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Datasheet

SMA Antenna Connector

Model No:

BWSMA-KE-Z001

Description:

SMA PCB-end Straight & Vertical Pin Connector

Features：

0-6000MHz

With External Thread and Internal Pin

PCB-end connection

Size:13.5mm x 6.5mm x 6.5mm

RoHS & REACH Complaint

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BWSMA-KE-Z001

Part Number Description

BW	Company	Bat Wireless
SMA	Name	SMA Type
K	Connector	K (hole)
E	Type	Board-End Connector
Z	Feature	Standard
001	Number	001

1. Description

Bat Wireless **BWSMA-KE-Z001** 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.

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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	13.5 x 6.5 x 6.5	mm	
Connector Type	K(Hole)		
Cable Type	-		
Cable Length	-	mm	
Mount way	Screw-on		
Color	Gold		
Meterial	Phosphor bronze plated with hard gold		
Weight	1.44	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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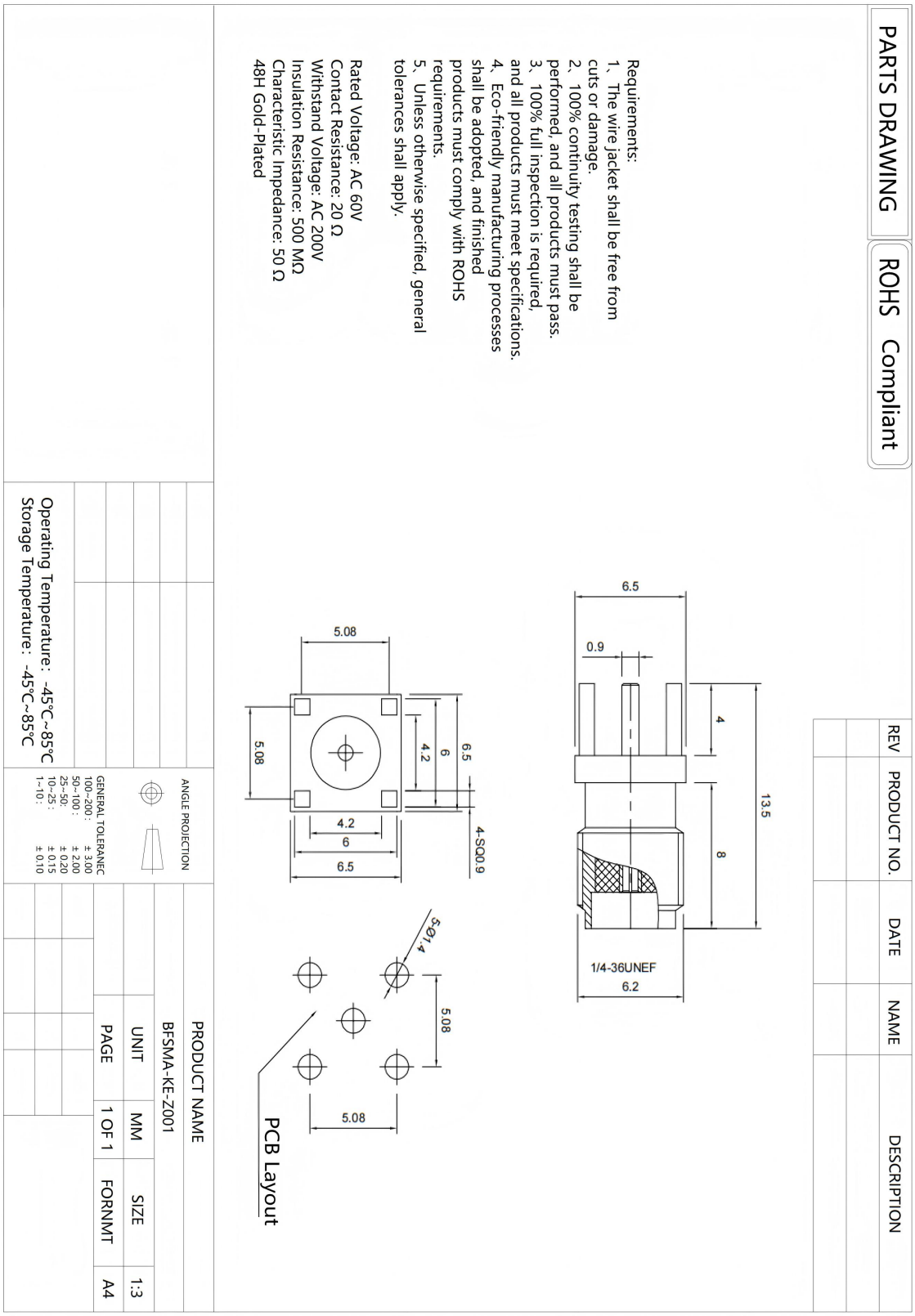
4. Mechanical Drawing



