

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT1608LL14R2455A

2.4 AND 5GHZ

1608 Series



FEATURES

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

APPLICATIONS

- 2.4&5GHz WiFi 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 1608 L L14 R 2455A
 (1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

1608 = 1.6 × 0.8

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L14

(5)PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5GHz

PHYCOMP CTC

CAN4311715142524K

I2NC

431171514252

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45 G / 5.5 G Hz
Bandwidth	120 / 900 MHz (Typ.)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	3.11 / 3.43 dBi (Typ.)
Impedance	50 ohm
Operating Temperature	- 40~105 °C
Maximum Power	1W
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)	1.60 ± 0.15
W (mm)	0.80 ± 0.15
T (mm)	0.40 ± 0.15
A1 (mm)	0.70 ± 0.15
A2 (mm)	0.25 ± 0.15
B1 (mm)	0.30 ± 0.15
B2 (mm)	0.25 ± 0.15
C1 (mm)	0.70 ± 0.15
C2 (mm)	0.25 ± 0.15
G1 (mm)	0.20 ± 0.05
G2 (mm)	0.10 ± 0.05

OUTLINES

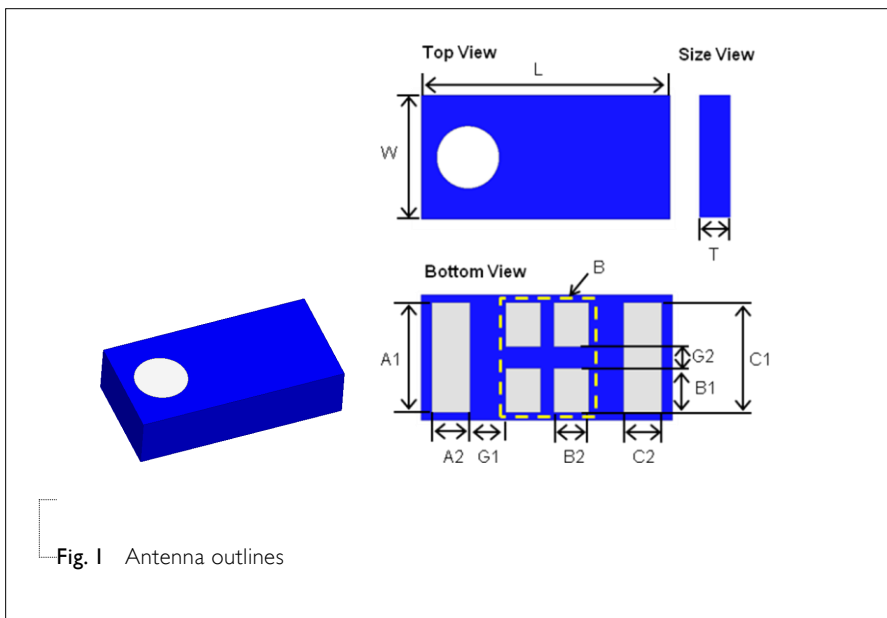


Fig. 1 Antenna outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
B	Feeding Point
A1, A2	Soldering Point for 2.4GHz
C1, C2	Soldering Point for 5 GHz

