

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

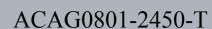
Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China











#### **FEATURES**

- High gain of 7.29 dBi
- Made using LTCC (low temperature co-fired ceramic) technology
- Compact 8.0 x 1.0 x 1.0mm
- High efficiency
- · Omni-directional

#### **APPLICATIONS**

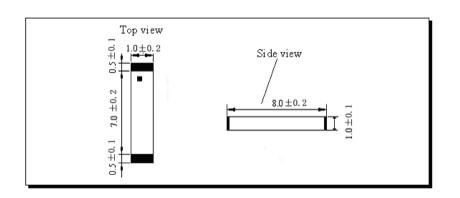
- Wifi
- Bluetooth
- ZigBee
- ISM applications
- IoT and wearable
- Remote Technology
- M2M

#### **ELECTRICAL CHARACTERISTICS**

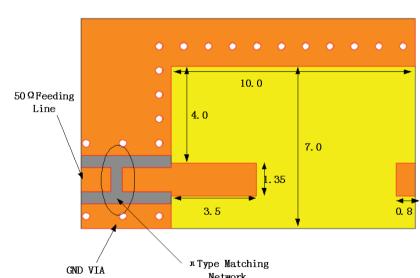
Item	Spec
Centre Frequency (No matching)	2857 MHz
Centre Frequency (After matching)	2450 MHz
Bandwidth	180 MHz typ
VSWR	≤2.0
Impedance	$50\Omega$
Gain	7.29 dBi
Azimuth	Omni-directional
Polarization	Linear
Operating Temperature range	-40°C ~+ 85°C

#### **MECHANICAL DIMENSIONS**

### Antenna Dimensions



# Layout Dimensions



**Dimensions (mm)** 

**REVISED: 06.21.2018** 

ABRACON IS ISO9001-2015 CERTIFIED

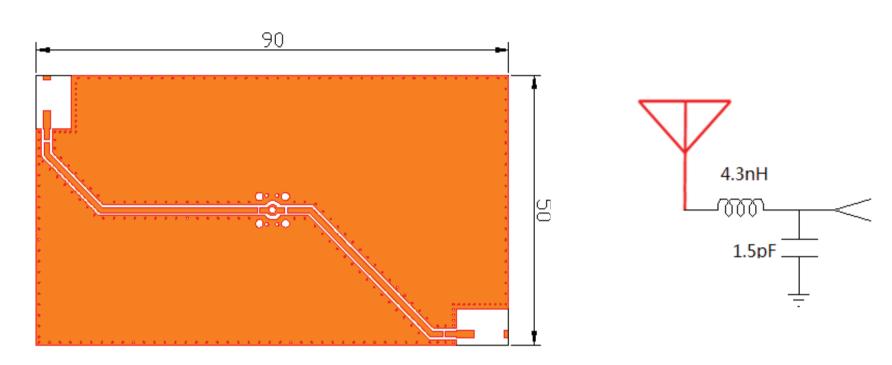


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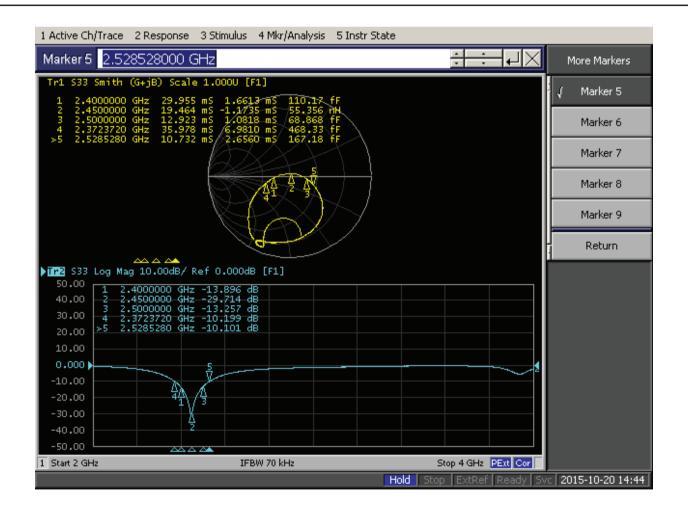


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# **EVALUATION BOARD AND MATCHING CIRCUITS**



#### ANTENNA RESPONSE – SMITH CHART AND RETURN LOSS S11





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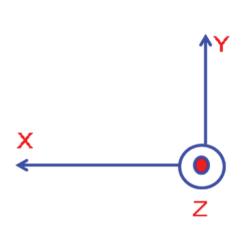
**REVISED: 06.21.2018** 

