



# **SMD CERAMIC ANTENNA**

## **Data Sheet**

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# **CA-2450-31**

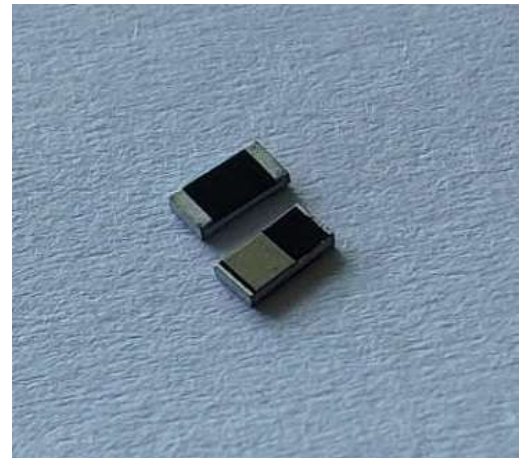
For 2400-2484MHz  
3.2x1.6mm [EIA1206]

**FEATURES**

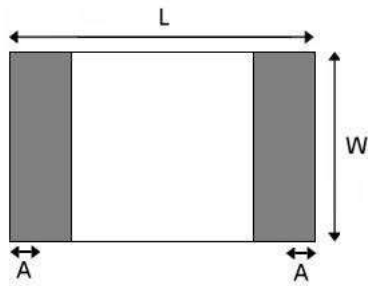
- Light weight,compact
- Wide bandwidth,lowcost
- Built-in antenna with high gain

**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

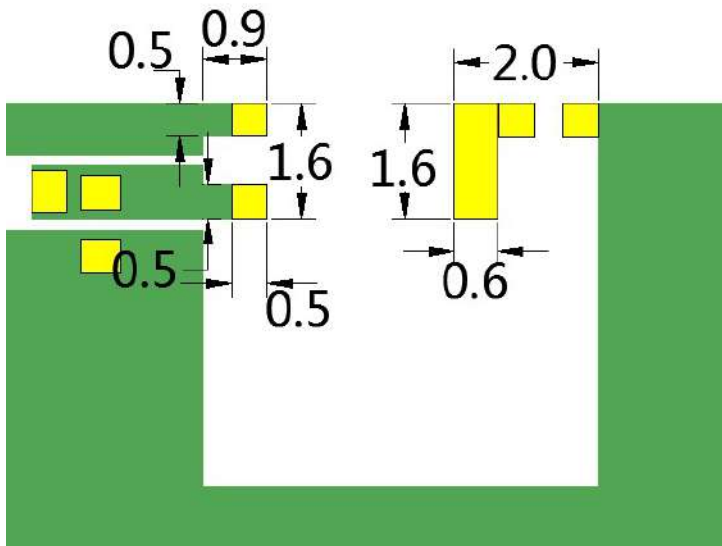


**ELECTRIC SPECIFICATIONS**

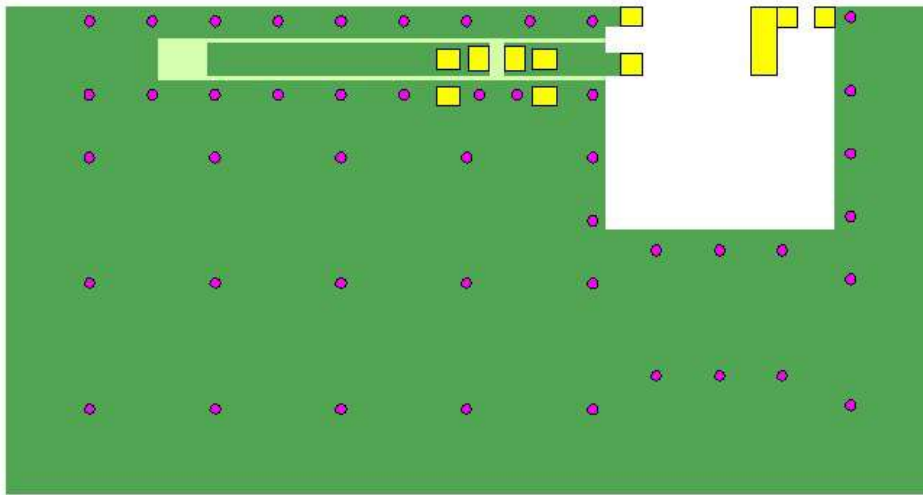
Product type	CA-2450-31
Center Frequency Range	2450MHZ
Maximum Antenna Gain	2.60 dBi

**PART NUMBERING SYSTEM**

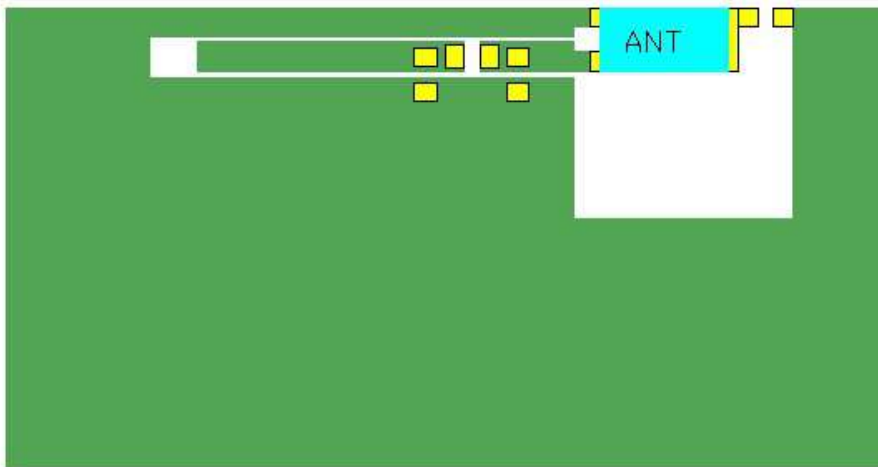
**CA**      -      **2450**      -      **31**      -      **A**  
 Material                  Frequency                  Size                  Type



