BAT WIRELESS

Datasheet

SMA Antenna Connector

Model No:

BWSMA-JWE

Description:

SMA PCB-end Straight & Vertical Pin Connector

Features：

0-6000MHz

With Inner Thread and Inner Pin

PCB-end connection

Size:15.9mm x 13mm x 6.5mm

RoHS & REACH Complaint

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BWSMA-JWE

Part Number Description

BW	Company	Bat Wireless
SMA	Name	SMA Type
J	Connector	J (Inner pin)
W	Feature	Angeled
E	Type	Board-End Connector

1. Description

Bat Wireless **BWSMA-JWE** is a common RF coaxial connector with a typical frequency range of 0 to 6 GHz. It is widely used in high-frequency applications such as wireless communications, test equipment, and radar systems. Its core features include high-frequency support and rugged durability, making it suitable for PCB-mounted antennas or RF signal connections. transmission direction perpendicular to the PCB. Designed for top-side connections to antennas or RF cables, its angled structure simplifies installation and accommodates applications with limited space.Featuring an internal pin interface, it pairs with female connectors. Its low-loss design, optimized manufacturing processes, and coaxial structure ensure minimal insertion loss during signal transmission.

Classic Application Scenarios:

Wireless Communication Modules: GPS/BeiDou positioning terminals, 4G/5G modules, Wi-Fi/Bluetooth modules
Test and Measurement Equipment: Connection interfaces for RF test probes, spectrum analysers, antenna ports for signal generators
Consumer Electronics and Industrial Equipment: Walkie-talkies, RFID readers/writers, medical monitoring devices

Bat Wireless provides customized services to optimize your device, we have a mature R&D team that can respond quickly to meet your needs. If you have any requirements, please contact our sales and FAE.

2. Specification

Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Product Type	SMA Antenna Connector		
Frequency Range	0-6000	MHz	
Input Impendence	50	Ω	
Contact resistance	IC<3，OC<2	mΩ	
Insulation resistance	>5000	MΩ	
Insert Loss	0.15	dB(6GHz)	
RF leakage	1000	V	
Durability	500	Cycles	
PLUG ID/JACK OD	-	mm	
DC Voltage	-	V	
Mechanical Characteristics			
Dimensions	15.9 x 13 x 6.5	mm	
Connector Type	J (Inner Pin)		
Cable Type	-		
Cable Length	-	mm	
Mount way	Screw-on		
Color	Gold		
Meterial	Phosphor bronze plated with hard gold		
Weight	1.53	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	YES		
Operating Temperature	-45~ +85	℃	
Storage Temperature	-45~ +85	℃	

