

# DATASHEET

## FAKRA Antenna Connector

**Model No:**

BFFAK-JWE-ZB

**Description:**

FAKRA PCB-end angled Z-type connector

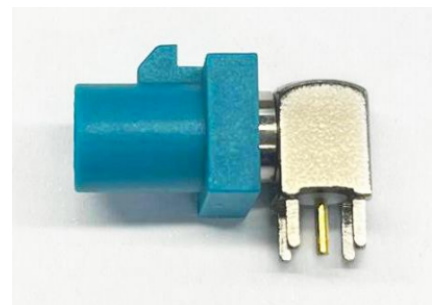
**Features :**

0-6000MHz

PCB-End male connector

Size: 22.6mmx11.3mmx9.3mm

**RoHS & REACH Complaint**



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## BFFAK-JWE-ZB

### Part Number Description

BF	Company	BAT WIRELESS
FAK	Name	FAKRA Connector
-	Constant	Constant
J	Connector	Jack / Male
W	Feature	Angled
E	Type	PCB-End Connector
-	Constant	Constant
Z	Type	Z-Type
B	Structural Type	Semi-Covered

## 1. Description

Bat Wireless BFFAK-JWE-ZB is a RF coaxial connector primarily employed for vehicle wireless communications, such as in-car Bluetooth, GPS navigation, and wireless networking. The Z-type angled connector features a light blue colouration, with a typical frequency range of 0–6 GHz. Its distinctive form and construction ensure proper connection and signal transmission. Featuring a quick-connect design, it facilitates installation and maintenance. The interface type is male, with a centre-pin in terminal, designed for pairing with a female connector. Its low-loss design, optimised manufacturing process, and coaxial structure ensure minimal insertion loss during signal transmission.

### Typical Applications:

In-vehicle navigation system: GPS/GLONASS/Galileo/BeiDou antenna

In-vehicle entertainment system: Connection for Digital Audio Broadcasting (DAB) antenna, delivering premium audio-visual experience

In-vehicle communication system: Communication modules including WiFi and LTE

Remote sensing and control system: Tyre Pressure Monitoring System (TPMS), remote start system

Driver assistance system: Distance control radar, rear-view camera

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

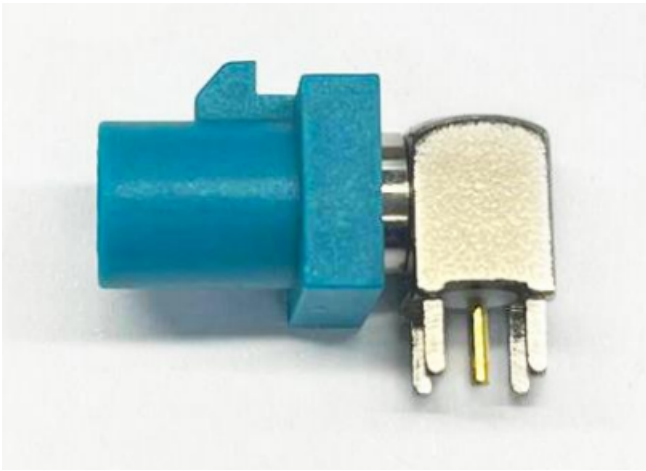
Parameters	Typ.	Unites	Notes
Electrical Characteristics			
Antenna Type	FAKRA Antenna Connector		
Frequency Range	0-6000	MHz	
Input Impedence	50	$\Omega$	
Contact resistance	IC $\leq 6$ , OC $\leq 1$	m $\Omega$	
Insulation resistance	1000	M $\Omega$	
Insert Loss	0.15	dB(6GHz)	
RF leakage	1000	V	
Durability	500	Cycles	
PLUG / JACK	-	mm	
DC Voltage	-	V	
Mechanical Characteristics			
Dimensions	22.6 x 11.3 x 9.3	mm	
Connector Type	Male		
Cable Type	-		
Cable Length	-	mm	
Mount way	Plug-in snap-on type		
Color	Light blue		
Material	PA66 + 20%GF		
Weight	5	g	
Environmental Characteristics			
Waterproof Rating	-		
ROHS Complaint	Yes		
Operating Temperature	-45~ +85	$^{\circ}\text{C}$	
Storage Temperature	-45~ +85	$^{\circ}\text{C}$	