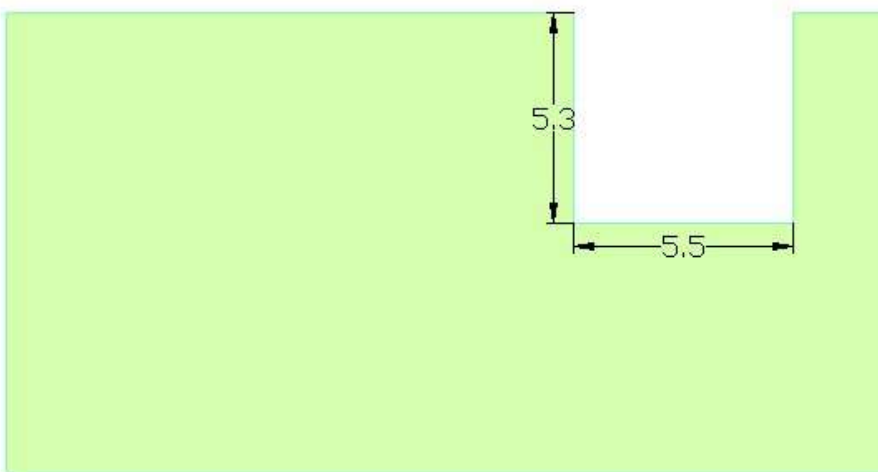
■ EVALUATION BOARD



-  天线
-  PAD
-  底层铺铜
-  顶层铺铜
-  打孔



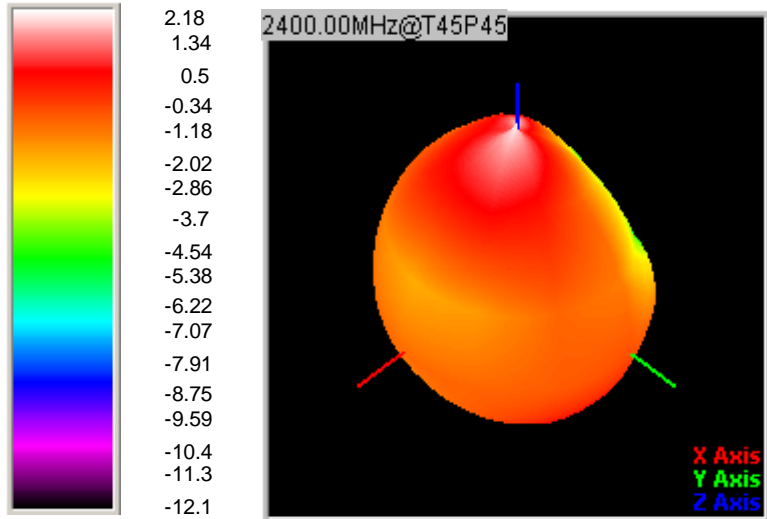
-  天线
-  PAD
-  底层铺铜
-  顶层铺铜



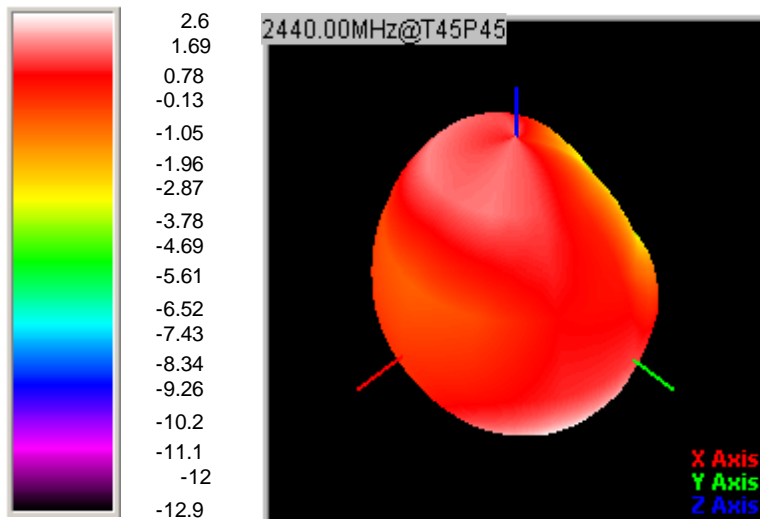
**RADIATION PATTERNS**

2.4GHz WLAN BAND

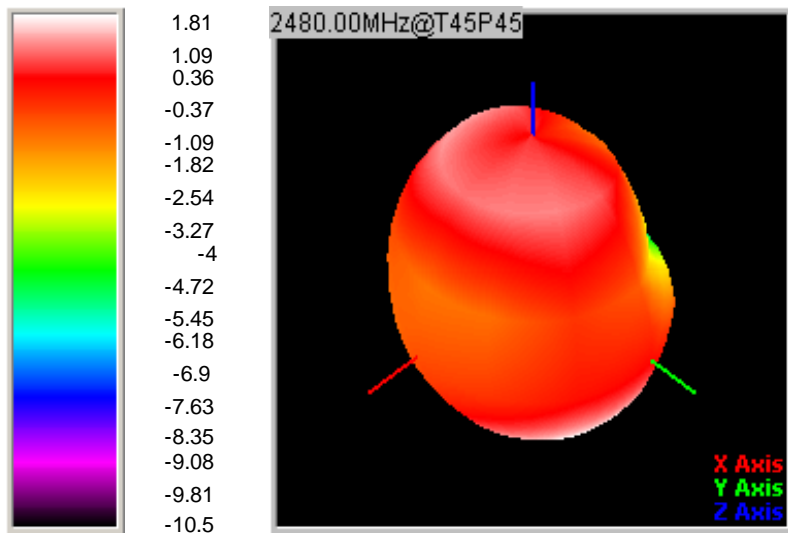
3D Gain Pattern (2400 MHz)