REFERENCE DESIGN OF EVALUATION BOARD

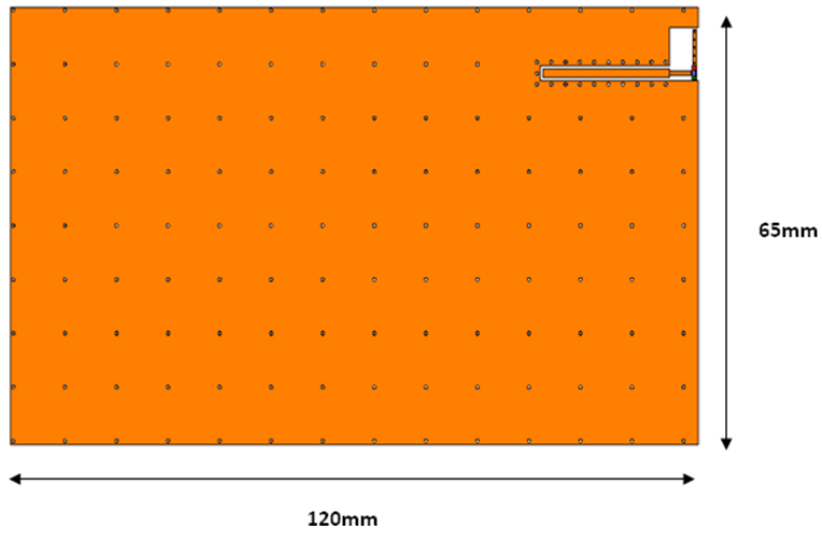


Fig. 2 Outlook and dimension of evaluation board

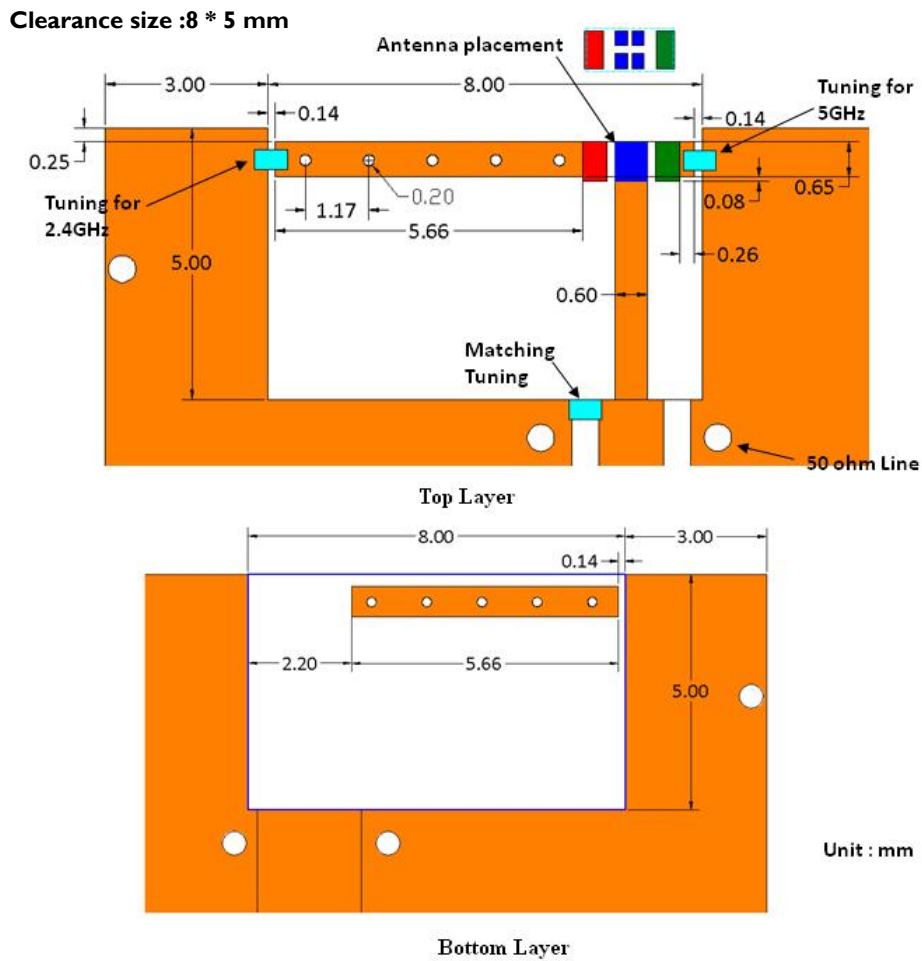


Fig. 3 Details of soldering Pad

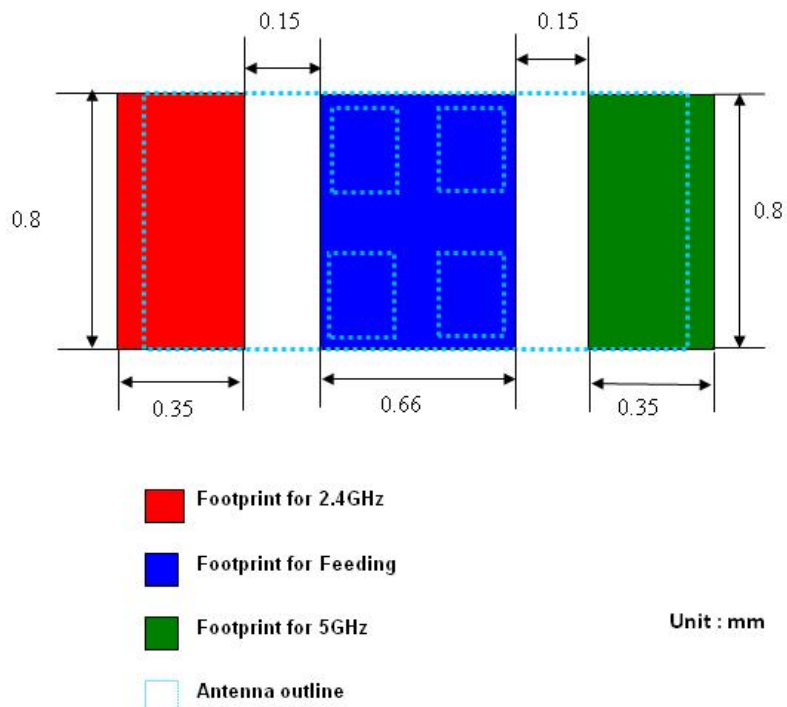


Fig. 4 Footprint

