

## 1. Features

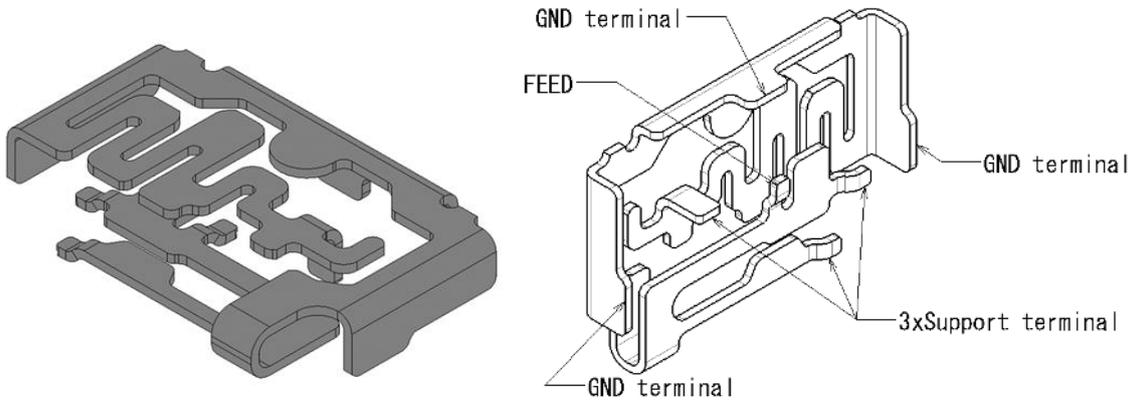
- LAN 2.4 – 2.5 GHz / 5.15 – 5.85 GHz  
2.4 – 2.5-GHz / 5.15 – 5.85-GHz antenna for WLAN
- Compact size
- High efficiency
- Surface mount device
- Embossed reel package

## 2. Part Number

RAC00245-R  
3200 (3200-piece T&R)

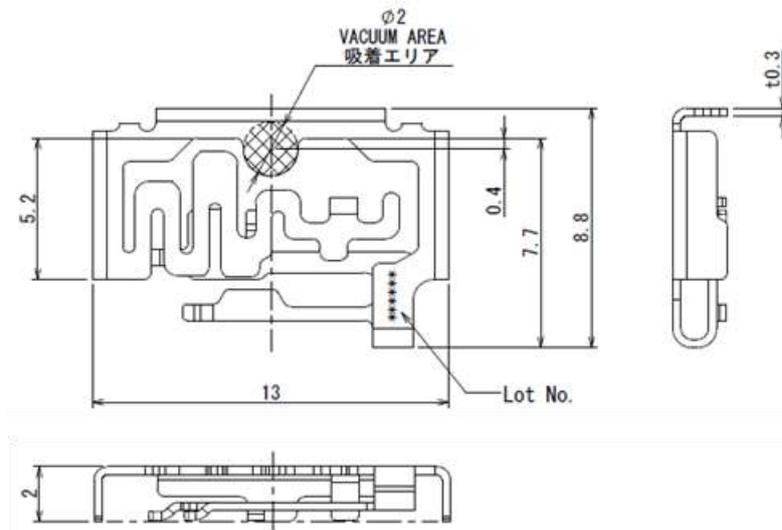
## 3. Shape, dimensions, and weight

### 3.1 Shape



### 3.2 Dimensions

w 13 × d 8.8 × h 2 mm



### 3.3 Weight

0.26 g (typical)

