

Guangzhou Cambrian Electronic Technology Co., Ltd

1119, 11th Floor, Building 1, Hongdae Creative Park, No. 96 Yuanxiang
Road, Yunpu Street, Huangpu District, Guangzhou

SMD 天线规格书

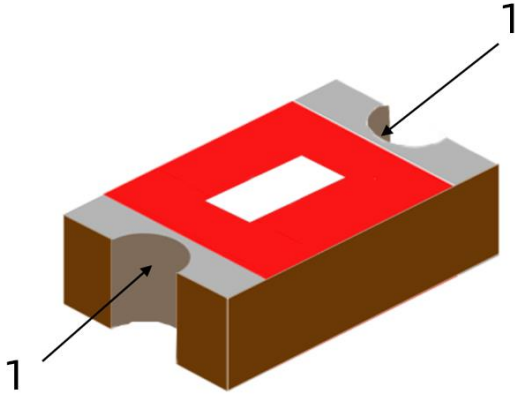
SMD Antenna Specification sheet

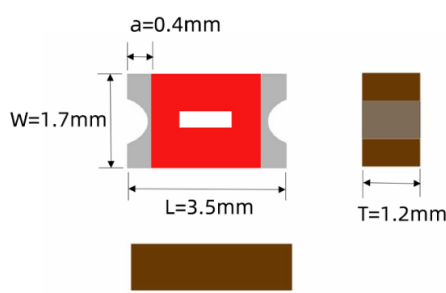
PN: OA-C07

2.4 GHz ISM 频段天线

2.4 GHz ISM Band antenna

特点	characteristic
1. 尺寸仅 3.5 X 1.7 X 1.2 mm ³ 的小尺寸 SMD 贴片天线. 2. 低能量损耗，高天线效率。 3. 在温湿度变化的情况下具有高稳定性。	1. A small-sized SMD surface mount antenna with dimensions of only 3.5 x 1.7 x 1.2 mm ³ . 2. Low energy loss and high antenna efficiency. 3. High stability under changes in temperature and humidity.
应用	application scenarios
1. 2.4GHz ISM 频段天线应用 2. 蓝牙、ZigBee、无线应用、智能家居应用等 3. WIFI（仅 2.4G）	1. 2.4GHz ISM band antenna application 2. Bluetooth, ZigBee, wireless applications, smart home applications, etc. 3. WIFI (2.4G only)

结构	construction
 不区分天线两端的馈电焊盘和固定焊盘 Does not distinguish between the feed pads at both ends of the antenna and the fixed pads	

尺寸	Size	symbol	
三视图 three views		符号	尺寸(mm)
		L	3.5±0.2
		w	1.7±0.1
		T	1.2±0.1
		a	0.4±0.1

