

# DATA SHEET

## WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT3216LL00R2400A

2.4 - 2.5 GHz

3216 Series



FEATURES

- Compact size
- Omni-directional radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- 2.4 GHz WiFi device
- Bluetooth gadget
- Zigbee device
- ISM band equipment

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER**

**ANT 3216 L L00 R 2400A**  
(1) (2) (3) (4) (5) (6)

**(1) PRODUCT**

ANT = Antenna

**(2) SIZE**

3216 = 3.2 × 1.6 mm

**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

**(4) SERIAL NO.**

L00

**(5) PACKING TYPE**

R = Tape and Reel

**(6) WORKING FREQUENCY**

2400 = 2.4GHz

**PHYCOMP CTC**

CAN4311712002453K

**I2NC**

431171200245

**SPECIFICATION**

Table 1

| DESCRIPTION                   | VALUE                                       |
|-------------------------------|---------------------------------------------|
| Working Frequency             | 2.4 - 2.5 GHz                               |
| Bandwidth                     | 160 MHz                                     |
| Polarization                  | Linear                                      |
| Azimuth Beamwidth             | Omni-directional                            |
| Peak Gain                     | 5.05 dBi (Typ.)                             |
| Impedance                     | 50Ω                                         |
| Operating Temperature         | -40 ~ 105°C                                 |
| Maximum Power                 | 1W                                          |
| Termination                   | Ni / Sn (Environmentally-Friendly Leadless) |
| Resistance to Soldering Heats | 260°C , 10sec.                              |

**NOTE**

1. The specification is defined on Yageo evaluation board

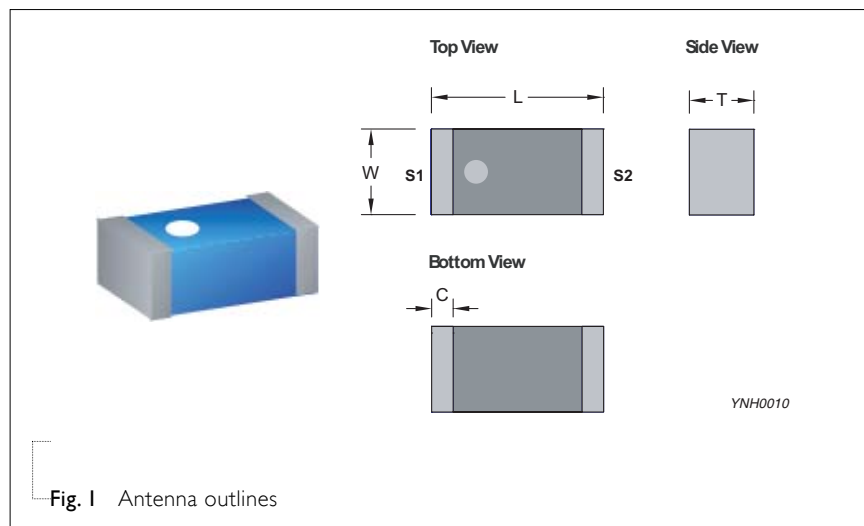
**DIMENSIONS**

Table 2 Machinical Dimension

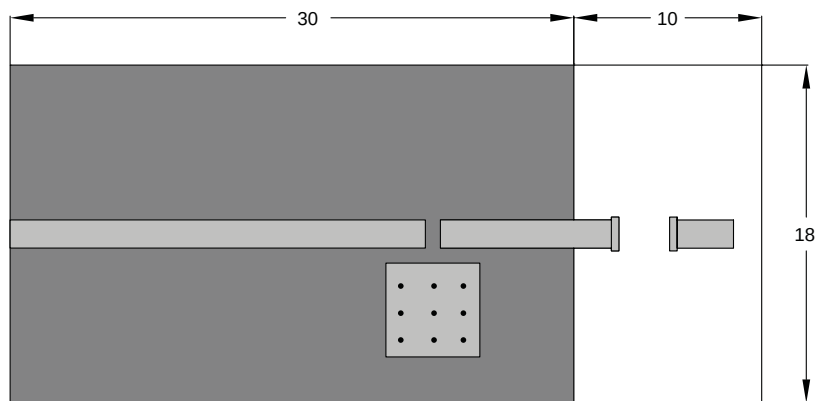
|        | DIMENSION  |
|--------|------------|
| L (mm) | 3.20 ±0.15 |
| W (mm) | 1.60 ±0.15 |
| T (mm) | 1.20 ±0.15 |
| C (mm) | 0.40 ±0.20 |

Table 3 Termination configuration

| TERMINAL NAME | FUNCTION        |
|---------------|-----------------|
| S1            | Feeding Point   |
| S2            | Soldering Point |