3D Gain Pattern (2440 MHz)

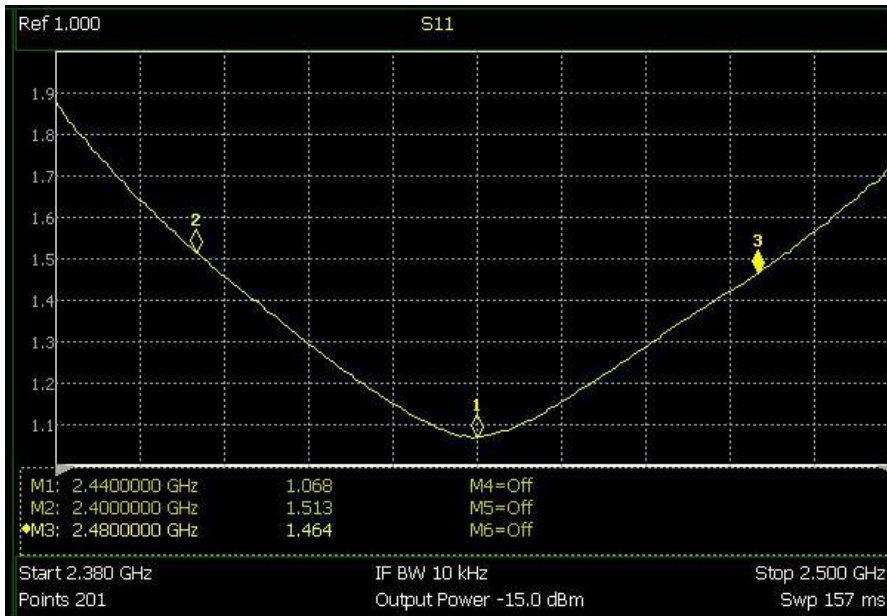
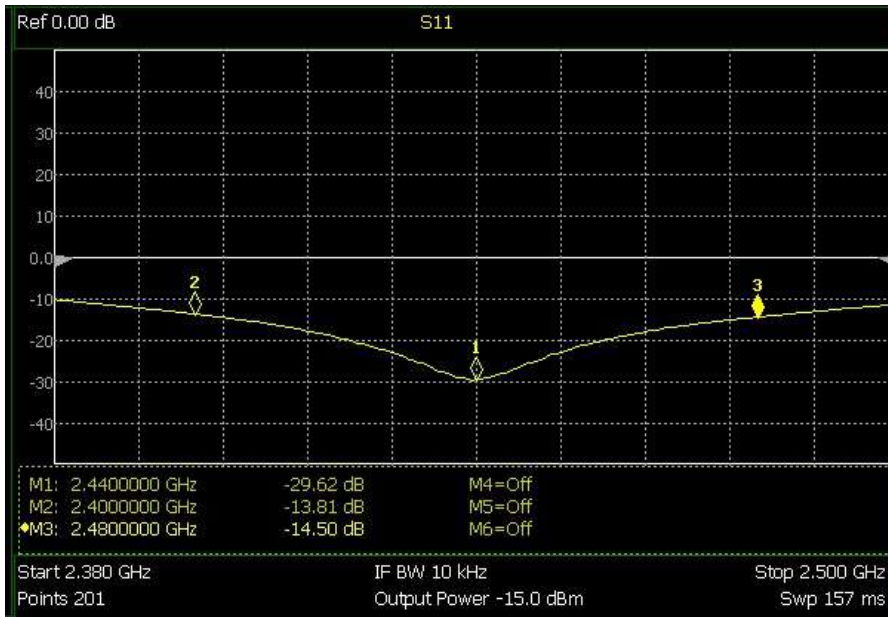


3D Gain Pattern (2480 MHz)

