

SMD CERAMIC ANTENNA

Data Sheet

CA-2450-31

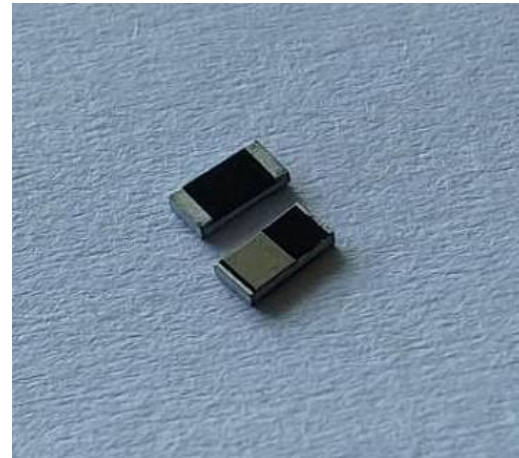
For 2400-2484MHz
3.2x1.6mm [EIA1206]

■ FEATURES

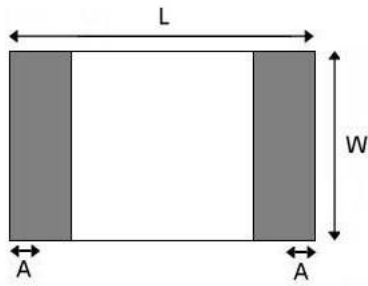
- Light weight,compact
- Wide bandwidth,lowcost
- Built-in antenna with high gain

■ 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

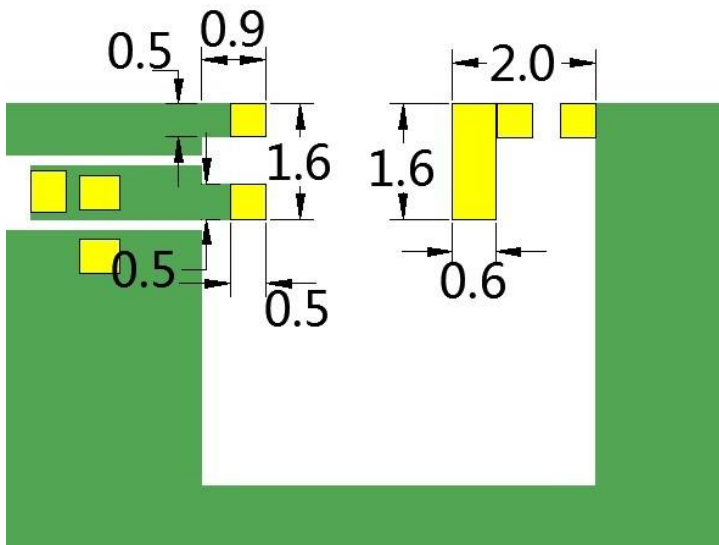


ELECTRIC SPECIFICATIONS

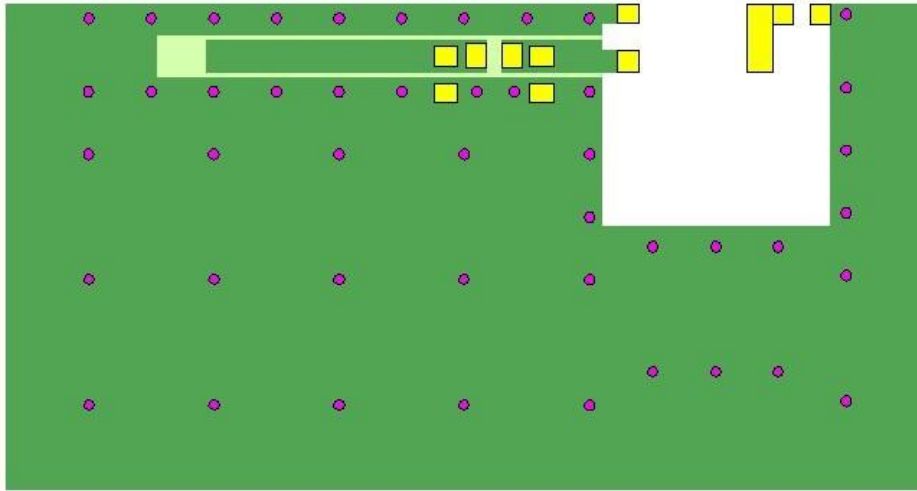
Product type	CA-2450-31
Frequency Range	2400~2480MHZ
Gain (dBi)	MAX 2.18
Input Impedance	50 Ω

PART NUMBERING SYSTEM

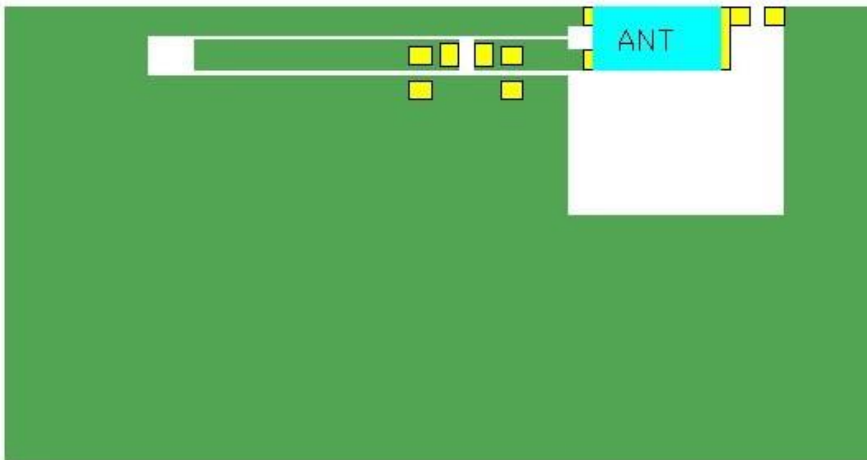
CA - **2450** - **31** - **A**
 Material Frequency Size Type



