



915A2540A 技术指标

SPECIFICATION OF PRODUCTS

CUSTOMER : _____

PRODUCT NAME: DIELECTRIC ANTENNA ELEMENT

PART NUMBER : AR915A2540A

Approved by	Checked by	Drawn by

Dongguan Tianfa Communication Technology Co., Ltd.
Address: No. 8, Lane 10, Tangzihong, Zhangmoutou, Dongguan City,
Guangdong Province



Approval Sheet	
Customer	
Supplier P/N	915A2540A
Customer P/N	

Customer's Approval Certificate	
Checked & Approval by	
Date	

Please return this copy as a certification of your approval.



1 SCOPE

This specification shall cover the characteristics of the dielectric antenna element with the type 915A2540A .

2 PART NO.

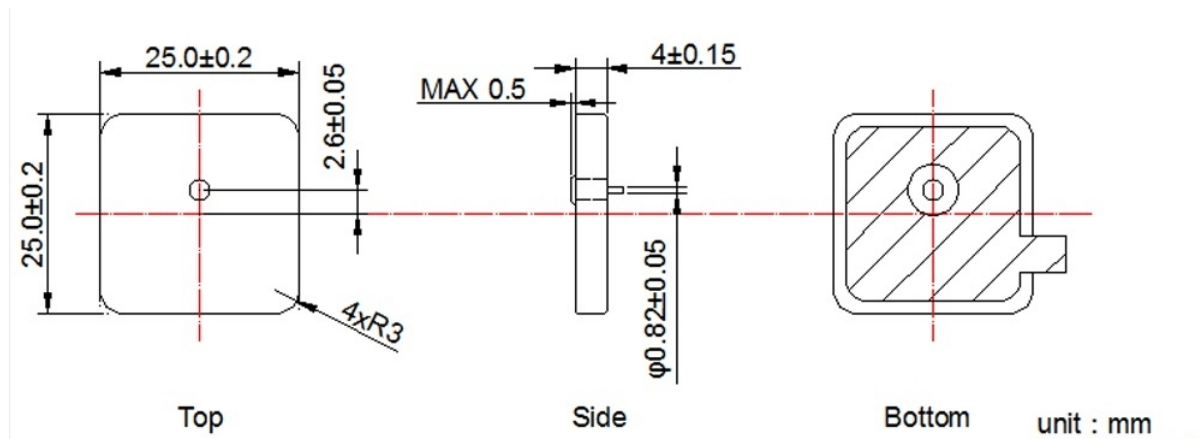
PART NUMBER	CUSTOMER PART NO	SPECIFICATION NO
915A2540A		

3 OUTLINE DRAWING AND DIMENSIONS

3.1 Appearance: No visible damage and dirt.

3.2 The products conform to the RoHS directive and national environment protection law.

3.3 Dimensions



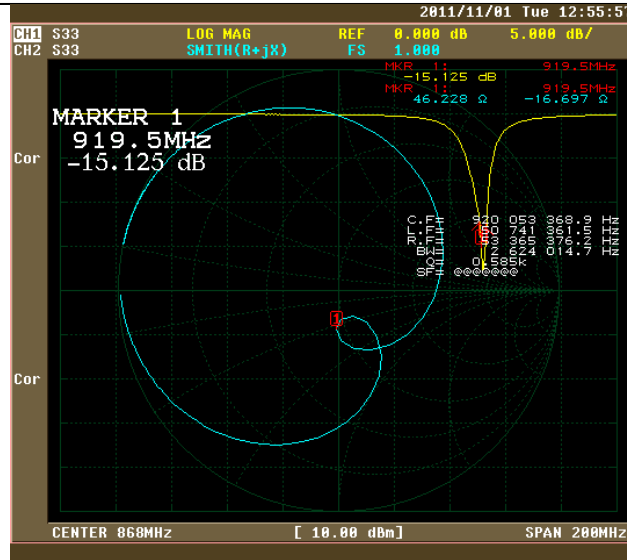
4 ELECTRICAL SPECIFICATIONS

4.1 Performance Characteristics

1. 1. 1 Items	Content
Center frequency MHz (with tape on 70*70 mm ground plane)	919 ± 3
-10dB Bandwidth MHz min	3.0
VSWR at CF max	1.5
Polarization Model	RHCP
Impedance	50Ω
Frequency Temperature Coefficient	20ppm/deg. °C max

* Center frequency :-10dB bandwidth center frequency. depend on the ground plane of customers.

