

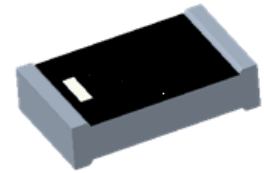
## 2.4GHz 3216 Chip Antenna: ANT3216R24003KL0

### Application:

WLAN, 802.11b/g, Bluetooth, etc...

### Features

SMD, high reliability, ultra compact, Omni-directional...



### Part number

ANT    3216    R    2400    3K    L0  
          (1)    (2)    (3)    (4)    (5)

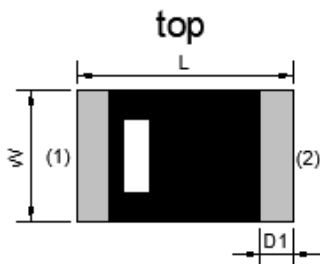
|                    |               |
|--------------------|---------------|
| (1)Size Code       | 3.2x1.6mm     |
| (2) Packing        | Tape and reel |
| (3) Frequency      | 2.4GHz        |
| (4) Packing Number | 3K            |
| (5)Code            | L1            |

### Electrical Specification

|                           |                  |
|---------------------------|------------------|
| Working FrequencyRange    | 2400 ~2484 MHz   |
| Peak Gain                 | 1.08dBi (Typ.)   |
| Impedance                 | 50 Ohm           |
| VSWR                      | 2.5(Max)         |
| Polarization              | Linear           |
| Azimuth Beamwidth         | Omni-directional |
| Operation Temperature(°C) | -40~85°C         |

The specification is defined on HEK EVB.

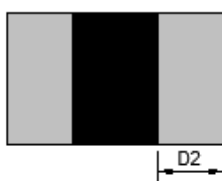
### Dimension and Terminal Configuration



| Dimension (mm) |             |
|----------------|-------------|
| L              | 3.20+/-0.15 |
| W              | 1.60+/-0.15 |
| T              | 0.60+/-0.10 |
| D1             | 0.50+/-0.15 |
| D2             | 1.30+/-0.15 |

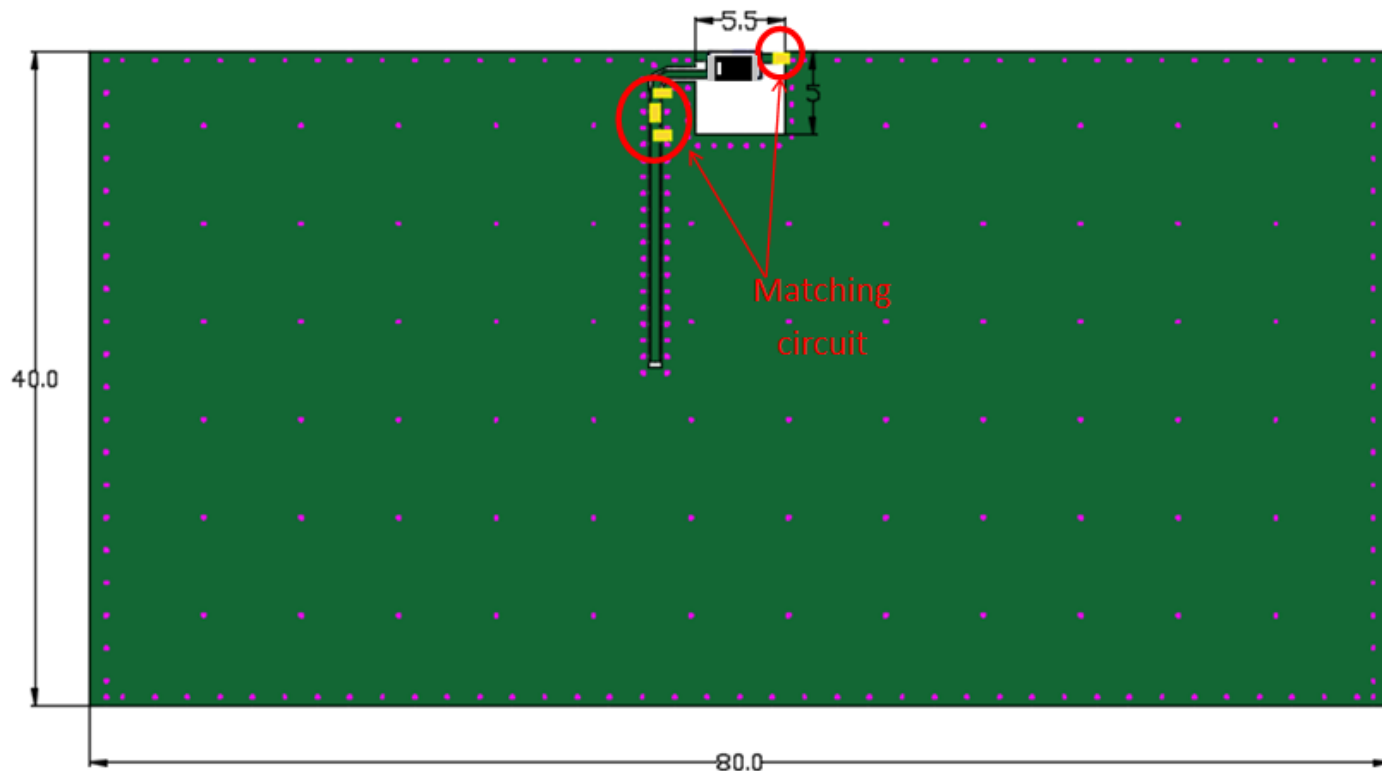
| No. | Terminal Name |
|-----|---------------|
| 1   | Feeding       |
| 2   | Ground        |

