

Specification for 915MHz SMD Internal antenna

Customer Name: Agrieyes (Guangzhou) Technology CO.,Ltd.

Model: BW915MNX1304

Description:

915MHz SMD Internal Antenna

Features:

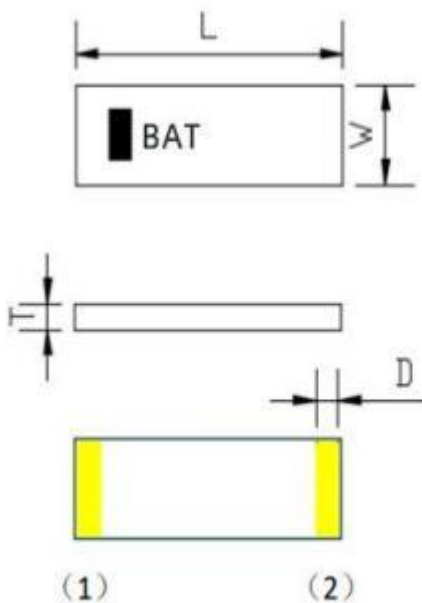
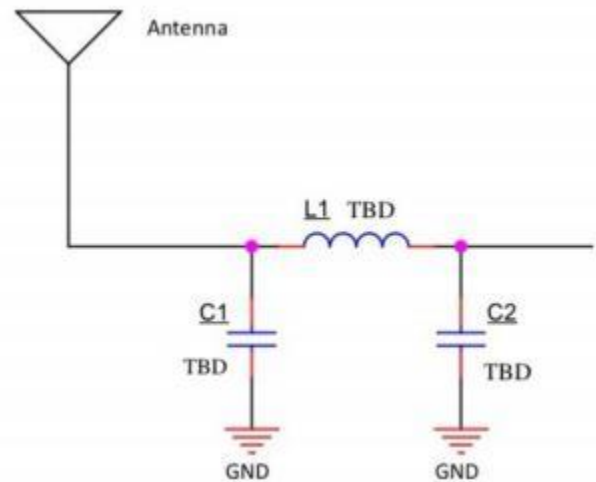
- Frequency range: 915 MHz
- Structure: 360° omni-directional radiation
- Size: 13mm x 4.2mm x 1.6mm
- Compliant with RoHS & REACH regulations

1. Product Specifications
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1. Specification

Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Antenna Type	SMD Internal Antenna		
Frequency Range	915±5	MHz	
Input Impedence	50	Ω	
V.S.W.R	<2.5		
Gain	0	dBi	
Polarization Type	Vertical		
Power Capacity	50	W	
Lightning Protection	-		
DC Voltage	-	V	
Radiator	-		
Mechanical Characteristics			
Dimensions	13 x 4 2 x 1.6	mm	
Connector Type	-		
Cable Type	-		
Cable Length	-	mm	
Mount way	SMD		
Color	aurantiacus		
Material	PCB		
Weight	0.2	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	conform		
Operating Temperature	-45~ +85	°C	
Storage Temperature	-45~ +85	°C	

