Pulse | LARSEN Antennas
A YAGEO Company

TECHNICAL DATA SHEET

Description: 3216 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT3216A063R2400A

Features:

- Size : 3.05x1.55x0.55 mm
- Omni-directional Radiation
- Tape & reel automaic mounting
- Reflow process compatible
- RoHS compliant

Applications:

- 2.4GHz WiFi device
- Bluetooth gadget
- Zigbee device
- ISM band equipment

ELECTRICAL SPECIFICATIONS

Working Frequency	2.45 GHz
Bandwidth	200 MHz(Typ.)
Return Loss	6.5 dB(Min.)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	1.69 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 Pulse evaluation board

Pulse Worldwide Headquarters
15255 Innovation Drive #100
San Diego, CA 92128
USA
Tel:1-858-674-8100

Pulse/Larsen Antennas
18110 SE 34th St Bldg 2 Suite 250
Vancouver, WA 98683
USA
Tel: 1-360-944-7551

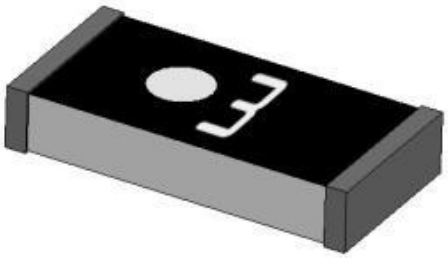
Europe Headquarters
Pulse GmbH & Do, KG
Zeppelinstrasse 15
Herrenberg, Germany
Tel: 49 7032 7806 0

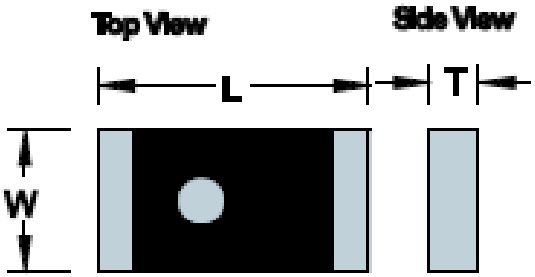
Pulse (Suzhou) Wireless Products Co, Inc.
99 Huo Ju Road(#29 Bldg,4th Phase
Suzhou New District
Jiangsu Province, Suzhou 215009 PR China
Tel: 86 512 6807 9998

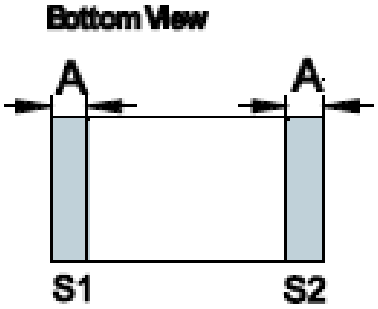
Description: 3216 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT3216A063R2400A

MECHANICAL DRAWING







	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

Terminal name	Function
S1	Feeding Point
S2	GND

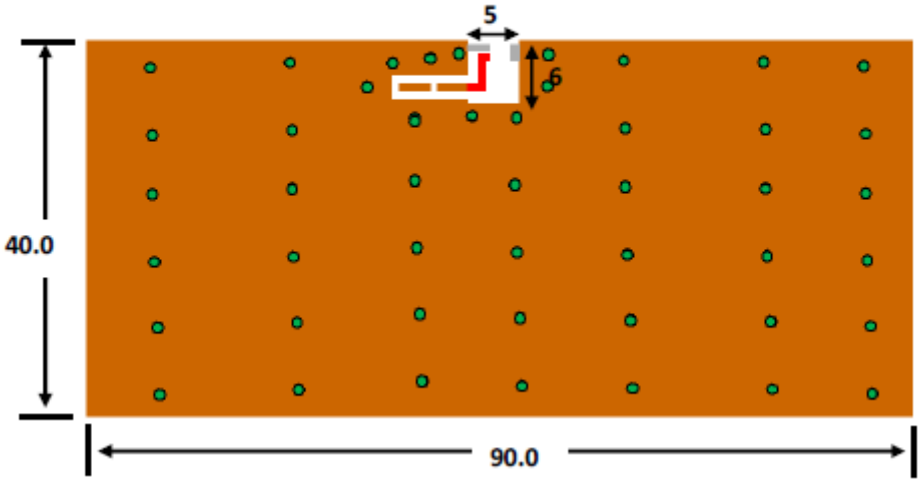
Description: 3216 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT3216A063R2400A