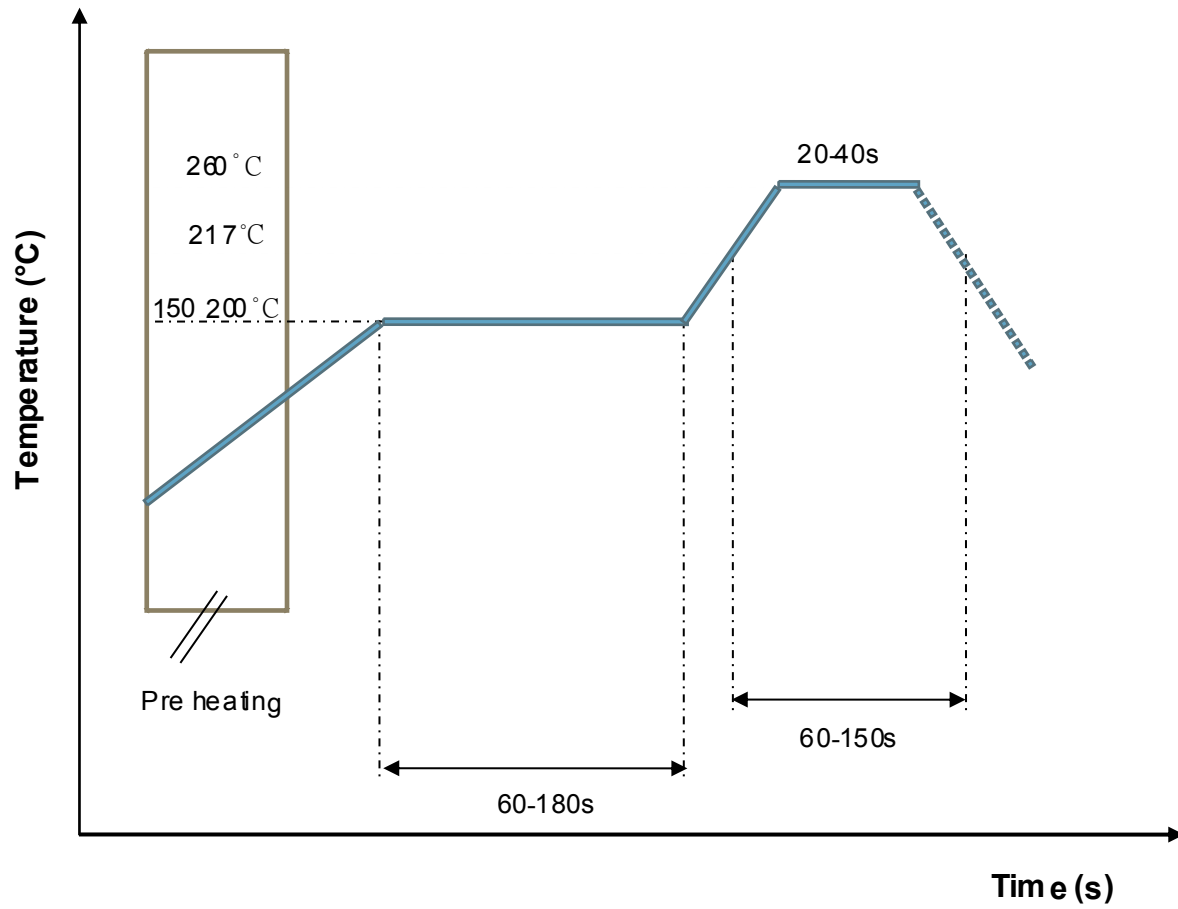


**FREQUENCY CHARACTERISTICS**

**EFFICIENCY AND VSWR**

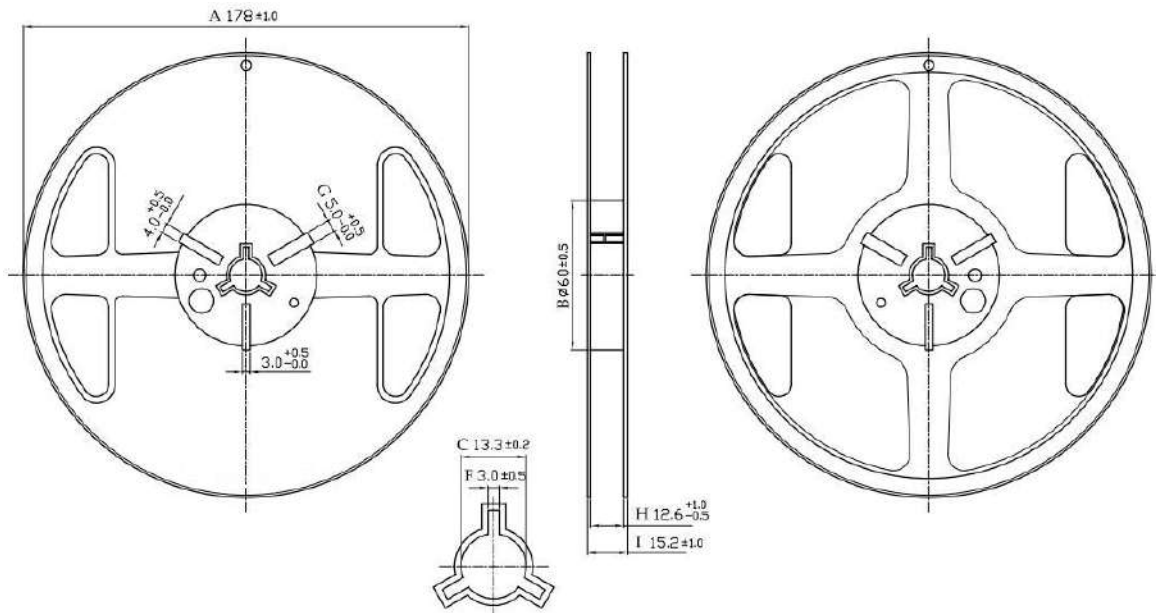


■ RECOMMENDED REFLOW PROFILE

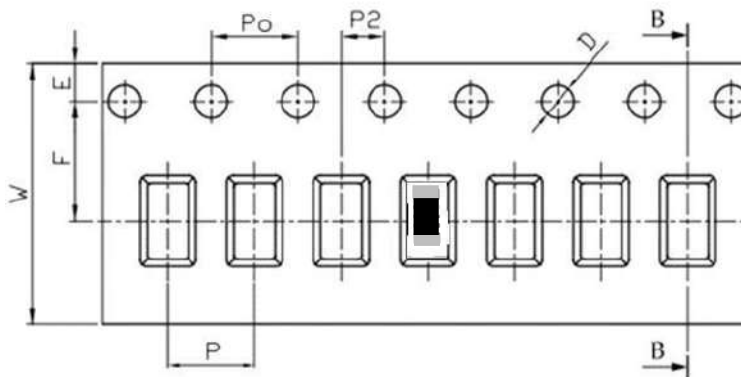


**PACKAGING STYLE**

REEL DIMENSIONS



TAPE DIMENSIONS



Feature	Specifications	Tolerances
W	8.00	$\pm 0.30$
P	4.00	$\pm 0.10$
E	1.75	$\pm 0.10$
F	3.50	$\pm 0.10$
P2	2.00	$\pm 0.10$
D	1.50	+0.10 -0.00
P <sub>0</sub>	4.00	$\pm 0.10$
10P <sub>0</sub>	40.00	$\pm 0.20$

