

# DATA SHEET

WIRELESS COMPONENTS

Ceramic Antenna  
ANT3505B002TWPENS

PENTA-BAND  
3505 Series



FEATURES

- Compact Size
- High radiation efficiency
- Multi-band coverage
- Reflow process compatible
- RoHS compliant

APPLICATIONS

- Global cellular network devices
- Telematics
- Cellular broadband access
- M2M module

ORDERING INFORMATION

All part numbers are identified by the series, packing type, material, size, antenna type, working frequency and packing quantity.

**PART NUMBER**

**ANT 3505 B 002 T WPENS**  
 (1) (2) (3) (4) (5) (6)

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(1) PRODUCT

ANT = Antenna

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(2) SIZE

3505 = 35 × 5 mm

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(3) ANTENNA TYPE

B= Bulk Antenna

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(4) SERIAL NO.

002

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(5) PACKING STYLE

T = Tray

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(6) WORKING FREQUENCY

WPEN=0.8/0.9/1.8/1.9/2.1 GHz

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PHYCOMP CTC

CAN439344902PEN I B

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I2NC

439344902PEN

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**SPECIFICATION**

Table 1

DESCRIPTION	VALUE
Working Frequency	824~960 / 1710~2170 MHz
Bandwidth	140MHz / 470 MHz (Typ.)
VSWR	2.8 / 3.5 dB max
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Peak Gain	2.91 dBi(Typ.)
Impedance	50 Ω
Operating Temperature	- 40~105 °C
Maximum Power	4 W
Termination	Ag (Environmentally-Friendly Leadless)
Resistance to Soldering Heats	260°C , 5sec.

**NOTE**

I. The specification is defined on Yageo evaluation board

**DIMENSIONS**

Table 2 Machinical Dimension

	DIMENSION
L (mm)	35.00 ±0.20
W (mm)	5.00 ±0.20
T (mm)	6.00 ±0.20
A (mm)	2.00 ±0.20
B (mm)	1.50 ±0.20
C (mm)	1.27 ±0.20

**OUTLINES**

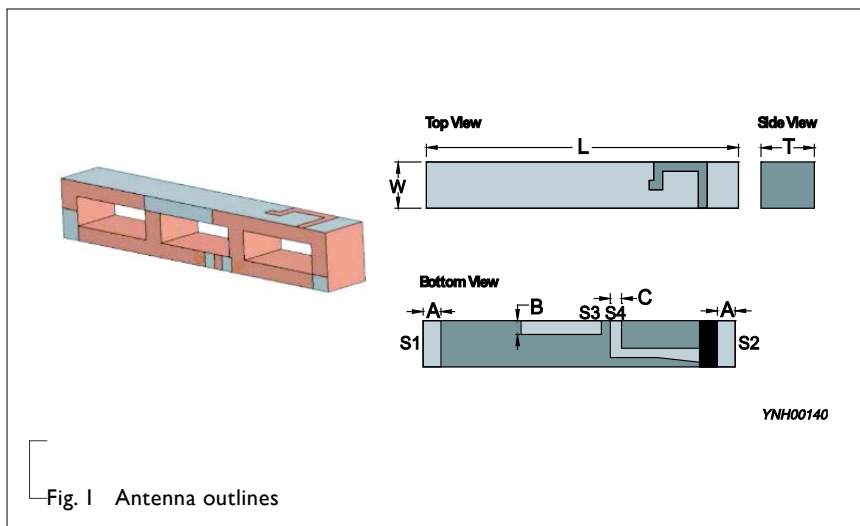


Fig. 1 Antenna outlines

Table 3 Termination configuration

TERMINAL NAME	FUNCTION
S1	Soldering Point
S2	Soldering Point
S3	GND
S4	Feeding Point

