHz	-0.502625
2420MHz	-0.772879
2430MHz	-0.955555
2440MHz	-1.23072
2450MHz	-1.94066
2460MHz	-1.90725
2470MHz	-2.01968
2480MHz	-2.30721
2490MHz	-2.28333
2500MHz	-2.8728

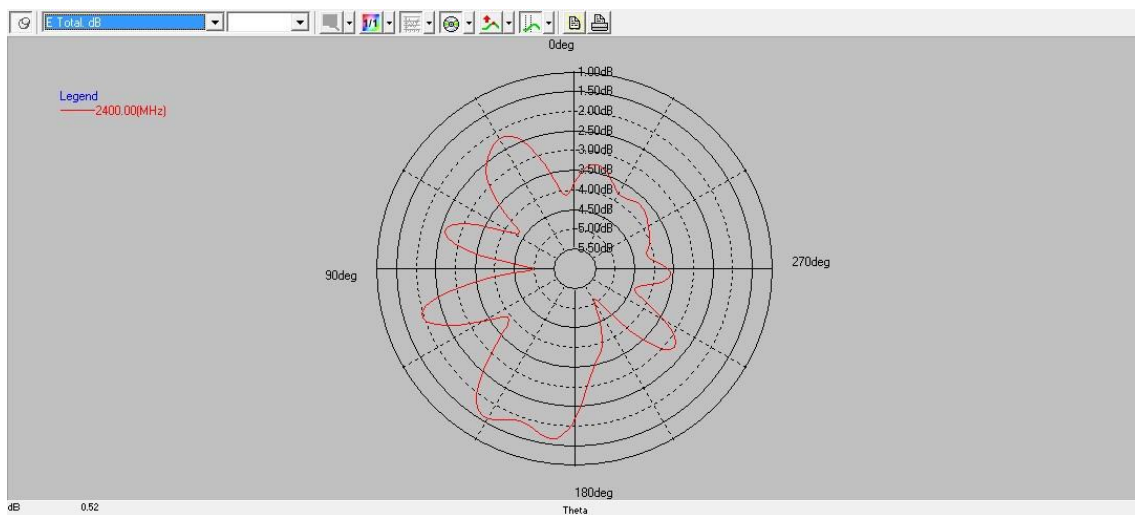
Radiation Pattern:



PHI 0 度



PHI 90 度



THETA 90 度

VSWR Plot:

