

# SMD CERAMIC ANTENNA

---

## Guangzhou Havit Technology Co.,LTD

ROOM 1307, 13F, PHASE 2 B, C BUILDING OF POLY WORLD  
TRADE CENTER, NO.1000, XINGANG EAST ROAD, HAIZHU,  
GUANGDONG, 510000, China

## CS-2450-31-A

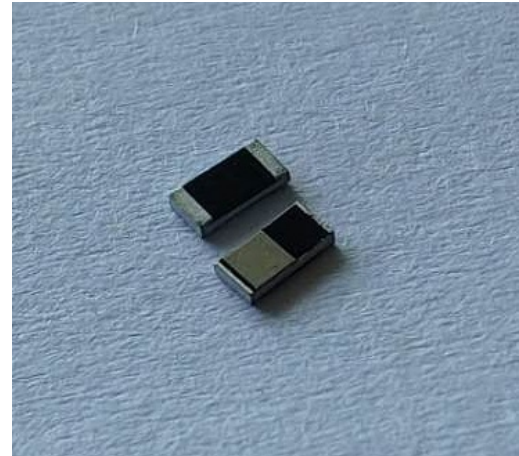
For 2400-2484MHz  
3.2x1.6mm [EIA1206]

## FEATURES

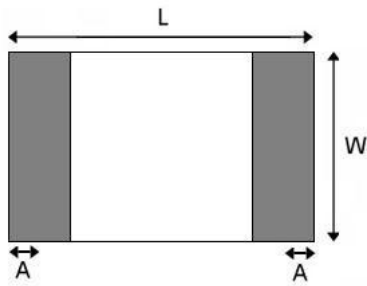
- Light weight,compact
- Wide bandwidth,lowcost
- Built-in antenna with high gain

## APPLICATIONS

- Bluetooth
- IEEE802.11g/b
- Zigbee systems,etc...



## SHAPES AND DIMENSIONS Dimensions in mm



L	W	A	H
3.10±0.10	1.55±0.10	0.40±0.20	0.50±0.10

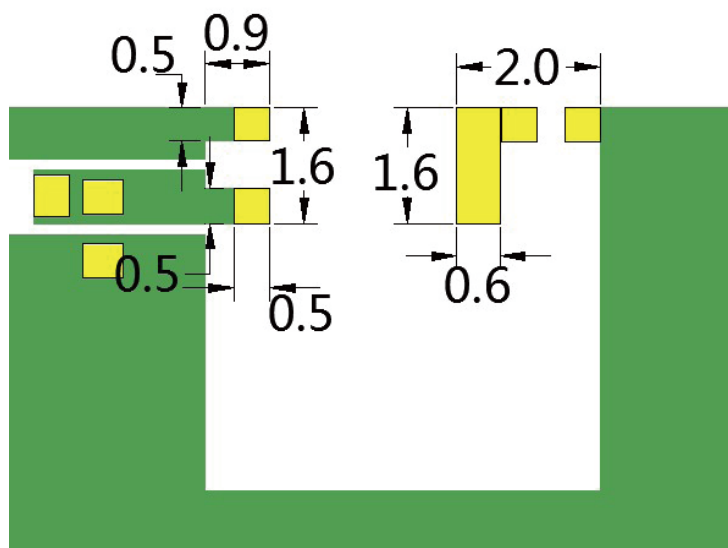


## Electrical Characteristics per line(TA= 25°C)

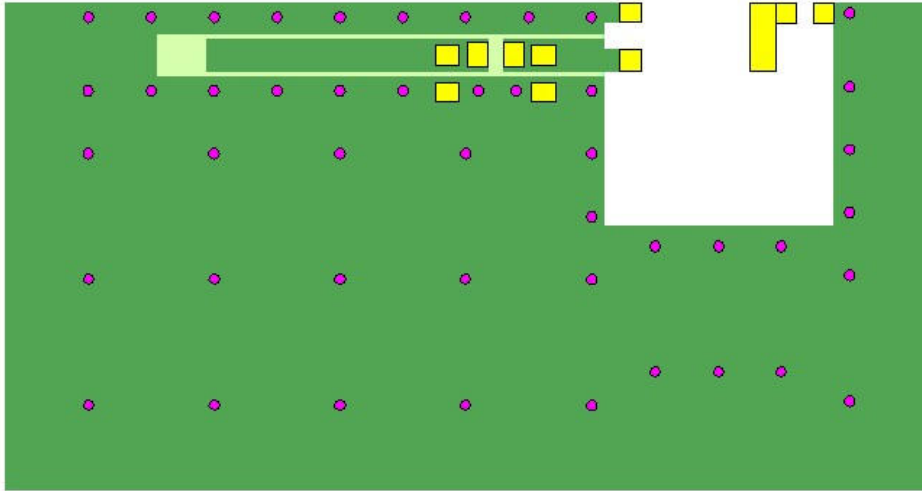
Parameter	Specification	Units
Frequency Band	2400~2483	MHz
Polarization	Line	
Peak Gain	2.67	dBi
Efficiency	72.30	%
Impedance	50	$\Omega$