Typing Quantity: 5000 pieces per 7" reel





# **SMD CERAMIC ANTENNA**

## **Data Sheet**

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# **CA-2450-31-SE**

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

# **CA-2450-52-SE**

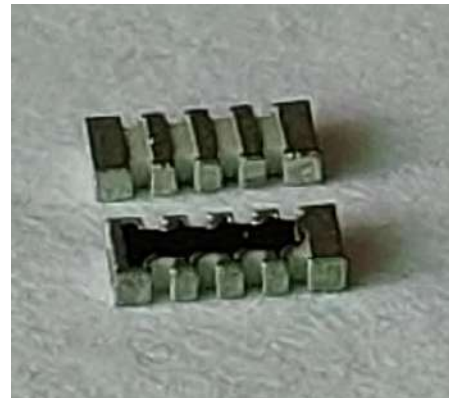
For 2400-2484MHz  
5.0x2.5mm [EIA5025]

**FEATURES**

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

**APPLICATIONS**

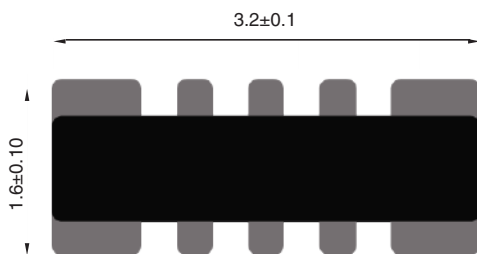
- Bluetooth
- IEEE802.11g/b
- Zigbee systems,etc...



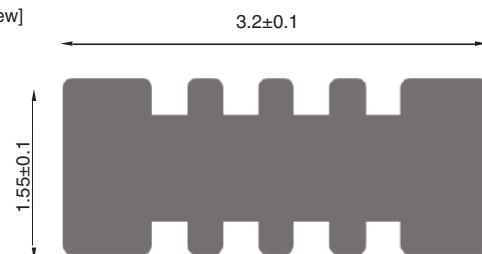
**SHAPES AND DIMENSIONS** Dimensions in mm

**CA-2450-31-SE**

[Top view]



[Bottom view]

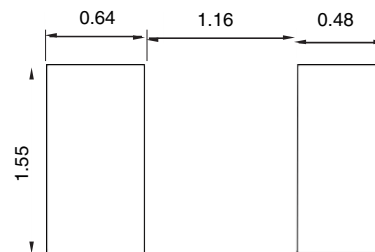


**RECOMMENDED LAND PATTERN**



Dimensions in mm

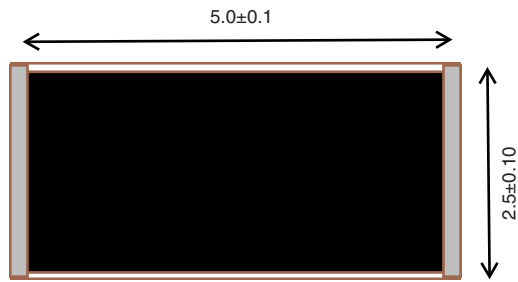
**OLDER RESIST PATTERN**



Dimensions in mm

# CA-2450-52-SE

[Top view]



[Bottom view]

