

# DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT3216LL11R2400A

2.4 – 2.5GHz

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 L11 R 2400A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

3216 = 3.2 × 1.6 mm

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**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

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**(4) SERIAL NO.**

L11

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**(5) PACKING TYPE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

2400 = 2.4GHz

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**PHYCOMP CTC**

CAN4311712112453K

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**I2NC**

431171211245

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**SPECIFICATION**

Table I

DESCRIPTION	VALUE
Centre Frequency	2.45 GHz
Bandwidth	230 MHz (Typ.)
Return Loss	6.5 dB Min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	3.68 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	- 40 °C ~ 105 °C
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

**NOTE**

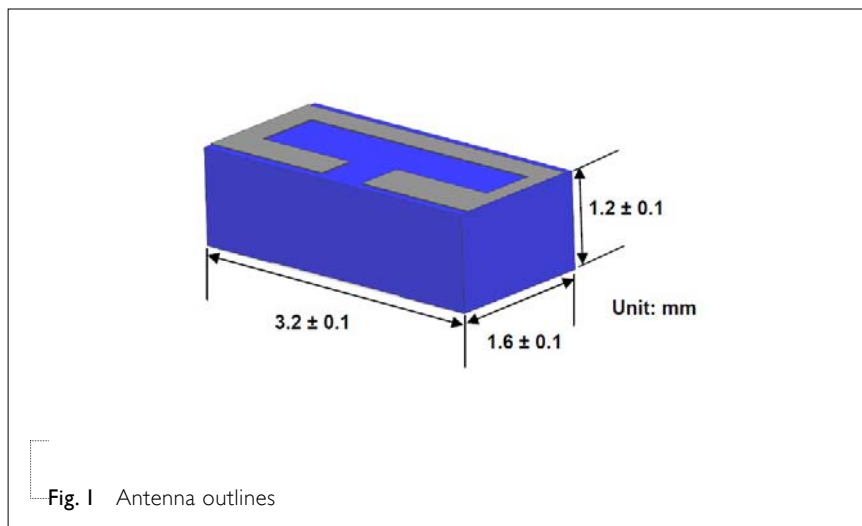
I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