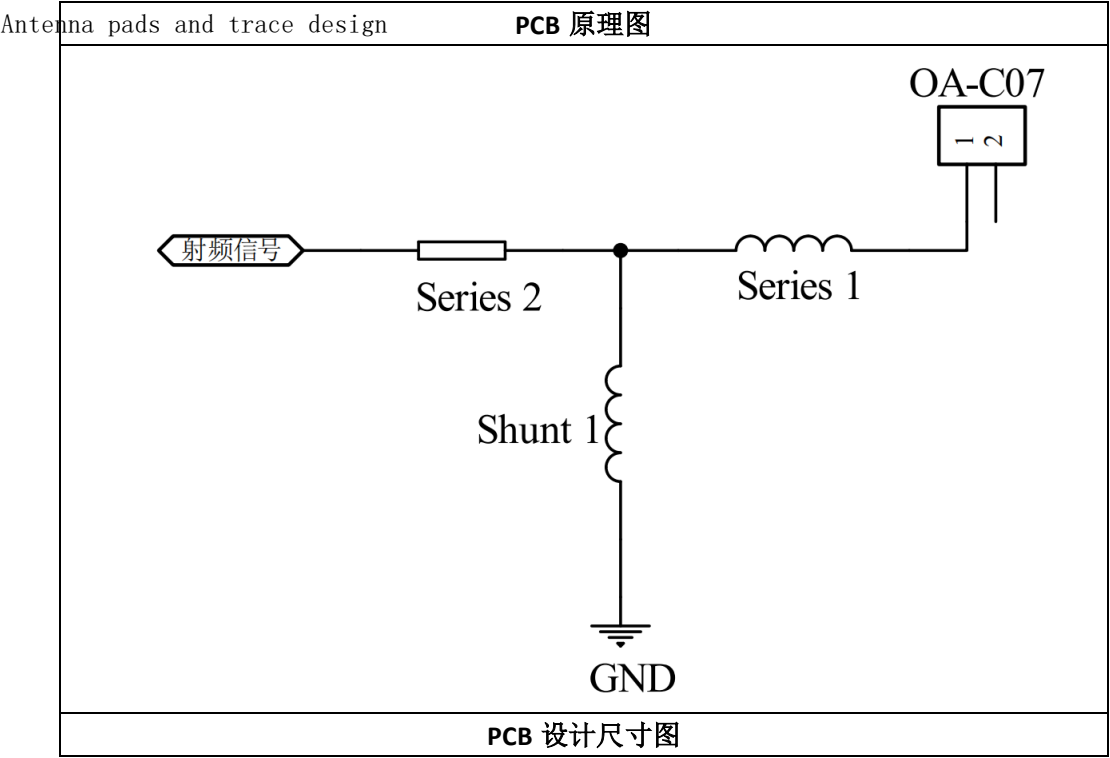
电气特性

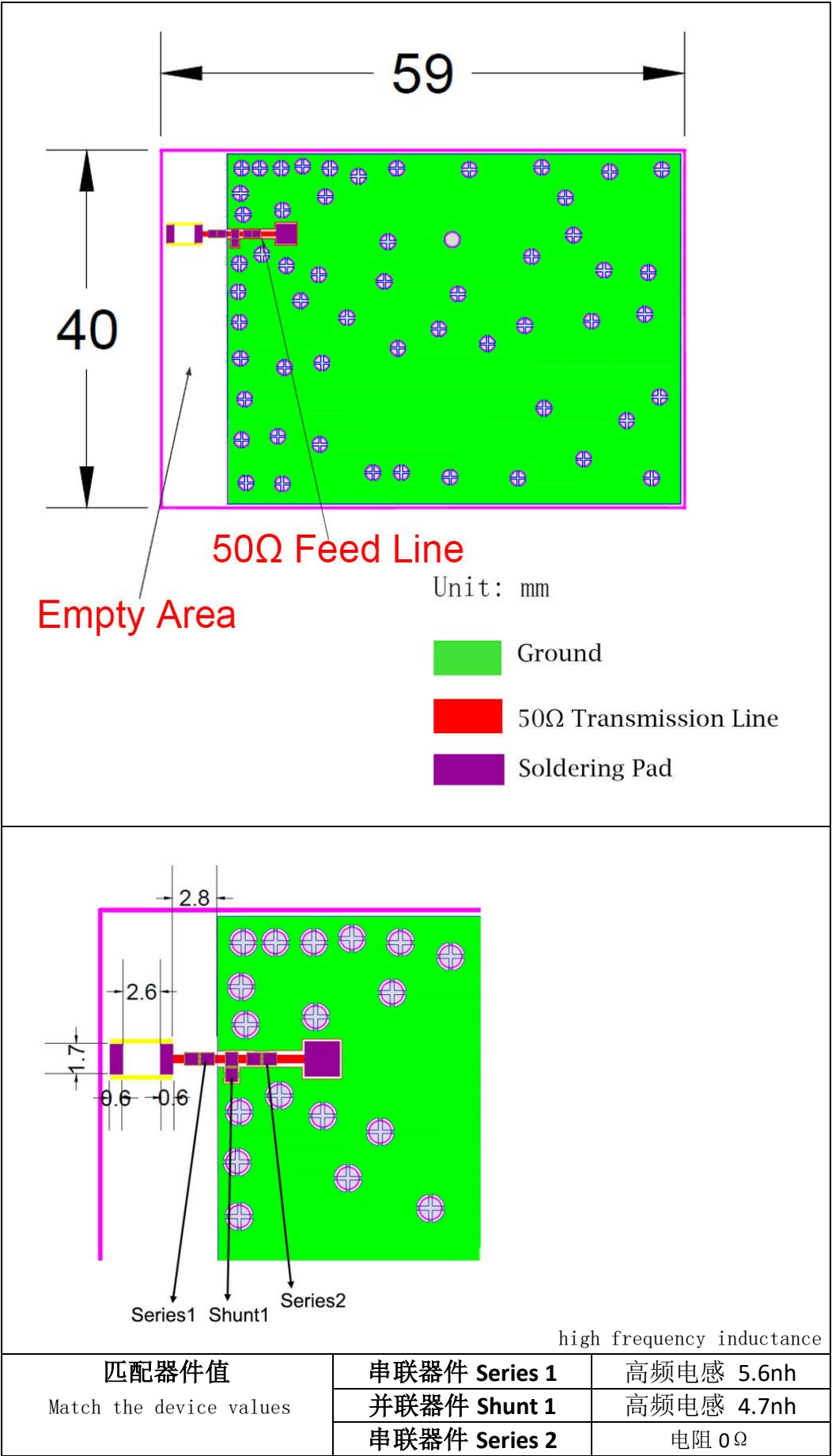
OA-C07	Specification
工作频率范围 Working Frequency	2450 ± 50MHz
带宽 Band Width	>100MHz
阻抗 Impedance	50 Ω
增益 Gain(dBi)	3.74 (peak)
驻波比 VSWR	<2
工作温度 Operation Temperature	-40℃~+95℃
可承受功率 Power Capacity	3W

