

SMD Antenna Specification

Address: Hongda Commercial and Creative Park 1, No. 96 Yuanxiang Road, Yunpu Street, Huangpu District, Guangzhou City

OverAir[®] SMD RoHS

PN: OA-C07

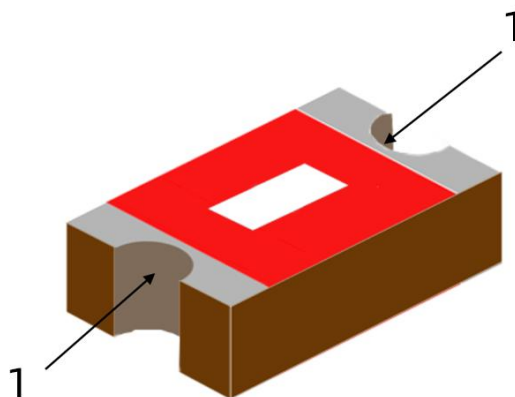
2.4 GHz ISM

1. Product Features

1. Ultra-small SMD patch antenna with dimensions of only $3.5 \times 1.7 \times 1.2 \text{ mm}^3$
2. Low energy loss and high antenna efficiency
3. Excellent stability under varying temperature and humidity conditions

2. Application Scenarios

1. 2.4 GHz ISM band wireless devices
2. Bluetooth, ZigBee and general wireless communication products
3. Smart home equipment
4. 2.4 GHz-only Wi-Fi devices