btm

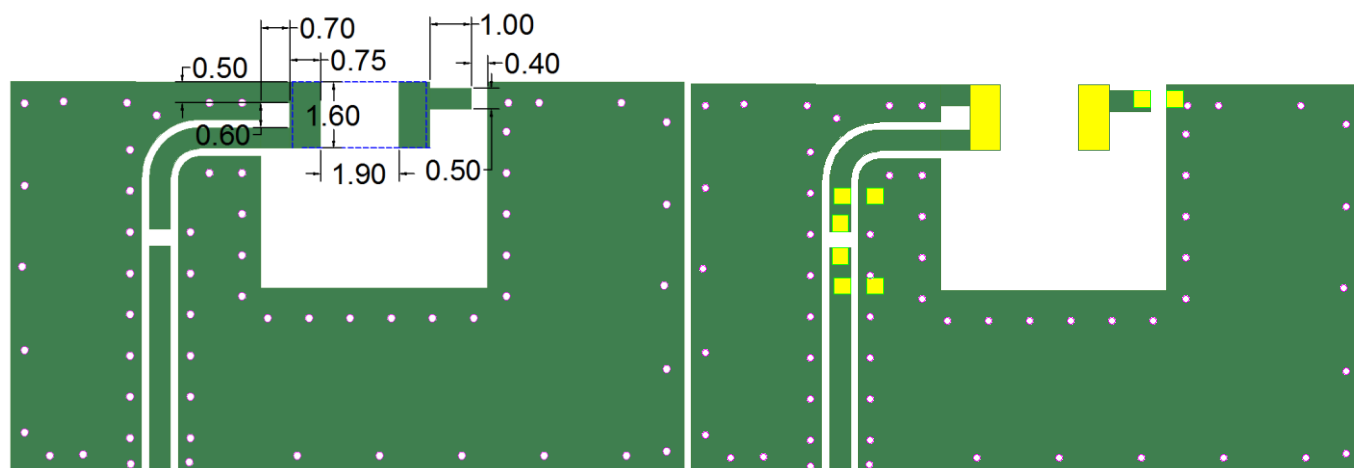


## Evaluation Board Reference

### PCB Dimension



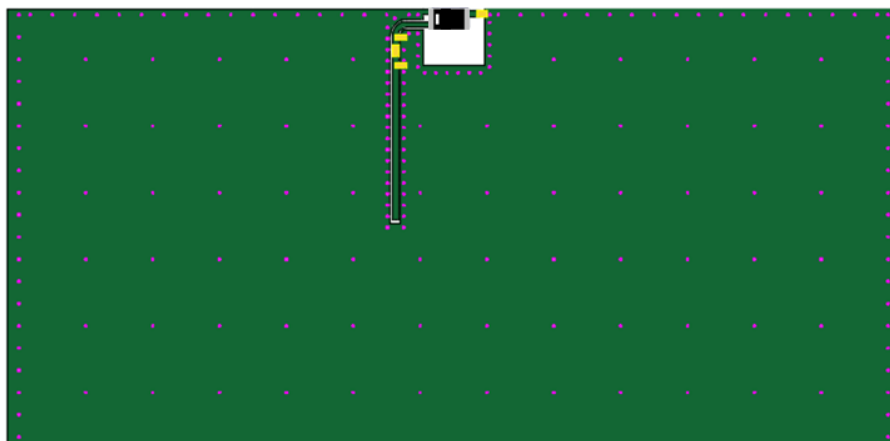
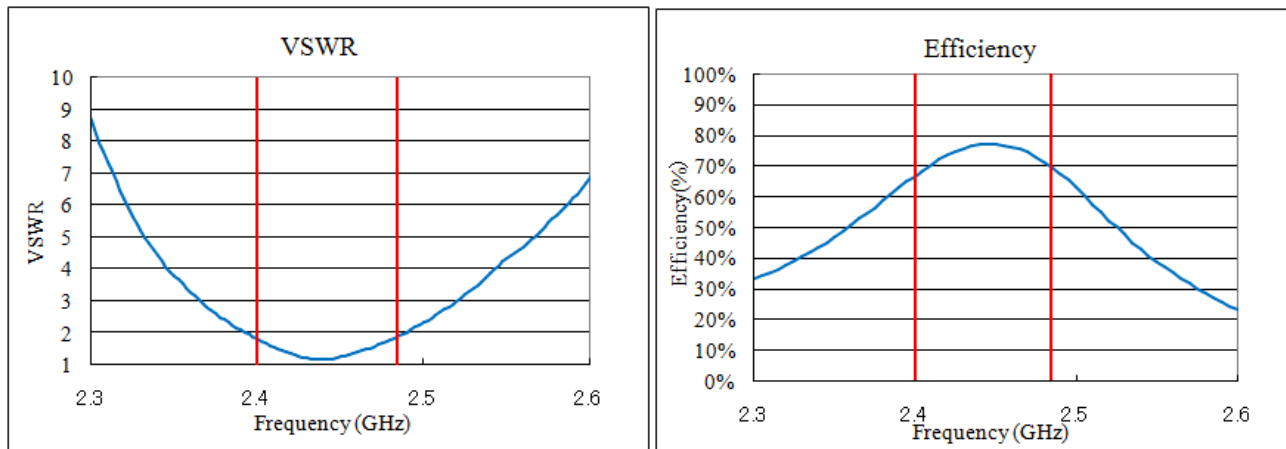
### Antenna Layout Reference



