

# DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT2012LL13R2400A

2.4 – 2.5 GHz

2012 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 2012 L L13 R 2400A**  
(1) (2) (3) (4) (5) (6)

**(1) PRODUCT**

ANT = Antenna

**(2) SIZE**

2012 = 2.0 × 1.2 mm

**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

**(4) SERIAL NO.**

L13

**(5) PACKING STYLE**

R = Tape and Reel

**(6) WORKING FREQUENCY**

2400 = 2.400 GHz

**PHYCOMP CTC**

CAN4311714132454K

**I2NC**

431171413245

**SPECIFICATION**

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45 GHz
Bandwidth	85 MHz (Typ.)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.72 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 °C
Maximum Power	1 W
Termination	Ni / Sn (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

**NOTE**

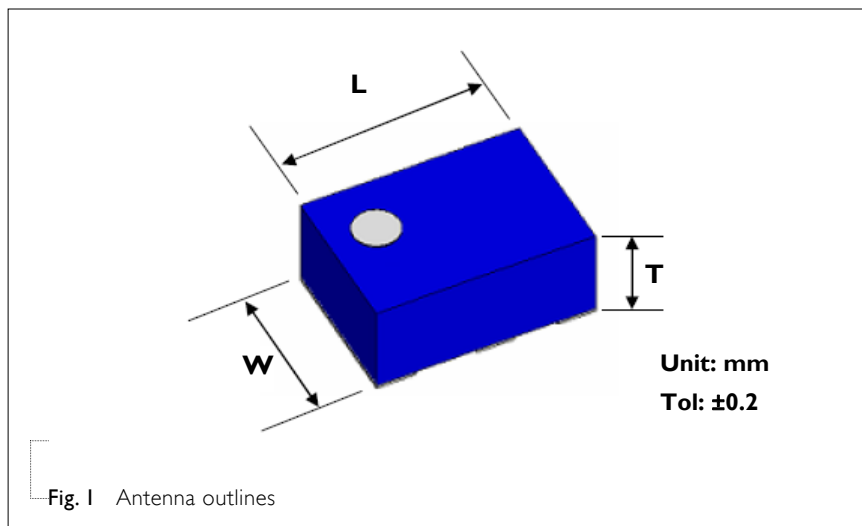
1. The specification is defined on Yageo evaluation board

