

SMD CERAMIC ANTENNA

Data Sheet

CA-2450-31-A

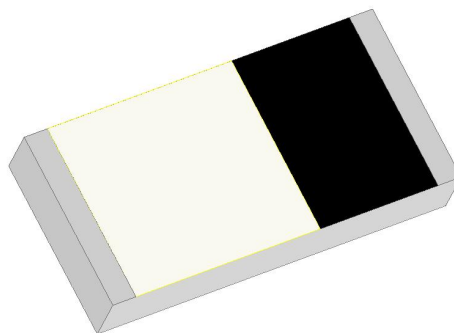
For 2400-2500MHz

3.2x1.6mm [EIA1206]

SHENZHEN CSCURVE TECHNOLOGY CO., LTD.

Feature

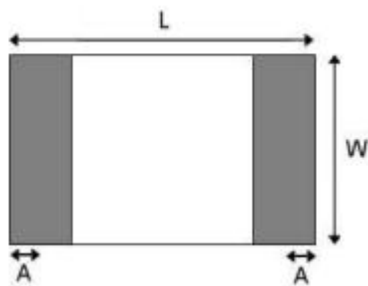
- Light weight, compact
- Wide bandwidth, low cost
- Built-in antenna with high gain



Application

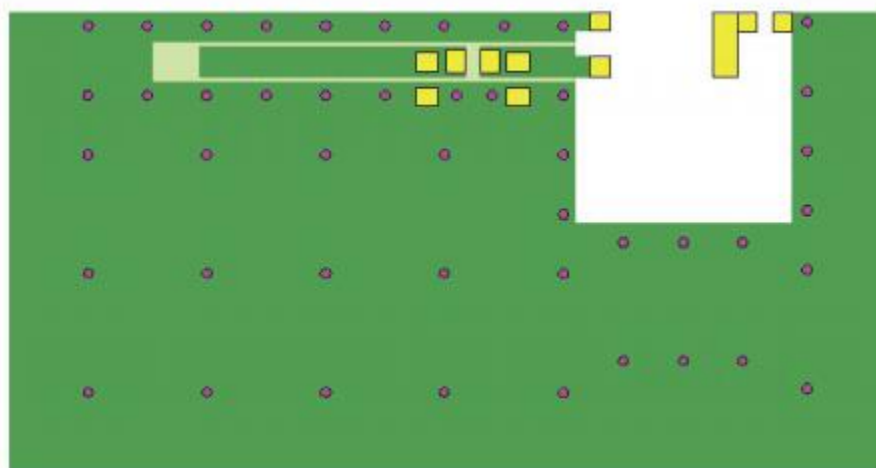
- Bluetooth
- IEEE802.11g/b
- Zigbee systems
- etc...