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3. Product Picture

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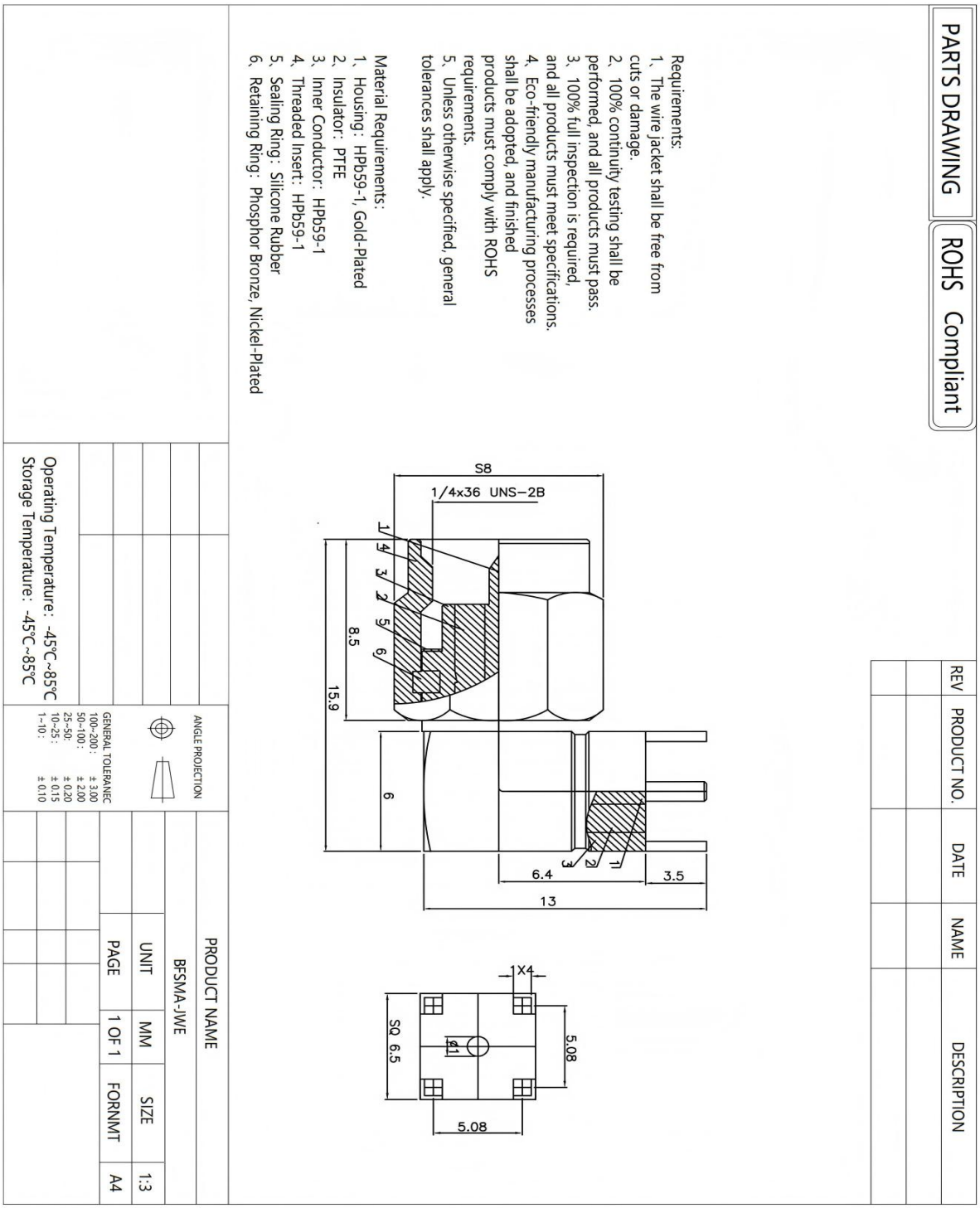
4. Mechanical Drawing



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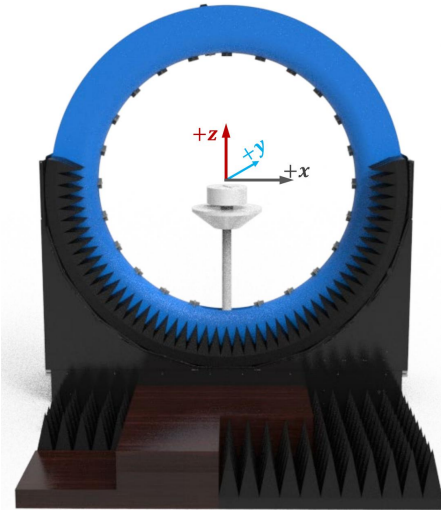
4 . Test Equipment

Keysight/E5071C Network Analyzer

R&S/CMW500 Comprehensive tester

R&S/SMBV100B Signal Source



DT-3500 Datasheet / System Specifications	
Specification:	**Description**
Test Frequency :	400MHz-8.5GHz
System Size :	L*W*H=4*3.5*3.5m
Number of Probes :	23 (Probe) + 1 (link)
Interval Angle :	15º
Sampling Diameter :	2200mm
Carring Capacity :	≦40kg

