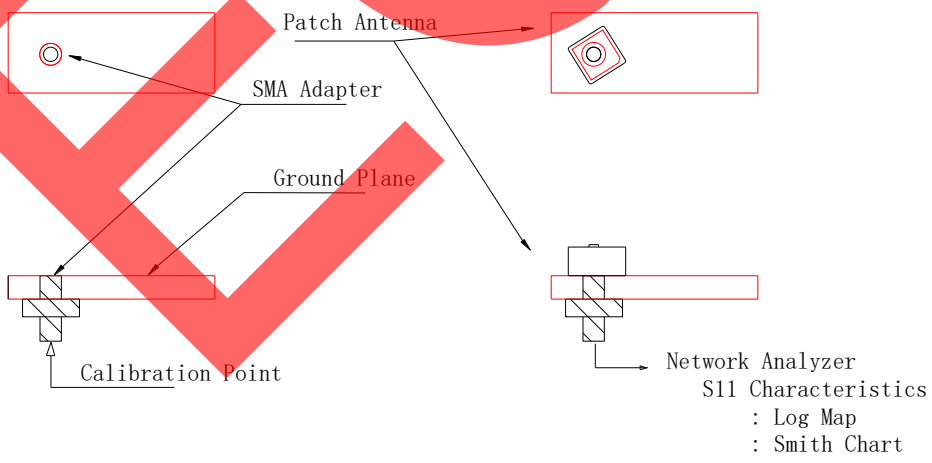
1.0 Electrical Specifications

Parameters	Min.	Typ.	Max.	Units	Note
Receiving Frequency Range		1575		MHz	
Center Frequency (*)		1606		MHz	(with JL03V2.0 GND Plane)
Bandwidth	5			MHz	(Return loss ≤-10dB)
Gain		-1.0		dBic	(Peak gain on standardized Ground Plane facing Zenith.)
Axial Ratio			5	dB	
VSWR @ Center Frequency			1.5		
Polarization Model		RHCP			(Right Hand Circular Polarization)
Impedance		50		Ω	
Frequency Temperature Coefficient	-10		10	ppm/°C	

(*) Application environment, including size of the ground plane, proximity to adjacent components, etc., will affect stated performance. Fine tuning might be required when installed on end-customer's PCB. Abracon offers Antenna Optimization Service, please contact Abracon.

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1.1 Test Conditions and Test Setup



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2.0 Special Requirements

This product is **RoHS/ RoHS II** compliant.

2.1 Structure and Material

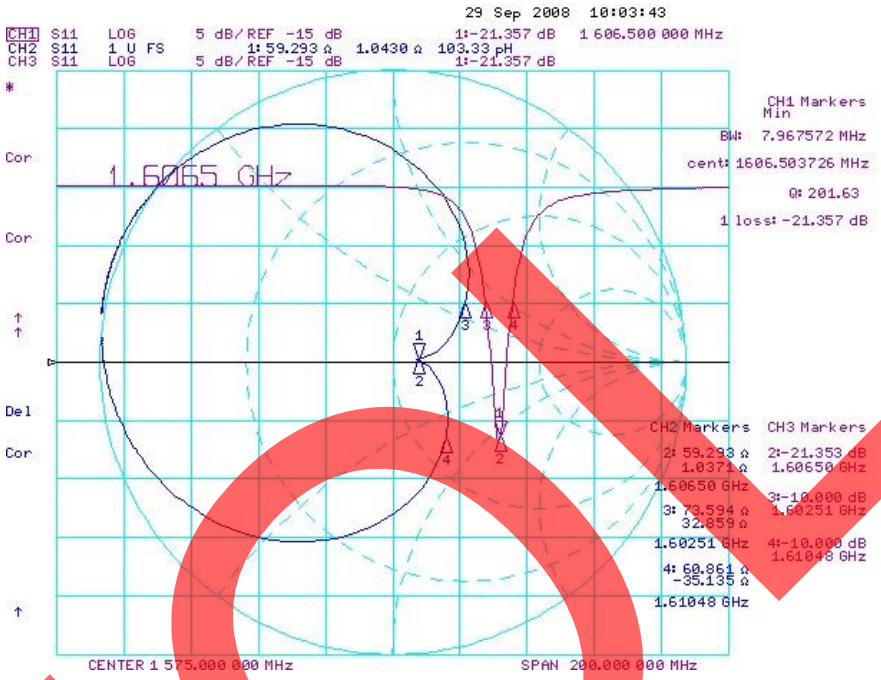
Description	Material
Antenna Substrate	Dielectric Ceramics
Pin	Copper and tinplated
Electrode	Ag Plated
Ground Plane	Ag Plated
Adhesive Type	NITTO 5000NS