### 3.4 Plating

None

### 3.5 Type

Split ring

## 4. RF characteristics

### 4.1 Frequency range

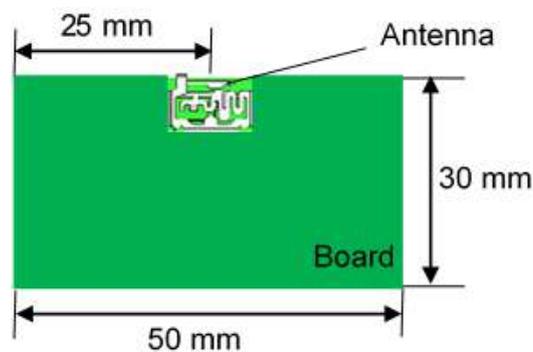
2.4 – 2.5 GHz / 5.15 – 5.85 GHz

### 4.2 Impedance

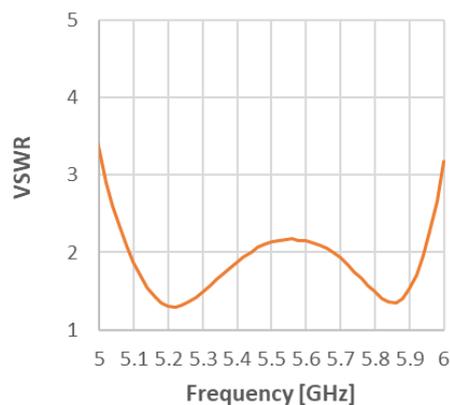
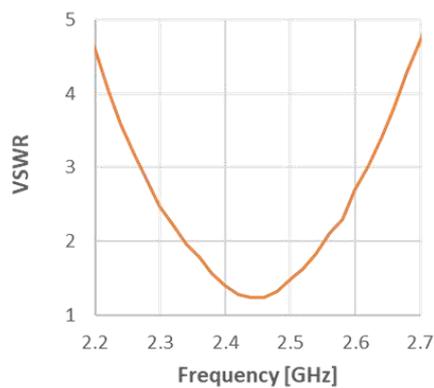
50  $\Omega$

### 4.3 Voltage standing wave ratio (VSWR)

VSWR characteristics of the antenna on a 50 × 30-mm reference board



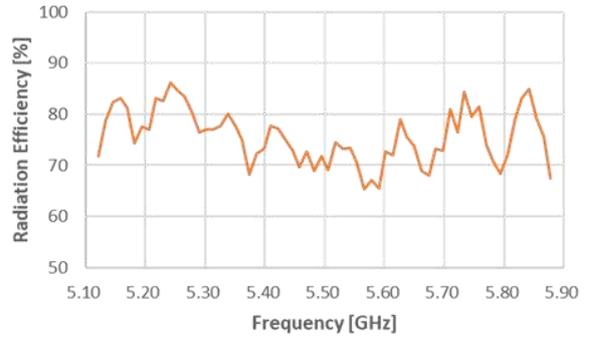
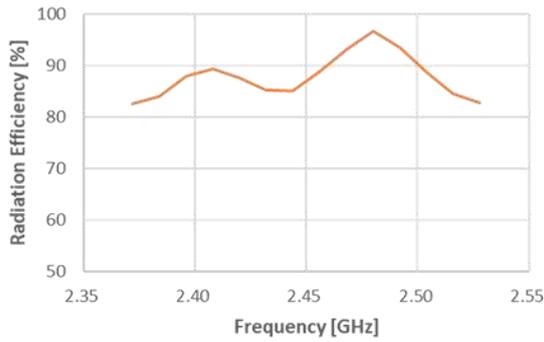
VSWR < 2.0 (frequency range: 2.4 – 2.5 GHz) or < 2.5 (frequency range: 5.15 – 5.85 GHz)



### 4.4 Radiation efficiency:

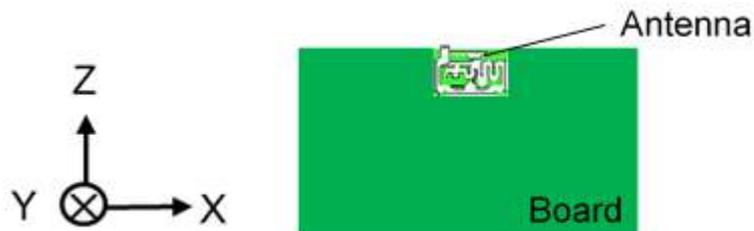
Radiation efficiency of the antenna mounted on a 50 × 30-mm reference board (excluding cable and feeder-line losses)

Radiation efficiency > 85% (frequency range: 2.4 – 2.5 GHz) or > 65% (frequency range: 5.15 – 5.85 GHz)