天线 2.4G 工作频率需要通过阻抗匹配器件调试来实现.

The 2.4G working frequency of the antenna needs to be adjusted through impedance matching devices.

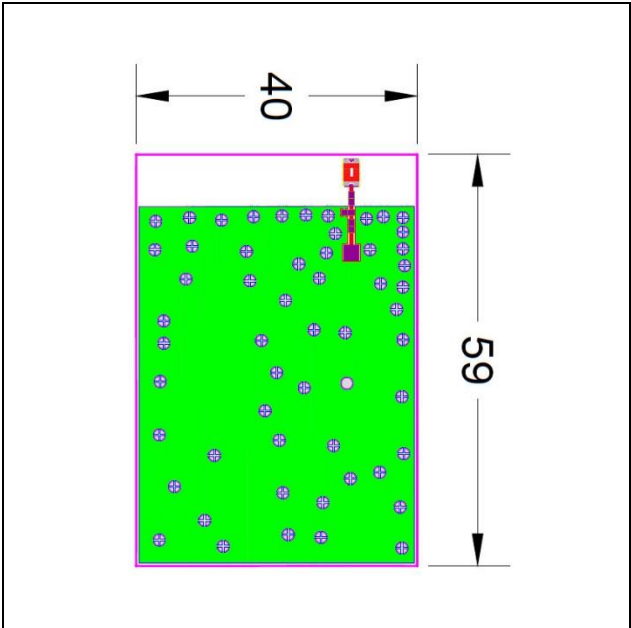
天线焊盘和走线设计



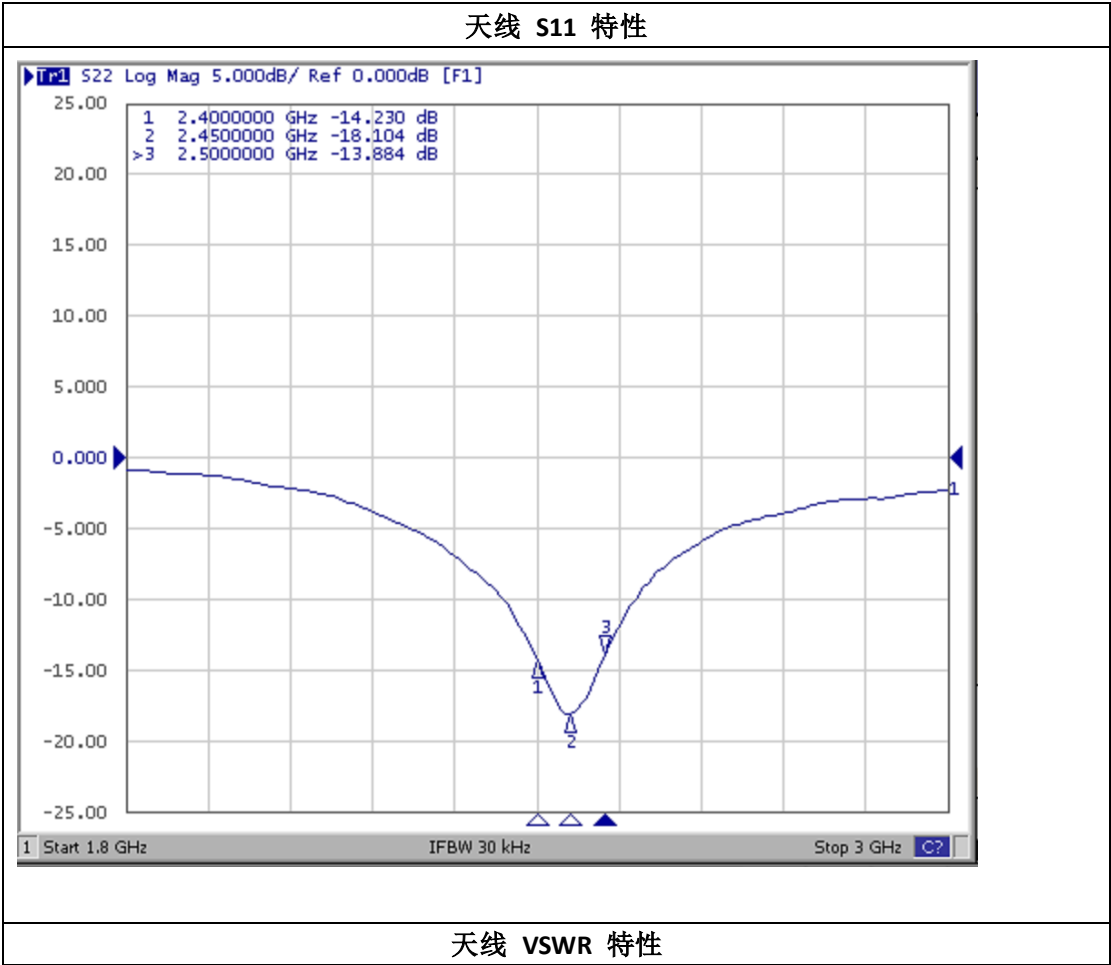