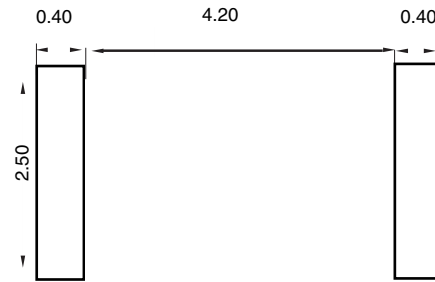


## RECOMMENDED LAND PATTERN



Dimensions in mm

## OLDER RESIST PATTERN



Dimensions in mm

## ELECTRICAL SPECIFICATIONS

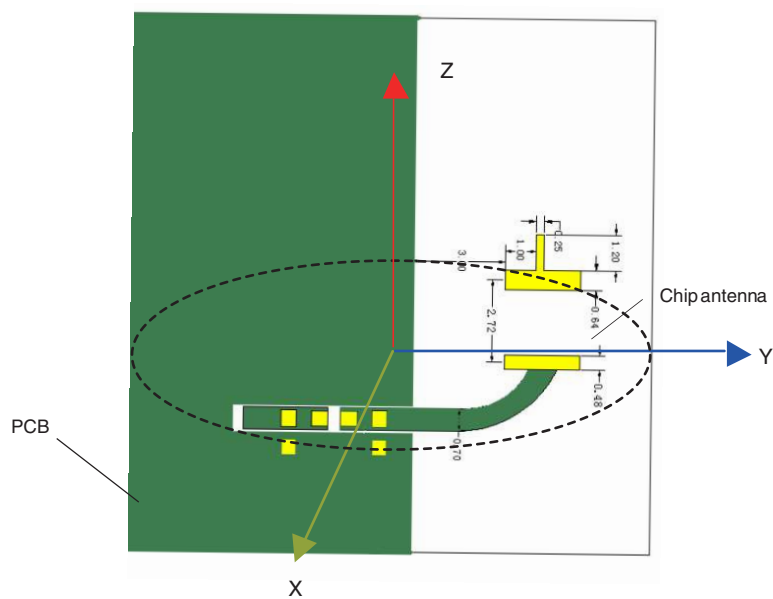
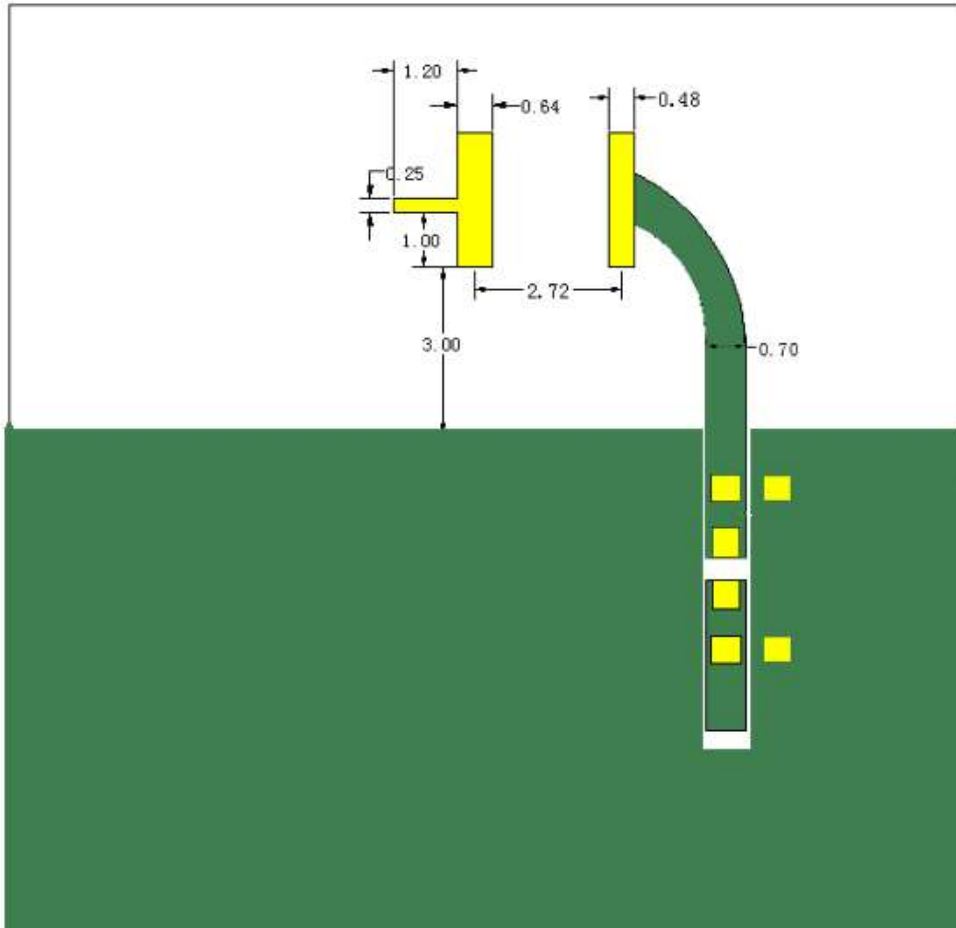
Product type	CA-2450-31-SE CA-2450-52-SE
Center Frequency Range	2450MHZ
Input Impedance	50 Ω

## PART NUMBERING SYSTEM

CA - 2450 - 31 /52 - SE

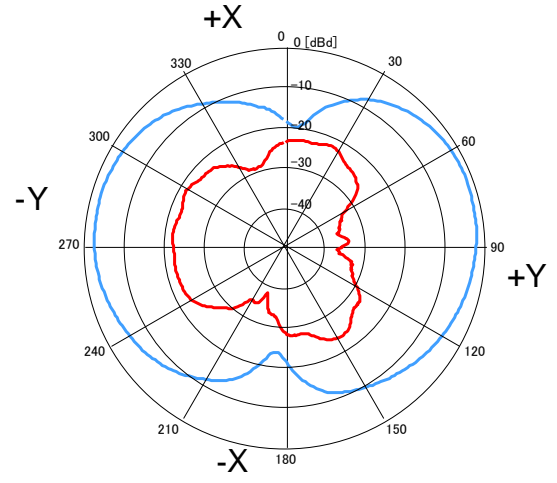
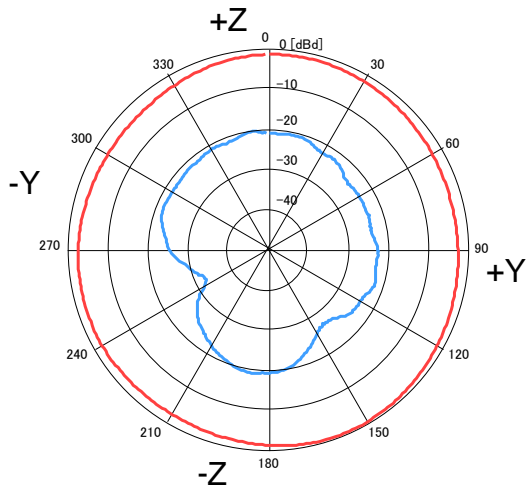
Material                      Frequency                      Size                      Series