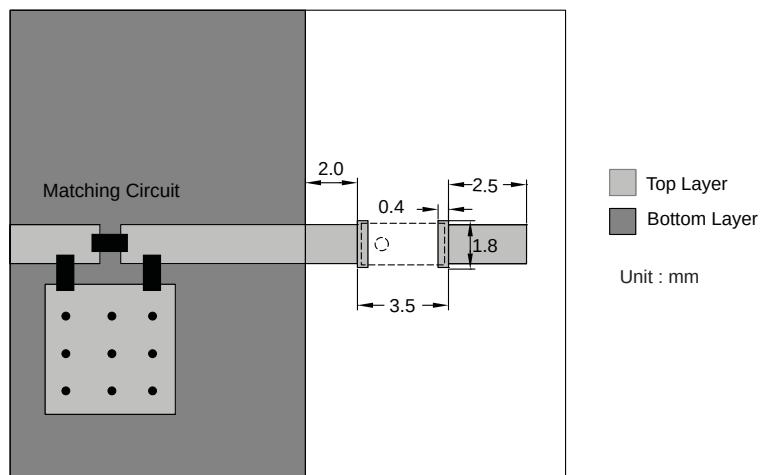
**OUTLINES**

# REFERENCE DESIGN OF EVALUATION BOARD



**Fig. 2** Outlook and dimension of evaluation board

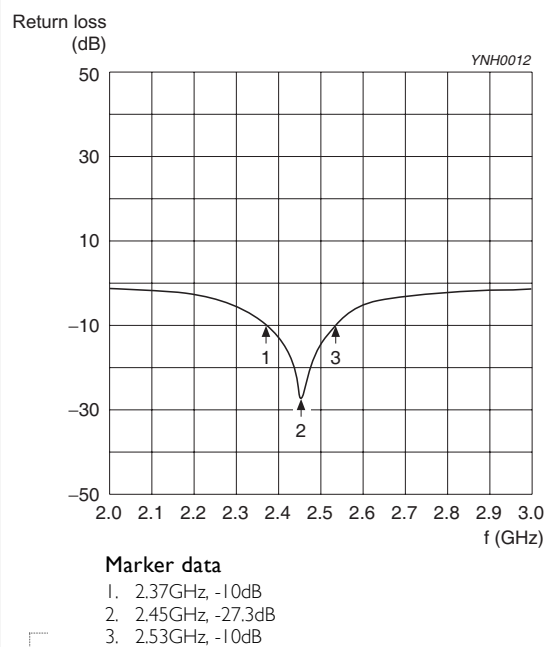
Unit : mm



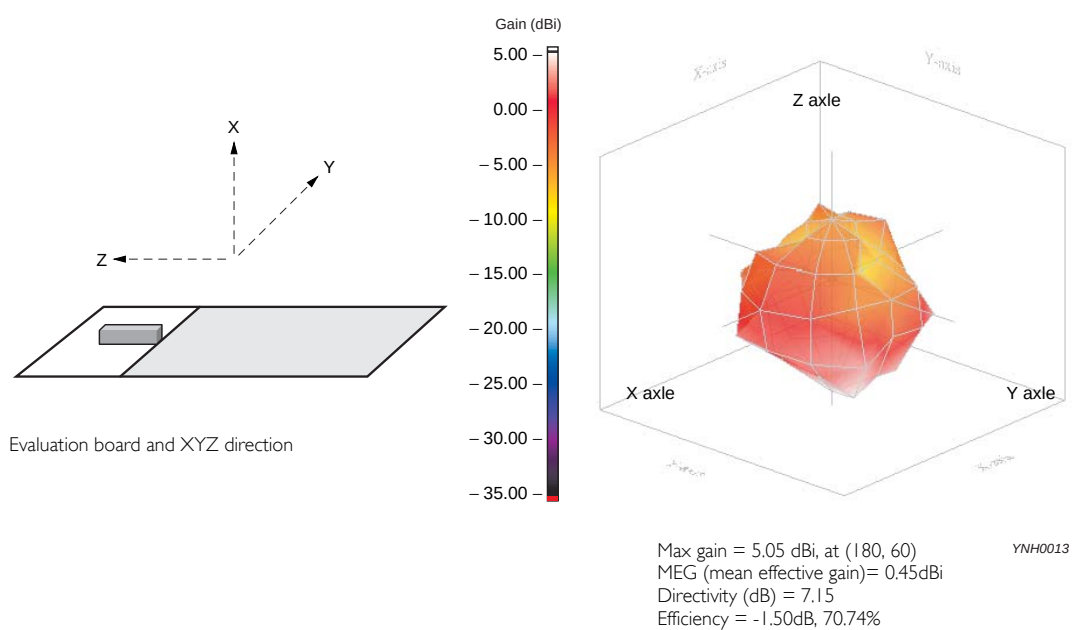
**Fig. 3** Details of soldering Pad

YNH0011

## ELECTRICAL PERFORMANCES



**Fig. 4** Return loss



**Fig. 5** Radiation pattern

# REVISION HISTORY

| REVISION  | DATE          | CHANGE NOTIFICATION | DESCRIPTION                                                                         |
|-----------|---------------|---------------------|-------------------------------------------------------------------------------------|
| Version 0 | Mar. 27, 2013 | -                   | - New datasheet for Ceramic Chip Antenna, 2.4-2.5 GHz application, size 3216 series |