Antenna test on the test board (board thickness 1.0mm)

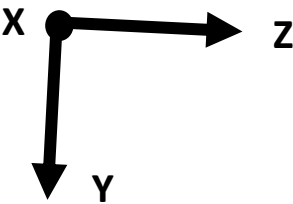
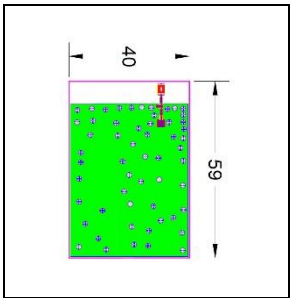
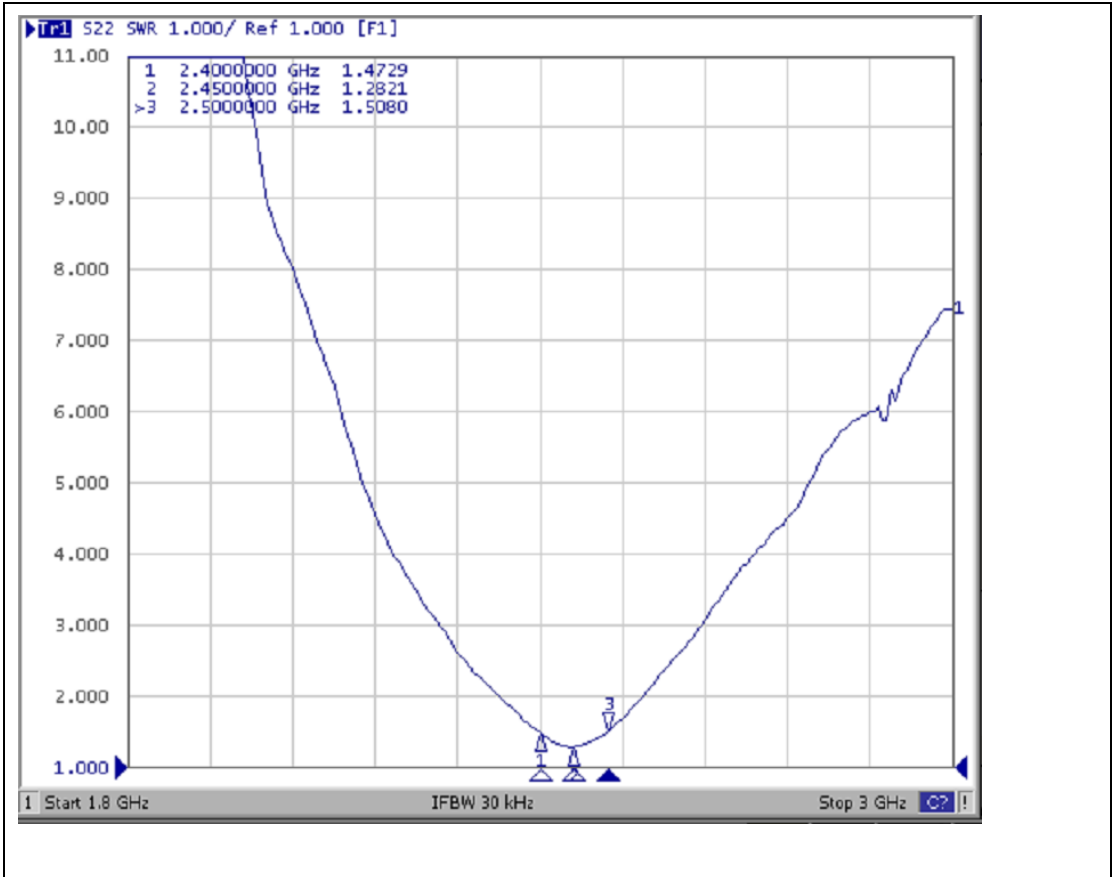
测试板上天线测试 (板厚 1.0mm)