■ EVALUATION BOARD



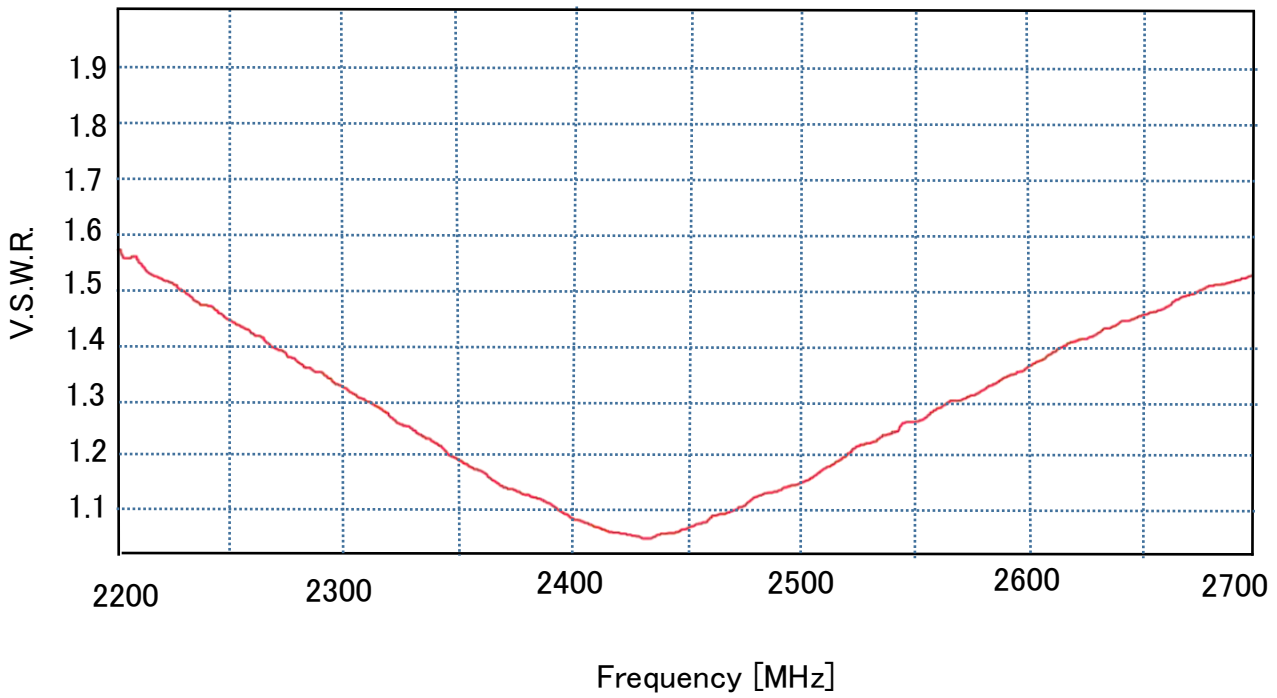
■ RADIATION PATTERNS

□ 2.4GHz WLAN BAND

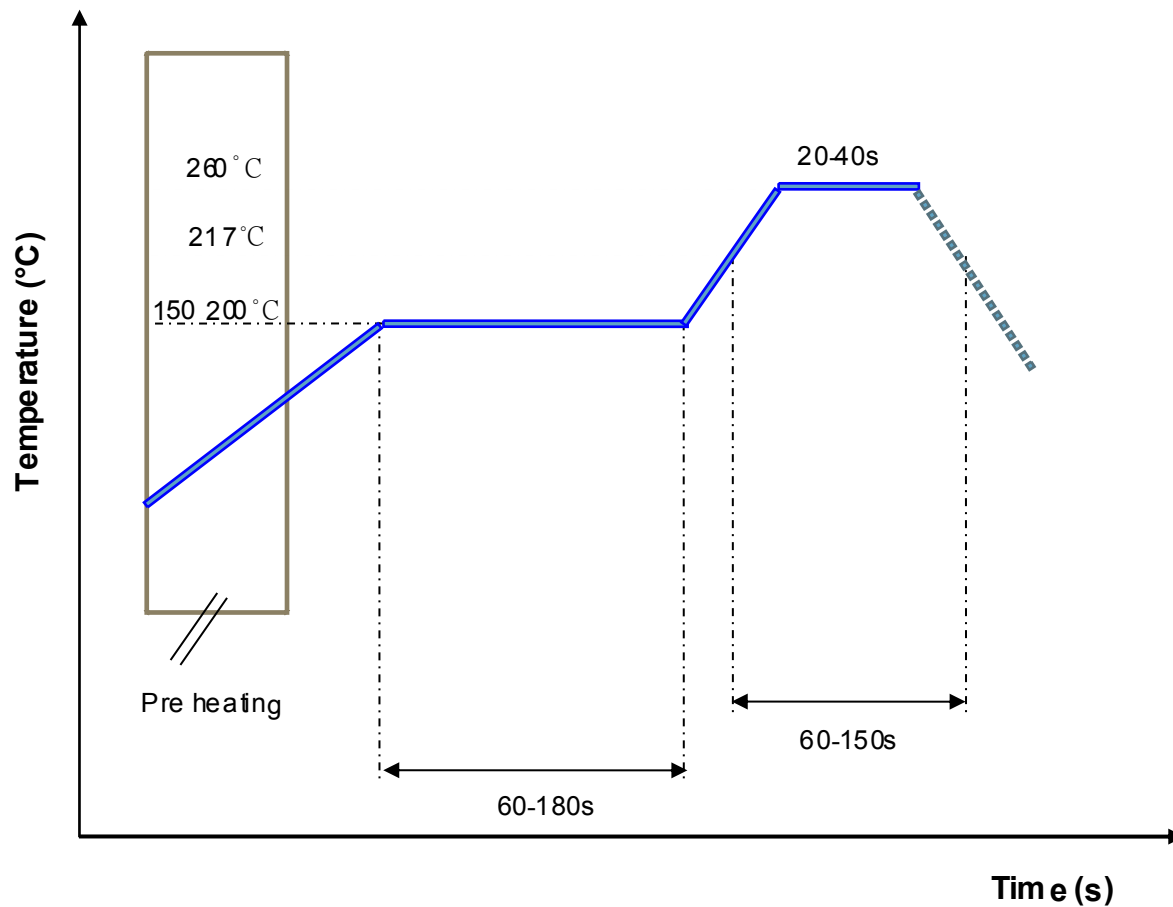


**FREQUENCY CHARACTERISTICS**

EFFICIENCY AND VSWR

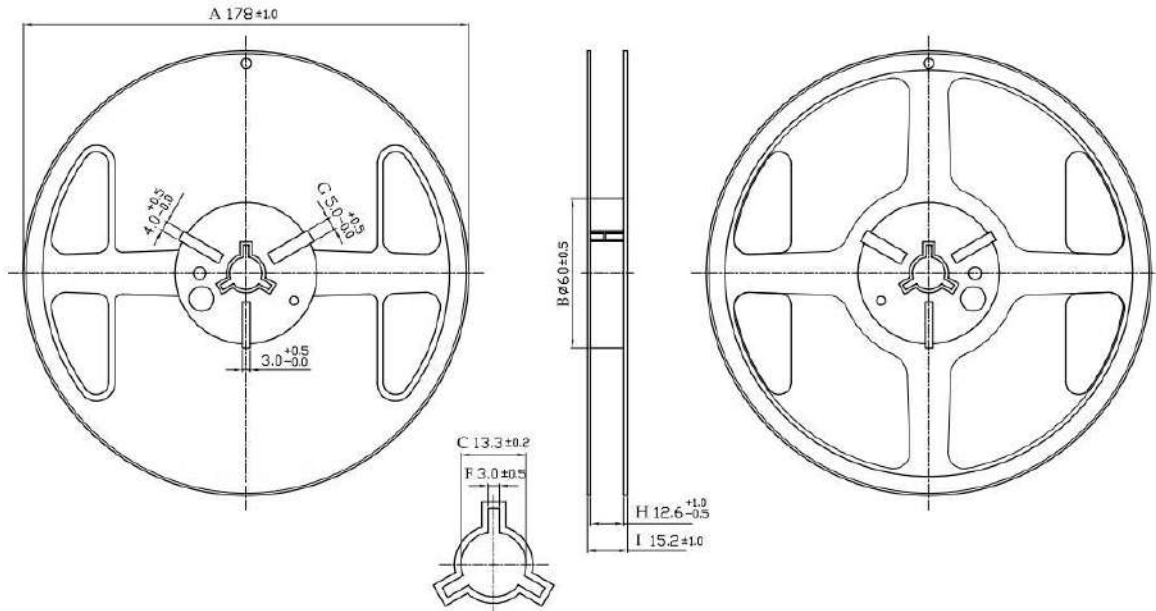


■ RECOMMENDED REFLOW PROFILE



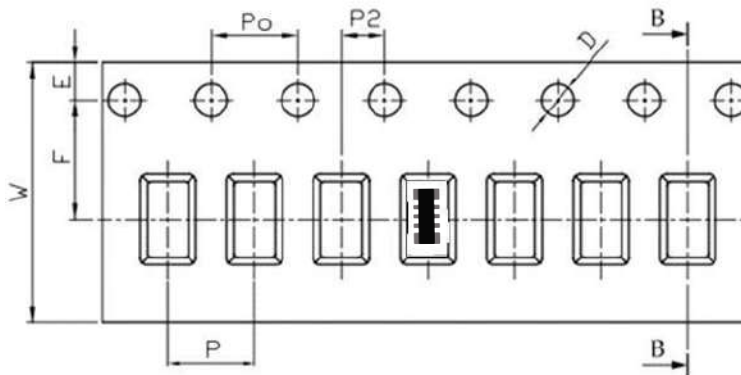
**PACKAGING STYLE**

REEL DIMENSIONS



