Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT1003LL15R2455A

2.4 AND 5 GHZ

1003 Series

YAGEO Phycomp

Product Specification – February 19, 2014 V.0

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	1003	L	L15	R	2455A
(1)	(2)	(3)	(4)	(5)	(6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

1003 = 10 × 3 mm

(3) ANTENNA TYPE

L,F,A=Chip Antenna

(4) SERIAL NO.

L15

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5 GHz

PHYCOMP CTC

CAN4311756152521K

12NC

431175615252

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.4~2.484 GHz / 5.15~5.85 GHz
Bandwidth	120/900 MHz (Typ.)
Return Loss	6.5 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.45 / 1.55 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	-40~105 degree
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260℃ , 10sec.

NOTE

1. The specification is defined on Yageo evaluation board

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	10.00 ± 0.20
W (mm)	3.20 ± 0.20
T (mm)	1.60 ± 0.20

OUTLINES

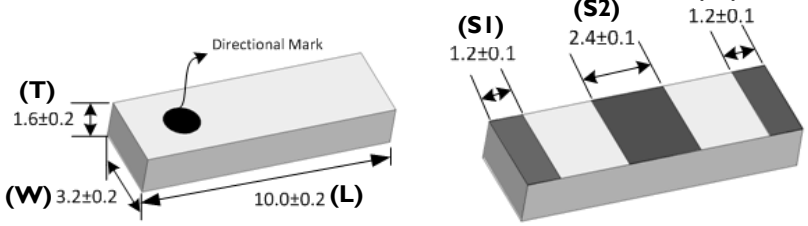


Fig. 1 Antenna outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	Soldering Point

