

# **Antenna Specification Sheet**

Manufacturer: Shenzhen Tuojin Shidai Technology Co., Ltd  
Manufacturer add.: 505B, No. 88-116 Pingxin South Road,  
Xinmu Community, Pinghu Street, Longgang District,  
Shenzhen, China

## General Specifications:

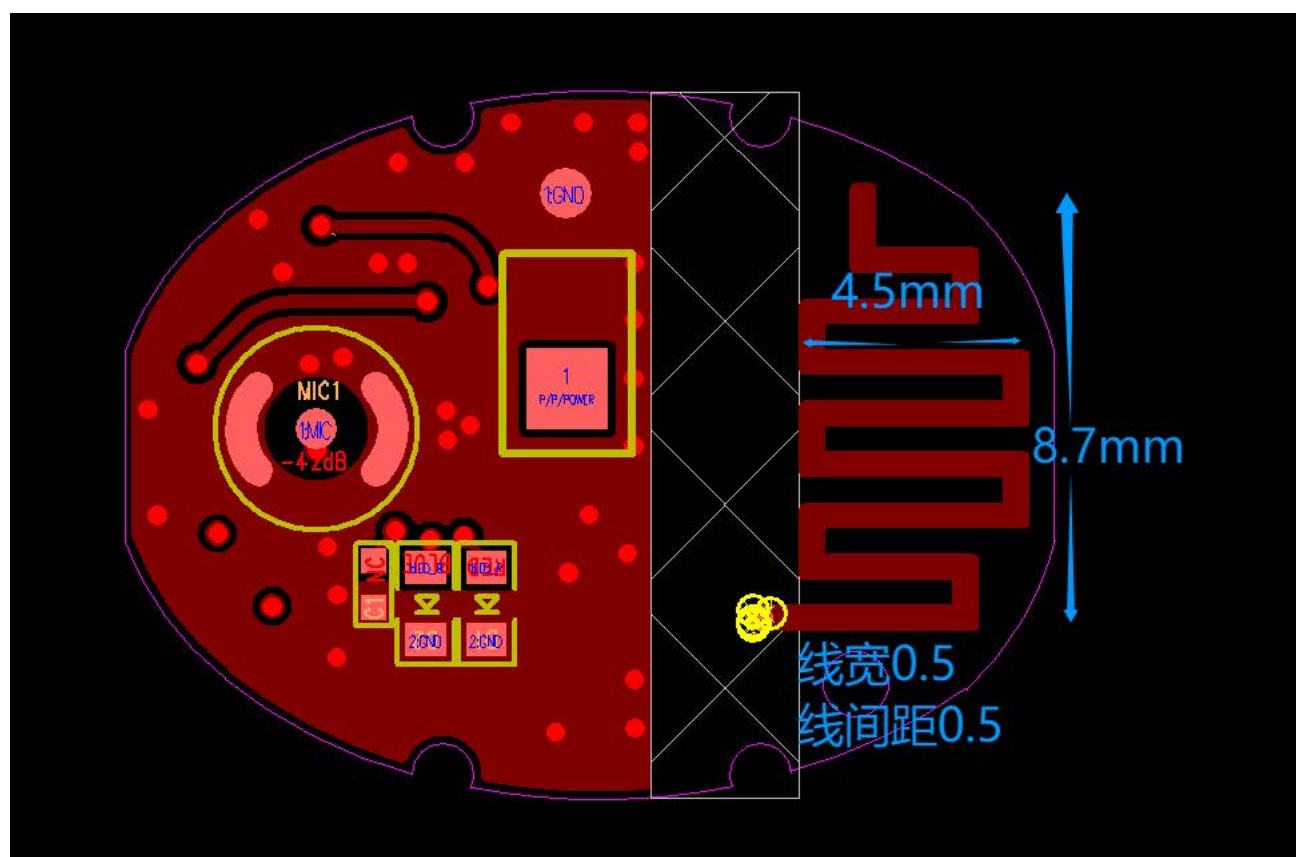
Antenna Type: PCB Antenna

Frequency Range: 2400-2483.5MHz

Impedance: 50ohm

Peak Gain: 0dBi

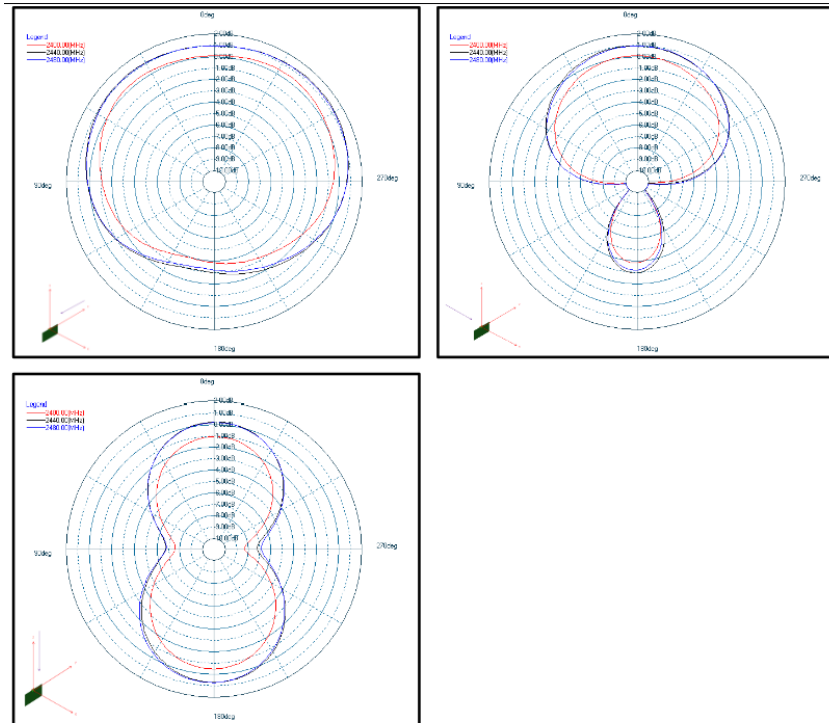
## Antenna Sharp



The pcb antenna follows the reference design guidelines described in the the [BGM220S module](#) datasheet from Silicon Labs.

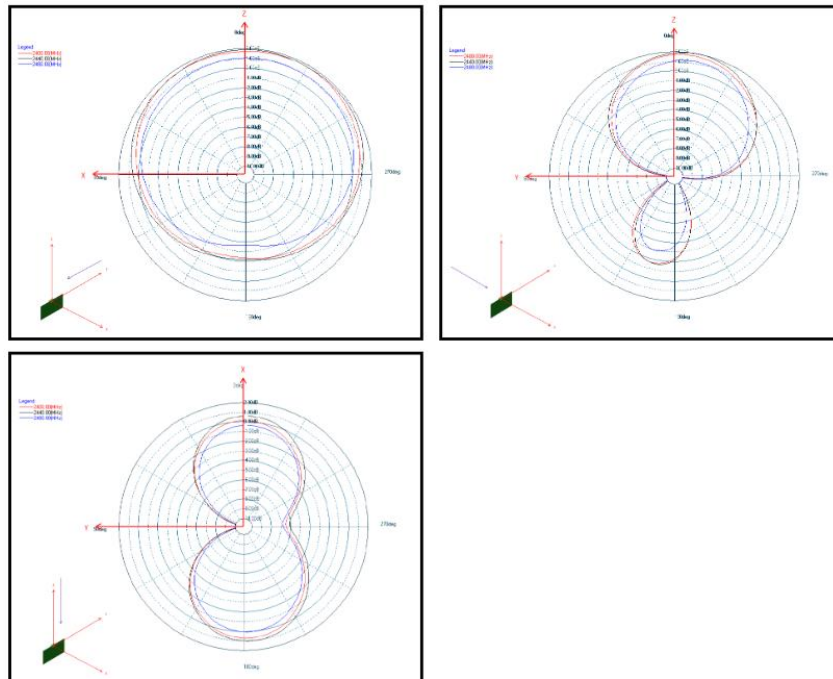
BGM220S modules include an integral antenna on board with the characteristics detailed in the tables below.

Antenna gain and radiation patterns have a strong dependence on the size and shape of the application PCB the module is mounted on, as well as on the proximity of any mechanical design to the antenna. The typical radiation patterns of the Bluetooth module BGM220S on a 50x30mm pcba are:



Top Left: Phi 0°, Top Right: Phi 90°, Bottom Left: Theta 90°

**Figure 4.3. BGM220S12A Typical 2D Antenna Radiation Patterns on 50 mm x 30 mm board**



Top Left: Phi 0°, Top Right: Phi 90°, Bottom Left: Theta 90°

**Figure 4.4. BGM220S22A Typical 2D Antenna Radiation Patterns on 55 mm x 20 mm board**