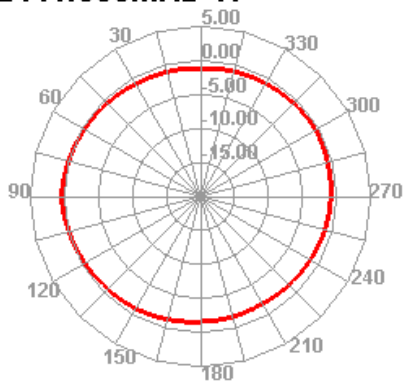
Unit : mm

## Electrical Characteristics

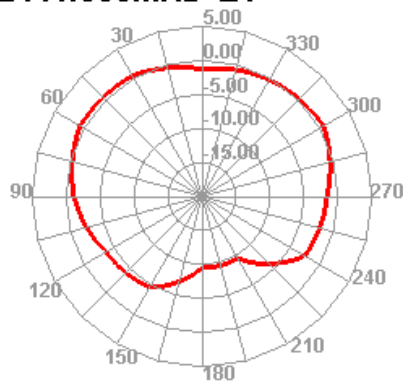
### VSWR



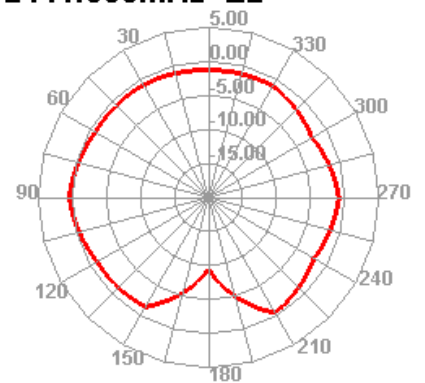
2441.000MHz H



2441.000MHz E1



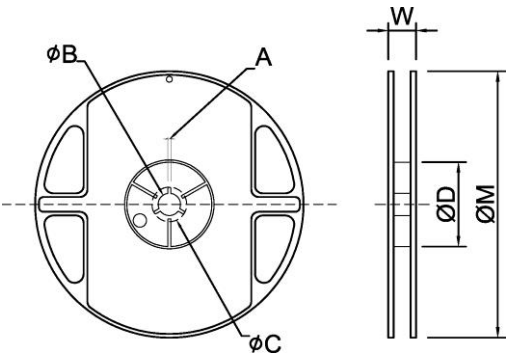
2441.000MHz E2



Taping Specifications

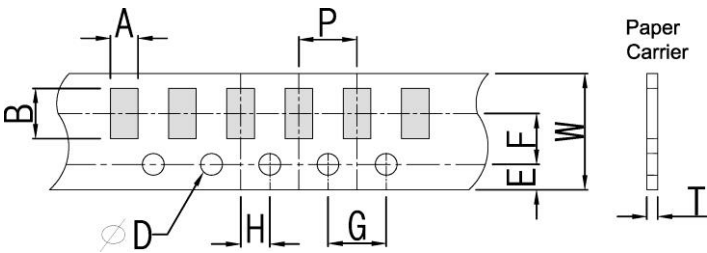
Reel and Taping Specification

Reel Specification



| TYPE | SIZE |         | A             | $\phi B$       | $\phi C$     | $\phi D$     | W              | $\phi M$      |
|------|------|---------|---------------|----------------|--------------|--------------|----------------|---------------|
| 3216 | 7"   | 3K/Reel | 2.0 $\pm$ 0.5 | 13.5 $\pm$ 1.0 | 21 $\pm$ 1.0 | 60 $\pm$ 1.0 | 11.5 $\pm$ 2.0 | 178 $\pm$ 2.0 |

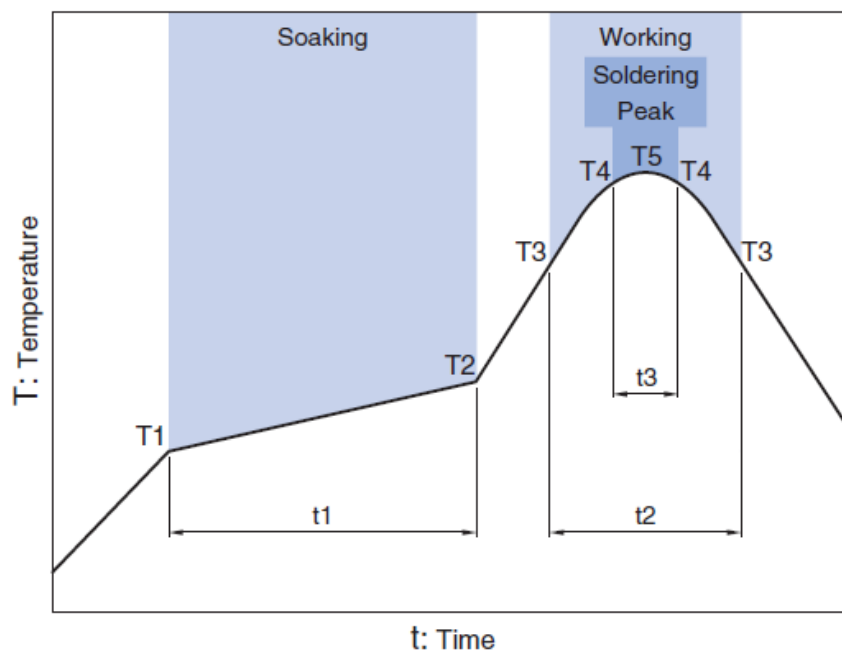
Taping Specification



| Packaging  | Type | A               | B               | W              | E               | F              | G              | H              | T               | $\phi D$                            | P             |
|------------|------|-----------------|-----------------|----------------|-----------------|----------------|----------------|----------------|-----------------|-------------------------------------|---------------|
| Paper Type | 3216 | 1.90 $\pm$ 0.20 | 3.50 $\pm$ 0.20 | 8.0 $\pm$ 0.20 | 1.75 $\pm$ 0.10 | 3.5 $\pm$ 0.05 | 4.0 $\pm$ 0.10 | 2.0 $\pm$ 0.05 | 0.75 $\pm$ 0.10 | 1.50 <sup>+0.10</sup> <sub>-0</sub> | 4.0 $\pm$ 0.1 |

**Recommended Reflow Profile**

Pb free solder



| Soaking |       |              | Working |                 | Soldering    |              | Peak       |
|---------|-------|--------------|---------|-----------------|--------------|--------------|------------|
| Temp.   |       | Time         | Temp.   | Time            | Temp.        | Time         | Temp.      |
| T1      | T2    | t1           | T3      | t2              | T4           | t3           | T5         |
| 150°C   | 180°C | 60 to 120sec | 230°C   | more than 30sec | 247 to 253°C | within 10sec | 260°C Max. |

July. 2022 Ver.H01

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