

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT1003LL05R2455A

2.4 AND 5 GHZ

1003 Series



FEATURES

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

APPLICATIONS

- 2.4 & 5 GHz 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 I003 L L05 R 2455A
(1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

I003 = 10 × 3 mm

(3) ANTENNA TYPE

L,F,A=Chip Antenna

(4) SERIAL NO.

L05

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5 GHz

PHYCOMP CTC

CAN431 I75605252 I K

I2NC

431 I75605252

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45/5 GHz
Bandwidth	120/900 MHz (Typ.)
Return Loss	6.5 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.50/ 2.48 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	-40~105 degree
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

NOTE

1. The specification is defined on Yageo evaluation board

DIMENSIONS

Table 2 Machinal Dimension

	DIMENSION
L (mm)	10.00 $\pm$ 0.20
W (mm)	3.20 $\pm$ 0.20
T (mm)	1.60 $\pm$ 0.20
A (mm)	1.20 $\pm$ 0.10

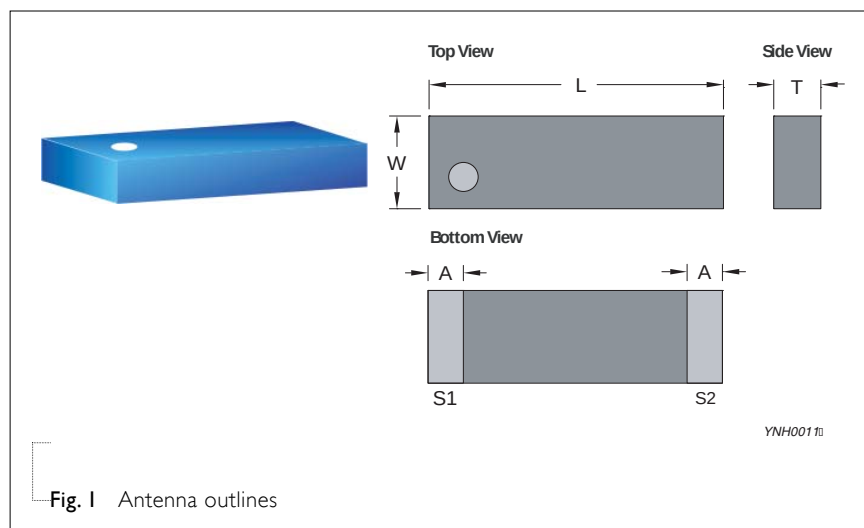
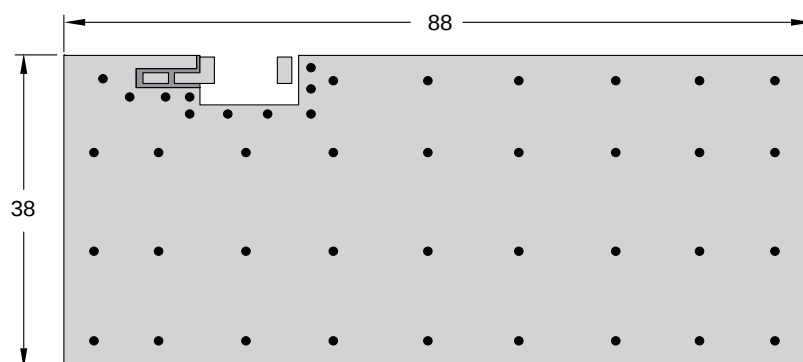
OUTLINES

Table 3 Termination configuration

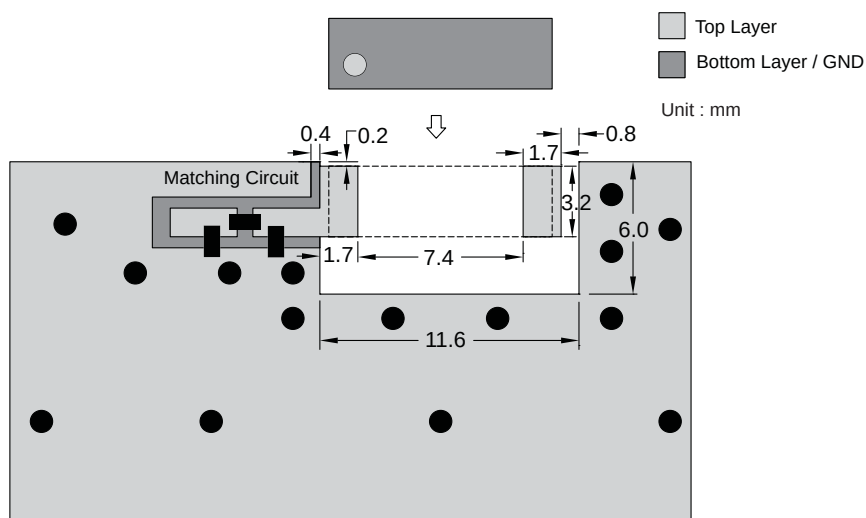
TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

