

# 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 1575A**  
 (1) (2) (3) (4) (5) (6)

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**(1) PRODUCT**

ANT = Antenna

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**(2) SIZE**

5320 = 5.3 × 2.0 mm

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**(3) ANTENNA TYPE**

L,F,A = Chip Antenna

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**(4) SERIAL NO.**

L14

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**(5) PACKING STYLE**

R = Tape and Reel

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**(6) WORKING FREQUENCY**

1575 = 1.575 GHz

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**PHYCOMP CTC**

CAN4311753141582K

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**I2NC**

431175314158

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**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 ±0.10
W (mm)	2.00 ±0.10
T (mm)	1.20 ±0.10
A (mm)	0.80 ±0.15
B (mm)	2.20 ±0.15
C (mm)	0.70 ±0.15

**OUTLINES**

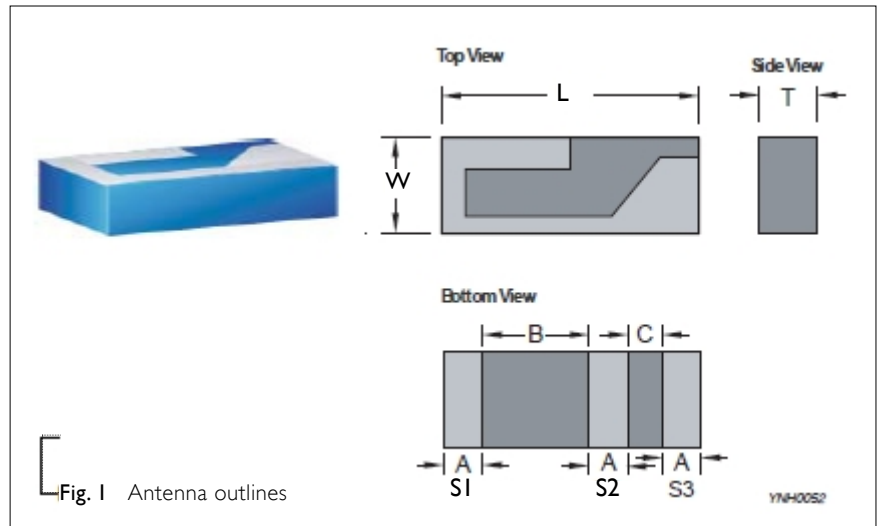
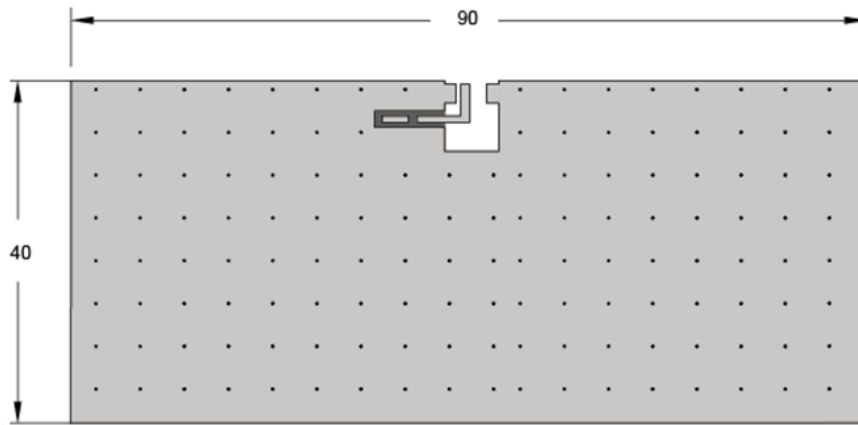


Table 3 Termination configuration

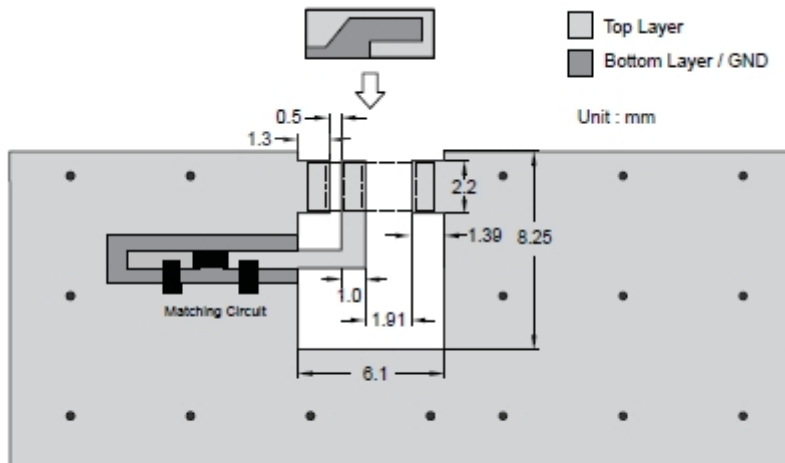
TERMINAL NAME	FUNCTION
S1	GND
S2	Feeding Point
S3	GND