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

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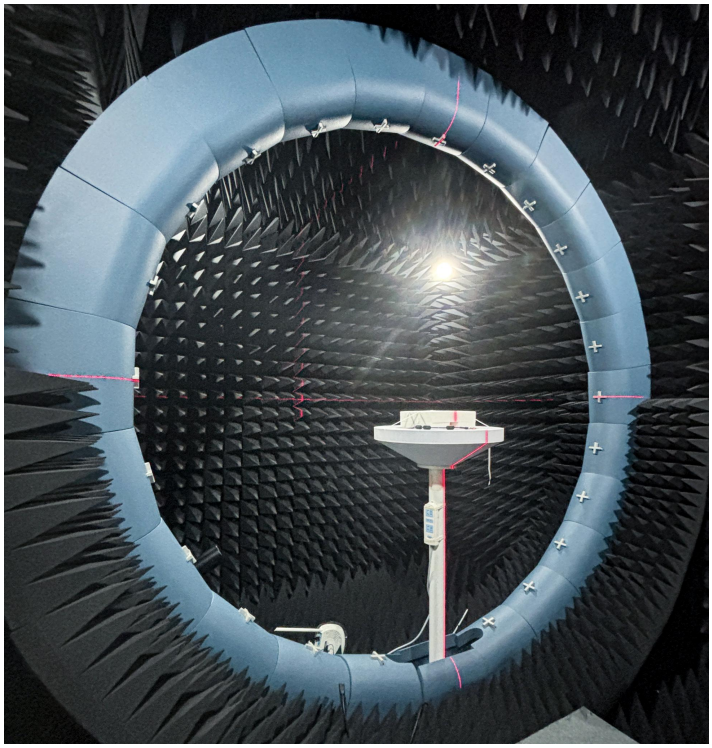
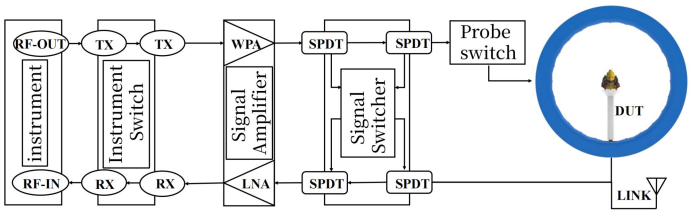
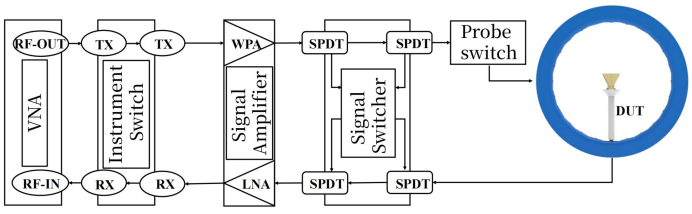


RF Link diaram of multi probe spherical near-field testing system

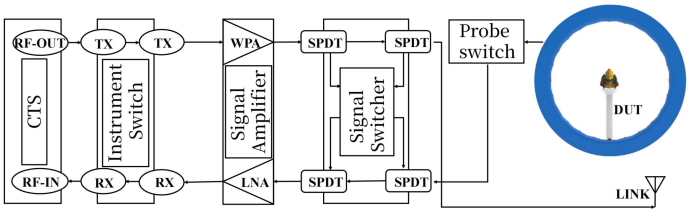
RF Link Overview



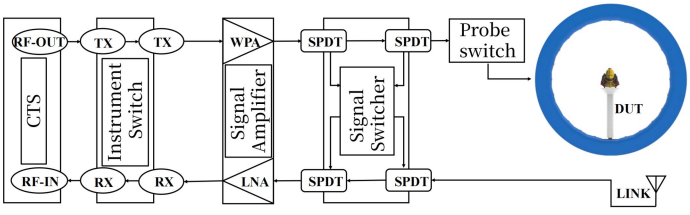
RF Link of Passivemeasurement



RF Link Overview



RF Link of Passivemeasurement



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Shenzhen Bat Wireless Technology Co,.Ltd

Office Add：Room 1301, 13th Floor, No. 8 Langhua Road, Xinshi Community, Dalang Street, Longhua District, Shenzhen

Email：marketing@batwireless.com

Tel：0755-21031236

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Documentation

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Author:	Carly

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