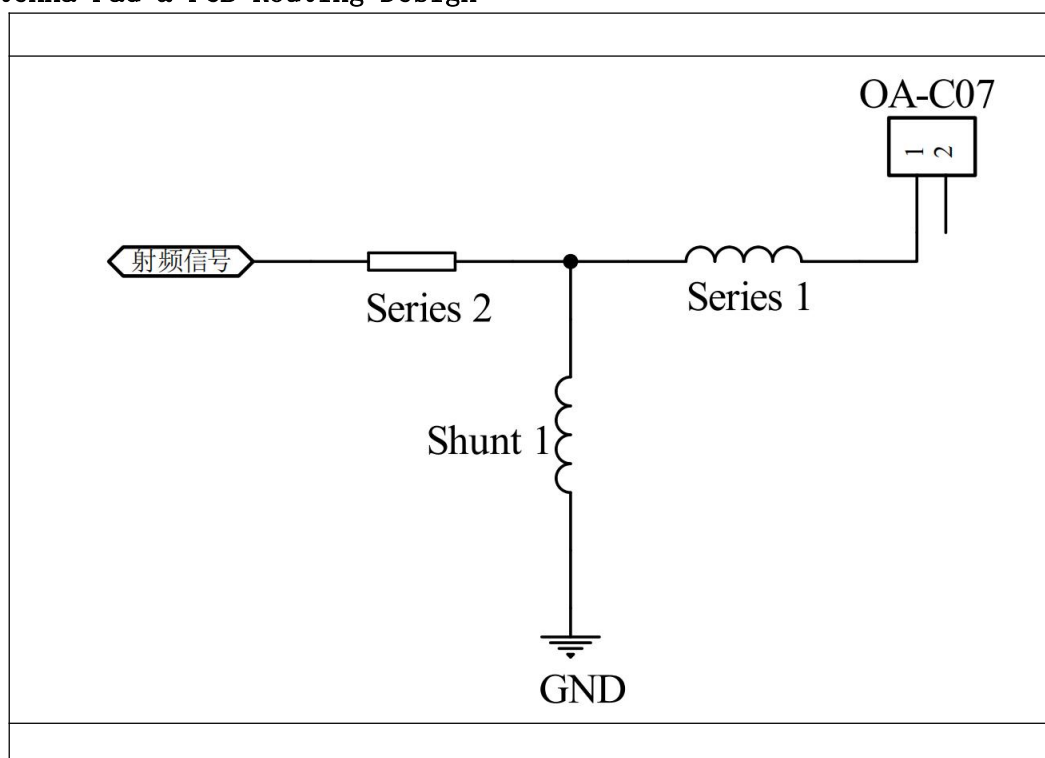


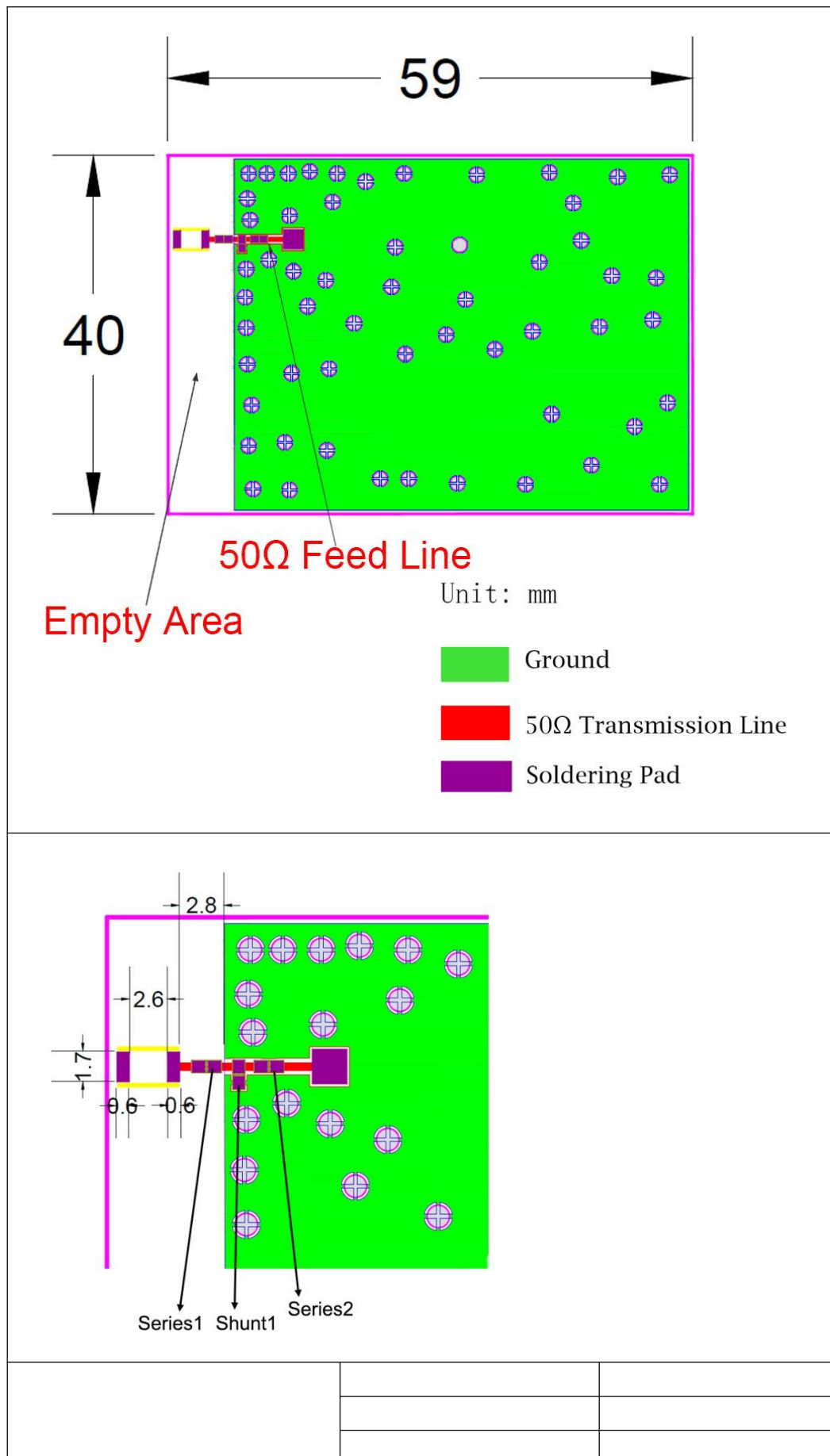
		(mm)
	L	3.5 ± 0.2
	w	1.7 ± 0.1
	T	1.2 ± 0.1
	a	0.4 ± 0.1

