BAT WIRELESS

DATASHEET

FAKRA Antenna Connector

Model No:

BWFAK-JE-HB

Description:

FAKRA straight plate end H-type connector

Features：

0-4000MHz

Board-End male connector

Size: 17.2mmx11mmx9.4mm

RoHS & REACH Complaint

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BWFAK-JE-HB

Part Number Description

BW	Company	BAT WIRELESS
FAK	Name	FAKRA Connector
-	Constant	Constant
J	Connector	Jack / Male
E	Type	Board-End Connector
-	Constant	Constant
H	Type	H-Type
B	Structural Type	Semi-Covered

1. Description

Bat Wireless BWFAK-JE-HB is a RF coaxial connector primarily used for wireless communications in vehicles, such as Bluetooth, GPS navigation, and Wi-Fi. This H-type straight connector is commonly used for AM/FM radios and other radio communications. It is black and typically operates in the 0-6 GHz frequency range. Its unique shape and construction ensure proper connection and signal transmission. It features a quick-connect design for easy installation and maintenance. The connector features a male connector with a center pin that mates with a female connector. Its low-loss design, optimized process, and coaxial construction ensure low insertion loss.

Typical Applications:

In-vehicle multimedia systems: AM/FM radio antennas, satellite radios
In-vehicle communications and navigation: 3G/4G LTE in-vehicle communication modules, telematics
Industrial and test equipment: Industrial and test equipment

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			
Antenna Type	FAKRA Antenna Connector		
Frequency Range	0-4000	MHz	
Input Impendence	50	Ω	
Contact resistance	IC ≤6, OC ≤1	mΩ	
Insulation resistance	1000	MΩ	
Insert Loss	0.15	dB(6GHz)	
RF leakage	1000	V	
Durability	500	Times	
PLUG / JACK	-	mm	
DC Voltage	-	V	
Mechanical Characteristics			
Dimensions	17.2 x 11 x 9.4	mm	
Connector Type	Male		
Cable Type	-		
Cable Length	-	mm	
Mount way	Plug-in snap-on type		
Color	Pink		
Meterial	PA66 + 20%GF		
Weight	1.77	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	Yes		
Operating Temperature	-45~ +85	℃	
Storage Temperature	-45~ +85	℃	

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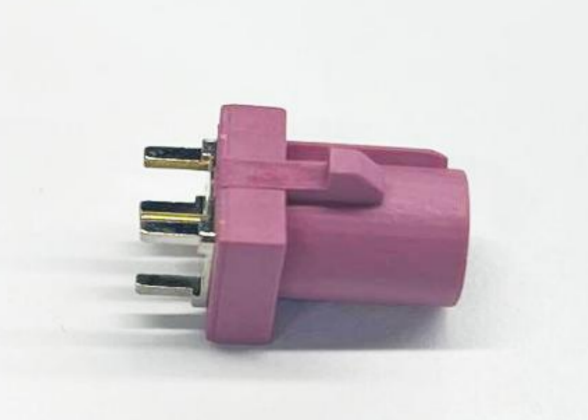
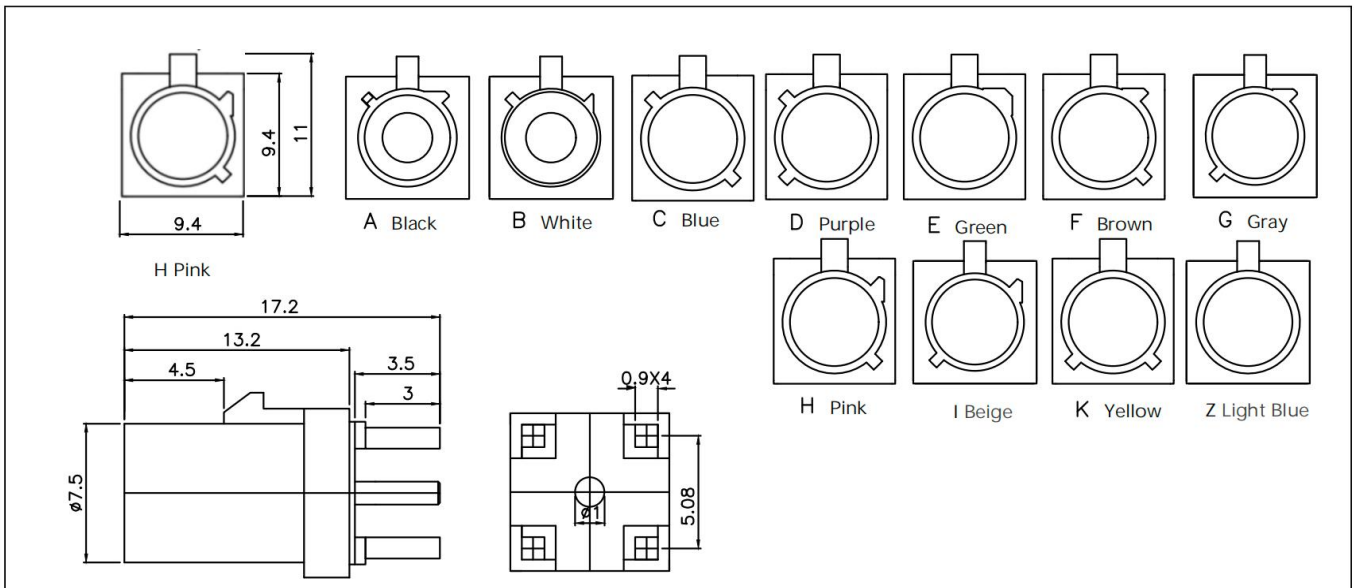
3 . Demensions