2. Dimensions & Drawing & Impedance Matching

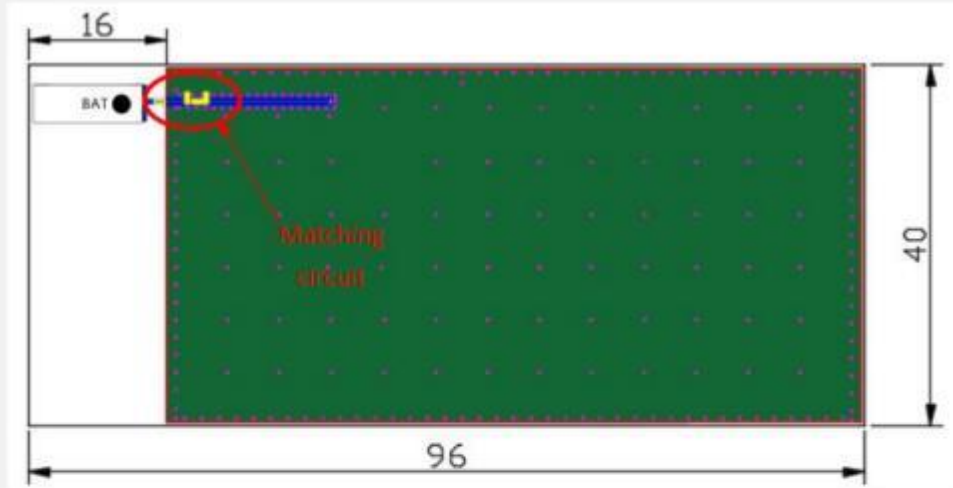


Dimension (mm)	
L	13.0 ± 0.15
W	4.2 ± 0.15
T	1.6 ± 0.15
A	1.0 ± 0.15

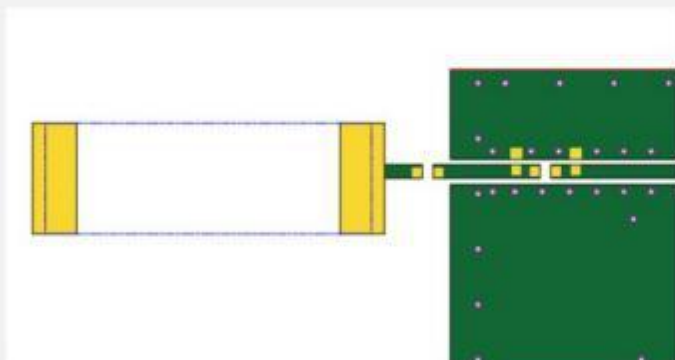
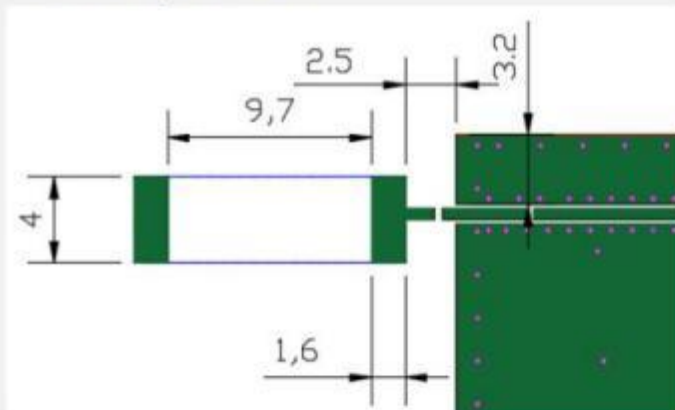
No.	Terminal Name
1	Feeding
2	grounding

3. Evaluation Board Reference

PCB Dimension



Antenna Layout Reference



Unit : mm

 : Chip Antenna

 : Land Pattern

4. Test Equipment



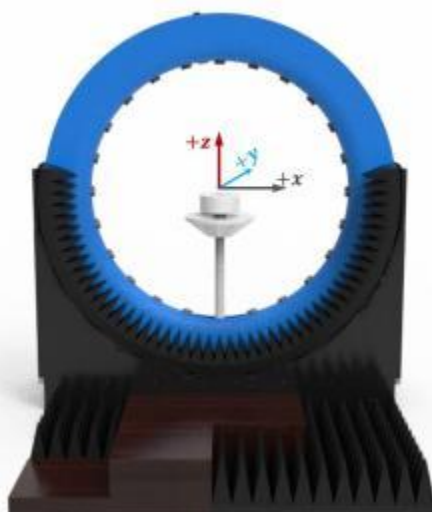
Keysight/E5071C



R&S/CMW500



R&S/SMBV100B



DT-3500 Datasheet

Specification:	Description
Test Frequency:	400MHz-8.5GMHz
System Size :	L*W*H=4*3.5*3.5m
Number of Probes:	23 (Probe) + 1 (link)
Interval Angle :	15°
Sampling Diameter:	2200mm
Carring Capacity:	≤40 kg

