Innovative Service Around the Globe YAGEO

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna
ANT3216LL15R1575A
GPS
3216 series

YAGEO Phycomp

Product Specification – February 7, 2017 V.0

FEATURES

- Compact size
- High radiation efficiency
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- Tablet
- Navigation device
- Telematics box
- Fleet management

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	L	L15	R	1575A
(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.

L15

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

1575 = 1.575 GHz

PHYCOMP CTC

CAN4311712151583K

12NC

431171215158

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1.575 GHz
Bandwidth	51 MHz (Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.01 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)	3.20 ±0.10
W (mm)	1.60 ±0.10
T (mm)	1.20 ±0.10
A (mm)	0.80 ±0.15
B (mm)	1.60 ±0.20

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Feeding Point
S2	GND

OUTLINES

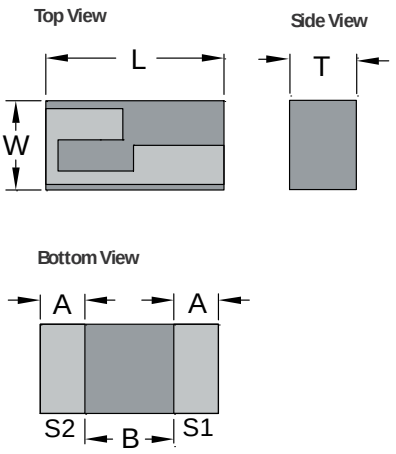


Fig. 1 Antenna outlines

YNH0048

REFERENCE DESIGN OF EVALUATION BOARD

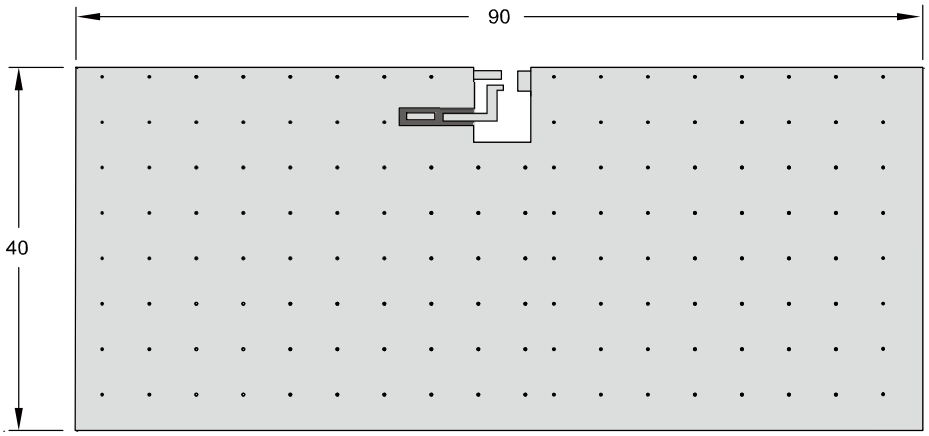


Fig. 3 Outlook and dimension of evaluation board Unit : mm

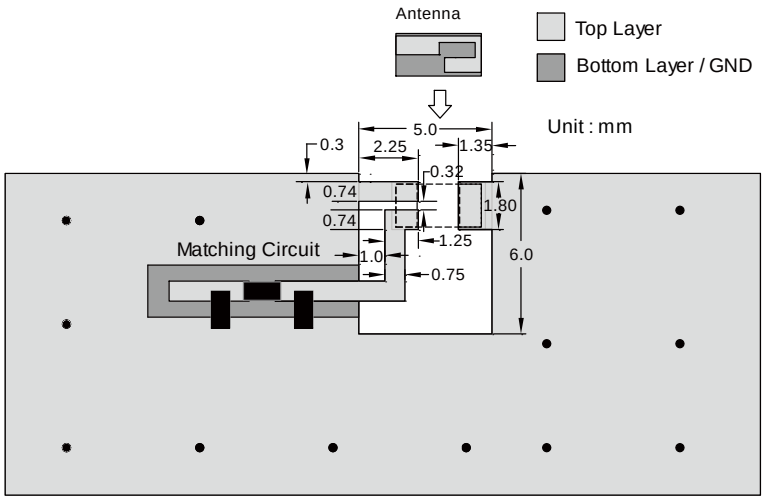
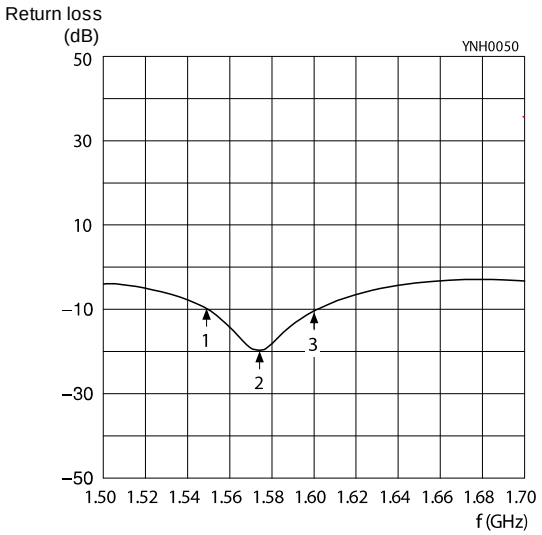


Fig. 4 Details of soldering pad

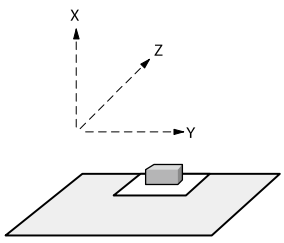
ELECTRICAL PERFORMANCES



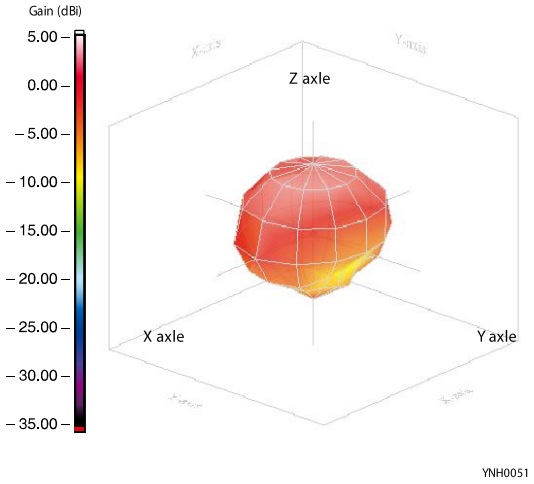
Marker data

1. 1.551GHz, -10dB
2. 1.575GHz, -20.1dB
3. 1.602GHz, -10dB

Fig. 5 Return loss



Evaluation board and XYZ direction



Frequency= 1.575 GHz
Max gain = 2.01 dBi, at (30,30)
MEG (mean effective gain)= -0.62dBi
Directivity (dB) = 3.53
Efficiency = -1.52 dB, 70.51%

Fig. 6 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Feb. 07, 2017	-	- New data sheet for SMD type antenna, 1.575GHz application, 3216 series PIFA mode