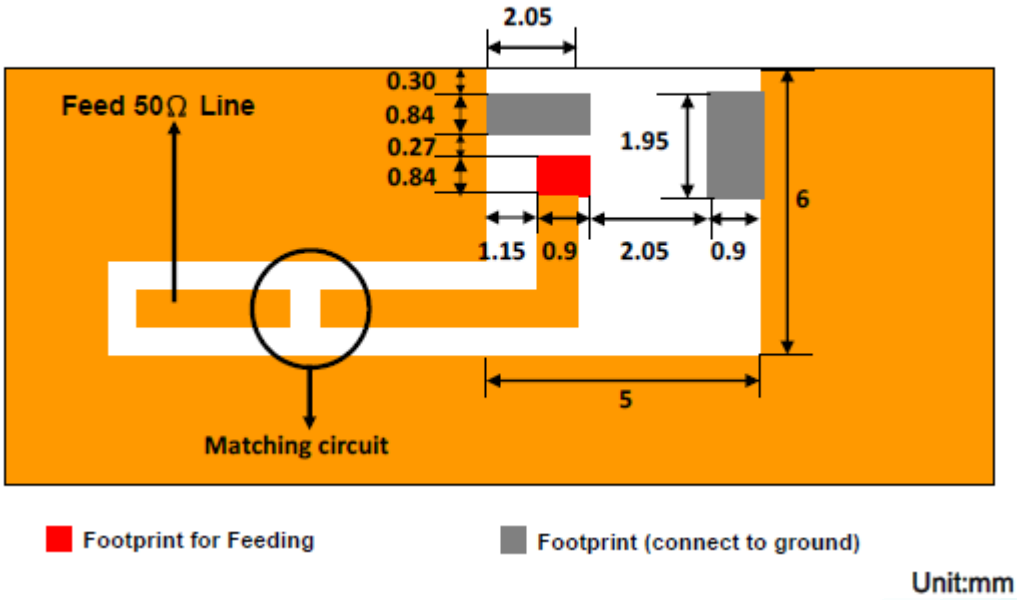
LAYOUT OF EVALUATION BOARD

■ Clearance Definition:

□ (Size = 6.0 * 5.0 mm)



■ Soldering Pads Dimension and Footprint :