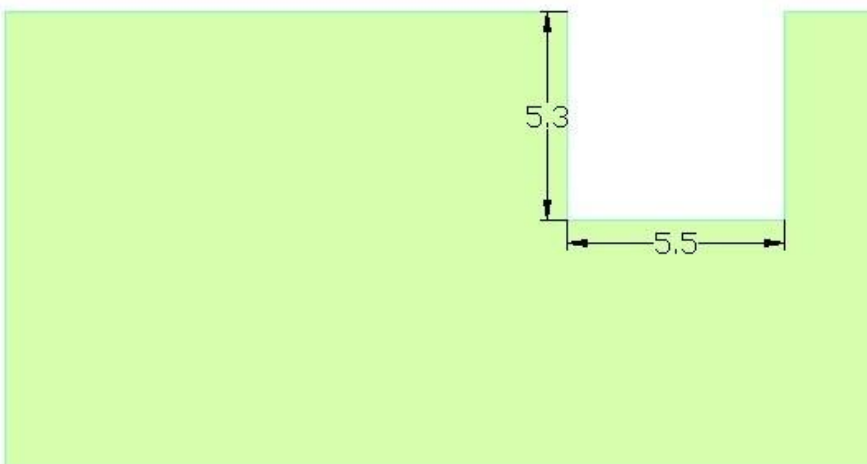
EVALUATION BOARD



- 天线
- PAD
- 底层铺铜
- 顶层铺铜
- 打孔



- 天线
- PAD
- 底层铺铜
- 顶层铺铜

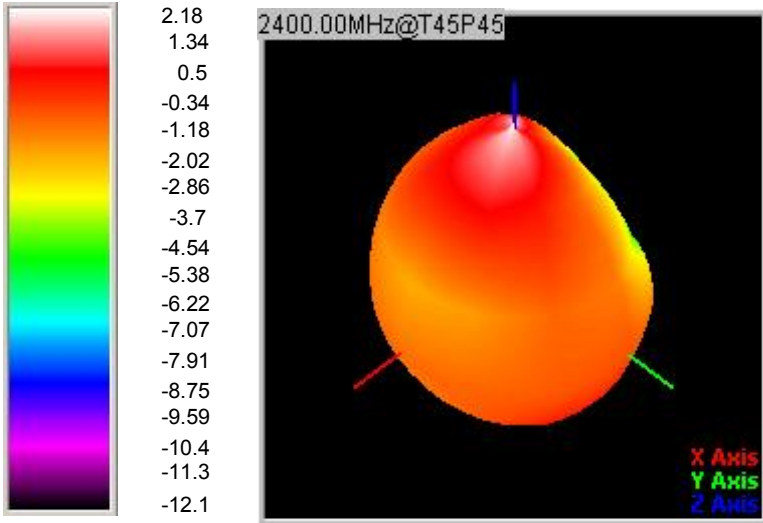


Frequency	Gain(dBi)	Efficiency (%)
2400MHz	1.69	23
2410MHz	2.16	33
2420MHz	-0.34	29
2430MHz	-1.18	26
2440MHz	-0.13	24
2450MHz	2.18	35
2460MHz	1.81	21
2470MHz	1.09	18
2480MHz	0.36	16

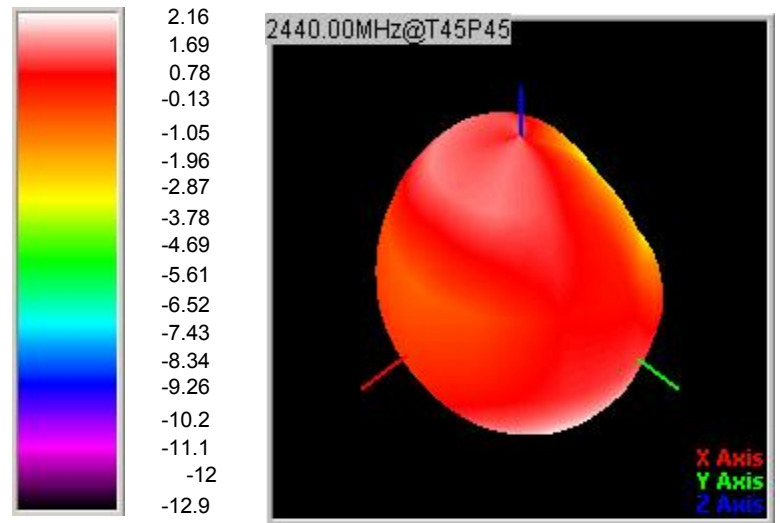
■ RADIATION PATTERNS

□ 2.4GHz WLAN BAND

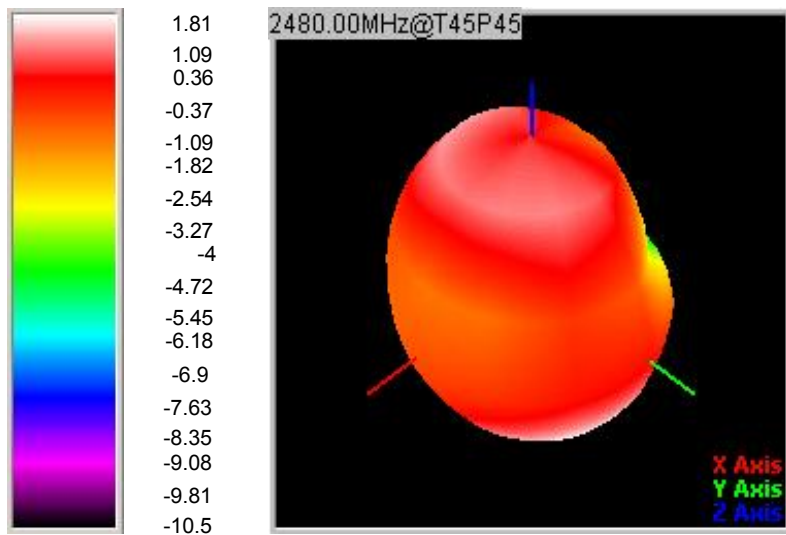
◎ 3D Gain Pattern (2400 MHz)