**REFERENCE DESIGN OF EVALUATION BOARD**

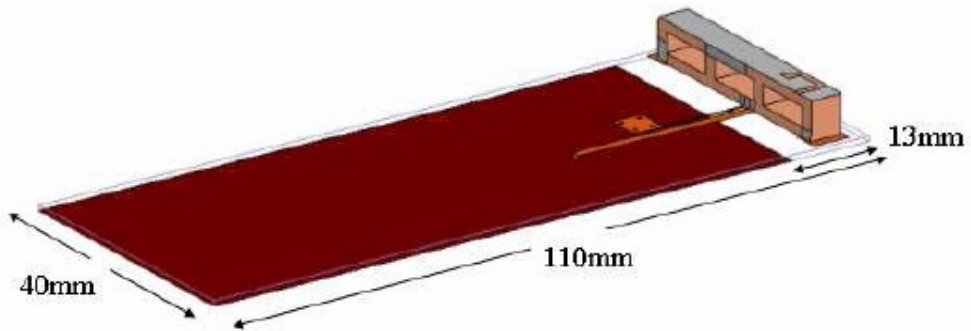


Fig. 2 Outlook and dimension of evaluation board

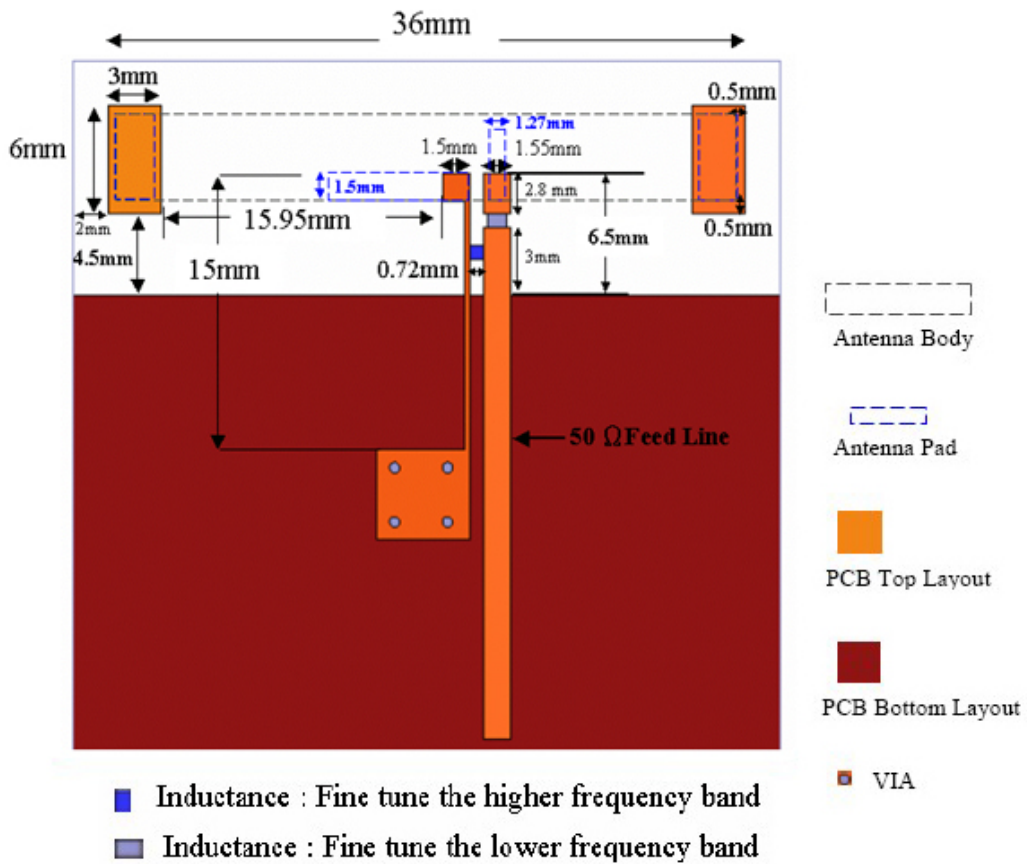
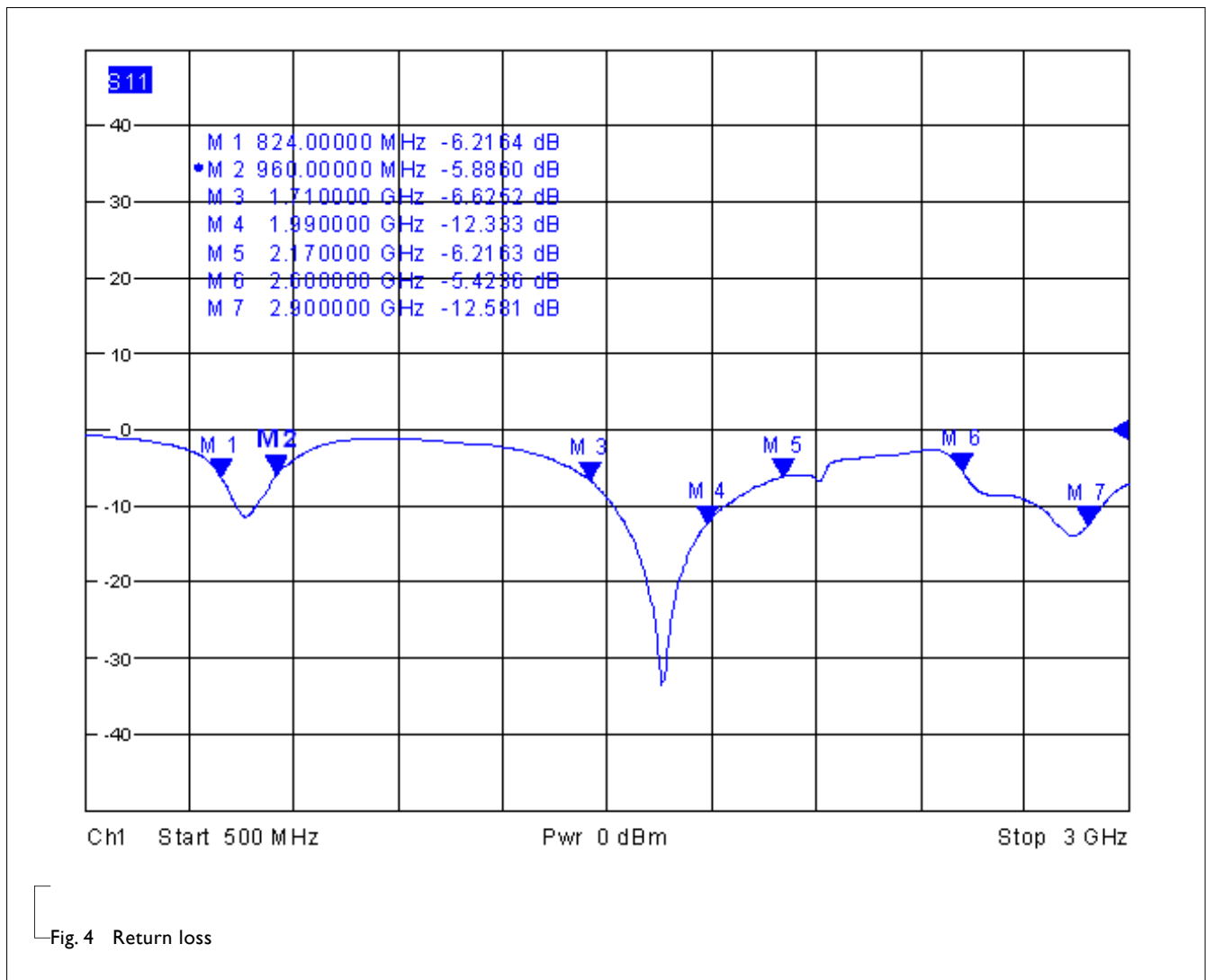


Fig. 3 Details of soldering Pad

**ELECTRICAL PERFORMANCES**



REVISION HISTORY

REVISION	DATE	CHANGE NOTIFICATION	DESCRIPTION
Version 0	Mar. 04, 2015	-	New data sheet for SMD type antenna, WWAN application, 3505 series