

DATA SHEET

WIRELESS COMPONENTS

Ceramic Chip Antenna

ANT5320LL14R1575A

GPS

5320 Series



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 5320 L L14 R I575A
(1) (2) (3) (4) (5) (6)

(1) PRODUCT

ANT = Antenna

(2) SIZE

5320 = 5,3 × 2,0 mm

(3) ANTENNA TYPE

L,F,A = Chip Antenna

(4) SERIAL NO.

L14

(5) PACKING STYLE

R = Tape and Reel

(6) WORKING FREQUENCY

I575 = 1,575 GHz

PHYCOMP CTC

CAN4311753141582K

I2NC

431175314158

SPECIFICATION

Table 1

DESCRIPTION	VALUE
Centre Frequency	1.575 GHz
Bandwidth	160 MHz(Typ.)
Return Loss	10 dB min
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	3.16 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	-40~105 °C
Maximum Power	1 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 10sec.

NOTE

1. The specification is defined on Yageo evaluation board

DIMENSIONS

Table 2 Machinical Dimension

	DIMENSION
L (mm)	5.30 $\pm$ 0.10
W (mm)	2.00 $\pm$ 0.10
T (mm)	1.20 $\pm$ 0.10
A (mm)	0.80 $\pm$ 0.15
B (mm)	2.20 $\pm$ 0.15
C (mm)	0.70 $\pm$ 0.15

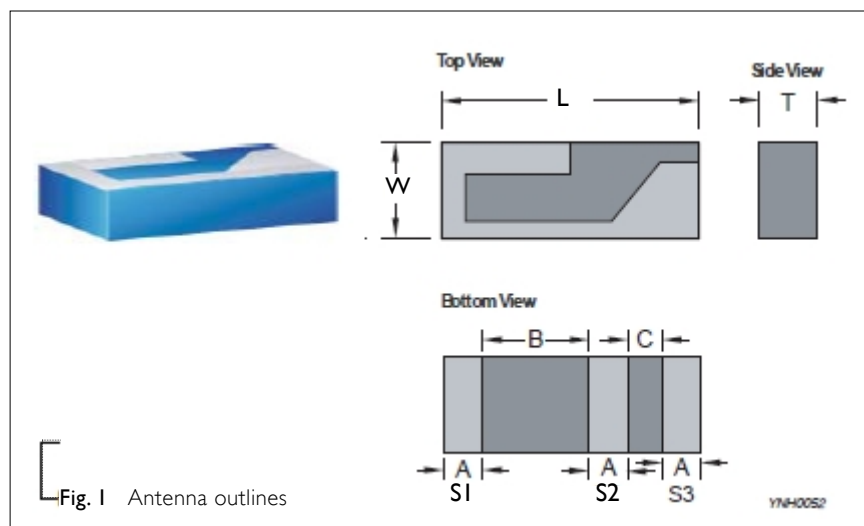
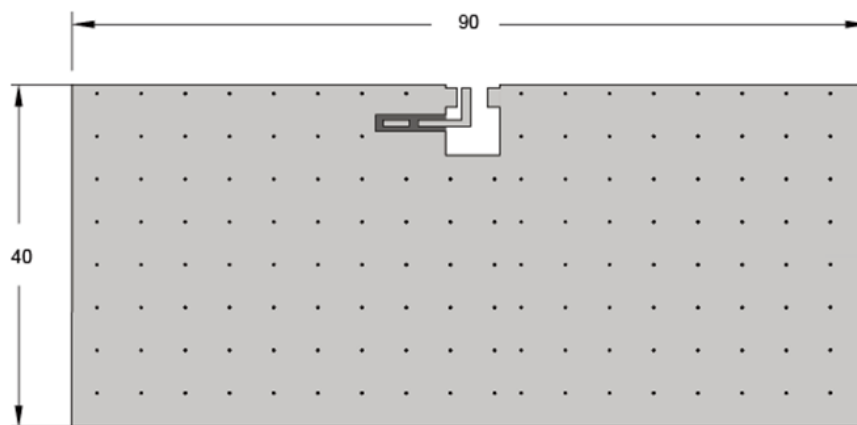
OUTLINES

Table 3 Termination configuration

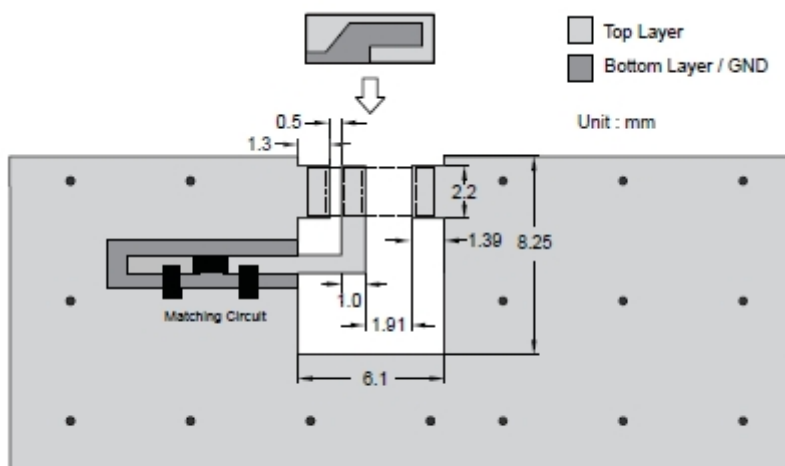
TERMINAL NAME	FUNCTION
S1	GND
S2	Feeding Point
S3	GND