Electrical Characteristics

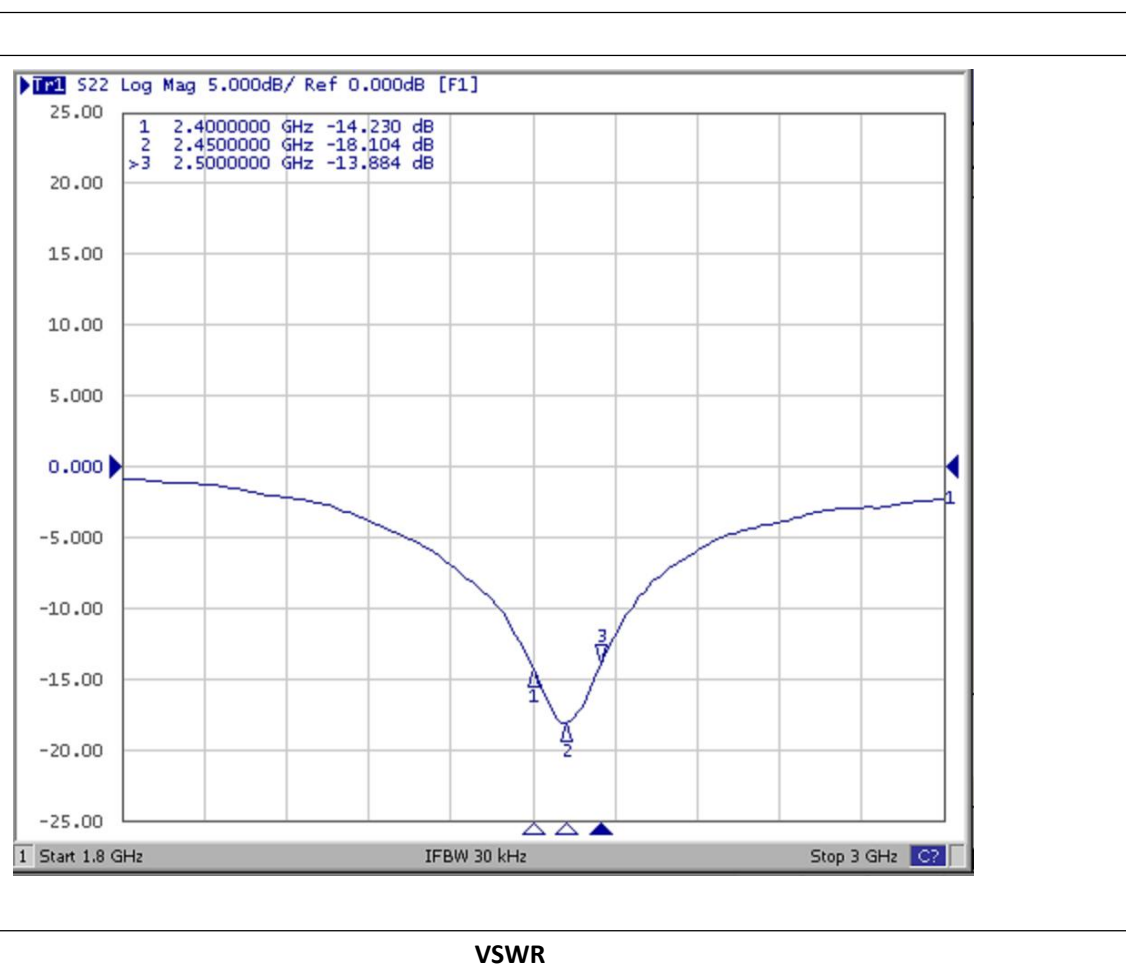
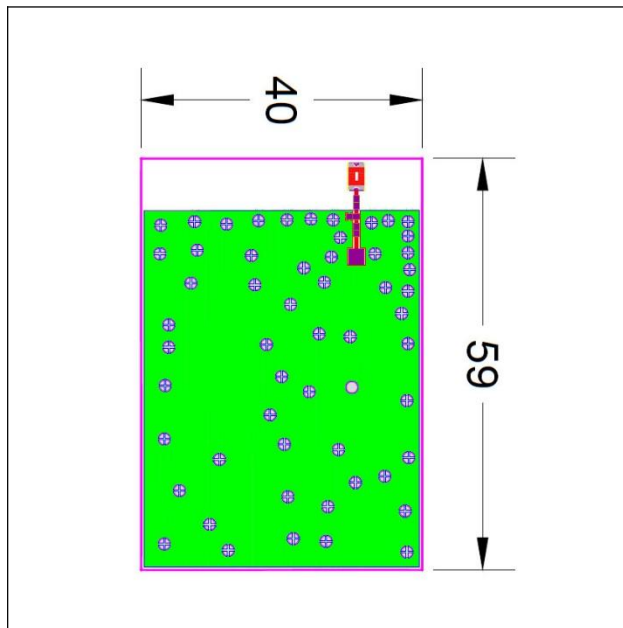
OA-C07	Specification
工作频率范围 Working Frequency	$2450 \pm 50\text{MHz}$
带宽 Band Width	$>100\text{MHz}$
阻抗 Impedance	$50\ \Omega$
增益 Gain(dBi)	3.74 (peak)
驻波比 VSWR	<2
工作温度 Operation Temperature	$-40^{\circ}\text{C} \sim +95^{\circ}\text{C}$
可承受功率 Power Capacity	3W