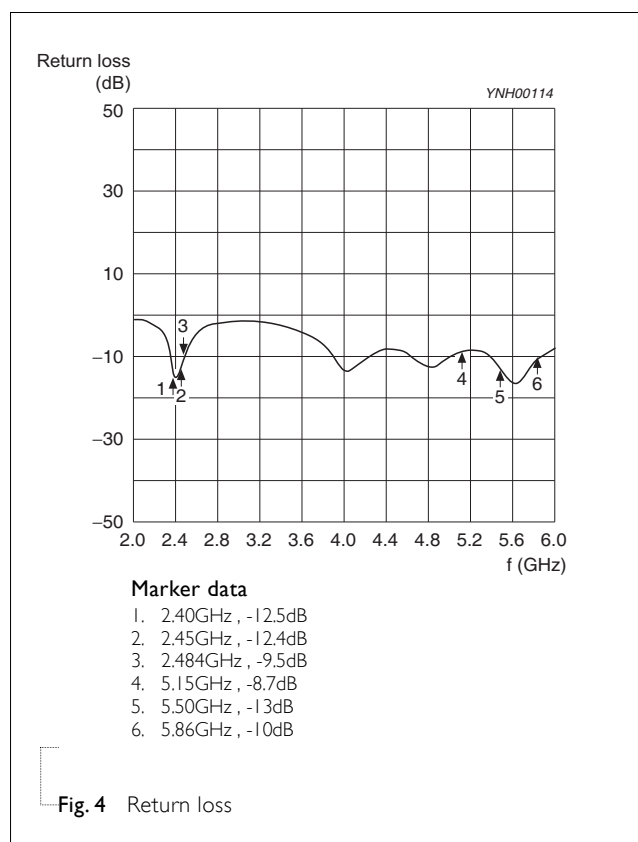
Fig. 2 Outlook and dimension of evaluation board

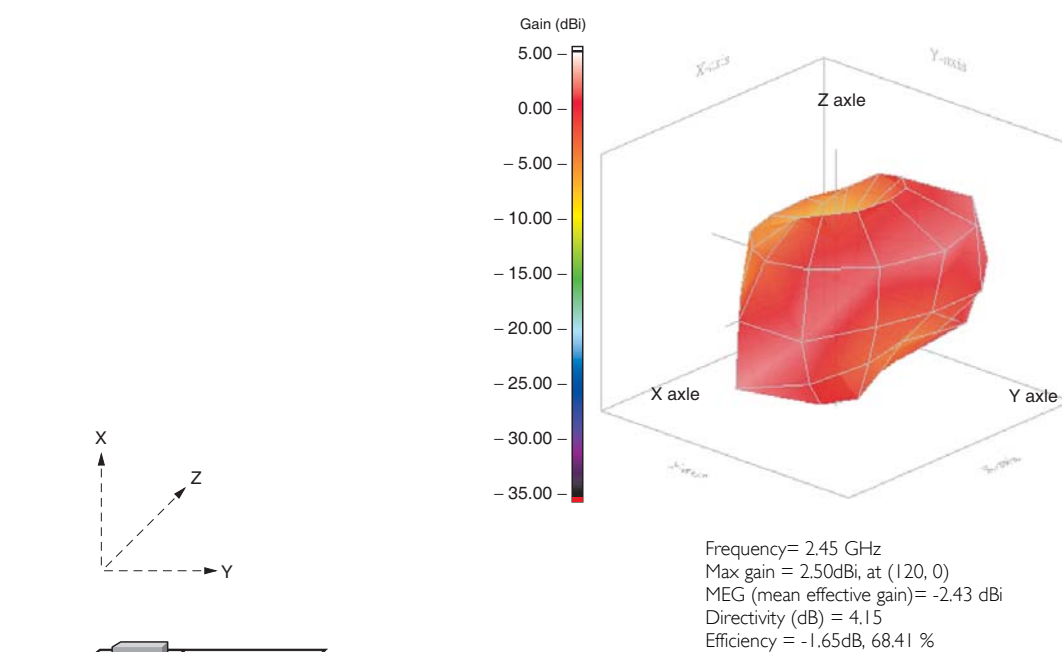


Unit : mm

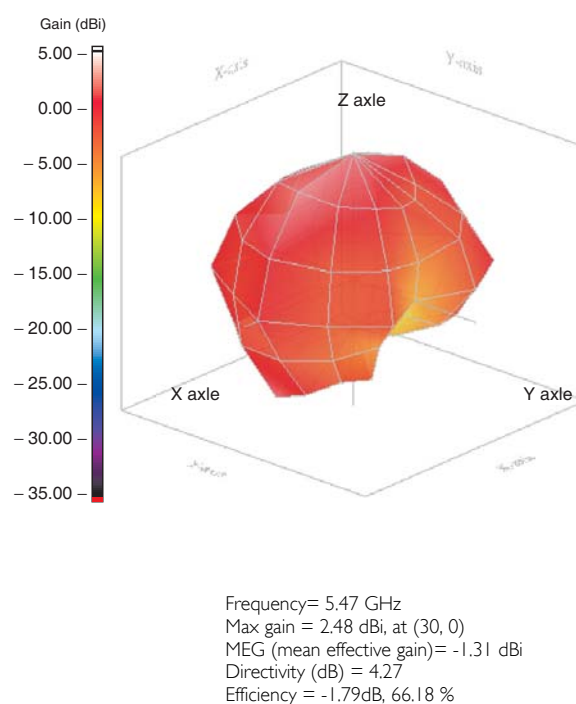
Fig. 3 Details of soldering pad

YNH00110

ELECTRICAL PERFORMANCES



Evaluation board and XYZ direction



YNH00115

Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 19, 2013	-	- New data sheet for SMD type antenna, 2.4/5GHz application, 1003 series