Shapes And Dimensions Dimensions in mm

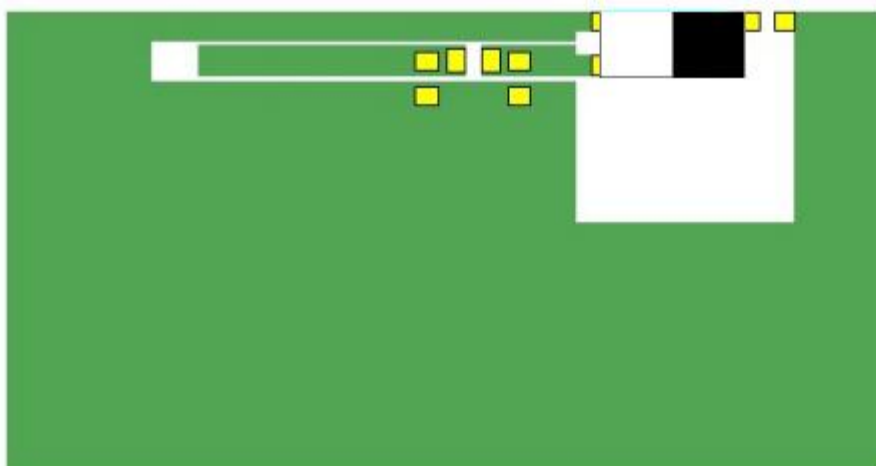


L	W	A	H
3.10±0.10	1.55±0.10	0.40±0.20	0.55±0.1

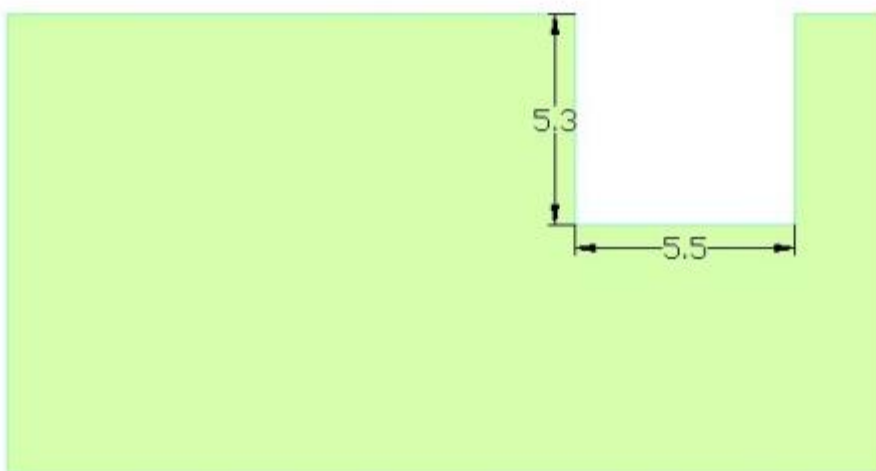
■ Evaluation Board



- ANT
- PAD
- TOP
- BOTTOM
- VIA



- ANT
- PAD
- TOP
- BOTTOM

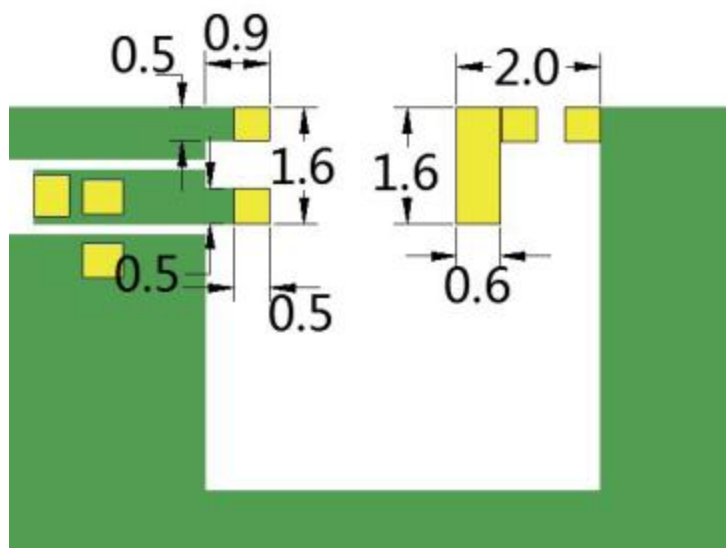


Electrical Characteristics per line(TA=25°C)

Parameter	Specification	Units
Frequency Band	2400~2500	MHz
Polar ization	Line	
* Peak Gain	2.6	dBi
* Efficiency	72.30	%
Im pendance	50	Ω

■ Part Numbering System

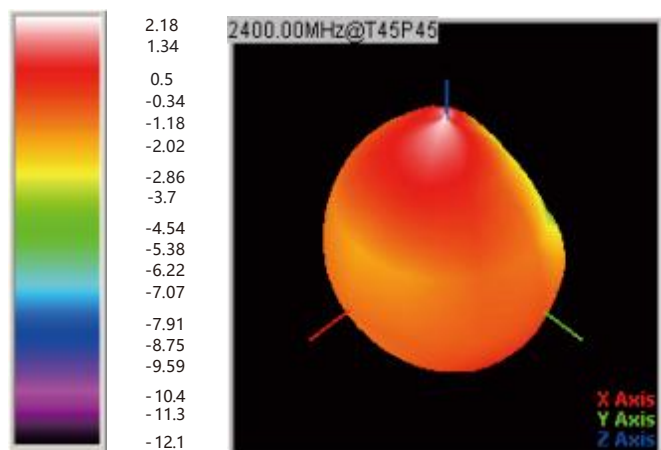
CA - 2450 - 31 - A
 Material Frequency Size Type



■ Radiation Patterns

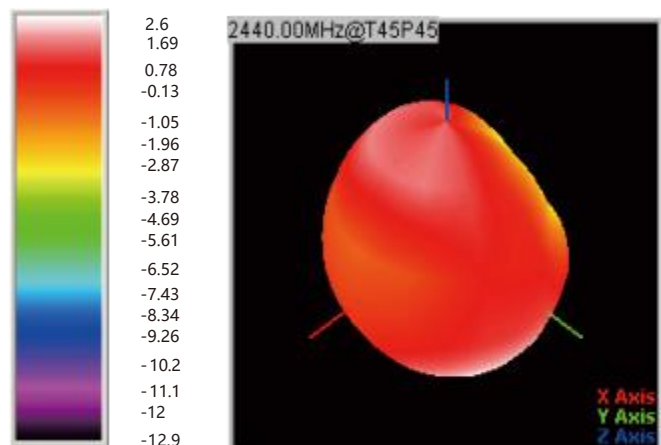
□ 2.4GHz WLAN BAND

© 3D Gain Pattern (2400 MHz)