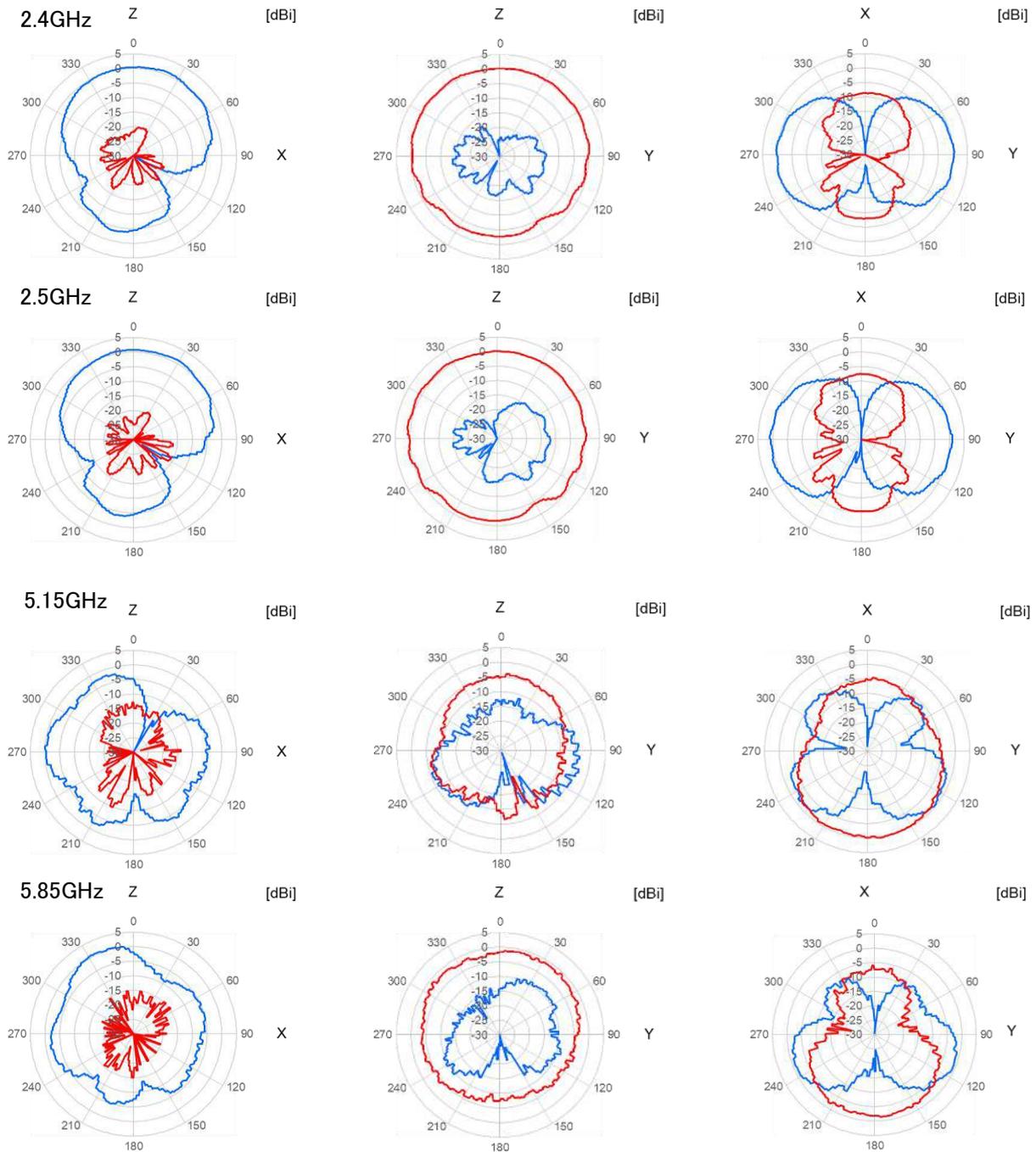


#### 4.5 Radiation pattern

Radiation pattern of the antenna mounted on a 50 × 30-mm reference board



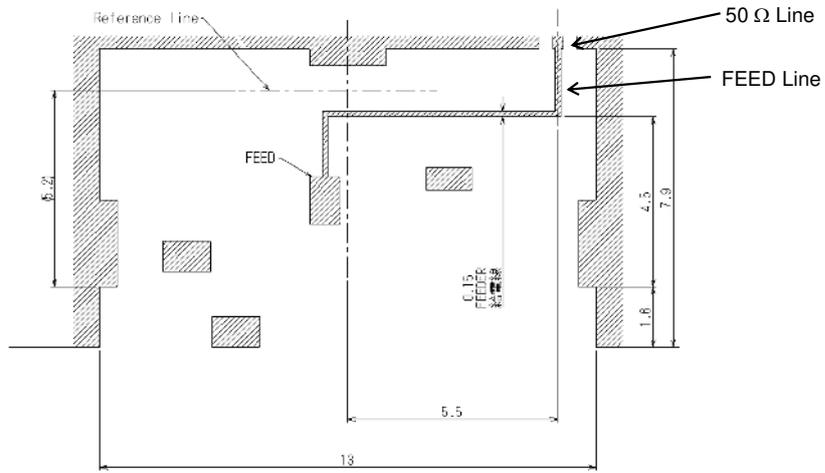
#### Radiation pattern



Blue line: horizontal polarization

Red line: vertical polarization

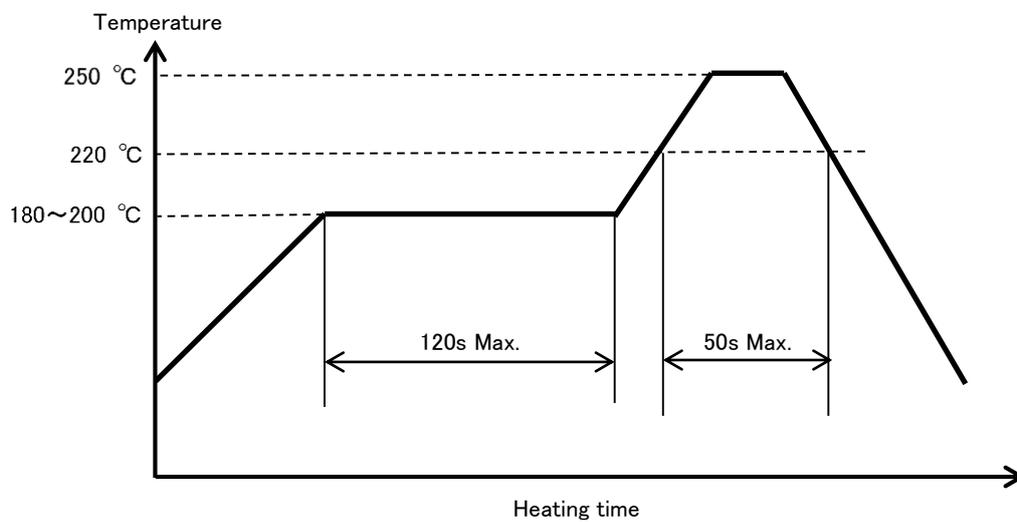




Reference board pattern (board thickness: 1.6 mm)

7. Recommended reflow temperature profile

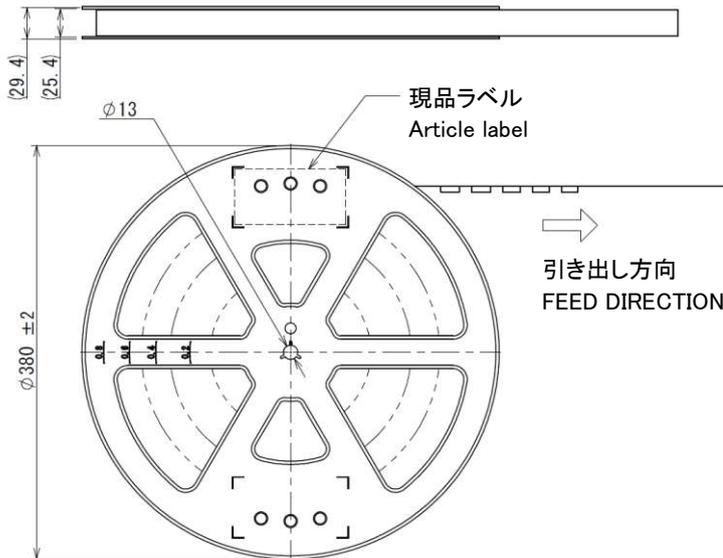
	Temperature	Heating time