Table 2 Machinical Dimension

	DIMENSION
L (mm)	3.2 ±0.10
W (mm)	1.6 ±0.10
T (mm)	1.2 ±0.10

**OUTLINES**



**REFERENCE DESIGN OF EVALUATION BOARD**

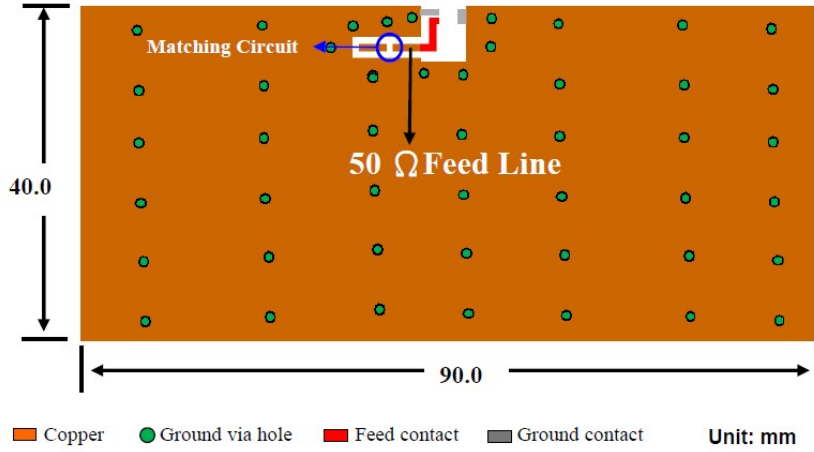


Fig. 2 Outlook and dimension of evaluation board

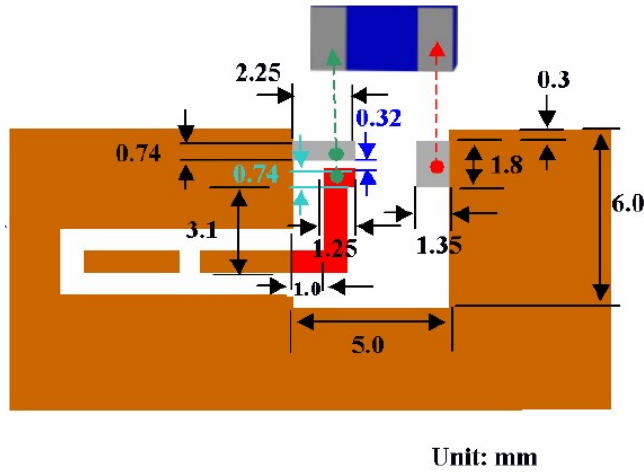


Fig. 3 Details of soldering Pad

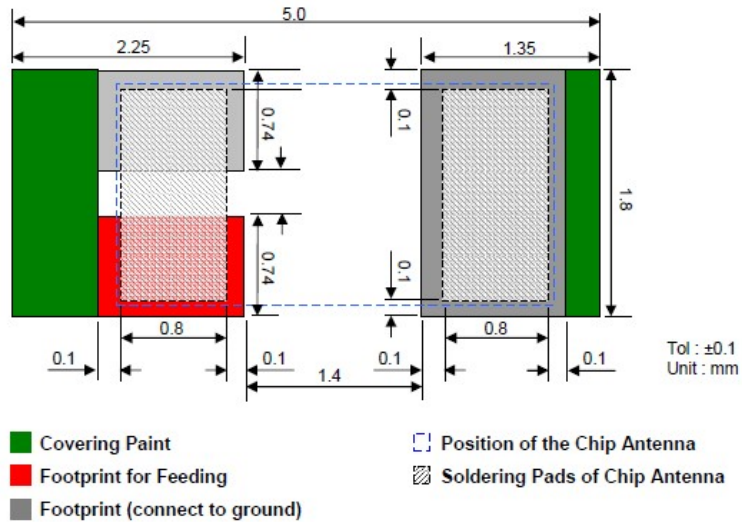
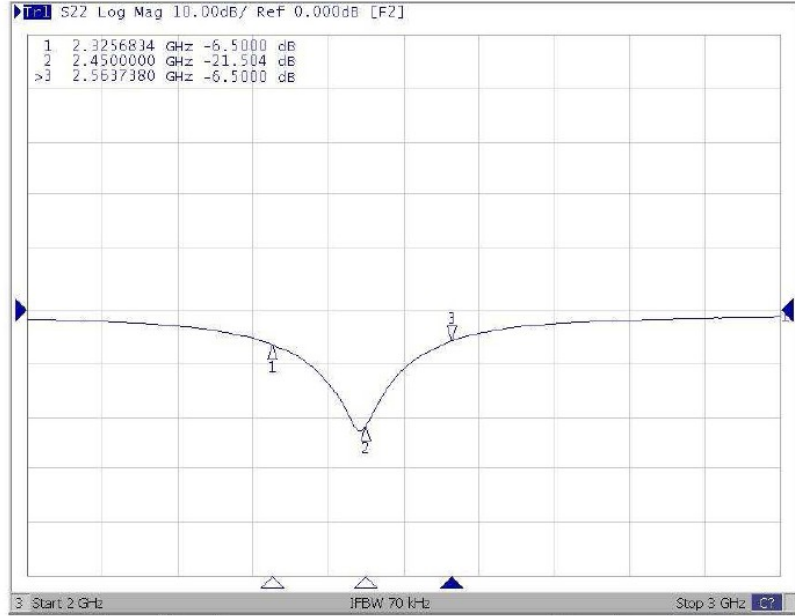
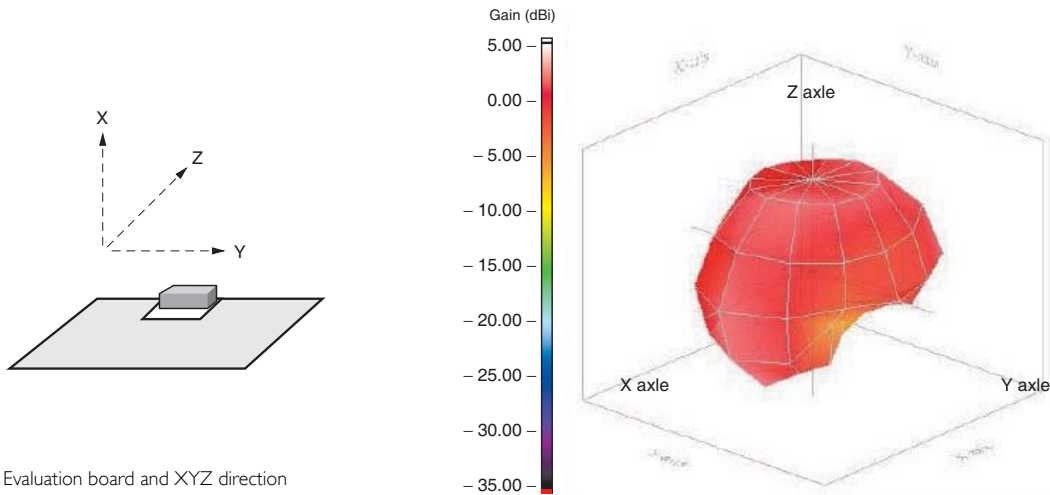


Fig. 4 Soldering Pads Dimension and Footprint

**ELECTRICAL PERFORMANCES**



**Fig. 5** Return loss



Evaluation board and XYZ direction

YNH00161

Frequency= 2.45 GHz  
 Max gain = 3.68 dBi, at (120,180)  
 MEG (mean effective gain)= -0.47 dBi  
 Directivity (dB) = 4.29  
 Efficiency = -0.61 dB, 86.89 %

**Fig. 6** Radiation pattern

**REVISION HISTORY**

<b>REVISION</b>	<b>DATE</b>	<b>CHANGE NOTIFICATION</b>	<b>DESCRIPTION</b>
Version 0	Mar. 27, 2013	-	- New data sheet for Ceramic Chip Antenna, 2.4-2.5GHz application, 3216 series