◎ 3D Gain Pattern (2440 MHz)

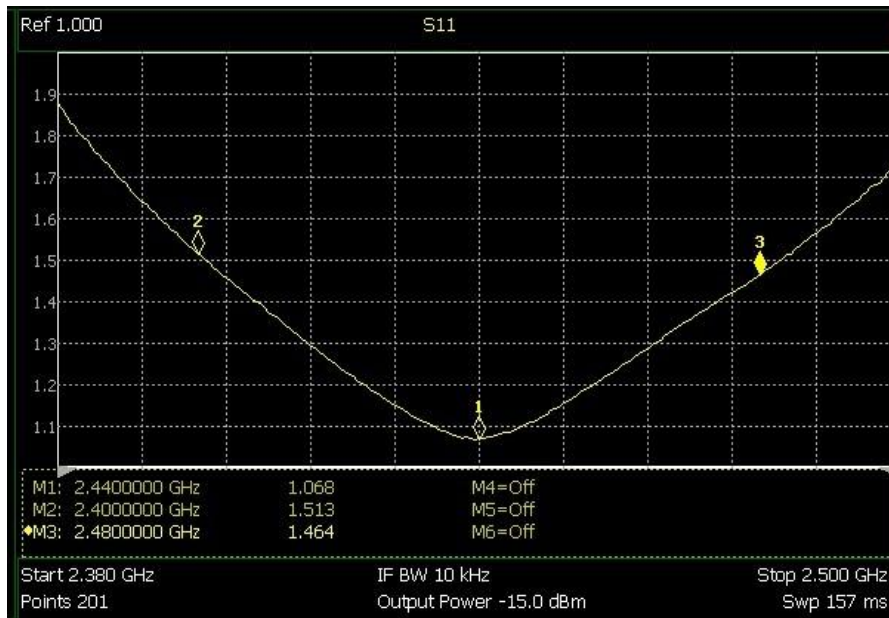
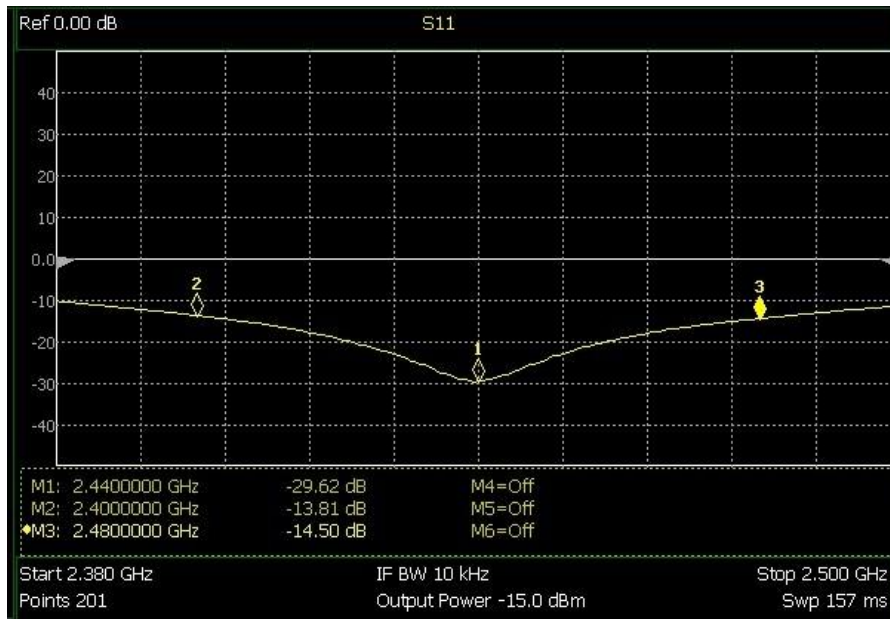


◎ 3D Gain Pattern (2480 MHz)