**DIMENSIONS**

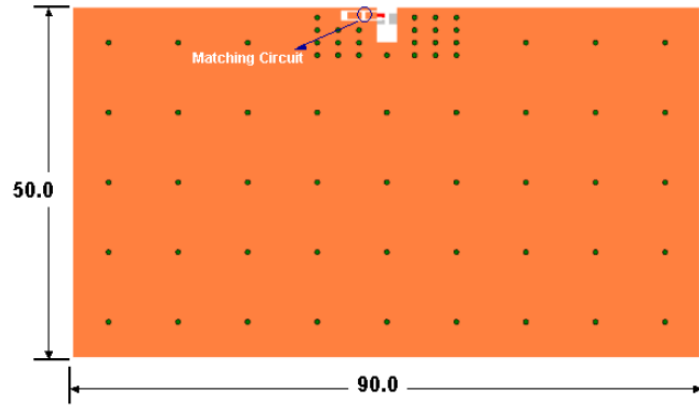
Table 2 Machinical Dimension

	DIMENSION
L (mm)	2 ±0.20
W (mm)	1.25 ±0.20
T (mm)	1.00 ±0.20

**OUTLINES**

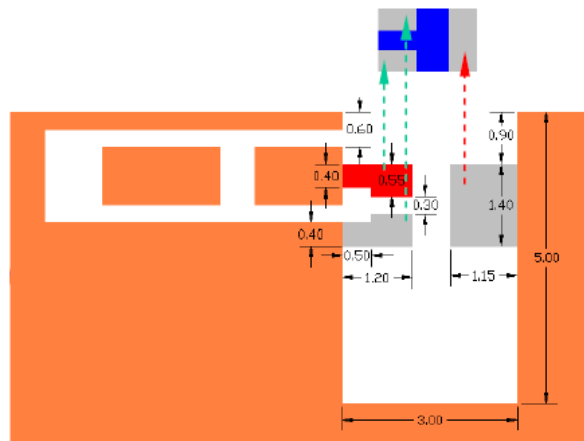


**REFERENCE DESIGN OF EVALUATION BOARD**



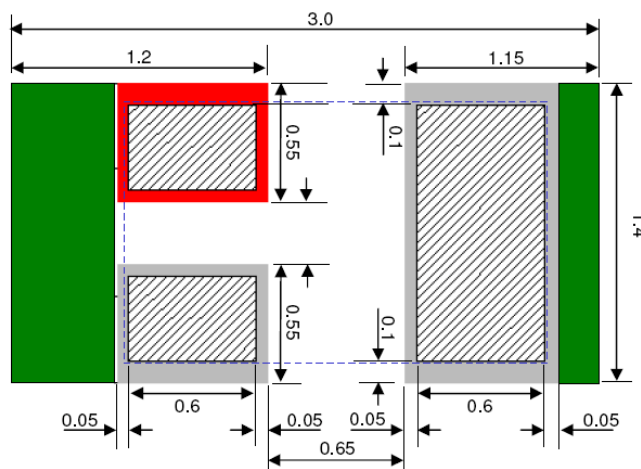
■ Copper   
 ● Ground via hole   
 ■ Feed contact   
 ■ Ground contact   
 Unit: mm