\*Note: The above data is for reference only



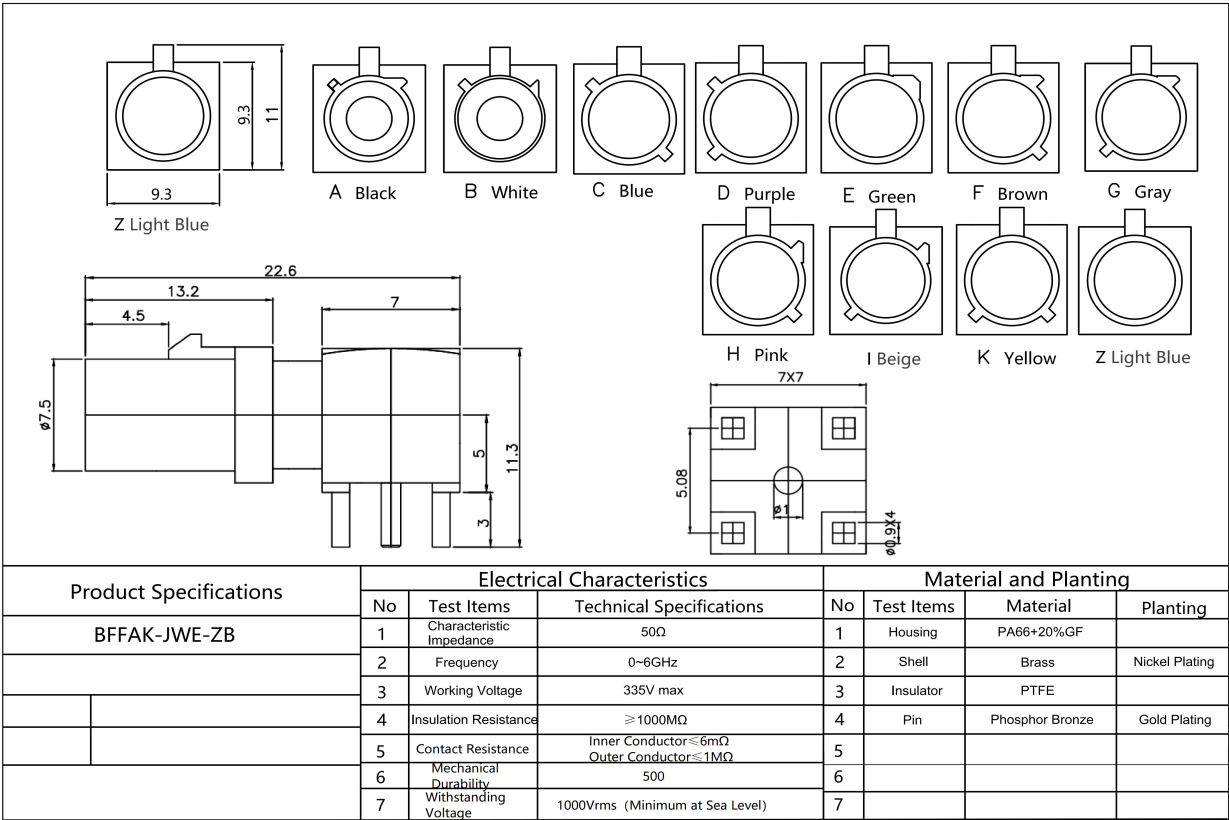
3 . Dimensions

3.1 Actual Picture



\* Product images are for reference only

3.2 Parts Drawing



## 4 . Test Equipment



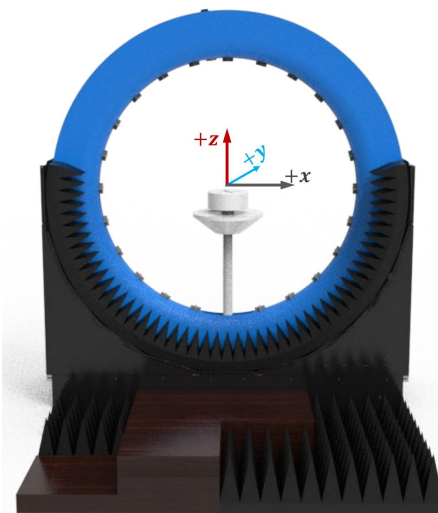
Keysight/E5071C Network Analyzer



R&amp;S/CMW500 Comprehensive tester



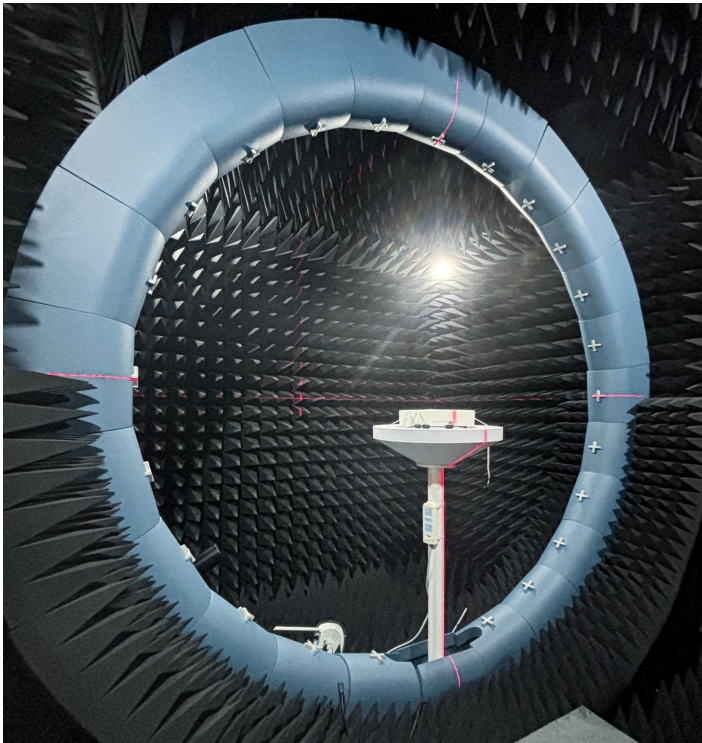
R&amp;S/SMBV100B Signal Source



### DT-3500 Datasheet / System Specifications

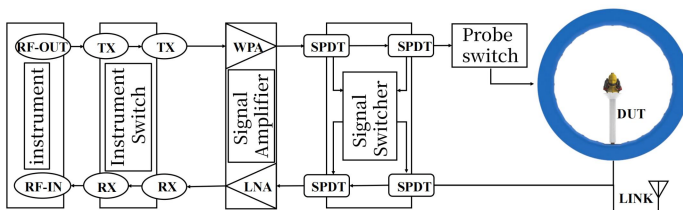
Specification:	Description
Test Frequency :	400MHz-8.5GHz
System Size :	L*W*H=4*3.5*3.5m
Number of Probes :	23 (Probe) + 1 (link)
Interval Angle :	15°
Sampling Diameter :	2200mm
Carring Capacity :	≤40kg

Testing Capability	Description