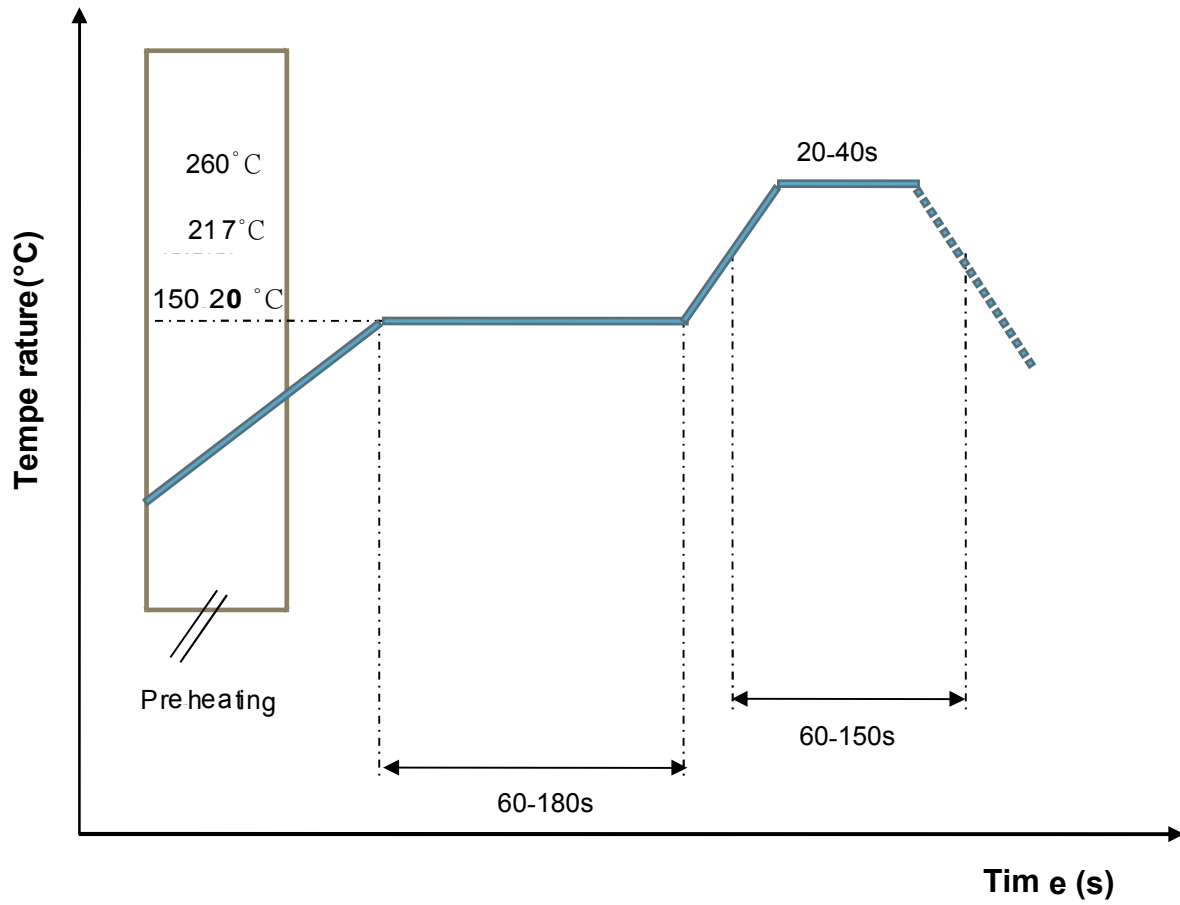


FREQUENCY CHARACTERISTICS

EFFICIENCY AND VSWR

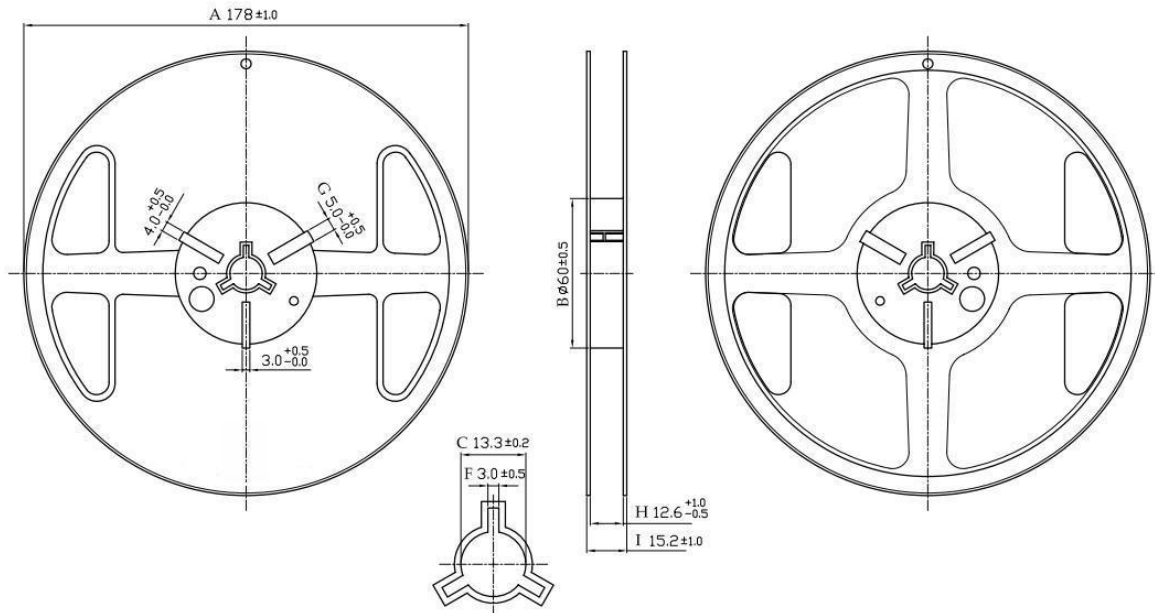


■ RECOMMENDED REFLOW PROFILE

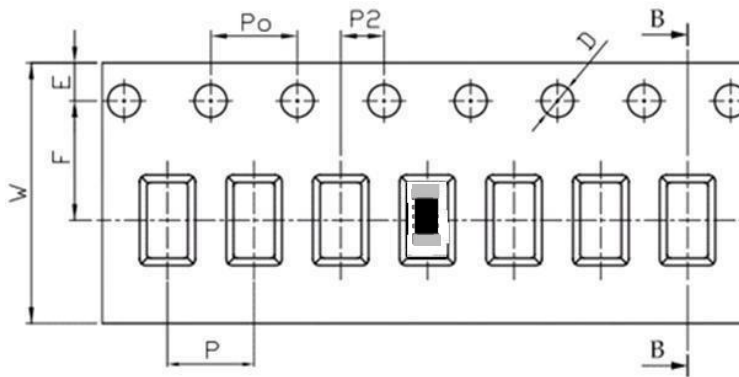


PACKAGING STYLE

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
P ₀	4.00	± 0.10
10P ₀	40.00	± 0.20