Antenna S11 characteristics



Antenna VSWR characteristics

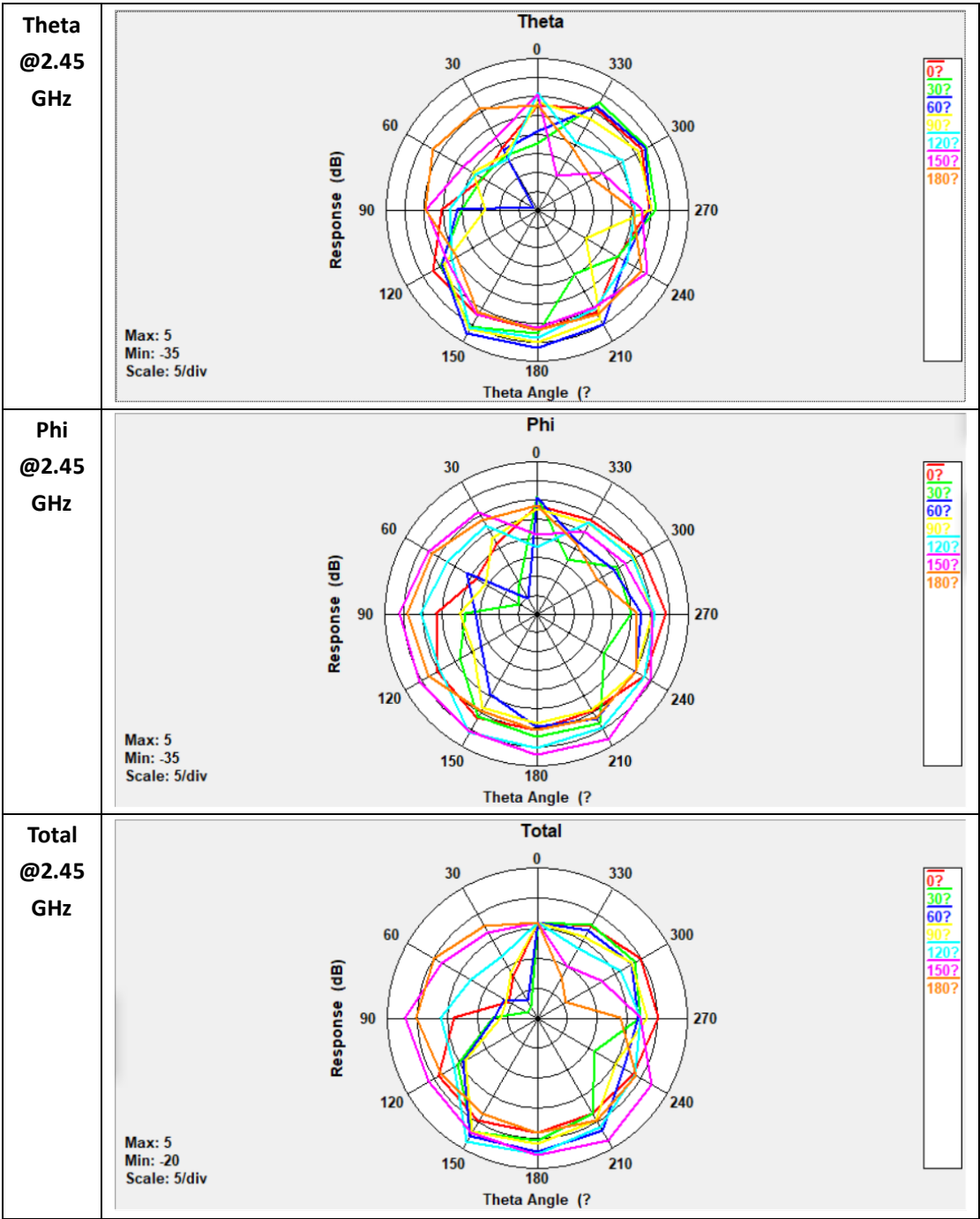


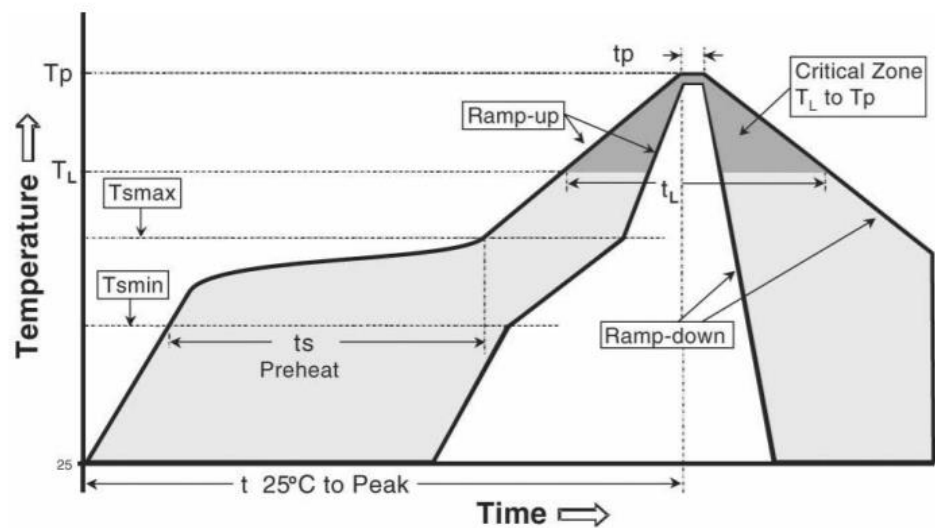
增益和效率	带宽 2.4G-2.5GHz
峰值增益 Peak Gain	3.74dBi
带内平均增益 Average Gain across the band	3.66dBi
带内增益范围 Gain Range across the band	3.42dBi~3.74dBi
峰值效率 Peak Efficiency	58.9%
带内平均效率 Average Efficiency across the band	55.9%

