Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT3216A063R2455A

2.4 AND 5GHZ

3216 Series



YAGEO Phycomp

Product Specification – November 28, 2014 V.1

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FEATURES

- Compact size
- Omni-directional Radiation
- Tape & reel automaic mounting
- Dual-band design
- 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	3216	A	063	R	2455A
(1)	(2)	(3)	(4)	(5)	(6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

3216 = 3.2 × 1.6 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

063

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455 = 2.4/5GHz

PHYCOMP CTC

CAN4311212632523K

12NC

431121263252

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SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45 G / 5.5 GHz
Bandwidth	90 / 700 MHz(Typ.)
Return Loos	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	1.59 / 2.23 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 ℃
Maximum Power	1 W
Termination	Ni/Sn (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)	3.05 ± 0.10
W (mm)	1.55 ± 0.10
T (mm)	0.55 ± 0.10
A (mm)	0.40 ± 0.10

OUTLINES

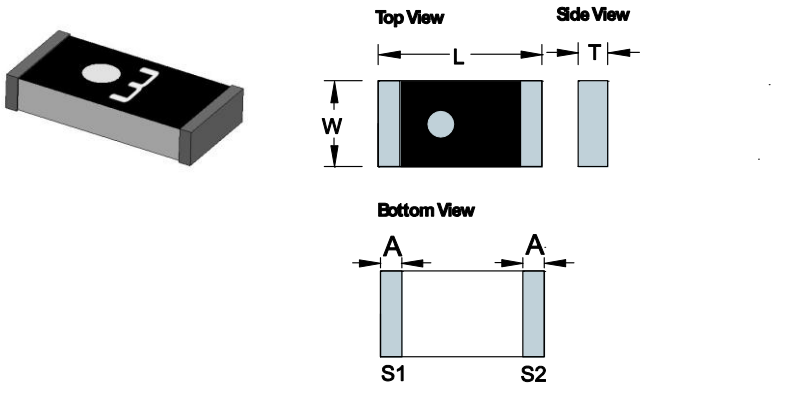


Fig. 1 Antenna outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	GND

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REFERENCE DESIGN OF EVALUATION BOARD

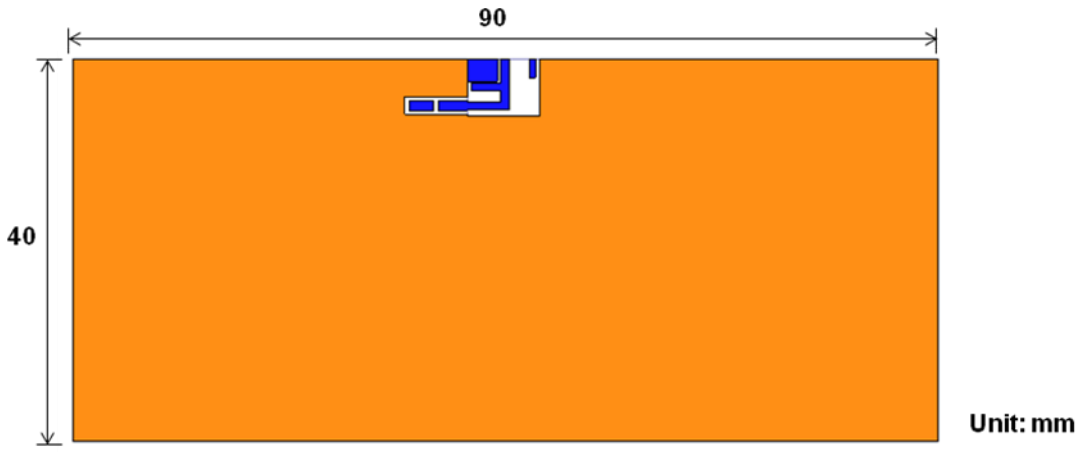
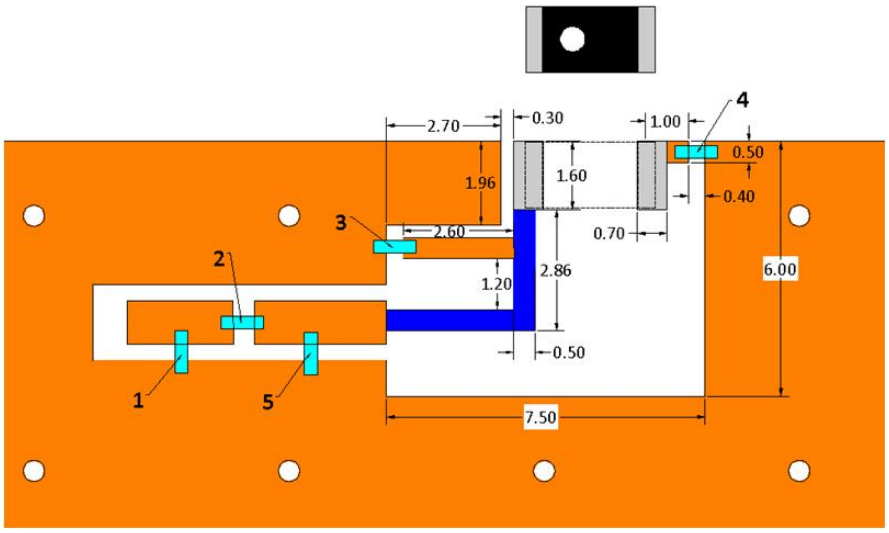