Typing Quantity: 5000 pieces per 7" reel

SMD CERAMIC ANTENNA

Data Sheet

CA-2450-31-SE

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

CA-2450-52-SE

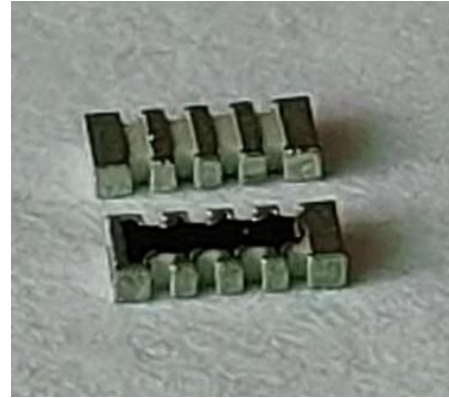
For 2400-2484MHz
5.0x2.5mm [EIA5025]

FEATURES

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

APPLICATIONS

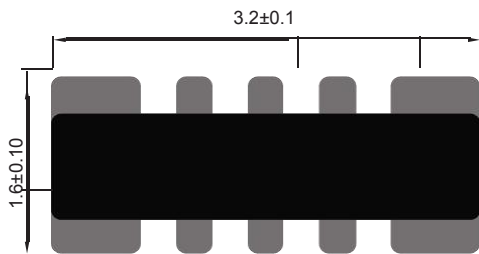
- Bluetooth
- IEEE802.11g/b
- Zigbee systems,etc...



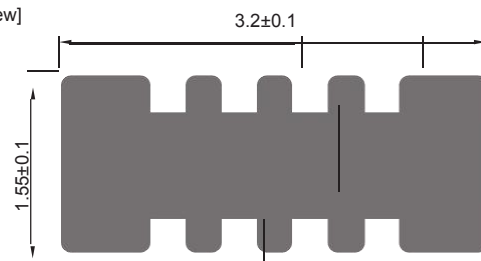
SHAPES AND DIMENSIONS Dimensions in mm

CA-2450-31-SE

[Top view]



[Bottom view]

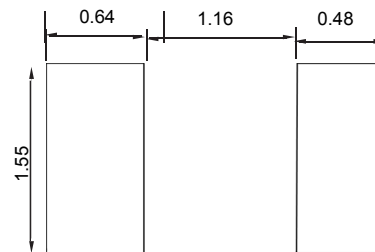


RECOMMENDED LAND PATTERN



Dimension s in mm

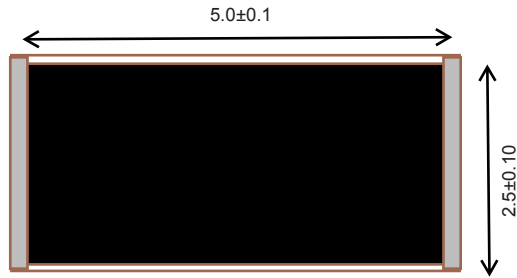
OLDER RESIST PATTERN



Dimensions in mm

CA-2450-52-SE

[Top view]



[Bottom view]