ELECTRICAL PERFORMANCES

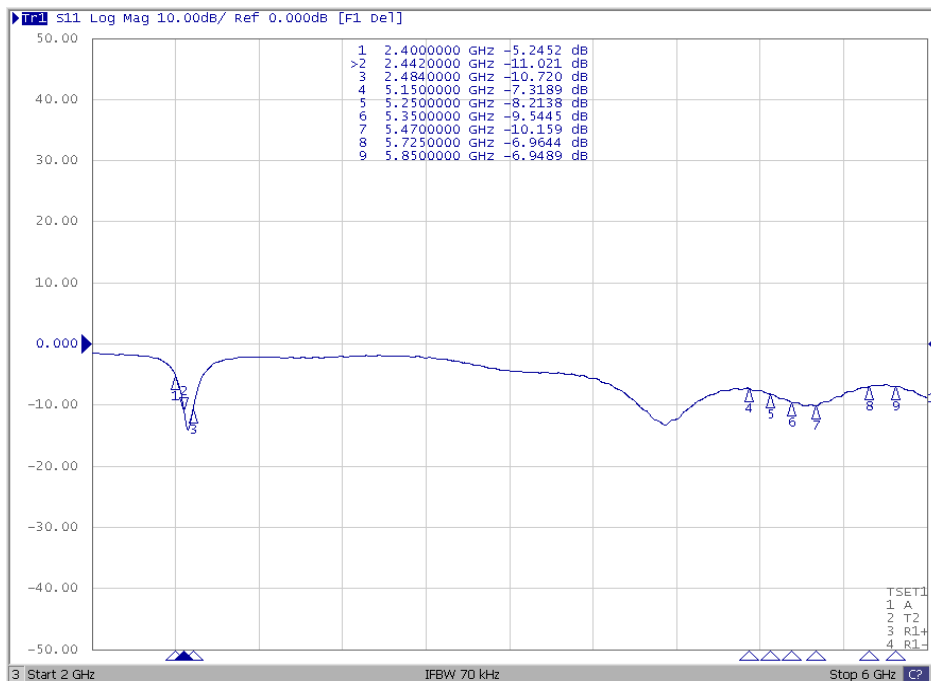
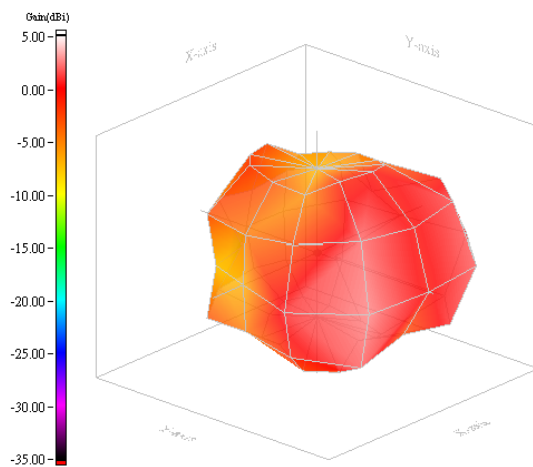
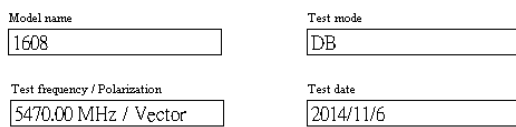
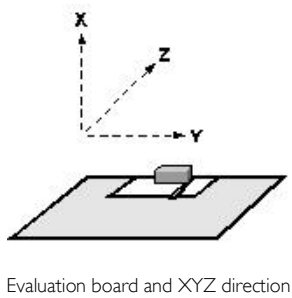
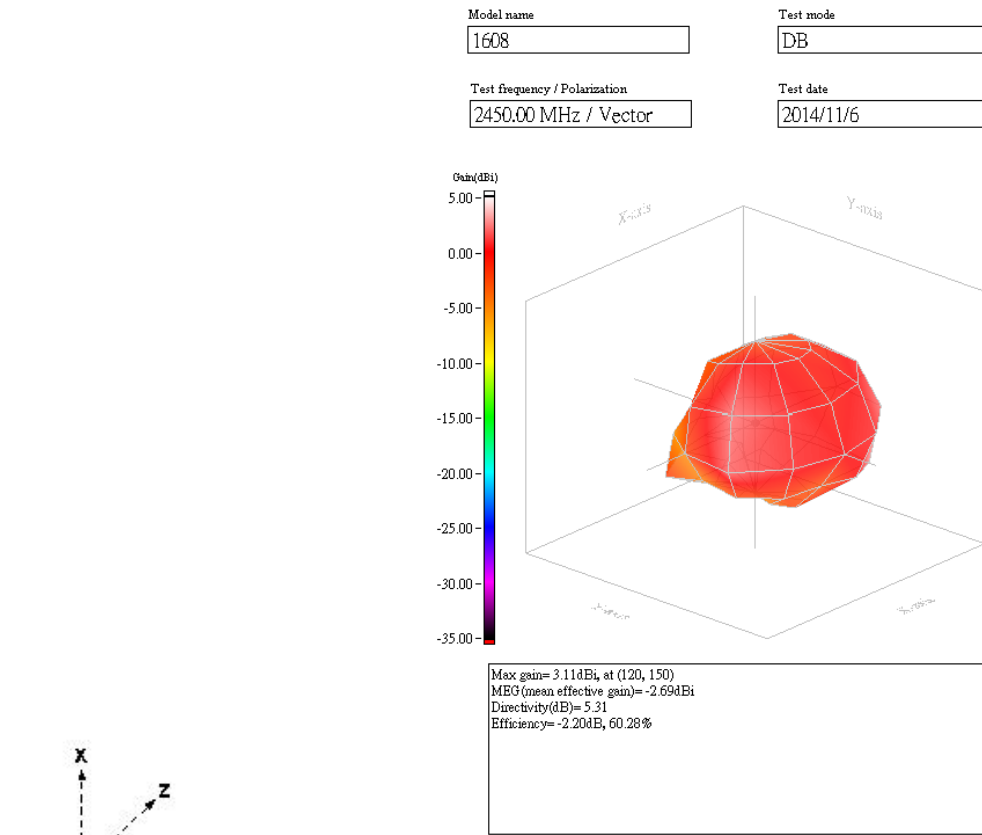


Fig. 5 Return loss



Max gain= 2.50dBi, at (90, 60)
 MEG (mean effective gain)=- 3.79dBi
 Directivity(dB)= 5.07
 Efficiency=- 2.57dB, 55.28%

Fig. 6 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Nov. 13, 2014	-	- New datasheet for SMD type antenna, 2.4/5 GHz application, 1608 series