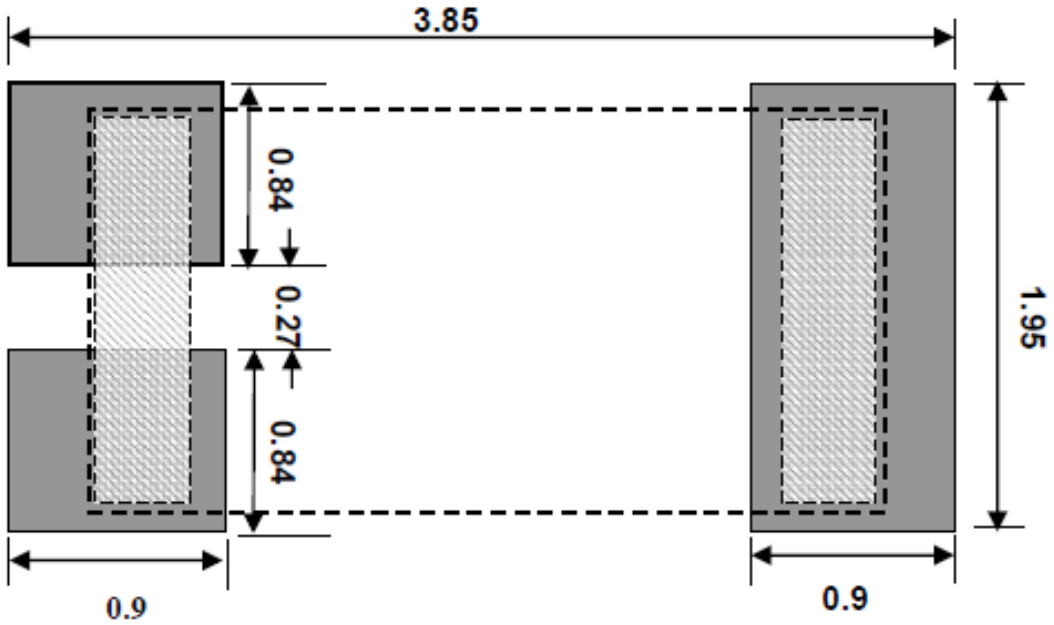


Outlook and dimension of evaluation board

Description: 3216 2.4-2.5GHz Chip Antenna

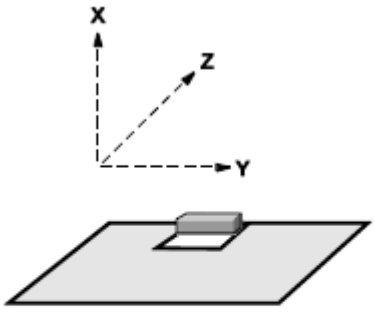
PART NUMBER: ANT3216A063R2400A

LAYOUT OF EVALUATION BOARD

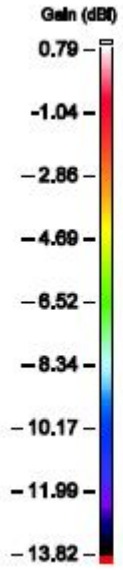


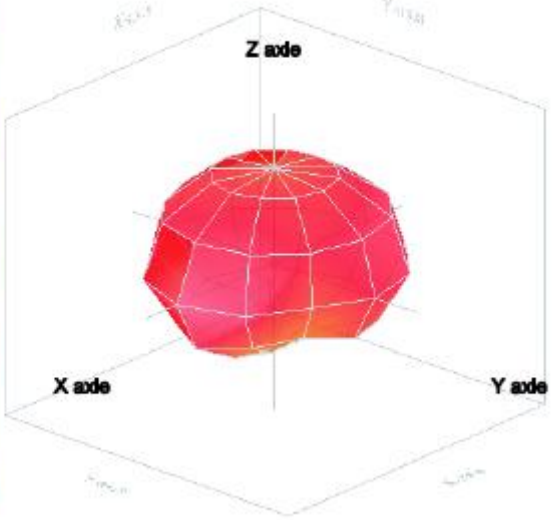
Tol : ±0.1
Unit : mm

