

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna
ANT3216LL11R2455A

2.4 & 5GHz
3216 Series



FEATURES

- Compact size
- Omni-directional Radiation
- Tape & reel automatic mounting
- Reflow process compatible
- RoHS compliant

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 LL 11 R 2455A**

(1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

3216 = 3.2 x 1.6 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L11

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

2455= 2.4 & 5 GHz

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	2.45/5.5 GHz
Bandwidth	90/700MHz (Typ.)
Return Loss	6.5 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	0.45/0.64 dBi (Typ.)
Impedance	50 Ω
Operating Temperature	- 40~85 °C
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)

NOTE

1. The specification is defined on Yageo evaluation board

DIMENSIONS

Table 2 Mechanical Dimension

	DIMENSION
L (mm)	3.2±0.2mm
W(mm)	1.6±0.2mm
T(mm)	1.2±0.2mm
A(mm)	0.8±0.2mm

Table 3 Terminal Configuration

TERMINAL NAME	FUNCTION
S1	Feeding point
S2	Soldering point

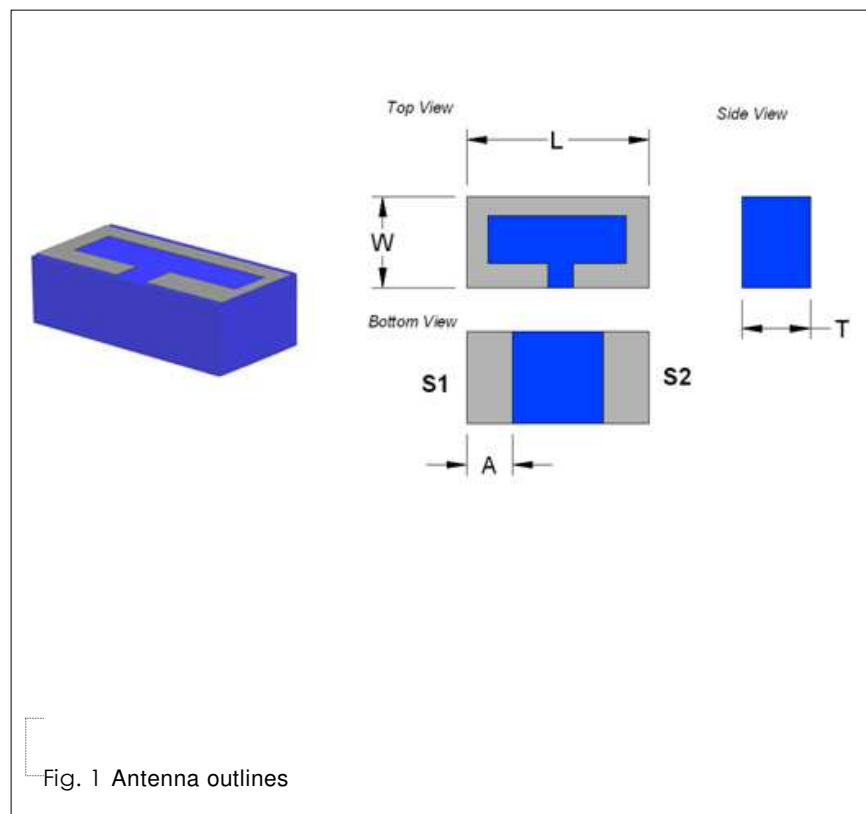
OUTLINES

Fig. 1 Antenna outlines

REFERENCE DESIGN OF EVALUATION BOARD

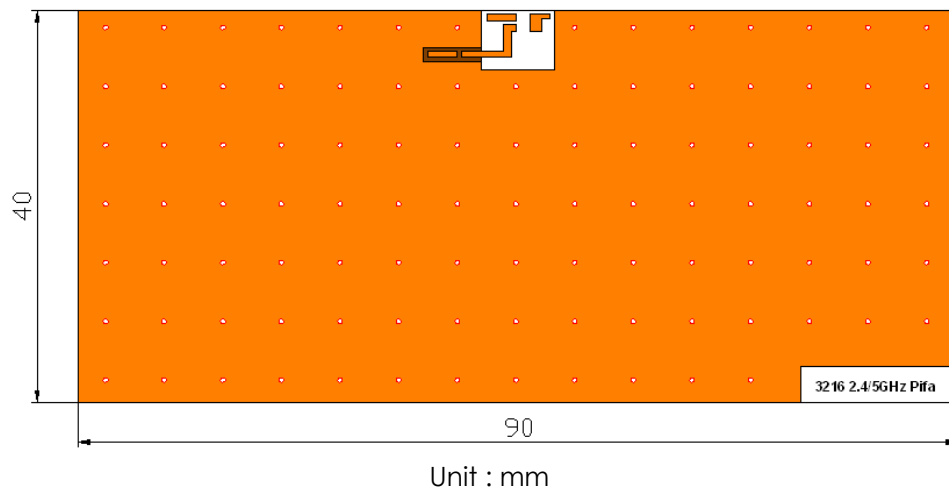


Fig. 2 Outlook and dimension of evaluation board

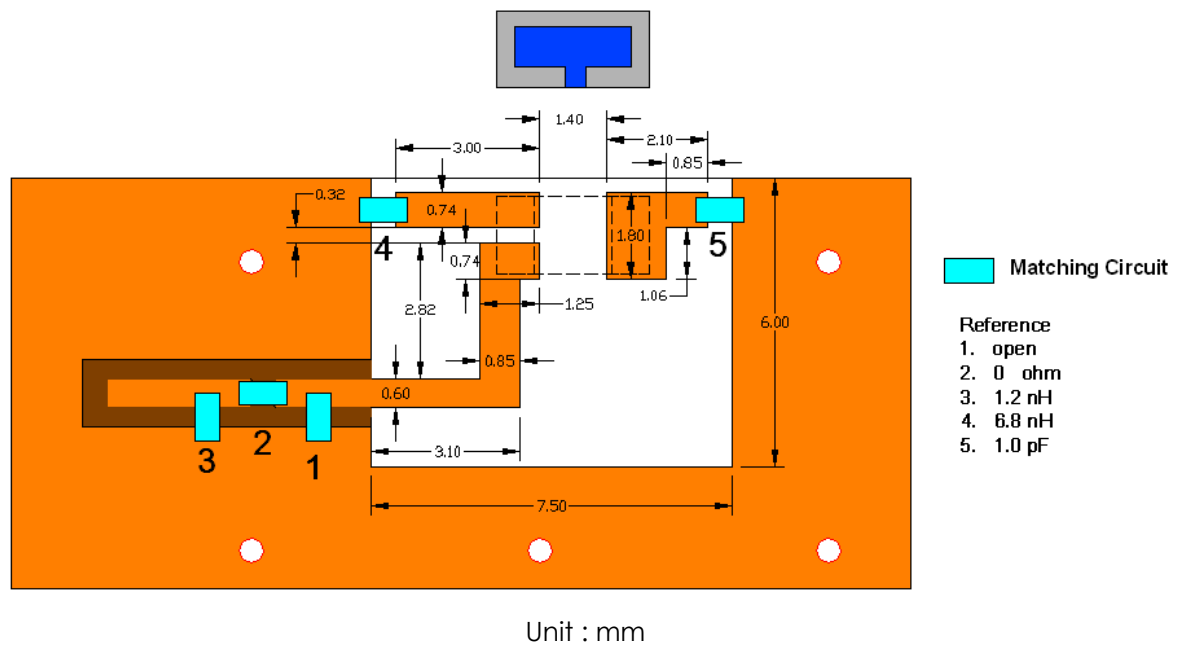


Fig. 3 Details of soldering Pad

ELECTRICAL PERFORMANCES

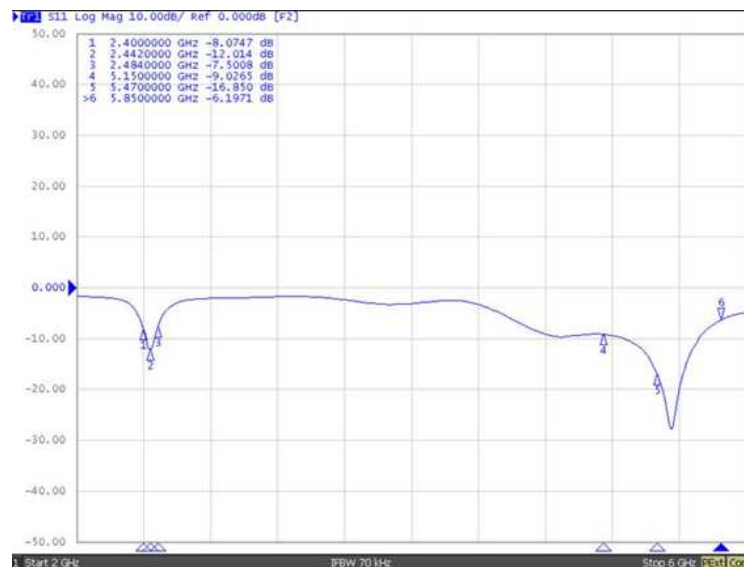
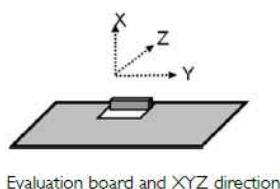


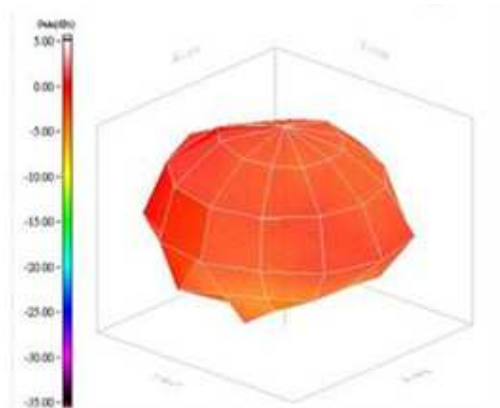
Fig. 4 Return loss

The X-Y-Z Plane Definition for the Evaluation Board



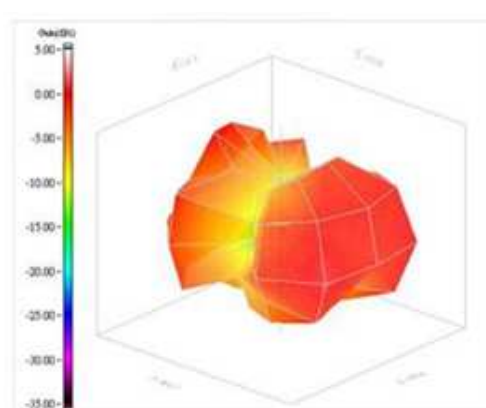
Evaluation board and XYZ direction

2442MHz



Max. Gain : 0.47 dBi
Avg. Gain : -2.49 dB
Efficiency : 56%

5470MHz



Max. Gain : 0.64 dBi
Avg. Gain : -3.26 dB
Efficiency : 47%

Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
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Version 1	Oct. 11, 2018	-	
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			- Data sheet for Ceramic Chip Antenna, 2.4&.5G, size 3.2x1.6 mm
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