3.1 Actual Picture



3.2 Parts Drawing



Product Specifications	Electrical Characteristics			Material and Planting			
	No	Test Items	Technical Specifications	No	Test Items	Material	Planting
BFFAK-JE-HB	1	Characteristic Impedance	50Ω	1	Housing	PA66+20%GF	
	2	Frequency	0~4GHz	2	Shell	Brass	Nickel Plating
	3	Working Voltage	335V max	3	Insulator	PTFE	
	4	Insulation Resistance	⩾1000MΩ	4	Pin	Phosphor Bronze	Gold Plating
	5	Contact Resistance	Inner Conductor⩽6mΩ Outer Conductor⩽1MΩ	5			
	6	Mechanical Durability	500	6			
	7	Withstanding Voltage	1000Vrms (Minimum at Sea Level)	7			

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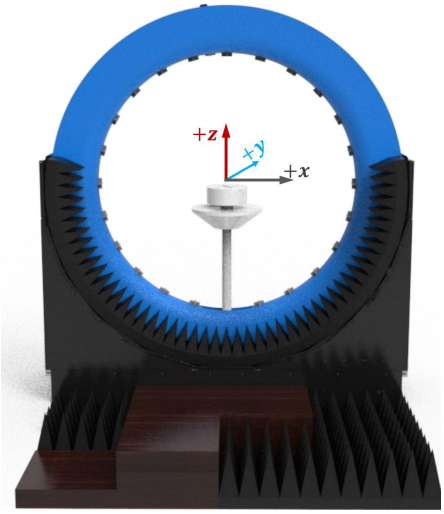
4 . Test Equipment

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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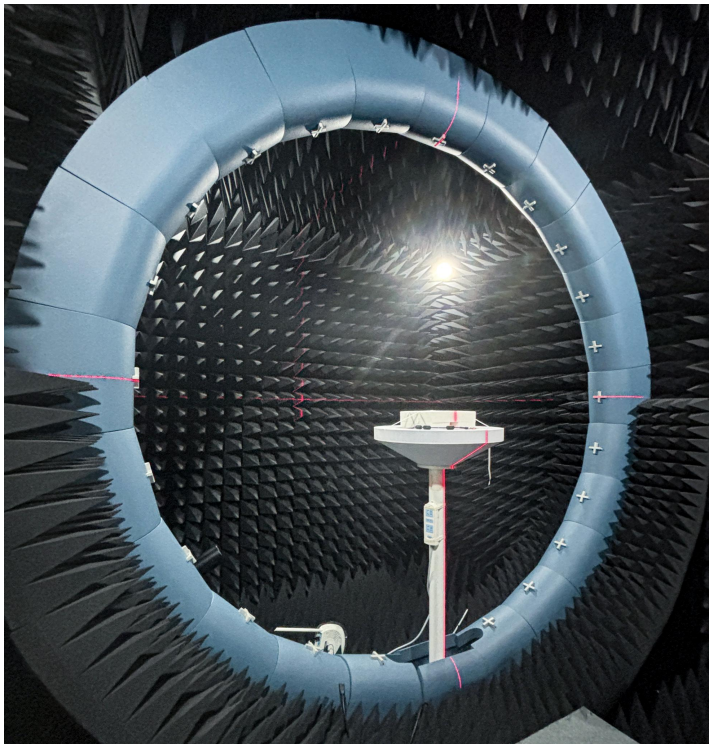
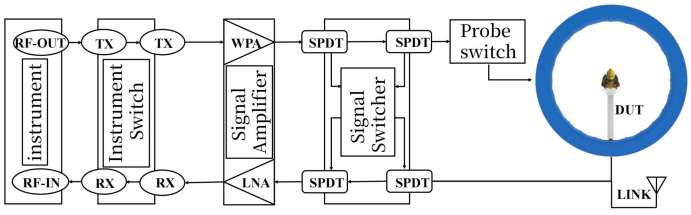
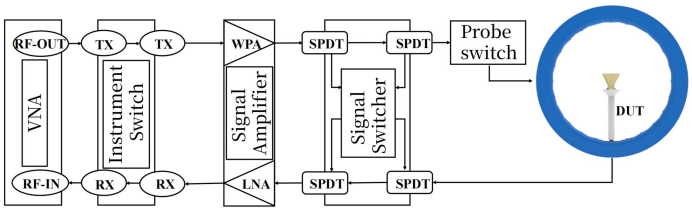


RF Link diaram of multi probe spherical near-field testing system

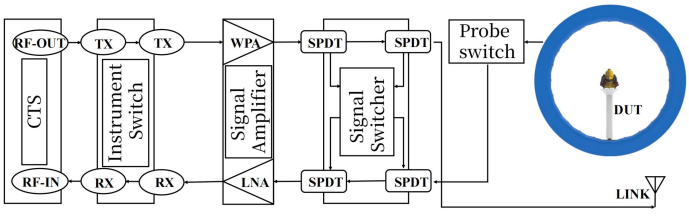
RF Link Overview



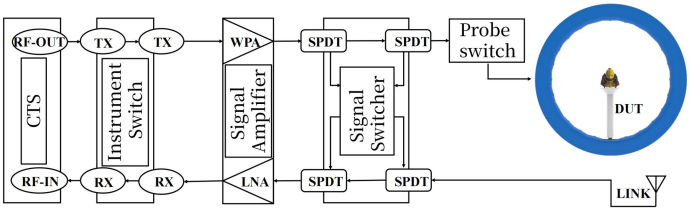
RF Link of Passivemeasurement



RF Link Overview



RF Link of Passivemeasurement



DECLARATION:

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Documentation

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