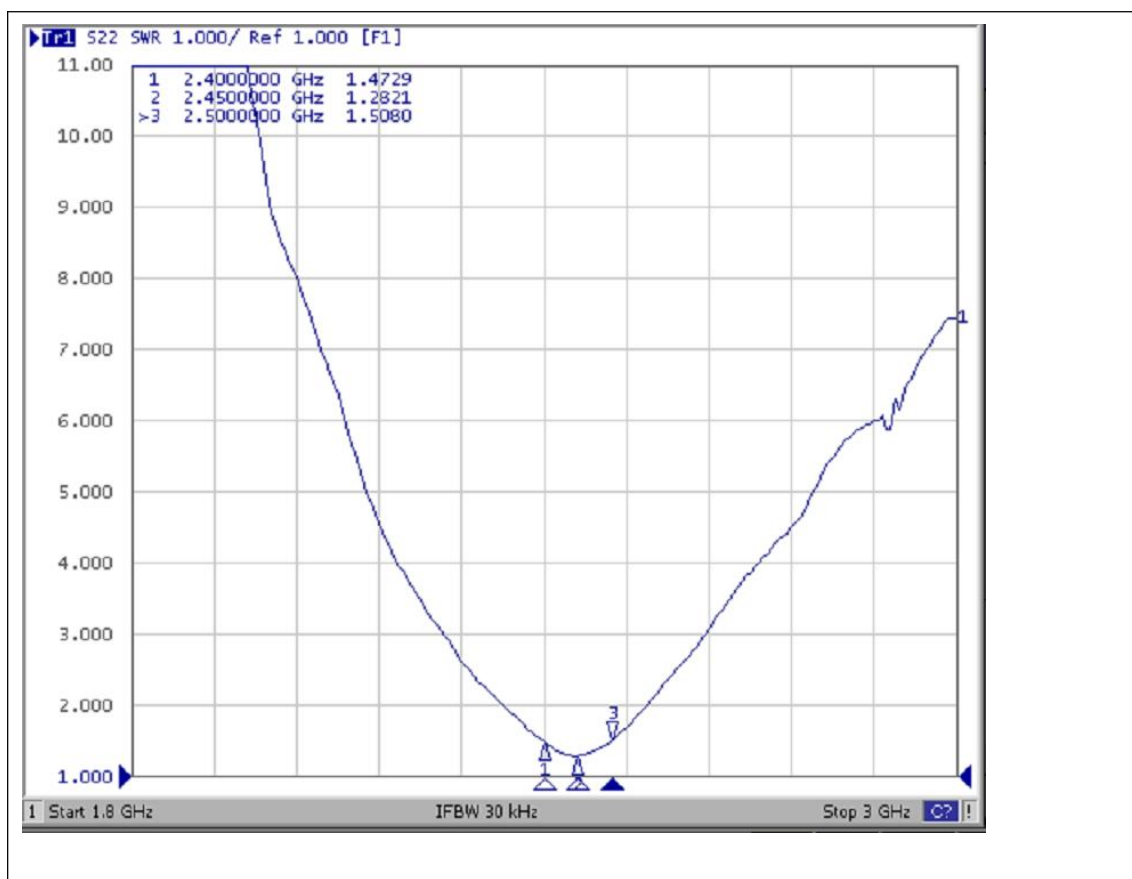
Antenna Pad & PCB Routing Design





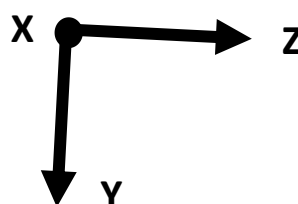
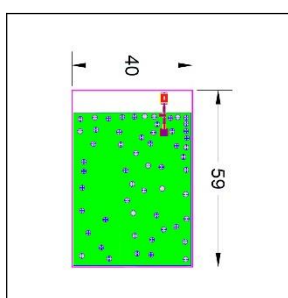
Test Board Information





Radiation Efficiency & Radiation Pattern

All efficiency, radiation pattern and gain data are measured on the designated test PCB within an ETS 3D microwave anechoic chamber. Test results cover the 2.4 GHz – 2.5 GHz bandwidth.



Performance Parameter	2.4G-2.5GHz
Peak Gain	3.74dBi
Average Gain across the band	3.66dBi
Gain Range across the band	3.42dBi~3.74dBi
Peak Efficiency	58.9%
Average Efficiency across the band	55.9%

Efficiency Range across the band

53.0%~58.9%