Testing Capability /

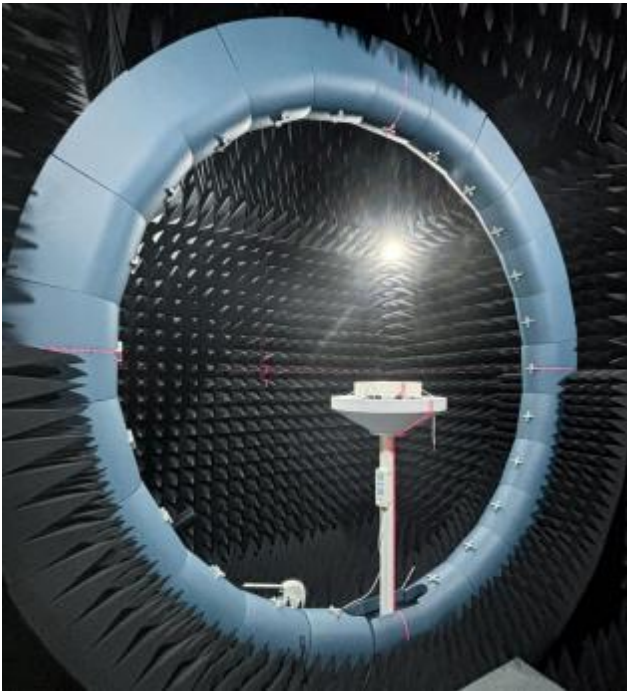
Description

Active measurement

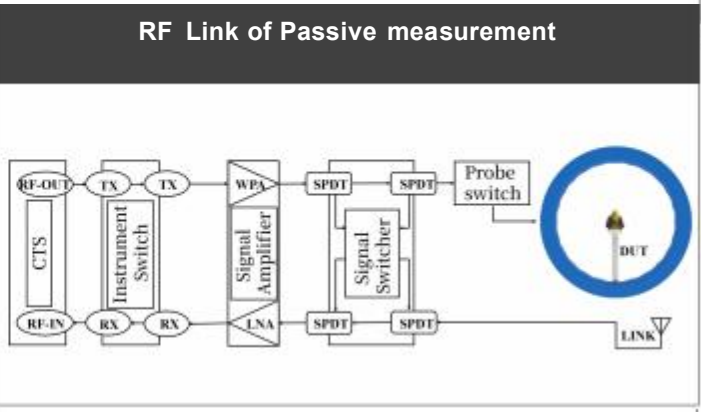
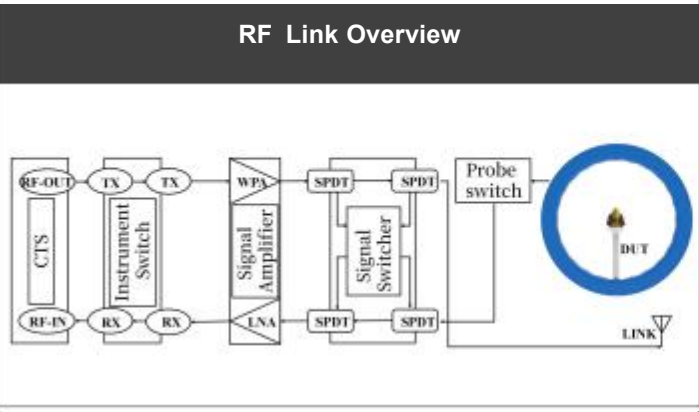
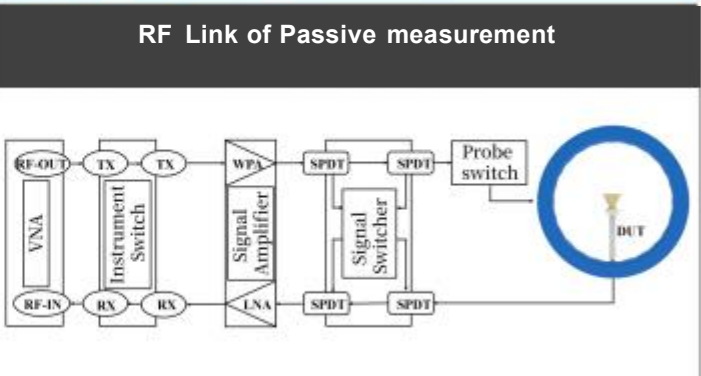
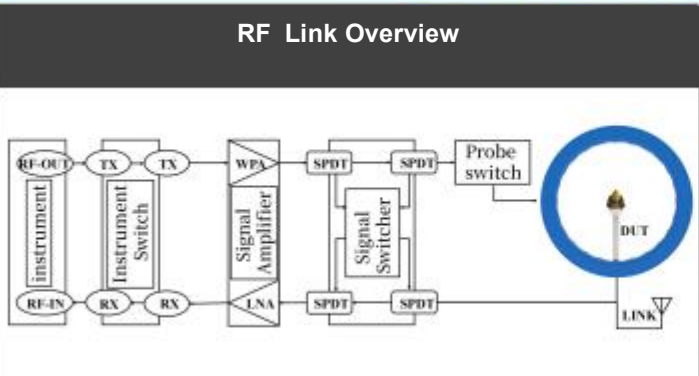
Capability: TRP、TIS、EIRP、EIS,. etc
Mode: 2G/3G/4G/5G、Wi-Fi b/g/n/a/ac/ax、BT、NB-IOT、Cat-M(eMTC)、GPS/BEIDOU/GLONASS、ZigBee、LoRa(Non-Signaling),.etc