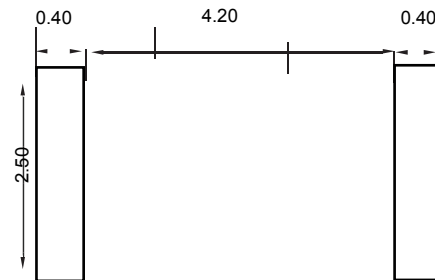


RECOMMENDED LAND PATTERN



Dimensions in mm

OLDER RESIST PATTERN



Dimensions in mm

ELECTRICAL SPECIFICATIONS

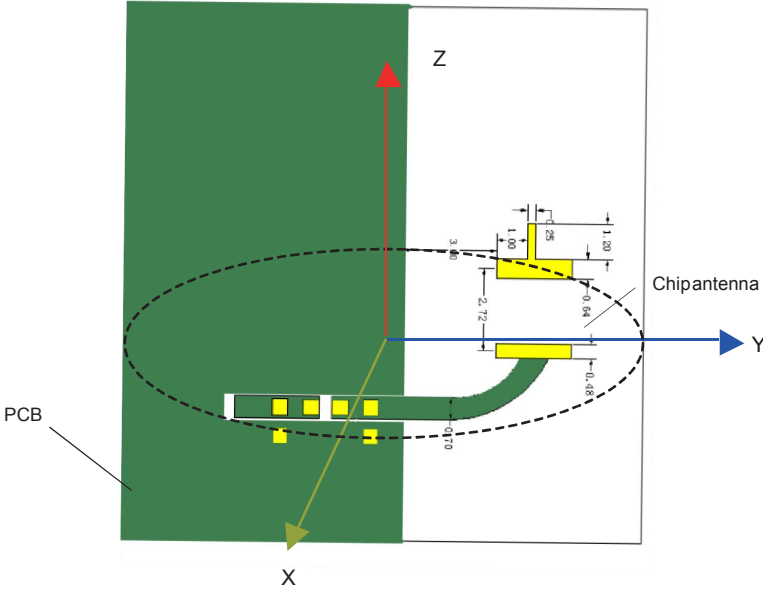
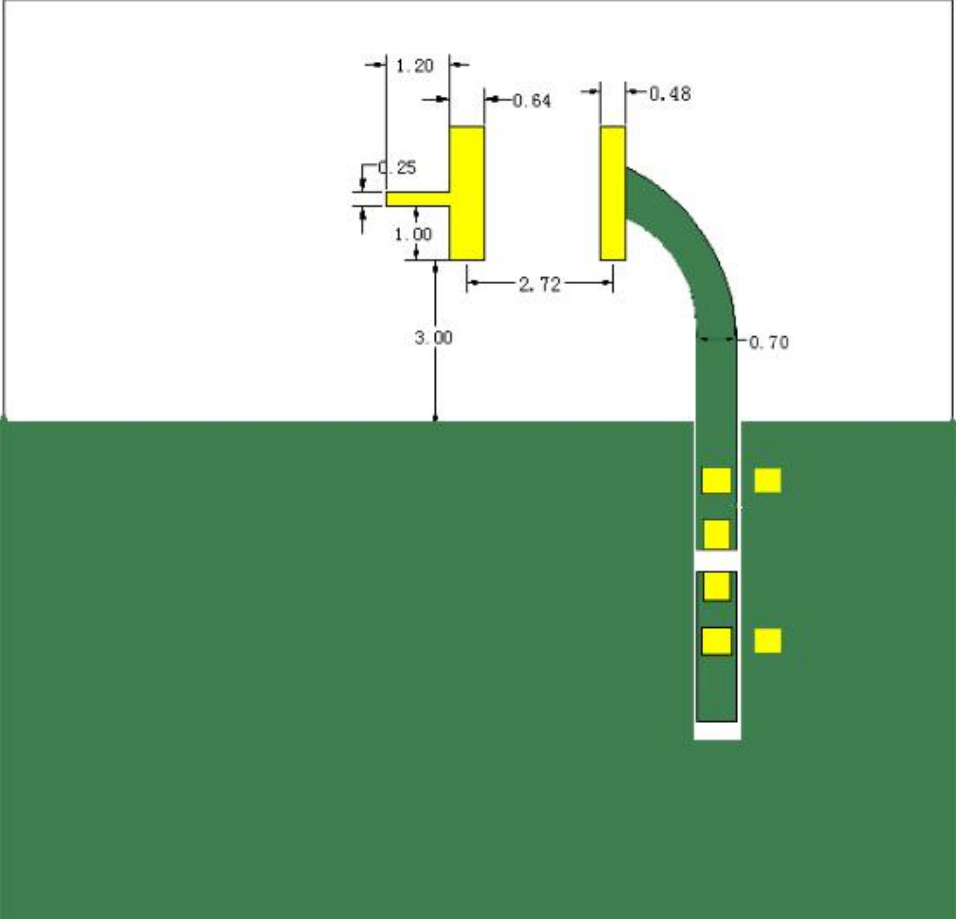
Product type	CA-2450-31-SE CA-2450-52-SE
Center Frequency Range	2450MHZ
Input Impedance	50 Ω

PART NUMBERING SYSTEM

CA - **2450** - **31 /52** - **SE**
 Material Frequency Size Series

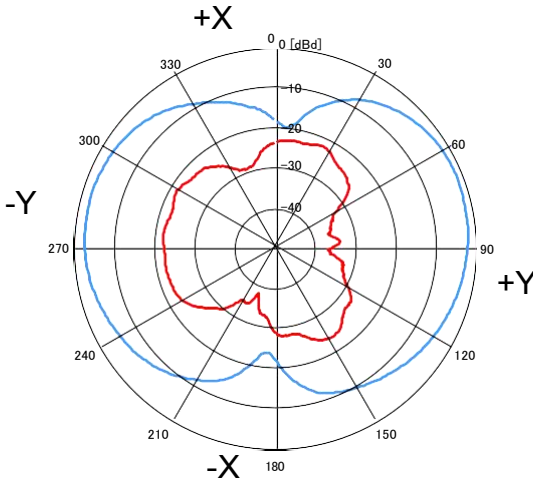
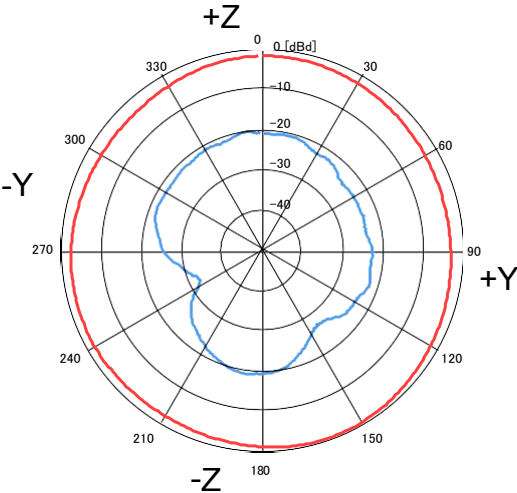
SMD CERAMIC ANTENNA