3.0 MSL level: Not Applicable

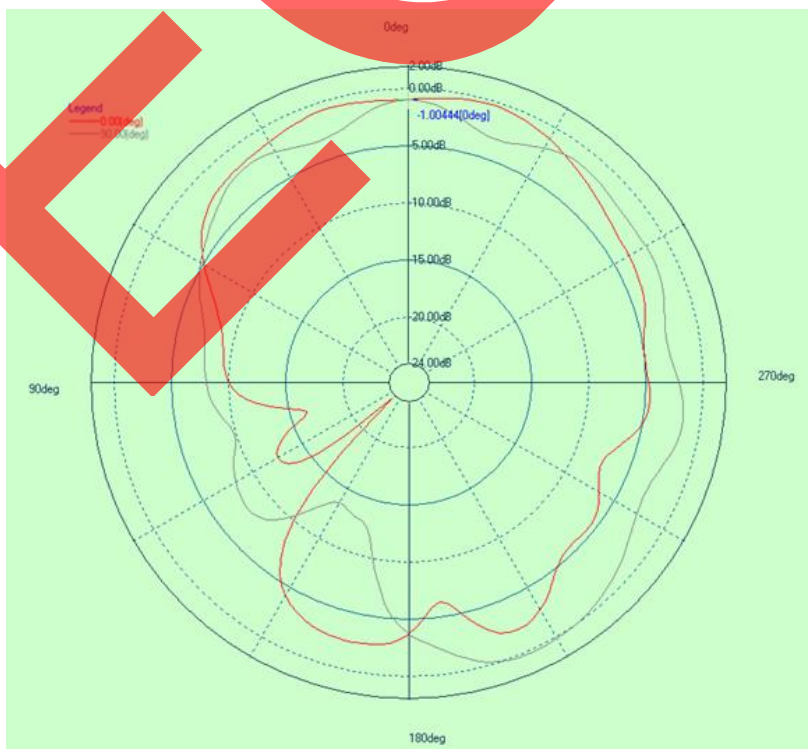
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4.0 Smith Chart