Passive measurement

Test category: Gain、Efficiency、2D pattern、3D pattern、Pattern roundness、Axial Ratio, ECC,Phase center,. etc
Polarization Circular polarization, linear polarization, elliptical polarization

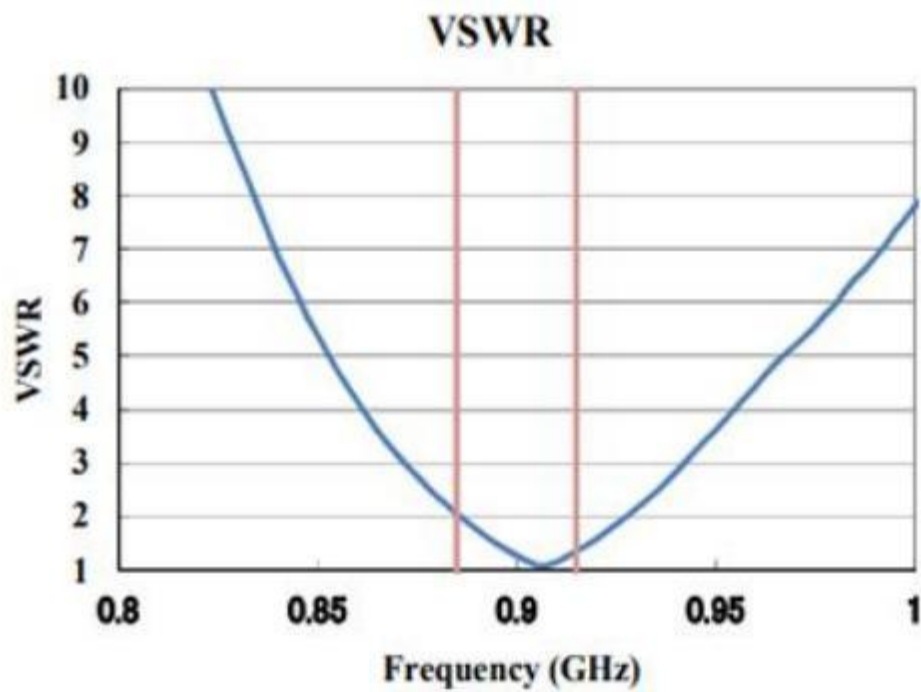


RF Link diagram of multi probe spherical near-field testing system

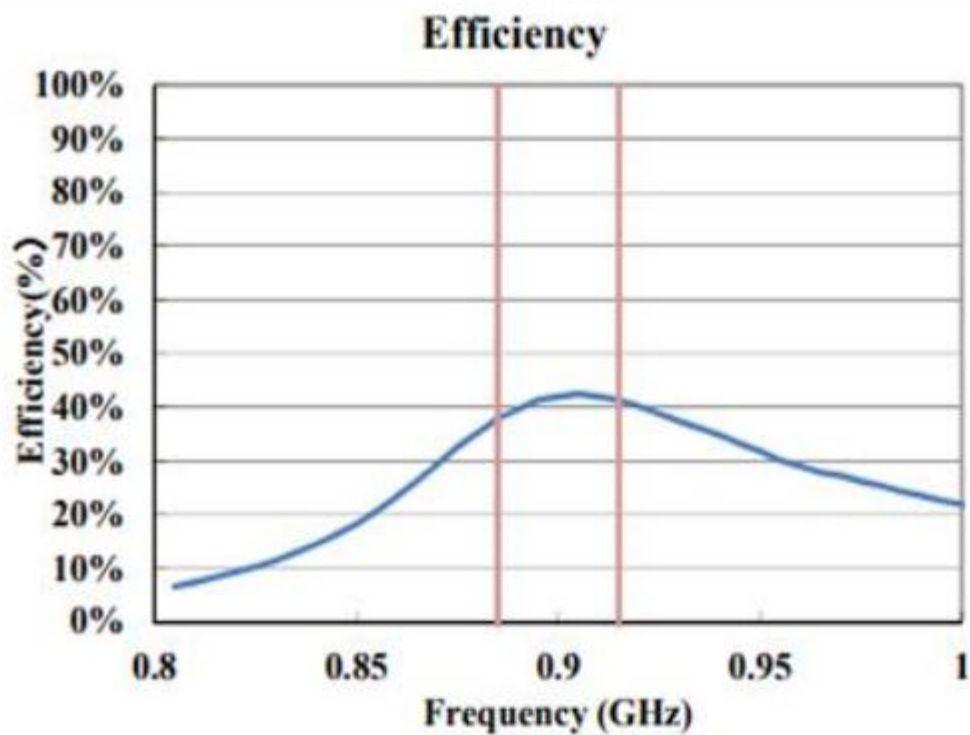


5. Performance Data

5.1 Return Loss