REFERENCE DESIGN OF EVALUATION BOARD

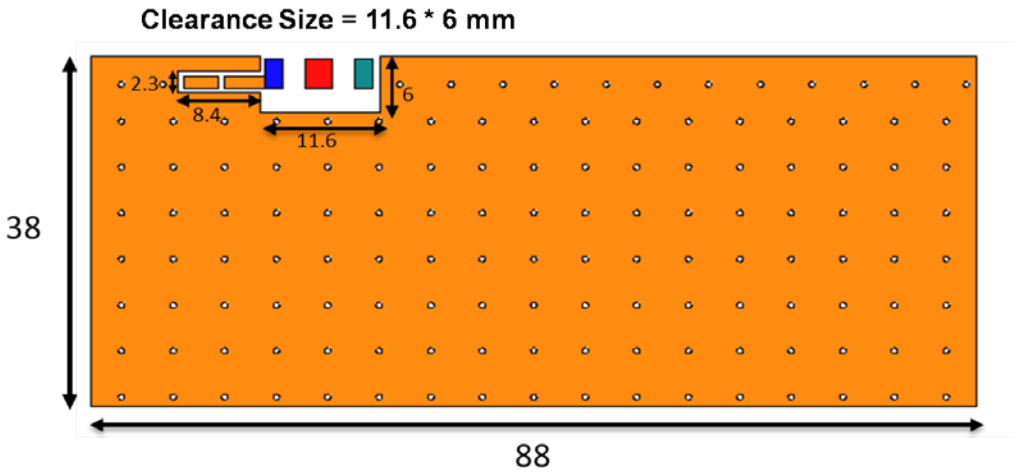


Fig. 2 Outlook and dimension of evaluation board

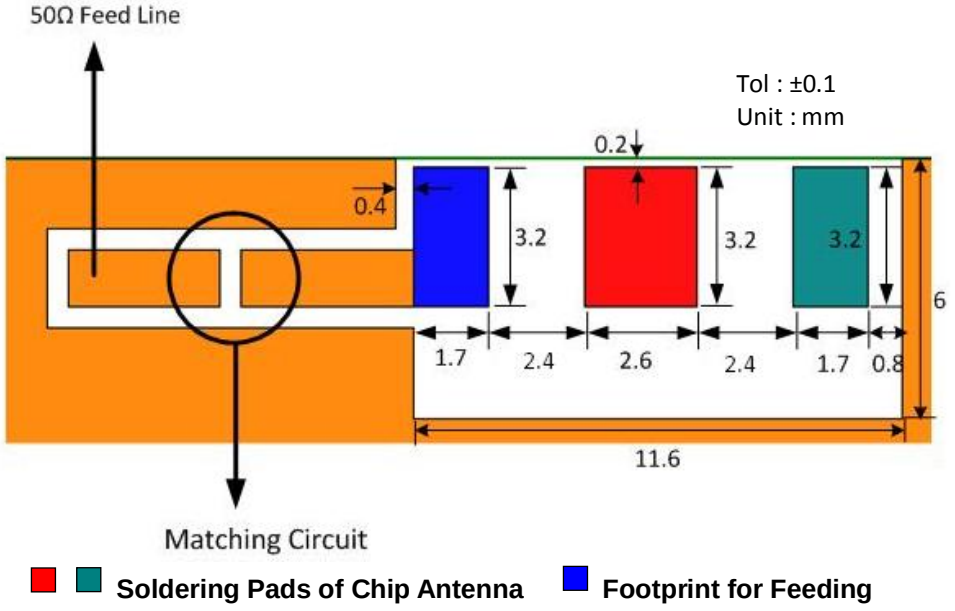


Fig. 3 Details of soldering pad

ELECTRICAL PERFORMANCES

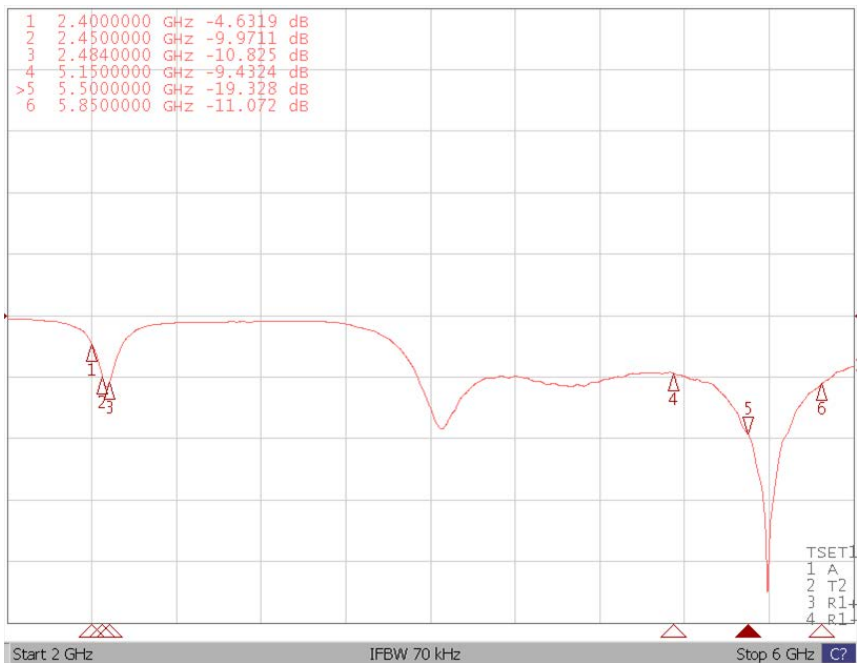
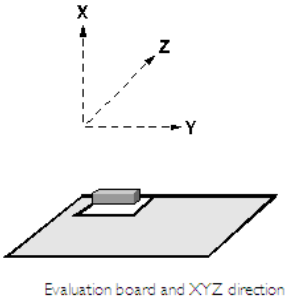
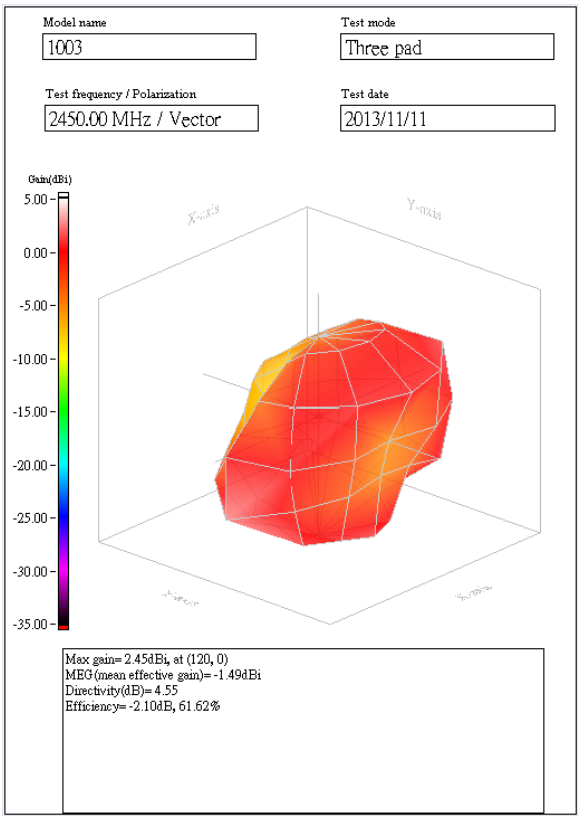


Fig. 4 Return loss



Evaluation board and XYZ direction



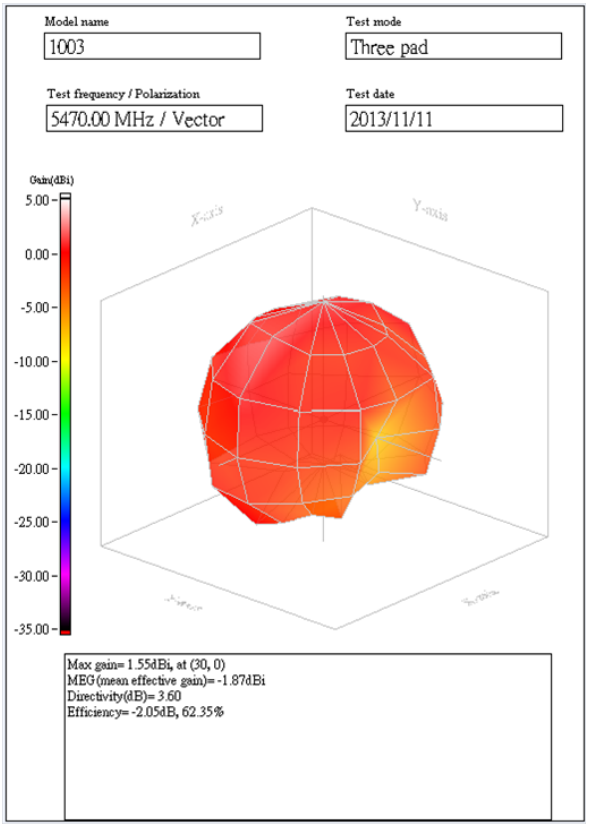


Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 19, 2014	-	- New data sheet for SMD type antenna, 2.4/5GHz application, 1003 series