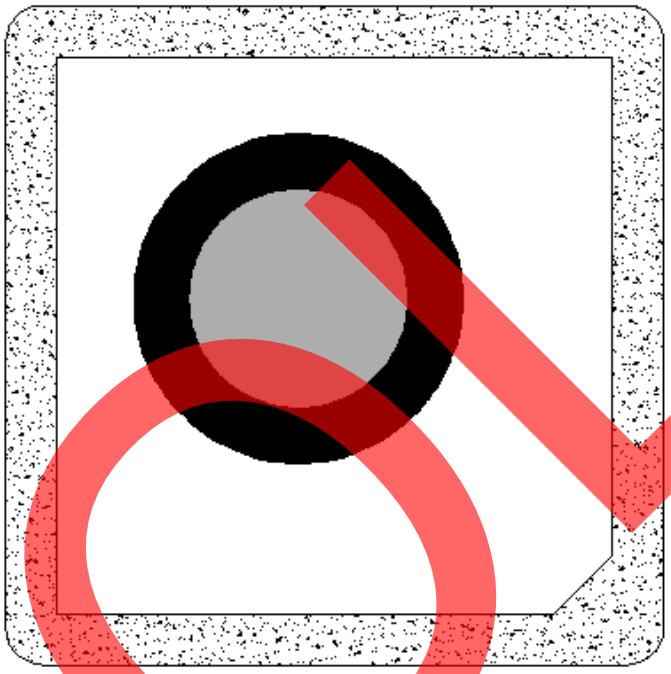
5.0 Radiation Pattern



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6.0 Marking

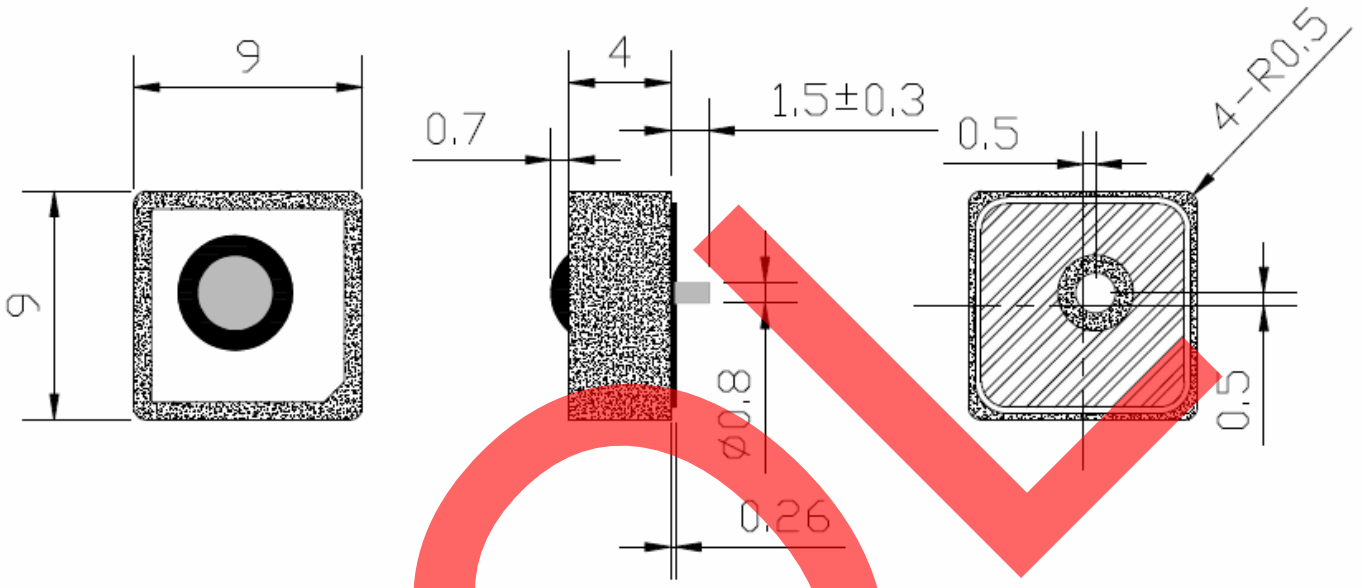


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6.1 Marking Method: Ink Marking

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7.0 Outline Dimensions



Other Tolerance: ±0.2mm

Unit: mm

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8.0 Reliability Test

Item	Test Condition	Remark
Humidity Test	The device is subjected to 90%~95% relative humidity 40℃±2℃ for 96h, then dry out at 25℃±5℃ 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.
High Temperature Exposure	The device shall satisfy the specification in table 1 after leaving at 80℃±2℃ for 24h,provided it would be measured after 2h~4h leaving in 25℃±5 ℃ and less than 65% relative humidity.	It shall fulfill the specifications in Table 1.
Low Temperature	The device shall satisfy the specification in table 1 after leaving at -40℃ for 24h, provided it would be measured after 2h~4h leaving in 25℃±5 ℃ and less than 65% relative humidity.	It shall fulfill the specifications in Table 1.
Temperature Cycle	Subject the device to -40℃ for 30 min. followed by a high temperature of 80℃ 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.
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.
Soldering Test	Lead terminals are heated up to 350℃±10℃ for 5s± 0.5 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.
Solder ability	Lead terminals are immersed in soldering bath of 260℃ ~290℃ for 3s±0.5s. 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.
Terminal Pressure Strength	Force of 2kg is applied to each lead in axial direction for 10s±1 s (see drawing). No visible damage and it shall fulfill the specifications in Fig 1	Mechanical damage such as breaks shall not occur.