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



Unit: mm

**Fig. 3** Dimension of footprint

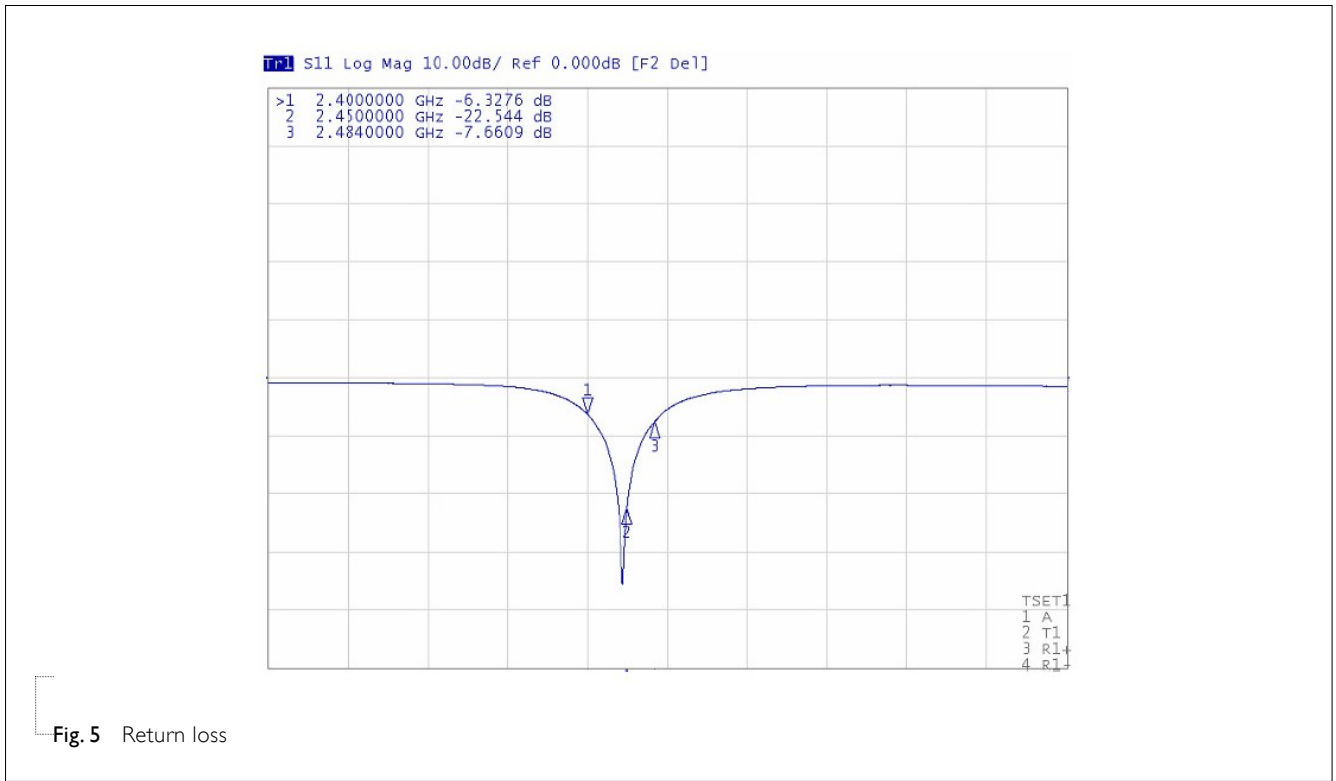


Unit: mm  
Tol: ±0.05

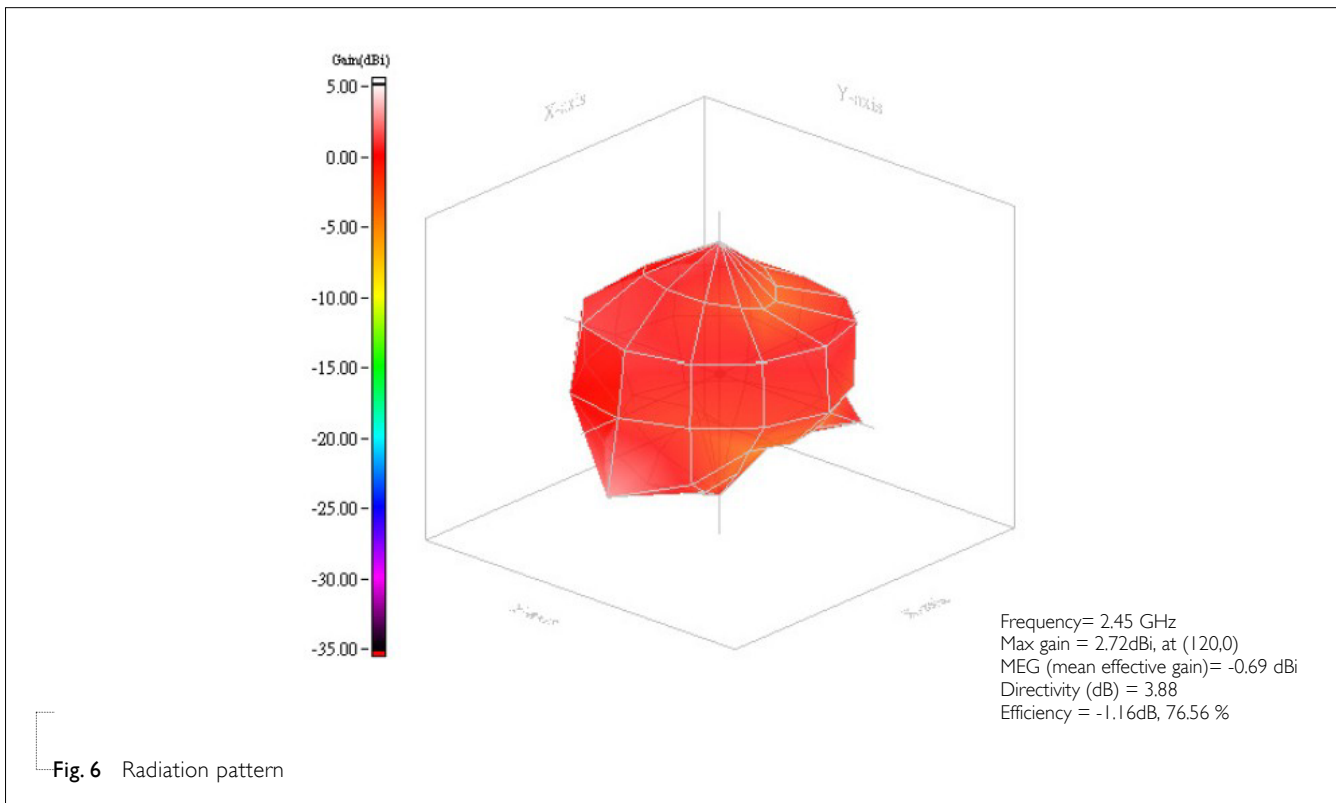
■ Covering Paint   
 ■ Footprint for Feeding   
 ■ Footprint (connect to ground)   
  Position of the Chip Antenna   
  Soldering Pads of Chip Antenna

**Fig. 4** Details of soldering pad

**ELECTRICAL PERFORMANCES**



**Fig. 5** Return loss



**Fig. 6** Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Mar. 05, 2013	-	- New data sheet for SMD type antenna, 2.45GHz application, 2012 series.

# Mouser Electronics

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Yageo:

[ANT2012LL13R2400A](#)