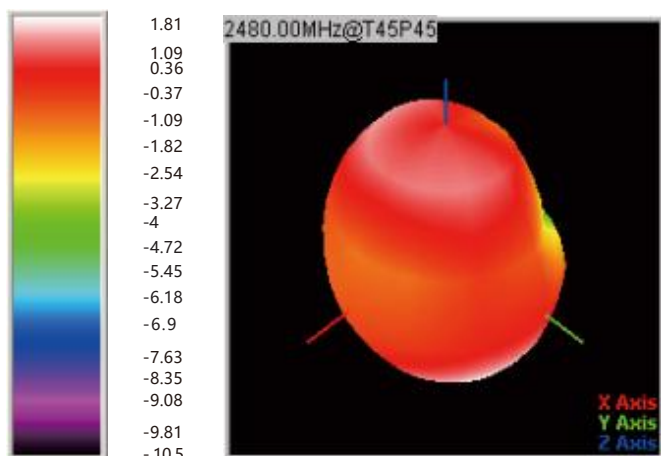


Freq (MHZ)	Effi (%)	Gain (dBi)
2400	74.8	2.18
2410	72.59	2.54
2420	71.6	2.25
2430	70.29	2.07
2440	71.23	2.6
2450	72.3	2.37
2460	71.04	2.52
2470	65.95	2.35
2480	64.42	2.42
2490	62.59	2.31
2500	60.01	1.81

© 3D Gain Pattern (2440 MHz)

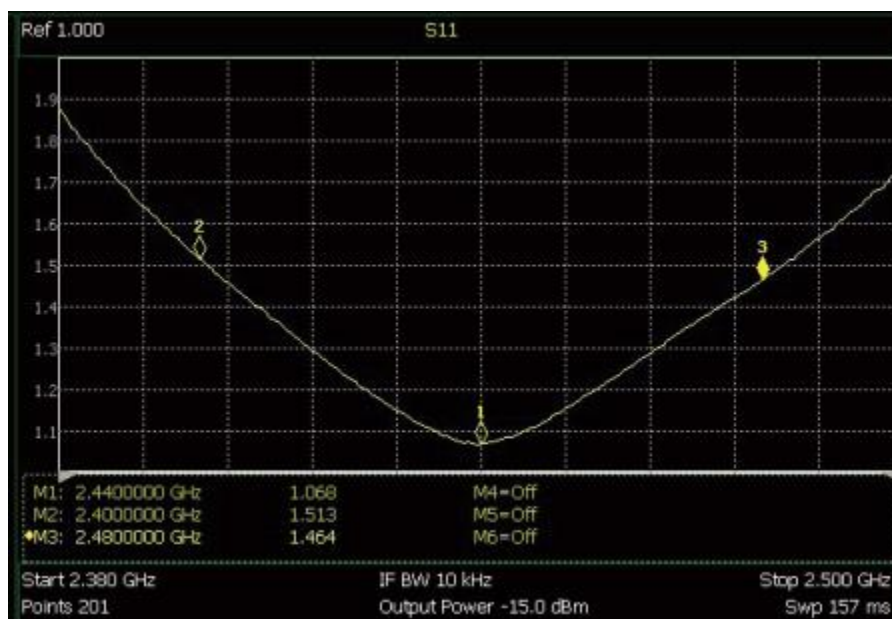
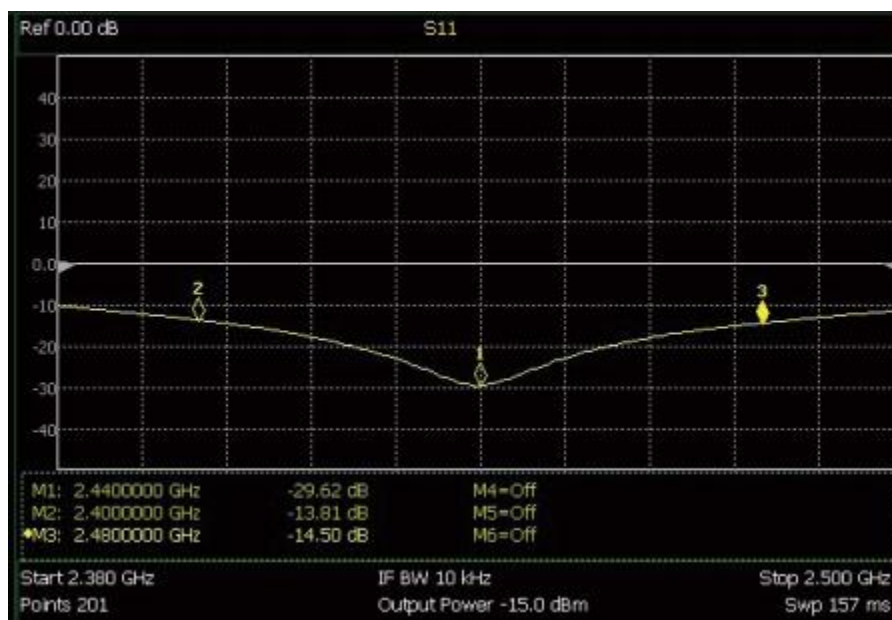