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Figure 1

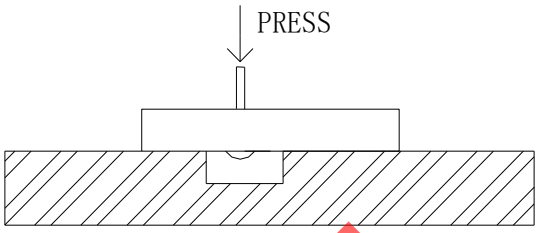


Table 1

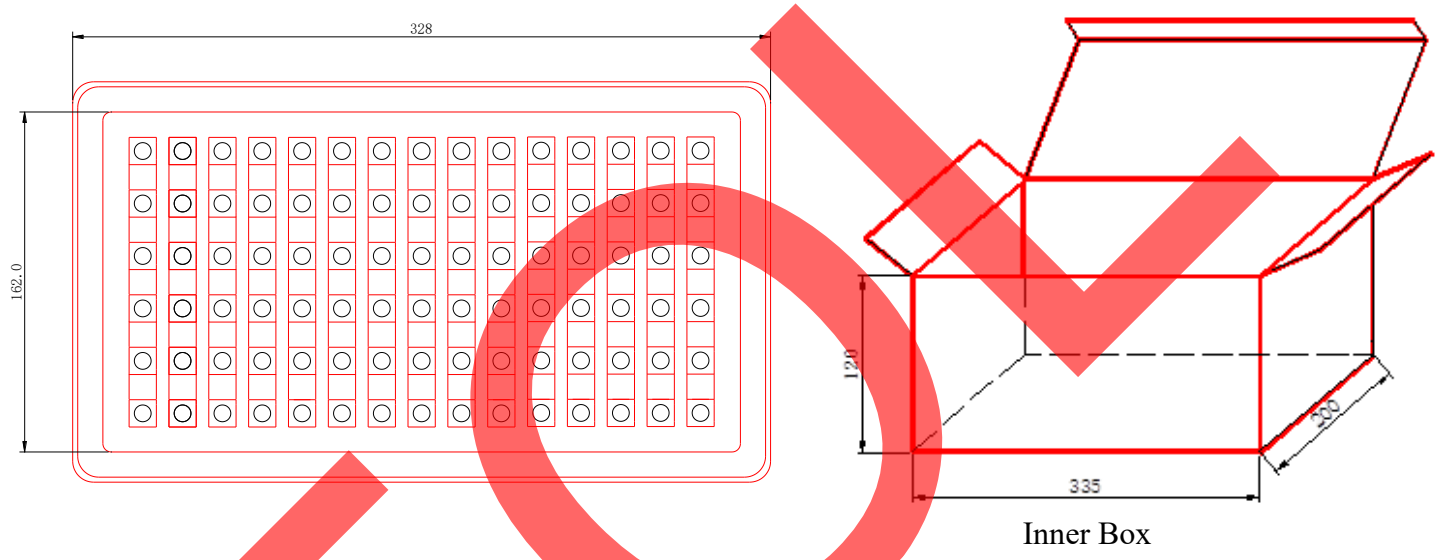
Item	Post Environmental Tolerance	Unit
Center Frequency	±2.0	MHz
Range of Receiving Frequency	±2.5	MHz
Bandwidth	±0.5	MHz
V.S.W.R	±0.5	

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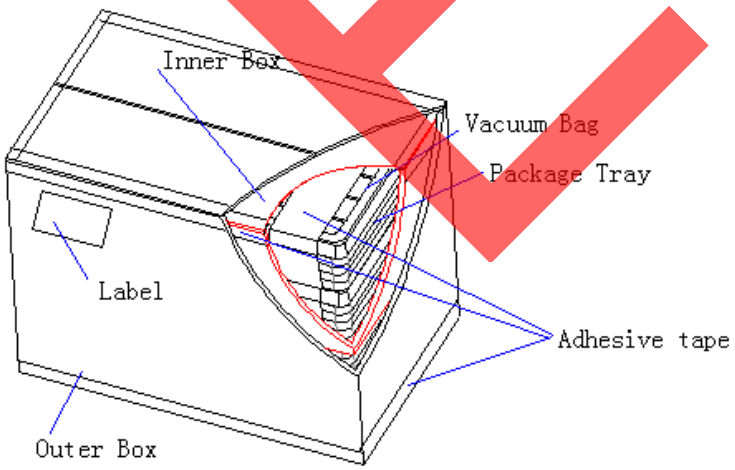
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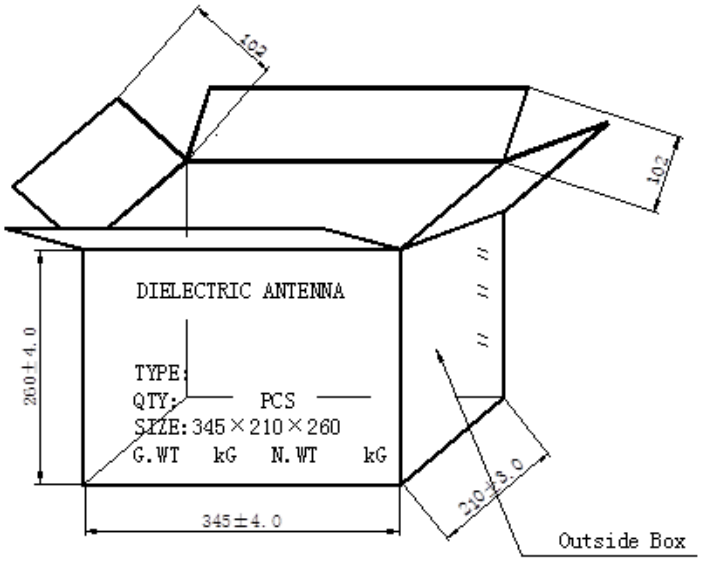
9.0 Packaging

Package Type	Quantity
Tray	90 pcs/tray
Inner Box	900pcs/box
Outer Box	1800 pcs/box



Inner Box





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