OA-C07 规格书

HWJ ELEC 广州寒武纪电子科技有限公司

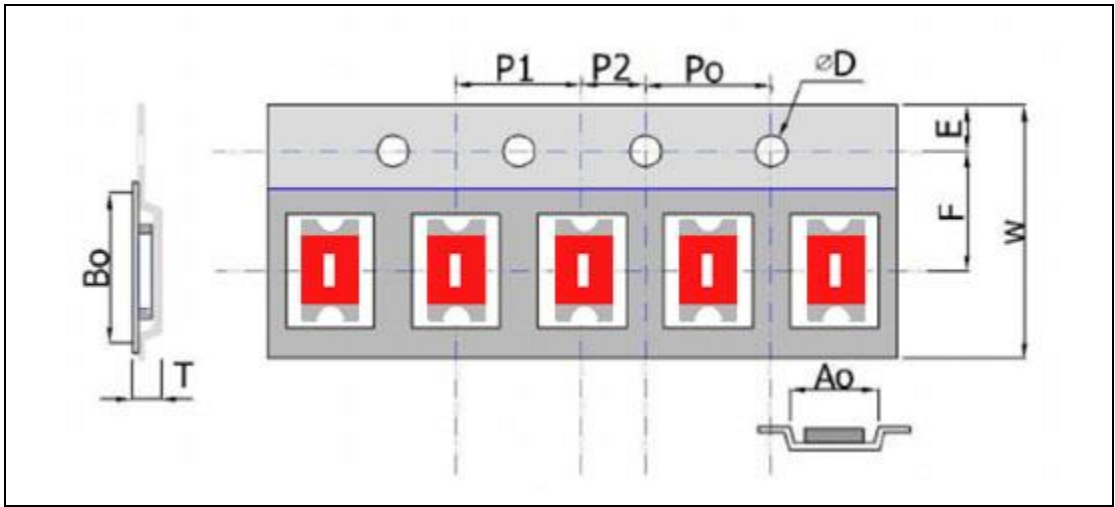
带内效率范围 Efficiency Range across the band	53.0%~58.9%
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Phase	Profile features	Pb-Free assembly (SnAgCu)
RAMP-UP	Avg. Ramp-up Rate (Tsmax to Tp)	3 °C / second (max.)
PREHEAT	- Temperature Min (Tsmmin) - Temperature Max (Tsmax) - Time (tsmin to tsmax)	150 °C 200 °C 60-180 seconds
REFLOW	- Temperature (TL) - Total Time above TL (tL)	217 °C 60-150 seconds
PEAK	- Temperature (Tp) - Time (tp)	260 °C 20-40 seconds
RAMP-DOWN	Rate	6 °C/second max
Time from 25 °C to Peak Temperature		8 minutes max

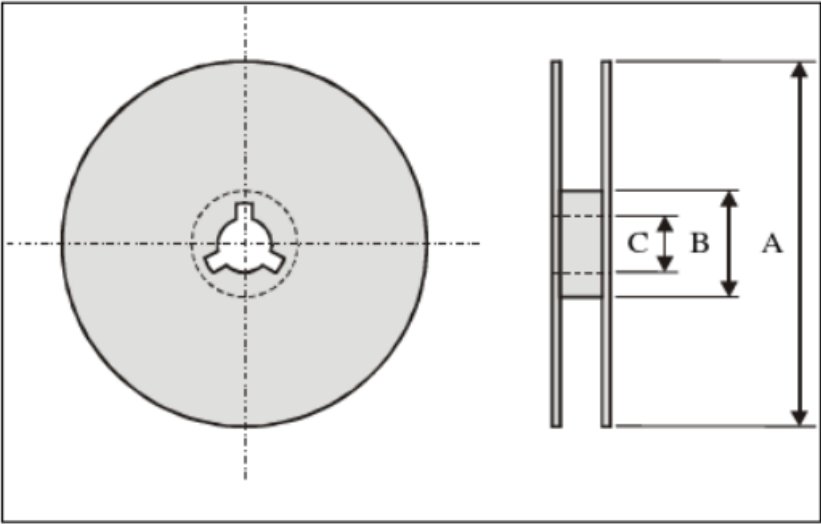
包装



塑胶载带规格 (单位:mm)

Index	Ao	Bo	ΦD	T	W
Dimension (mm)	2.0±0.1	4.0±0.1	1.55±0.05	1.8±0.1	12±0.1
Index	E	F	Po	P1	P2
Dimension (mm)	1.5±0.1	5.4±0.1	4.0±0.1	4.0±0.1	2.0±0.1

卷盘尺寸



Index	A	B	C
Dimension(mm)	330	100	13.5

标准数量： 3000 PCS/ 盘.

存储环境

- 产品存储时应满足下列条件：
- 温度 ： -10℃~+40℃
- 湿度 ： 30% 至 70% 相对湿度
- 产品放置的位置不要接触腐蚀性气体，如硫磺等。氯气或酸可能导致产品电极氧化造成可焊接性变差。
- 产品应放置在工具箱里且避免受潮、灰尘的影响。
- 产品应存放在仓库中且避免热、振动、阳光直射。
- 产品应在密闭条件下储存。

storage environment

- The product should be stored under the following conditions:
- Temperature: -10 C to +40 C
- Humidity: 30% to 70% relative humidity
- The product should not be placed in areas exposed to corrosive gases such as sulfur. Chlorine or acid may cause the product's electrodes to oxidize, resulting in reduced weldability.
- The product should be placed in a toolbox and protected from moisture and dust.
- The product should be stored in a warehouse and protected from heat, vibration, and direct sunlight.
- The product should be stored in a sealed environment.