Dimension of footprint



Evaluation board and XYZ direction





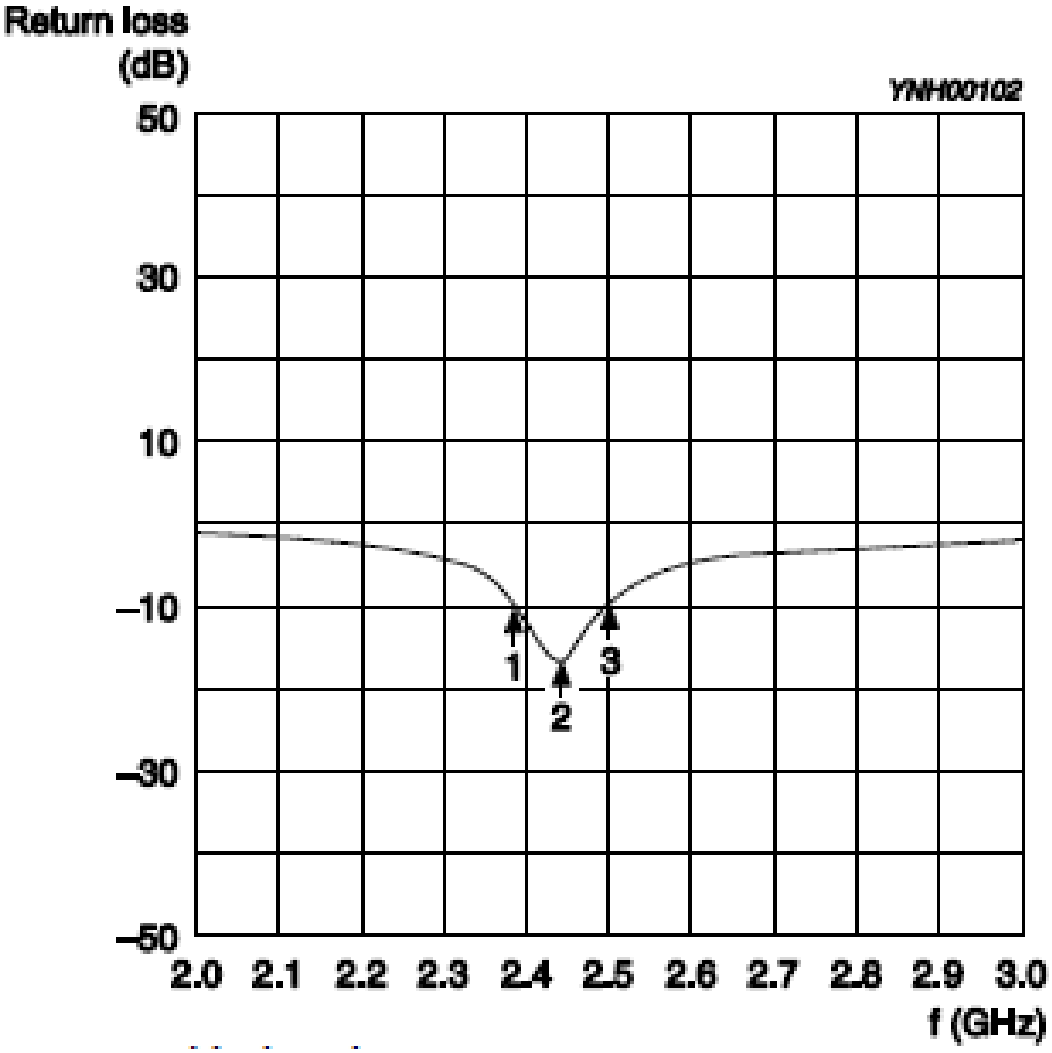
Radiation pattern

Frequency= 2.45 GHz
Max gain = 1.69 dBi
MEG (mean effective gain)= -1.00 dBi
Directivity (dB) = 2.18
Efficiency = - 0.49dB, 89.33%

Description: 3216 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT3216A063R2400A