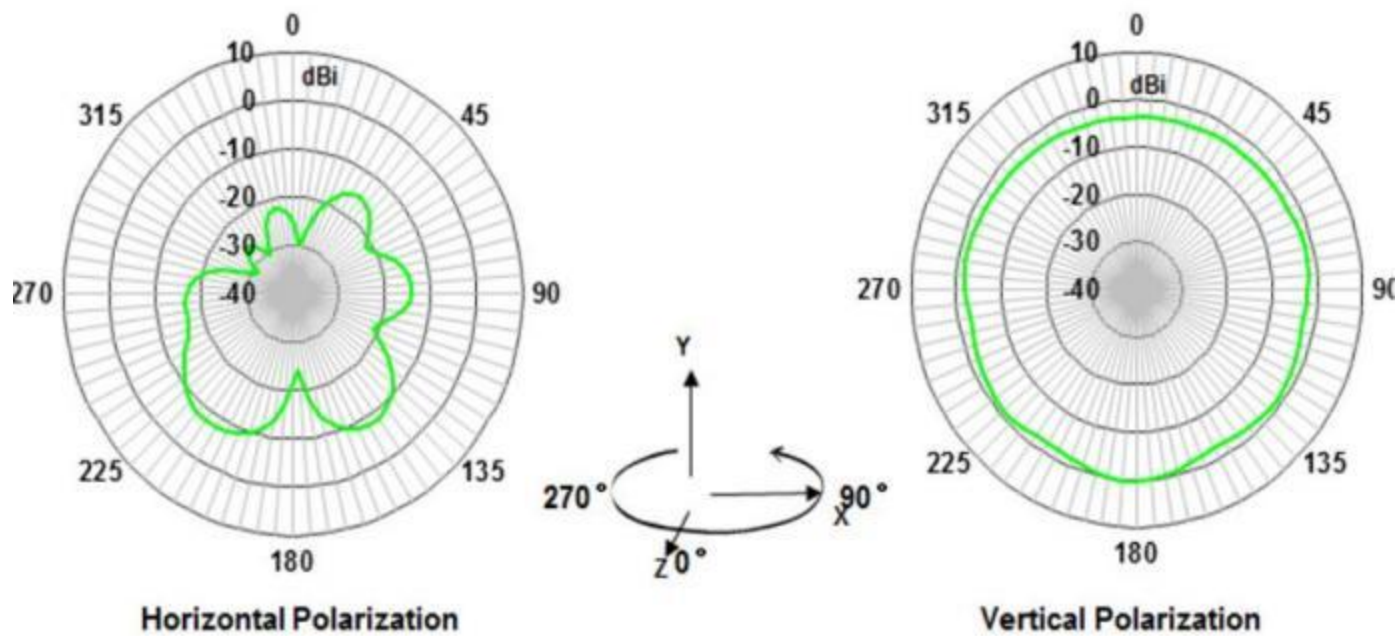


5.2 Efficiency



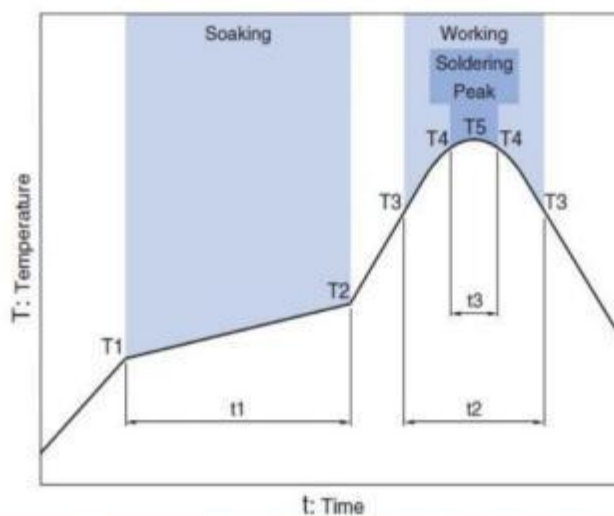
6. Radiation Patterns

6.1 2D Radiation Patterns



6.2 Recommended Reflow Profile

Pb free solder



Soaking			Working		Soldering		Peak
Temp.		Time	Temp.	Time	Temp.	Time	Temp.
T1	T2	t1	T3	t2	T4	t3	T5
150°C	180°C	60 to 120sec	230°C	more than 30sec	247 to 253°C	within 10sec	260°C Max.