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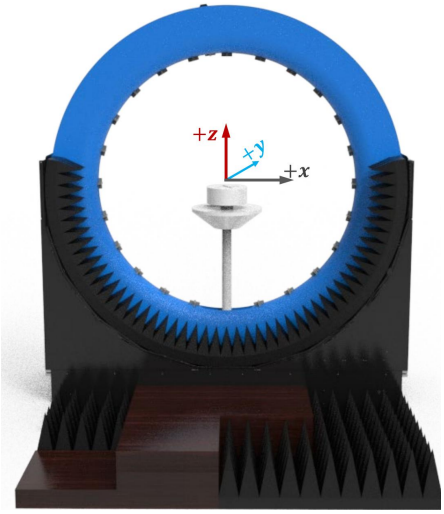
4 . Test Equipment

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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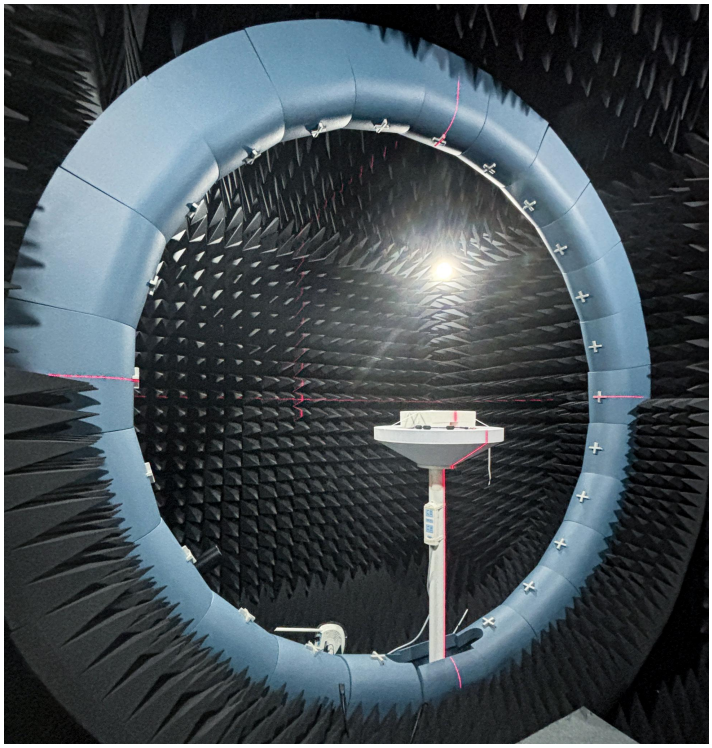
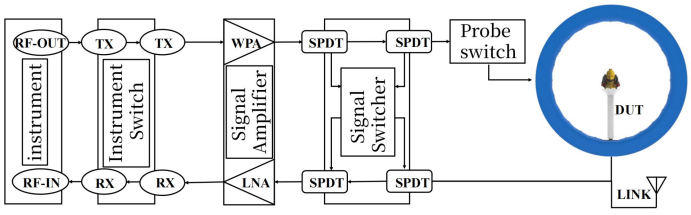
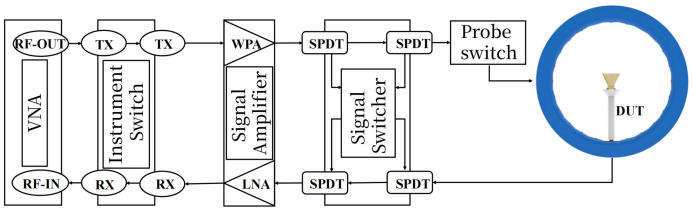


RF Link diaram of multi probe spherical near-field testing system

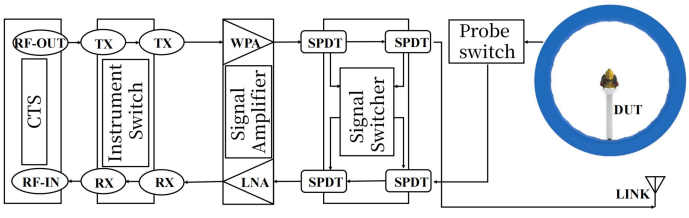
RF Link Overview



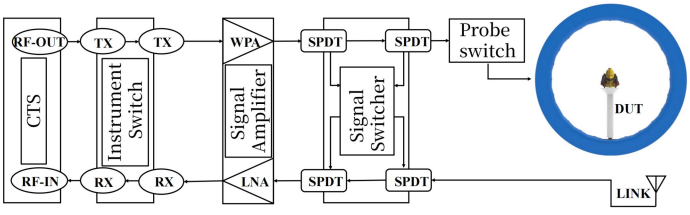
RF Link of Passivemeasurement



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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