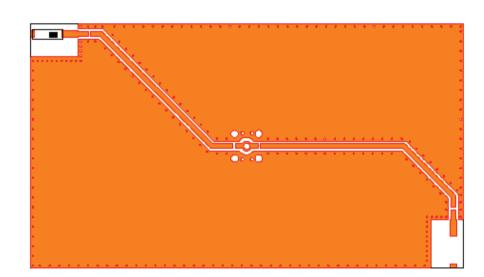
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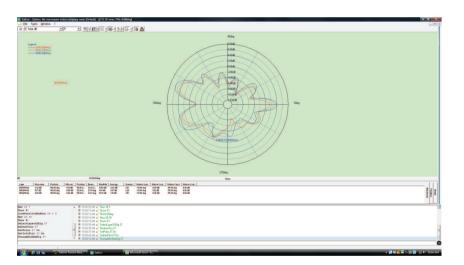
# **RADIATION PATTERNS**

### **Coordinates**

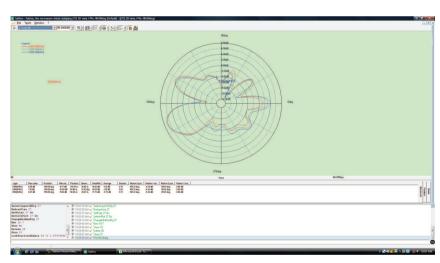




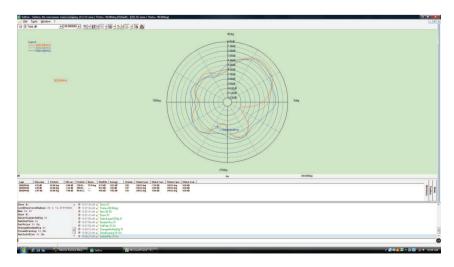
X-Z Plane



Y-Z Plane



X-Y Plane





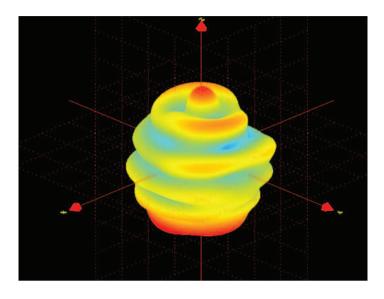
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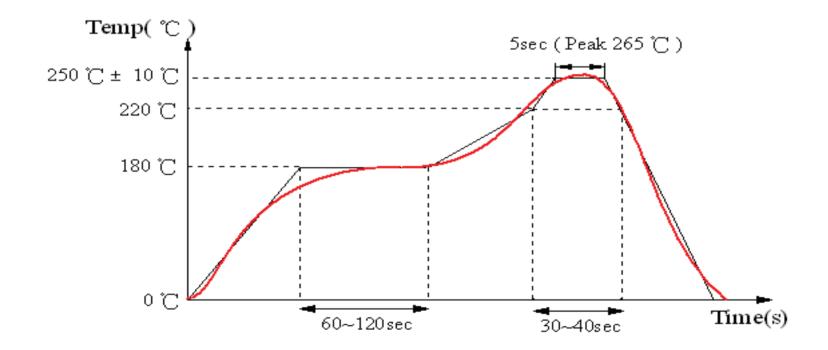


### **3D PATTERNS**



Frequency (MHz)	2400	2450	2500
Avg. Gain (dBi)	-1.30	-1.15	-1.26
Peak Gain (dBi)	6.67	7.29	6.69
Efficiency (%)	72.6	74.5	72.8

### REFLOW SOLDERING STANDARD CONDITION





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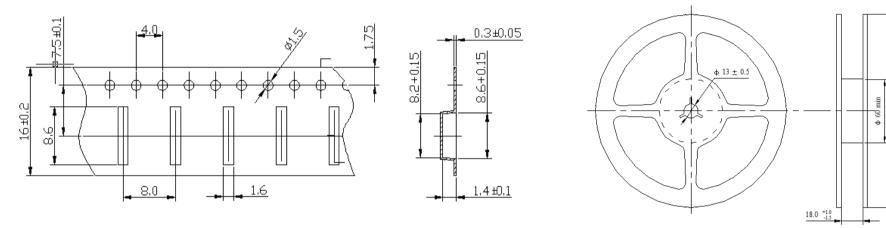


**Dimensions: mm** 

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#### **PACKAGING**

Package Type	Quantity/Size
Inner Box	1500 pcs/reel
Centre Frequency (After matching)	15000 pcs/carton
Carton	330 x 210 x 210 mm



Storage Temperature Range: <30 degree C, Humidity: <60%RH

MSL - 1 Oxidizable, 12 months in a vacuum sealed bag.

Once opened, please repack the unused items within 168 hours by re-seal package treatment.

#### **CAUTIONS**

### 1. Static voltage

Static voltage between signal & ground may cause deterioration & destruction of the component. Please avoid static voltage.

## 2. Ultrasonic cleaning

Ultrasonic vibration may cause deterioration & destruction of the component. Please avoid ultrasonic cleaning.

#### 3. Soldering

Only leads of the component may be soldered. Please avoid soldering to any other part of the component, such as on the patterns as this will change the performance of the antenna.



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