REFERENCE DESIGN OF EVALUATION BOARD



Unit : mm

Fig. 2 Outlook and dimension of evaluation board



YNH0053

Fig. 3 Details of soldering pad

ELECTRICAL PERFORMANCES

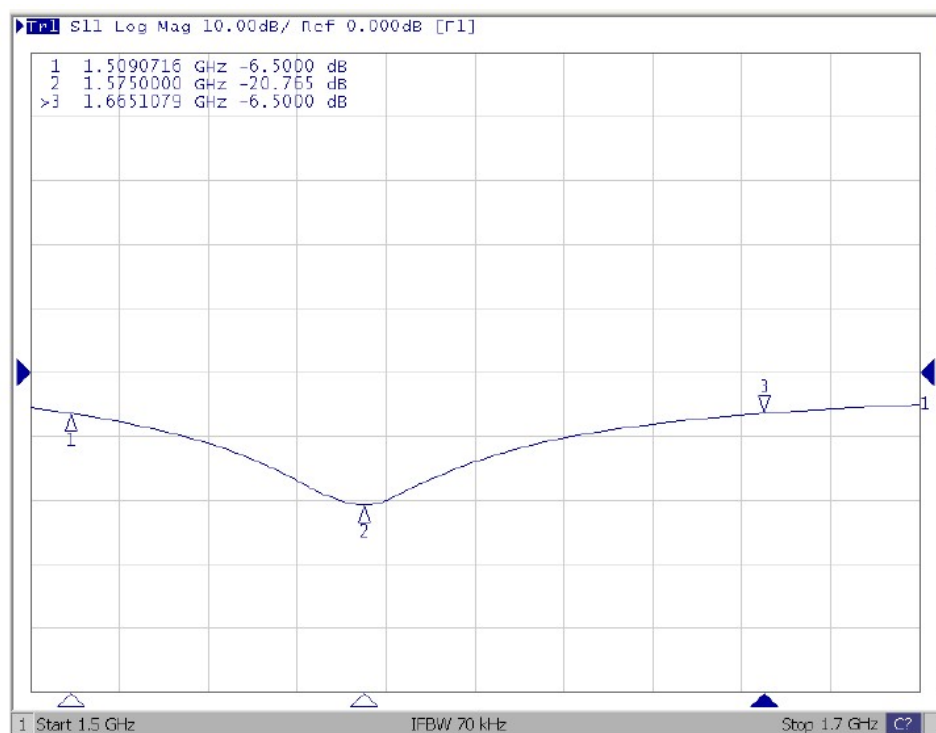
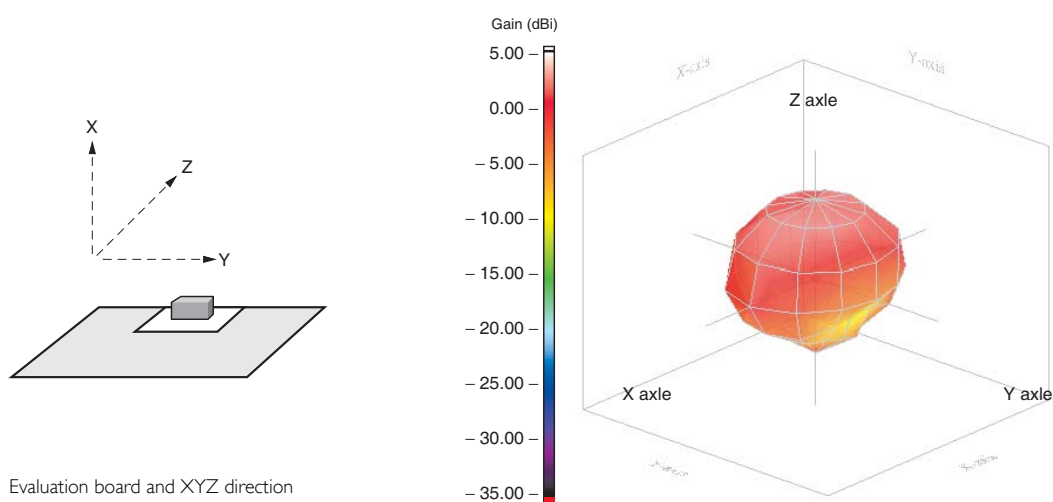


Fig. 4 Return loss



YNH0051

Frequency= 1.575 GHz
Max gain = 2.15 dBi, at (30,30)
MEG (mean effective gain)= -0.34dBi
Directivity (dB) = 3.31
Efficiency = -1.16dB, 76.64 %

Fig. 5 Radiation pattern

REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Mar. 29, 2013	-	- New data sheet for SMD type antenna, 1.575GHz application, 5320 series PIFA mode