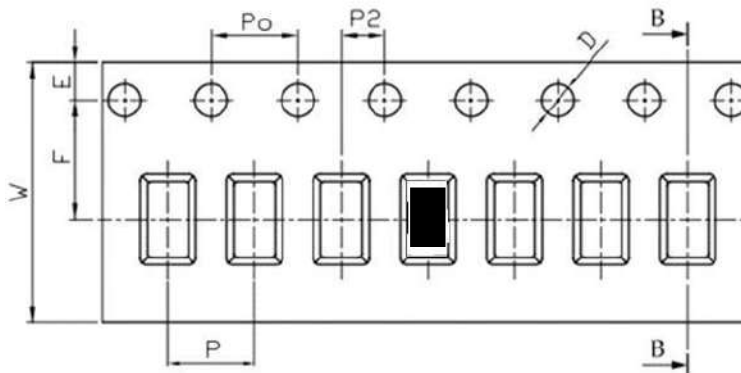
TAPE DIMENSIONS

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	$\pm 0.10$
P2	2.00	$\pm 0.10$
D	1.50	+0.10 -0.00
P <sub>0</sub>	4.00	$\pm 0.10$
10P <sub>0</sub>	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	$\pm 0.10$
P2	2.00	$\pm 0.10$
D	1.50	+0.10 -0.00
P <sub>0</sub>	4.00	$\pm 0.10$
10P <sub>0</sub>	40.00	$\pm 0.20$