© 3D Gain Pattern (2480 MHz)

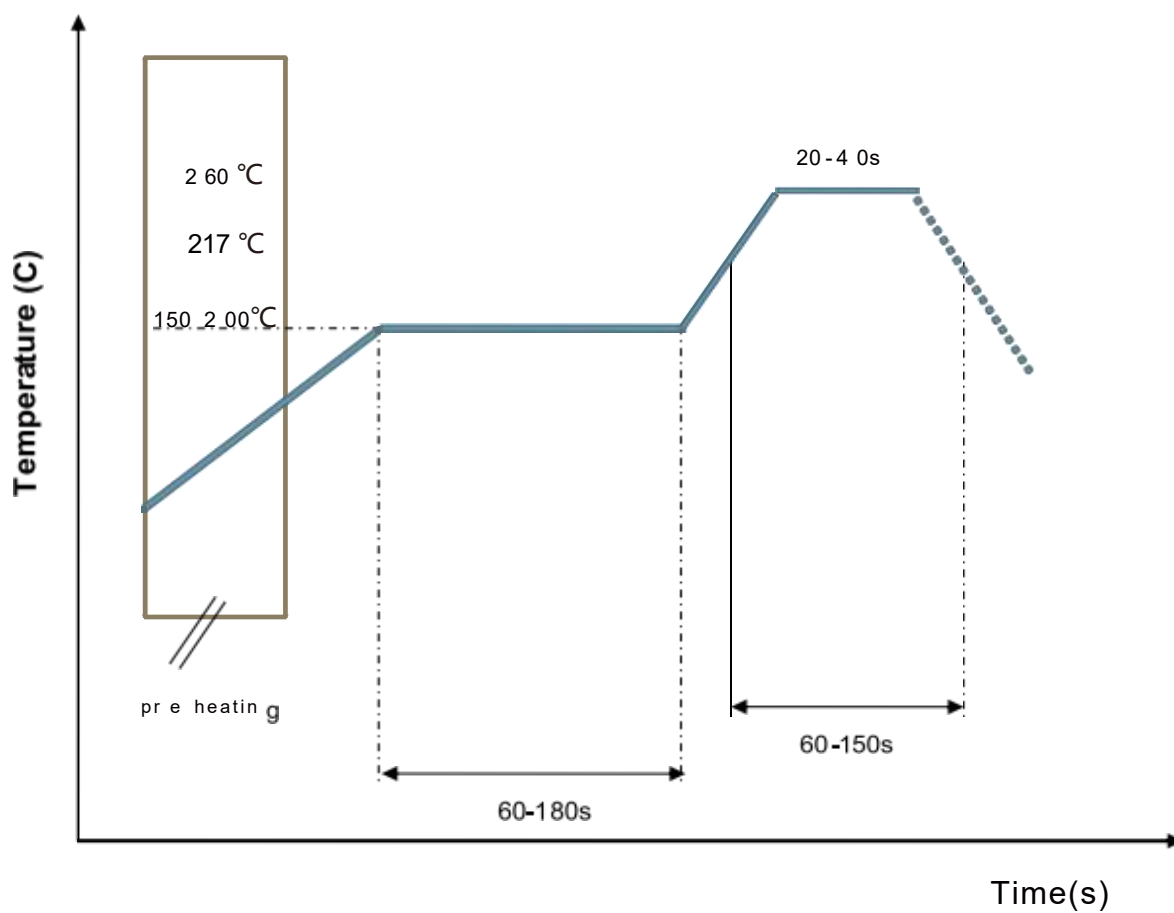


■ Frequency Characteristics

□ EFFICIENCY AND VSWR

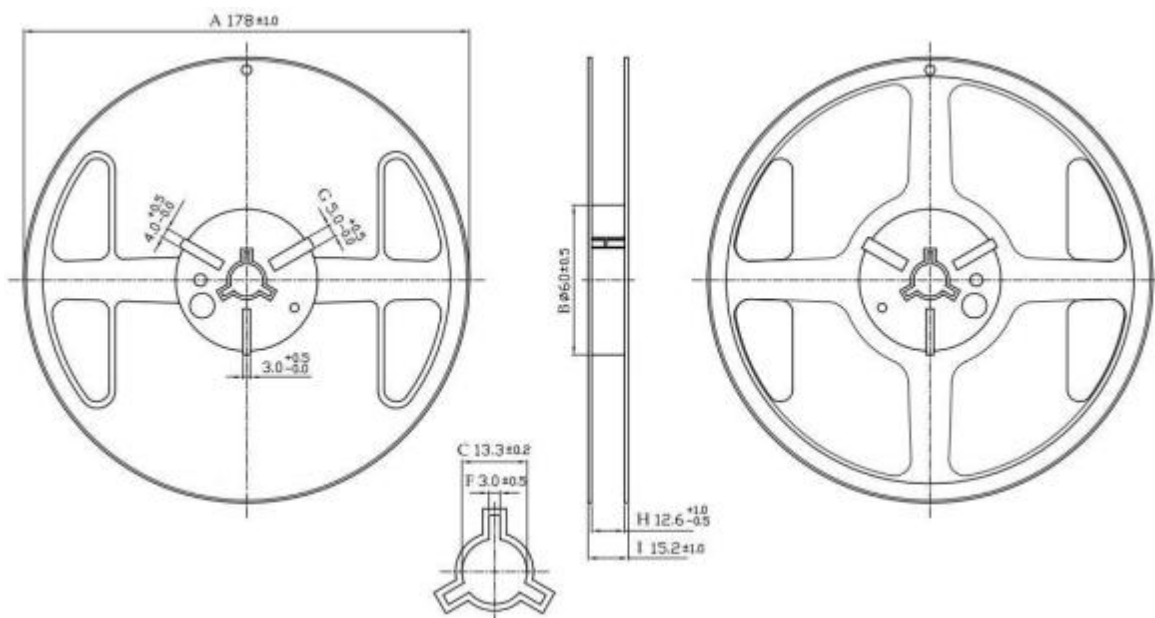


■ RECOMMENDED REFLOW PROFILE

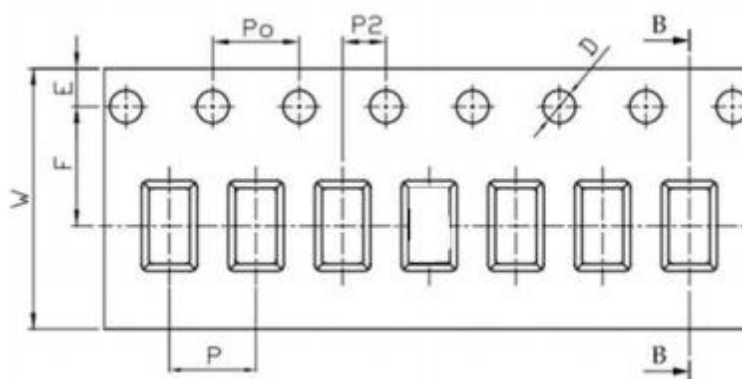


■ Packaging Style

□ REEL DIMENSIONS



□ TAPE DIMENSIONS



Feature	Specifications	Tolerances
W	8.00	±0.30
P	4.00	±0.10
E	1.75	±0.10
F	3.50	±0.10
P2	2.00	±0.10
D	1.50	+0.10 -0.00
P0	4.00	±0.10
10P0	40.00	±0.20

Quantity: 5000 pieces per 7 reel

订货信息 Order Information

Device	Package	Net Weight	Carrier	Quantity	HSF Status
CA-2450-31-A	3216	0.0089g	Tape&Reel	5000pcs	RoHS compliant

Revision history

Date	Revision	Description of changes
2018-11-5	1.0	First Version
2022- 8-5	1.1	Update the package information
2026-04-29	1.2	Update test data