### ■ Part Numbering System

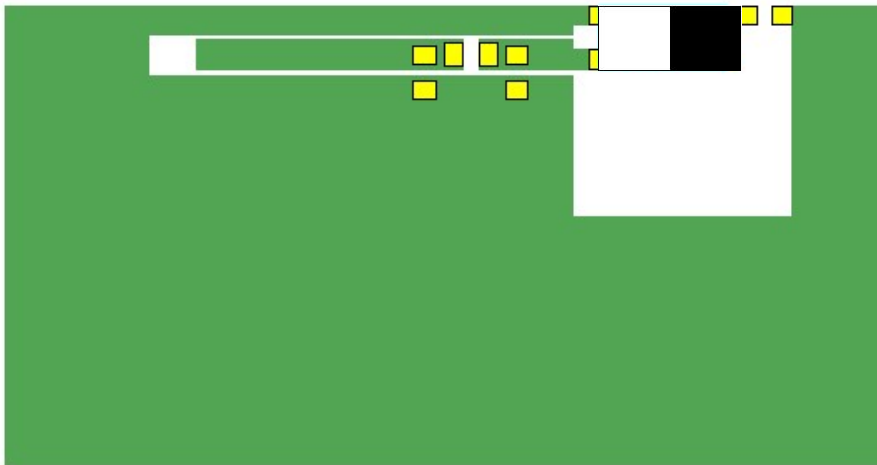
**CS**      -      **2450**      -      **31**      -      **A**  
 Material                      Frequency                      Size                      Type



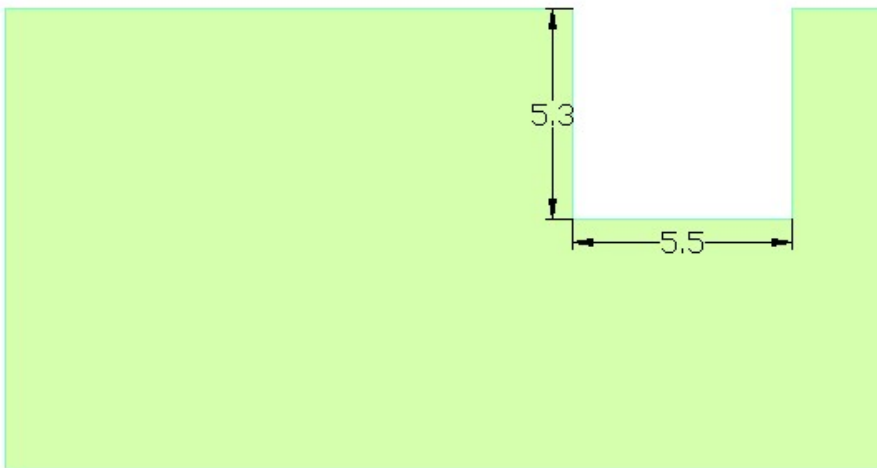
■ EVALUATION BOARD



- PAD
- 底层铺铜
- 顶层铺铜
- 打孔



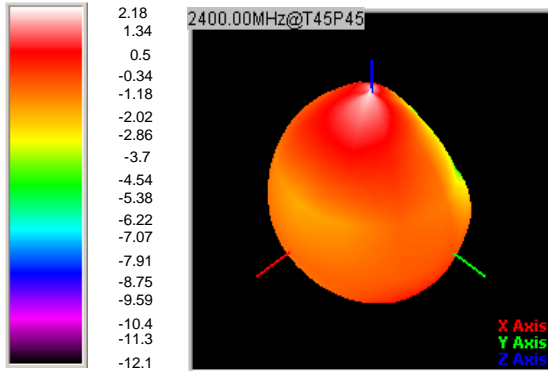
- 天线
- PAD
- 底层铺铜
- 顶层铺铜



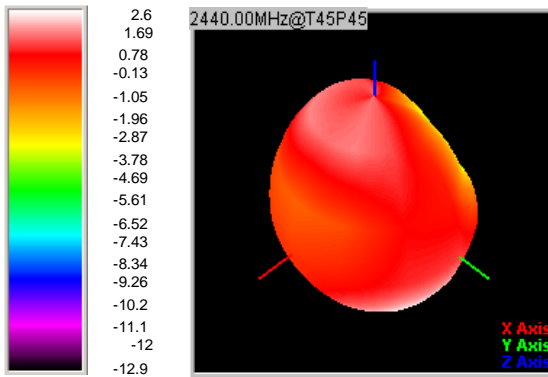
## ■ RADIATION PATTERNS

### □ 2.4GHz WLAN BAND

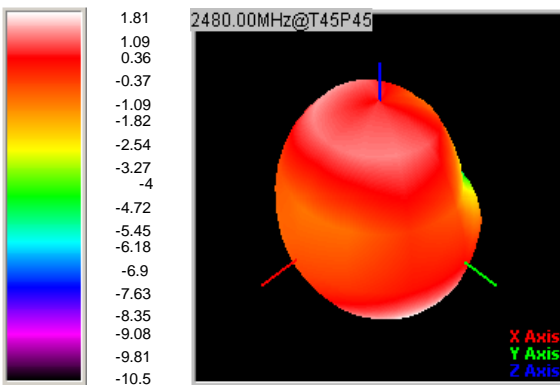
#### ◎ 3D Gain Pattern (2400 MHz)



#### ◎ 3D Gain Pattern (2440 MHz)



#### ◎ 3D Gain Pattern (2480 MHz)



Freq (MHz)	Effi (%)	Gain (dBi)
2400	74.8	2.67
2410	72.59	2.54
2420	71.6	2.25
2430	70.29	2.07
2440	71.23	2.16
2450	72.3	2.37
2460	71.04	2.52
2470	65.95	2.35
2480	64.42	2.42
2490	62.59	2.31
2500	60.01	2.07