EVALUATION BOARD



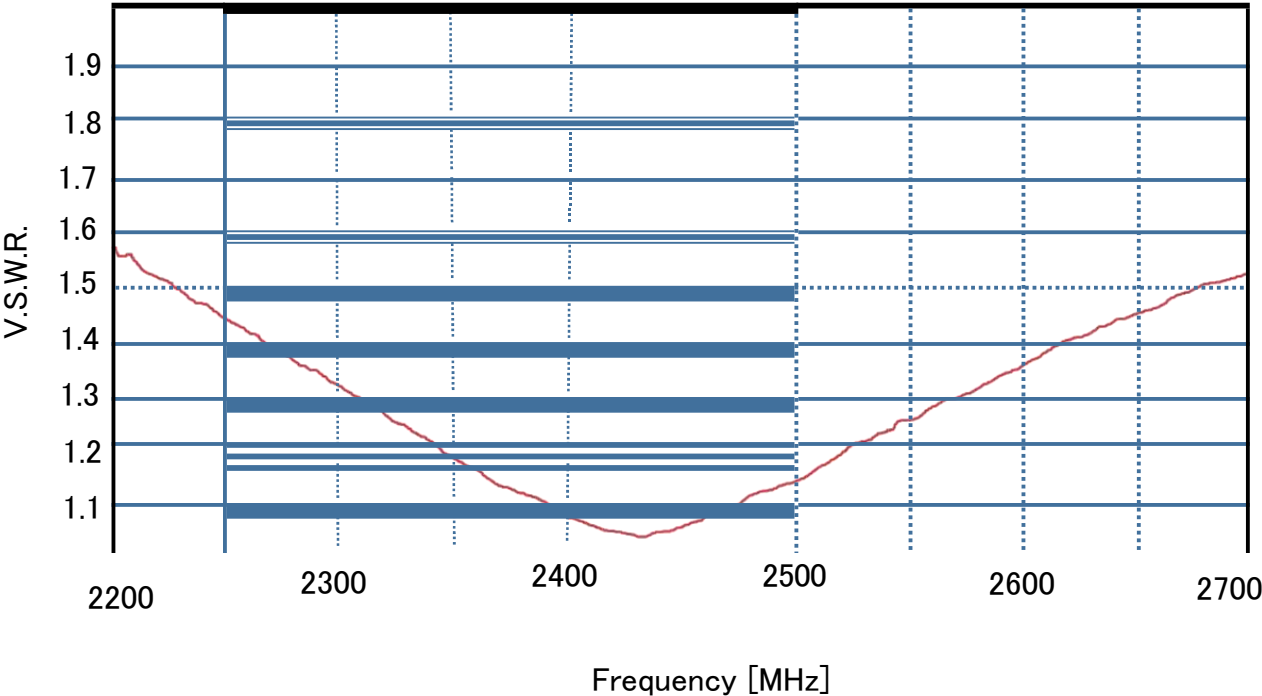
RADIATION PATTERNS

2.4GHz WLAN BAND

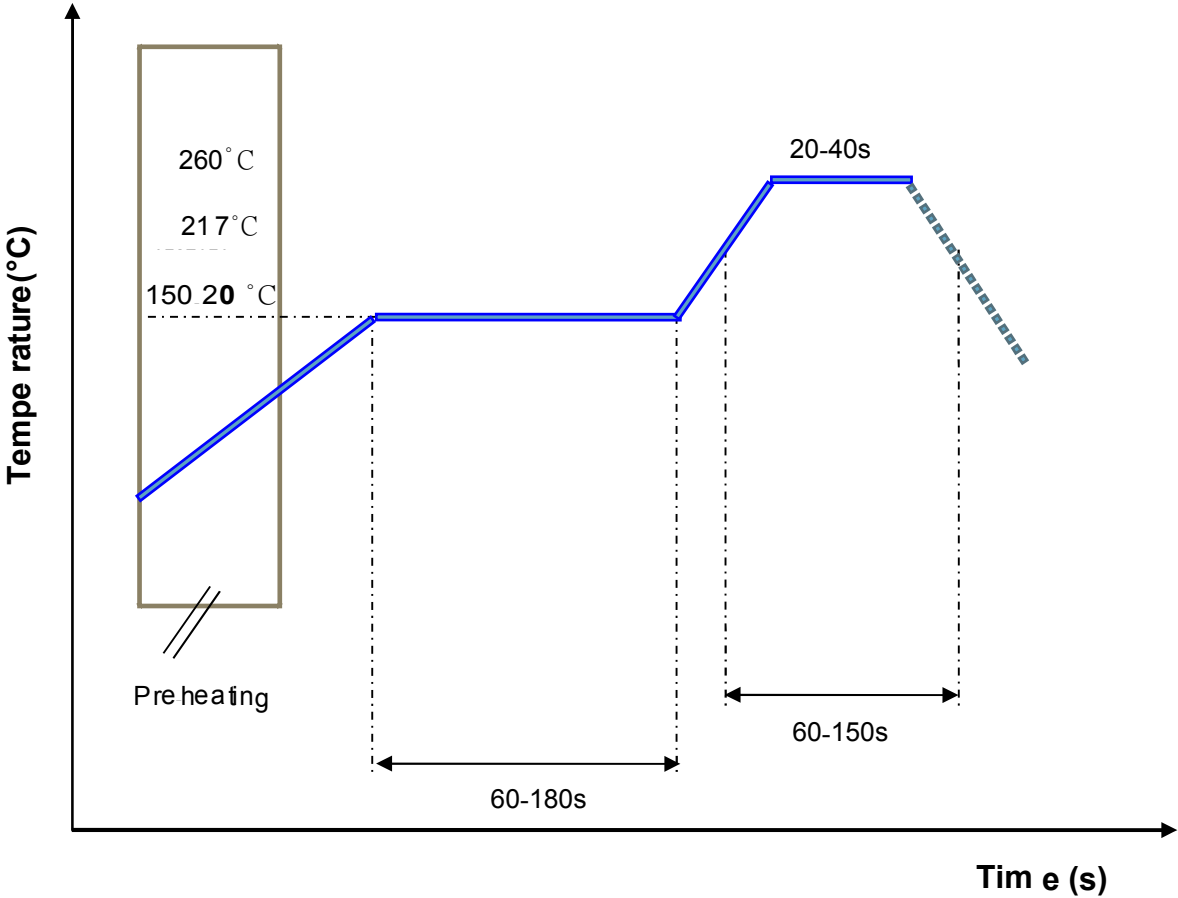


FREQUENCY CHARACTERISTICS

EFFICIENCY AND VSWR

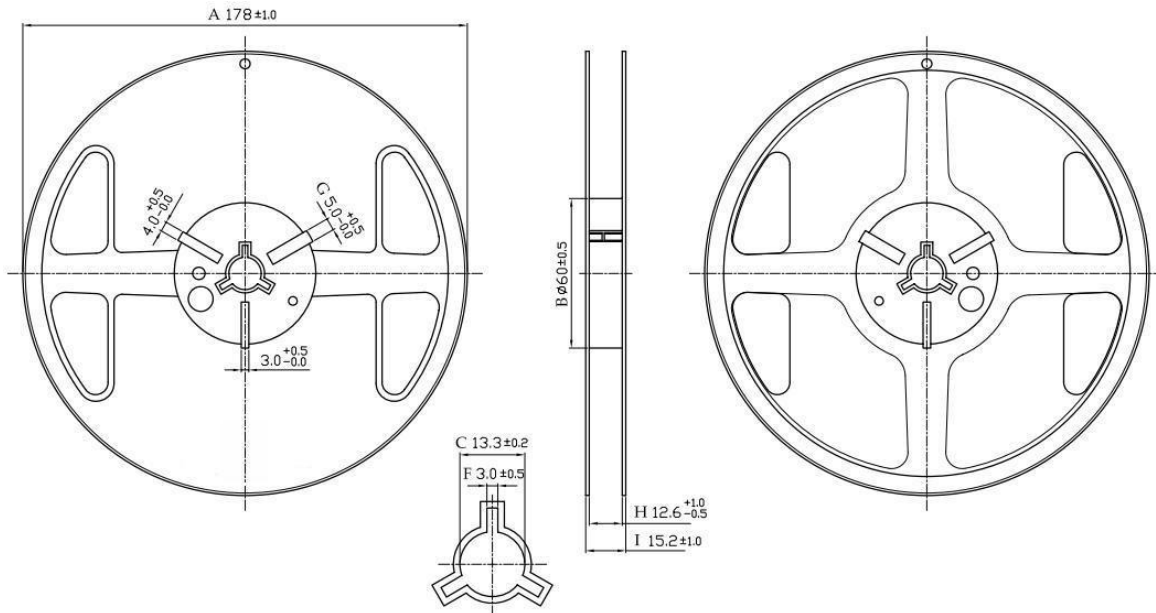


■ RECOMMENDED REFLOW PROFILE



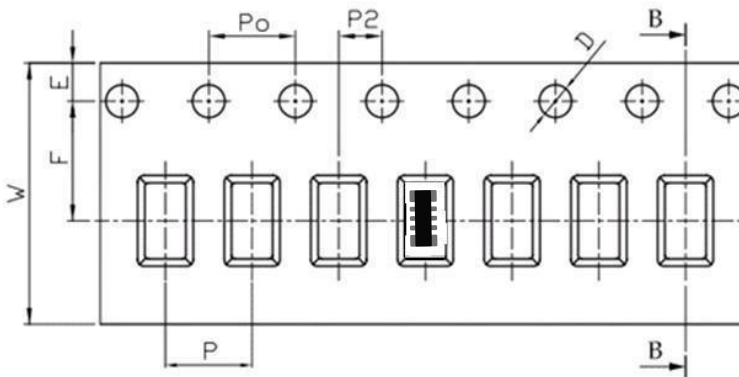
PACKAGING STYLE

REEL DIMENSIONS



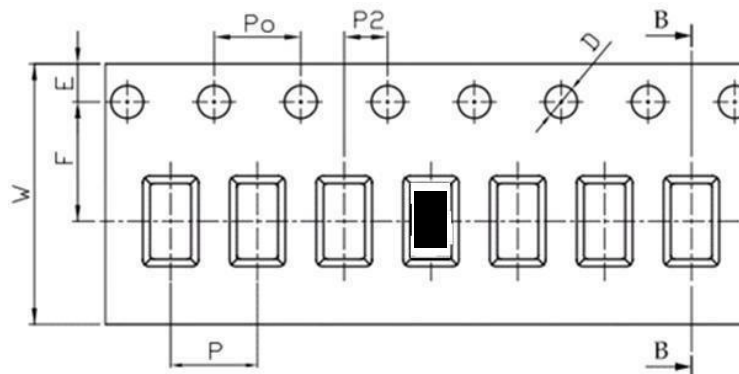
TAPE DIMENSIONS

3216 Typing Quantity: 5000 pieces per 7" reel



Feature	Specifications	Tolerances
W	8.00	\pm 0.30
P	4.00	\pm 0.10
E	1.75	\pm 0.10
F	3.50	\pm 0.10
P ₂	2.00	\pm 0.10
D	1.50	+0.10 -0.00
P ₀	4.00	\pm 0.10
10P ₀	40.00	\pm 0.20

5025 Typing Quantity: 4000 pieces per 13" reel



Feature	Specifications	Tolerances
W	12.00	\pm 0.30
P	4.00	\pm 0.10
E	1.75	\pm 0.10
F	5.50	\pm 0.10
P ₂	2.00	\pm 0.10
D	1.50	+0.10 -0.00
P ₀	4.00	\pm 0.10
10P ₀	40.00	\pm 0.20