4.2 Impedance Characteristic

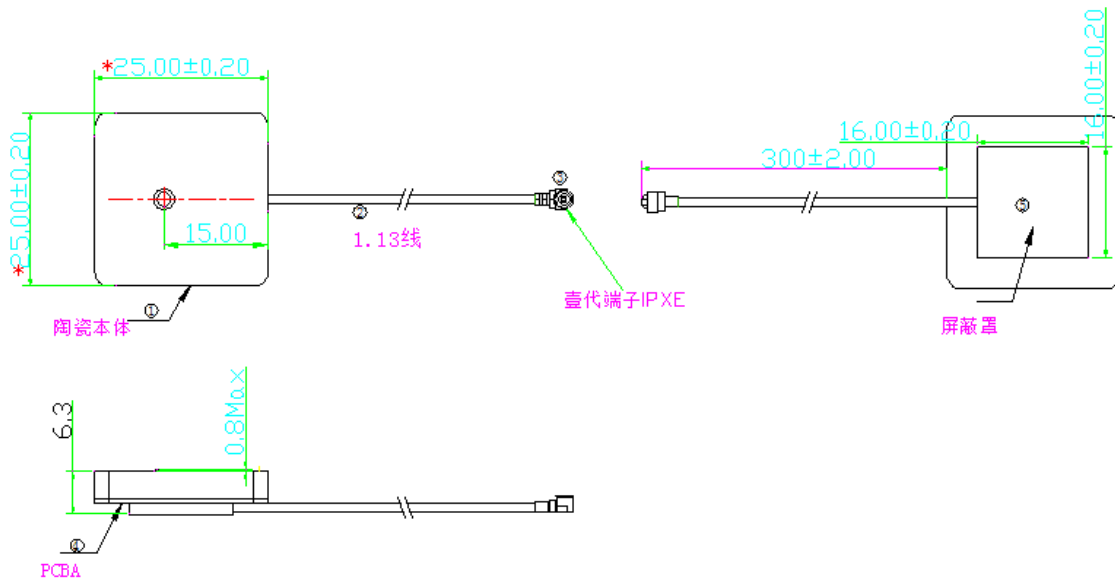


5 TEST

5.1 Test Conditions

Parts shall be measured under a condition (Temp.: $20^{\circ}\text{C}\pm 15^{\circ}\text{C}$, Humidity : $65\%\pm 20\%$ R.H.).

5.2 Test fixture



6 ENVIRONMENTAL TEST

No.	1. 1. 2 Item	1. 1. 3 Test Condition	Remark
6.1	Humidity Test	The device is subjected to 90%~95% relative humidity $60^{\circ}\text{C}\pm 3^{\circ}\text{C}$ for 96h~98h, then dry out at $25^{\circ}\text{C}\pm 5^{\circ}\text{C}$ and less than 65% relative humidity for 2h~4h. After dry out the device shall satisfy the specification in table 1.	It shall fulfill the specifications in Table 1.
6.2	High Temperature	The device shall satisfy the specification in table 1 after leaving at 105°C for	It shall fulfill the



	Exposure	96h~98h,provided it would be measured after 2h~4h leaving in $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.	specifications in Table 1.
6.3	Low Temperature	The device shall satisfy the specification in table 1 after leaving at -40°C for 96h~98h,provided it would be measured after 2h~4h leaving in $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$ and less than 65% relative humidity.	It shall fulfill the specifications in Table 1.
6.4	Temperature Cycle	Subject the device to -40°C for 30 min. followed by a high temperature of 105°C for 30 min cycling shall be repeated 5 times. At the room temperature for 1h prior to the measurement.	It shall fulfill the specifications in Table 1.
6.5	Vibration	Subject the device to vibration for 2h each in x、y and z axis with the amplitude of 1.5mm, the frequency shall be varied uniformly between the limits of 10Hz~55Hz.	It shall fulfill the specifications in Table 1.
6.6	Soldering Test	Lead terminals are heated up to $350^{\circ}\text{C} \pm 10^{\circ}\text{C}$ for $5\text{s} \pm 0.5\text{s}$ with brand iron and then element shall be measured after being placed in natural conditions for 1 h. No visible damage and it shall fulfill the specifications in Table 1	It shall fulfill the specifications in Table 1.
6.7	Solder ability	Lead terminals are immersed in soldering bath of $260^{\circ}\text{C} \sim 290^{\circ}\text{C}$ for $3\text{s} \pm 0.5\text{s}$. More than 95% of the terminal surface of the device shall be covered with fresh solder.	The terminals shall be at least 95% covered by solder.
6.8	Terminal Pressure Strength	Force of 2kg is applied to each lead in axial direction for $10\text{s} \pm 1\text{s}$ (see drawing). No visible damage and it shall fulfill the specifications in Fig 1	Mechanical damage such as breaks shall not occur.

FIG 1

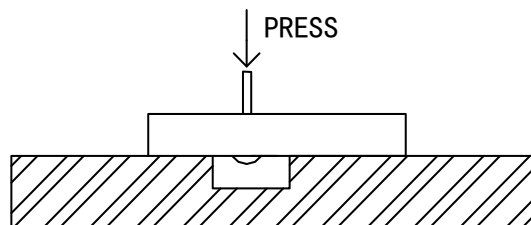


TABLE 1

Item	Specification After Test (MHz)
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Center Frequency change	± 2.0
-10dB Bandwidth Change	± 3.0

technical requirements	technical index
Frequency center	922MHz
Gain	3 dBi
Polarization	Right Hand Circular Polarization(RHCP)
Impedance	50 Ω
Antenna axis ratio	$\leq 5\text{dB}$
10dB Band Width	10Mhz
Ceramic size	25*25*4mm