<b>Active measurement</b>	<b>Capability</b> : TRP、TIS、EIRP、EIS,. etc <b>Mode</b> : 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
<b>Passive measurement</b>	<b>Test category</b> : Gain、Efficiency、2D pattern、3D pattern、Pattern roundness、Axial Ratio、ECC、Phase center,. etc <b>Polarization</b> : Circular polarization, linear polarization, elliptical polarization

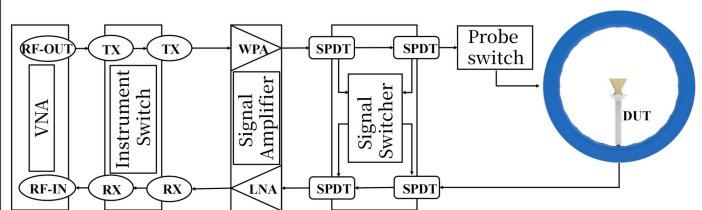


## RF Link diagram of multi probe spherical near-field testing system

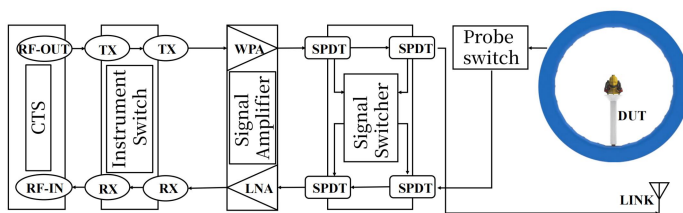
### RF Link Overview



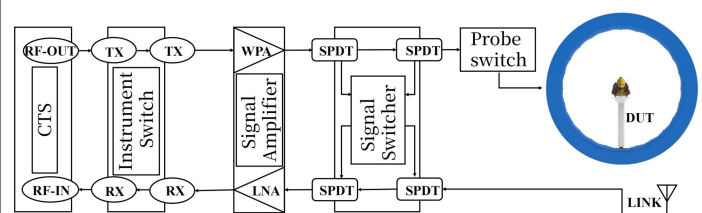
### RF Link of Passivemeasurement



### RF Link Overview



### RF Link of Passivemeasurement





## DECLARATION:

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