Preheating temperature	180 to 200°C	120 s (max.)
Main heating temperature	Above 220°C	50 s (max.)
Peak temperature	250°C (max.)	-



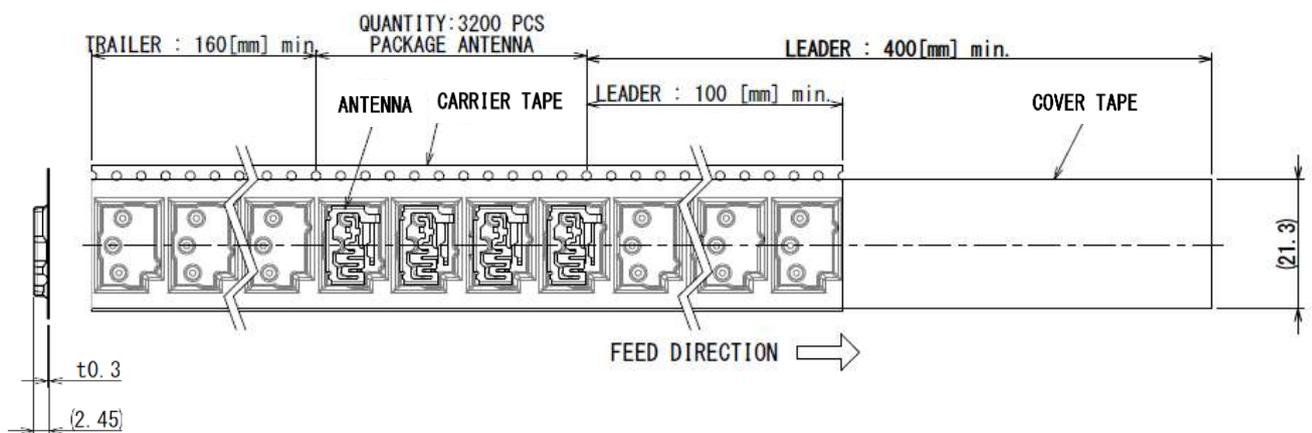
## 8. Packaging

8.1 Package quantity: 3,200 (pieces / reel)

8.2 Embossed reel dimensions



## 8.3 Tape dimensions





# RAC00245: Dual-Band 2.4/5 GHz PCB-Mount Antenna using a Split Ring Resonator structure

## Revision history

Version	Date	Changes
Issue A	16 March 2022	Initial release