Fig. 2 Outlook and dimension of evaluation board



Matching Circuit Component	
Location	Description
1	3.3nH
2	1.2pF
3	3.3nH
4	1.5pF

Fig. 3 Details of soldering Pad

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ELECTRICAL PERFORMANCES

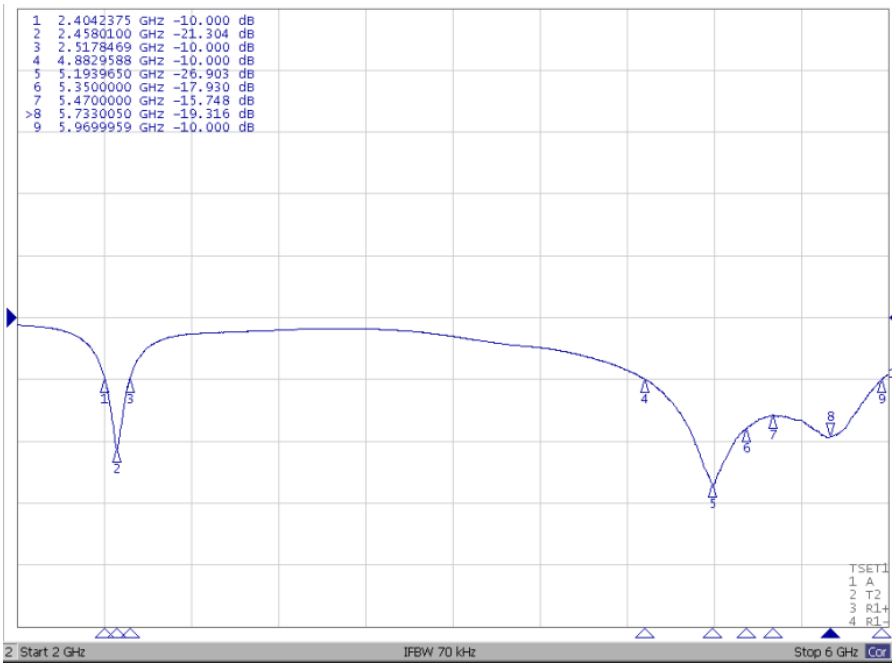
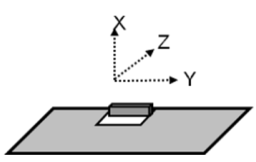


Fig. 4 Return loss



Evaluation board and XYZ direction

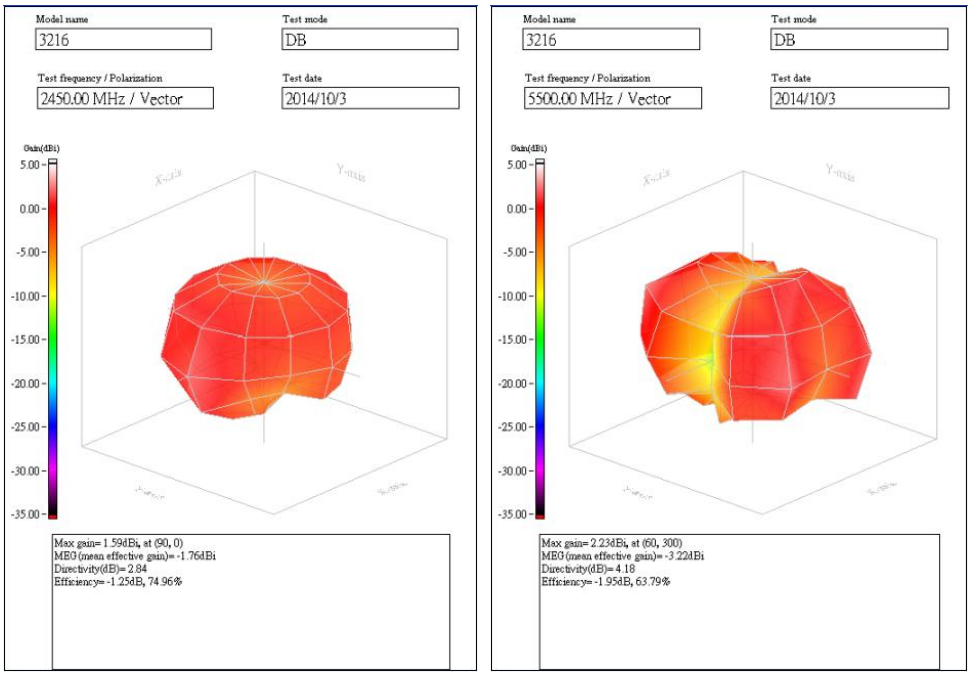


Fig. 5 Radiation pattern

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REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Nov. 04, 2014	-	- New data sheet for SMD type antenna, 2.4 and 5GHz application, 3216 series PIFA mode

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