ELECTRICAL PERFORMANCES



Maker data
1. 2.39GHz, -10.00dB
2. 2.45GHz, -16.48dB
3. 2.50GHz, -10.00dB

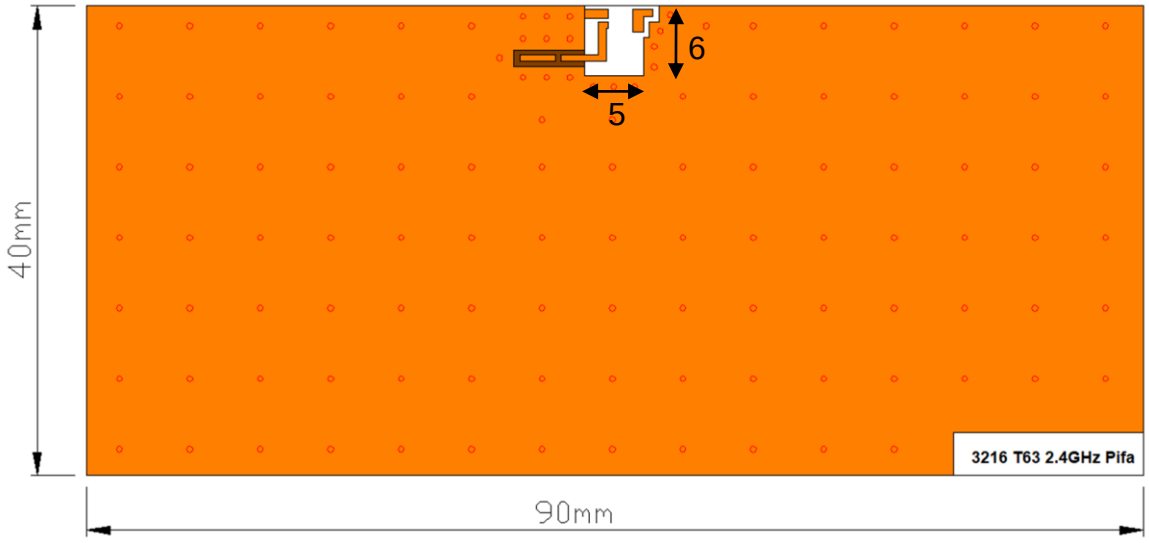
Return loss

Description: 3216 2.4-2.5GHz Chip Antenna

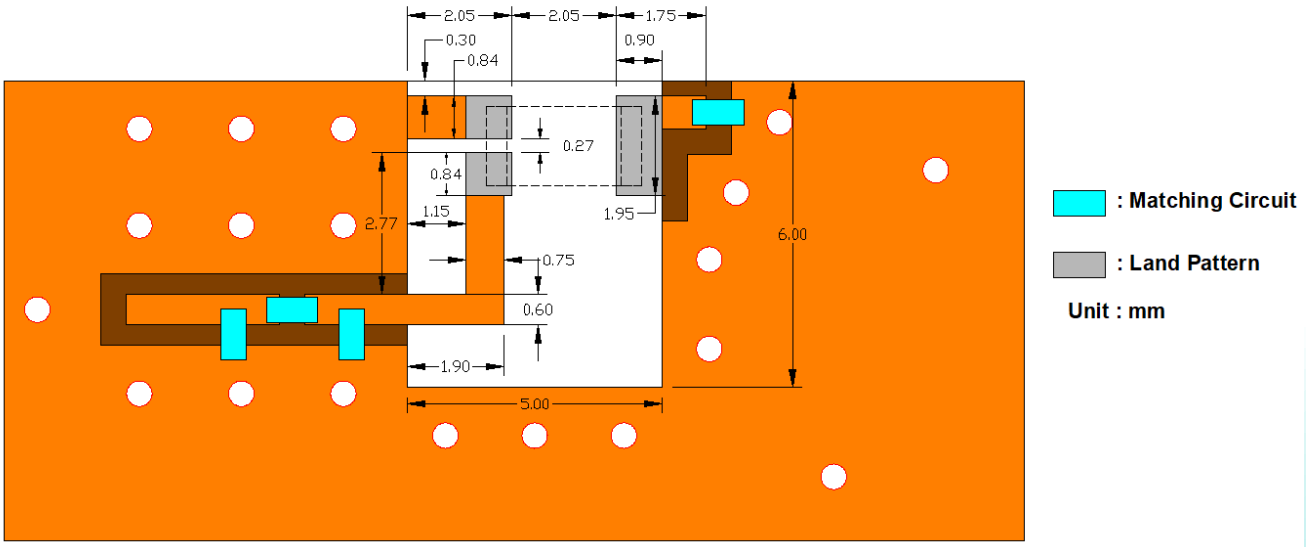
PART NUMBER: ANT3216A063R2400A

REFERENCE DESIGN OF MATCHING CIRCUIT

- Clearance Definition :
  Size = 5.0 * 6.0 mm



- Soldering Pads Dimension Footprint :



Outlook and dimension of matching circuit

Description: 3216 2.4-2.5GHz Chip Antenna

PART NUMBER: ANT3216A063R2400A

REVISION HISTORY

Revision	Date	Description
Version 1	Nov. 20, 2020	- New issue.
Version 2	Aug. 11, 2021	- Added reference design of matching circuit.