**REFERENCE DESIGN OF EVALUATION BOARD**



Unit : mm

**Fig. 2** Outlook and dimension of evaluation board



Unit : mm

YNH0053

**Fig. 3** Details of soldering pad

**ELECTRICAL PERFORMANCES**

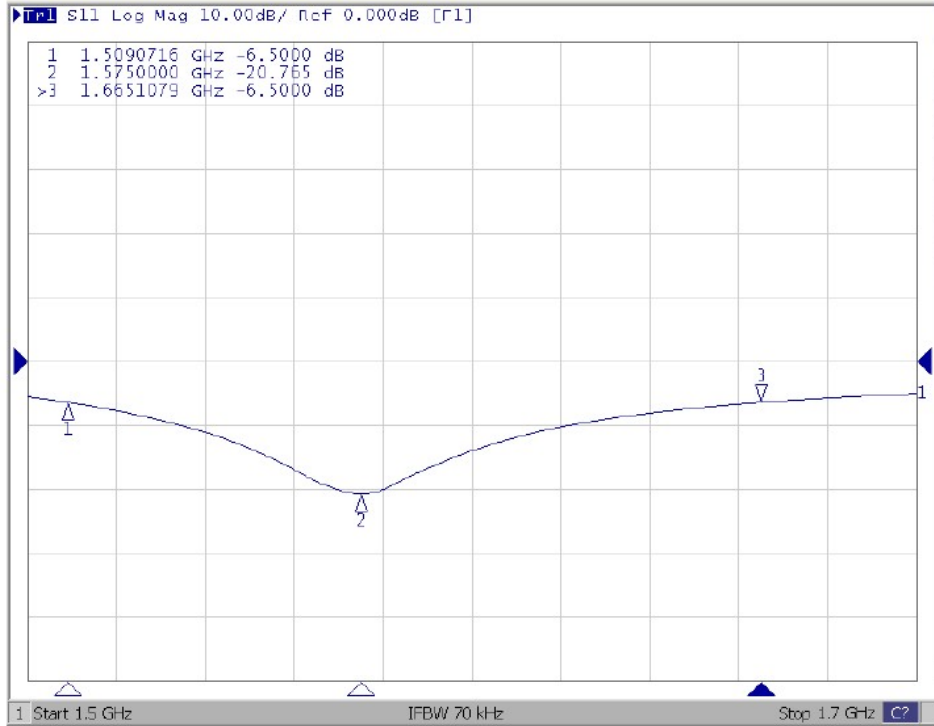
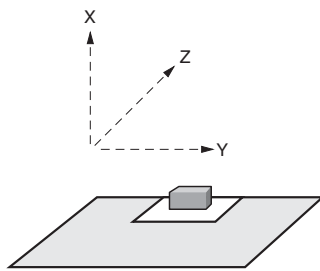
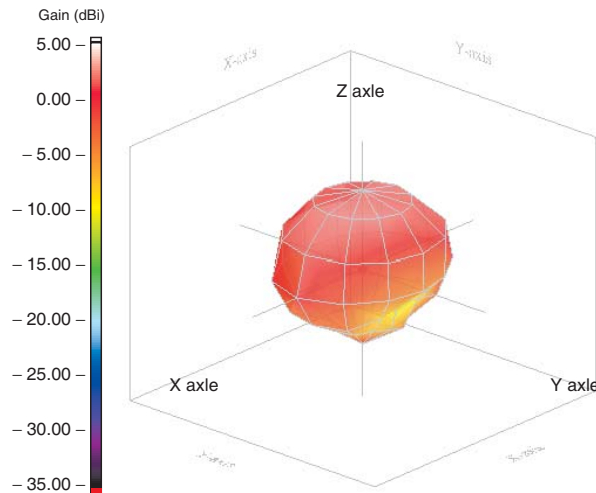


Fig. 4 Return loss



Evaluation board and XYZ direction



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

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