# 868MHz PCB Mounting

## **Features**

- Omni directional Antenna
- Miniature Size:

Length 
$$= 8.5$$
mm

$$DIA = 7mm$$

- VSWR <2
- $50\Omega$  Impedance
- OdBi Gain (nominal)

## **Applications**

- General Low Power Radio
- M2M Applications
- Telemetry

The BEAD Antenna provides a compact PCB mounting solution where a high performance is required from a small space. Available as straight or 90 degree mount this antenna is a general purpose omni-directional

## Ordering Information

PART No	Description
ANT-BEAD-868	Miniature Bead Antenna
ANT-BEAD-86890	Miniature Bead Antenna R/A Leg





# **BEAD Antenna**



#### Technical Data

#### Parameter Description

Frequency Band 868 MHz
Nominal Impedance 50 ohm
Polarization Vertical

Return Loss Please See Data below

V.S.W.R 2.0: 1

#### Mechanical

Antenna Type External Antenna Antenna Material TPE EL630 Antenna Dimensions 14.5mm  $\pm 2$  Antenna Color Black

Operating Temperature Range  $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$ Storage Temperature Range  $-30^{\circ}\text{C} \sim +70^{\circ}\text{C}$ 

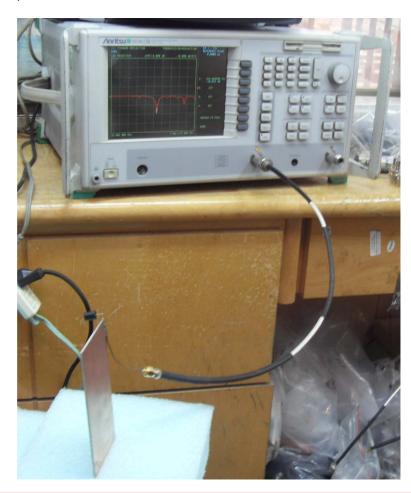
#### Notes

Optimum antenna performance is achieved with a Ground Plane. The following data was characterised with the setup as below

Test PCB, Size: 137(L) x 57(W) x 1(H) mm (for ref.)

#### Customisation

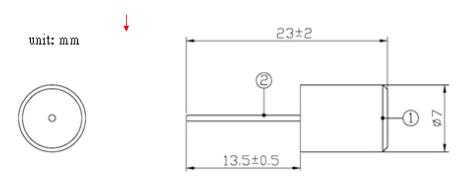
We are able to provide custom tuning of these antenna for specific customer applications. Please contact our sales dept for further information



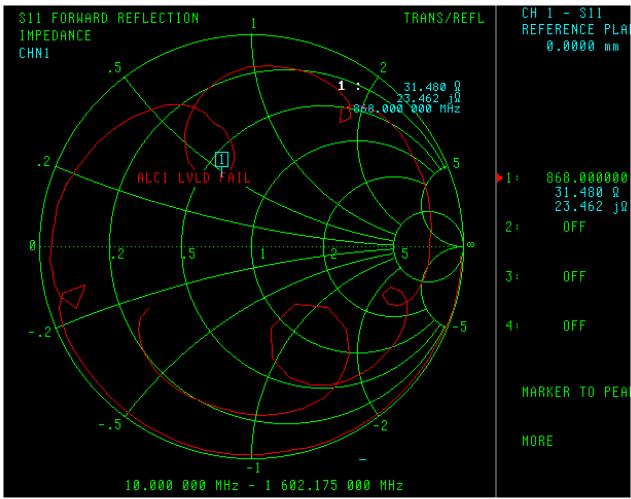


# Straight Leg Version

### Mechanical Detail



## Performance Data — SMITH CHART



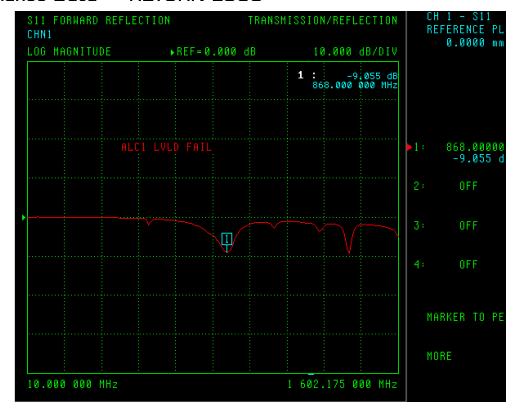
# **BEAD Antenna**



#### Performance Data — VSWR



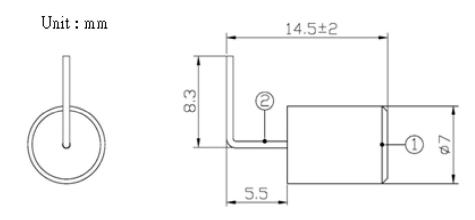
## Performance Data — RETURN LOSS



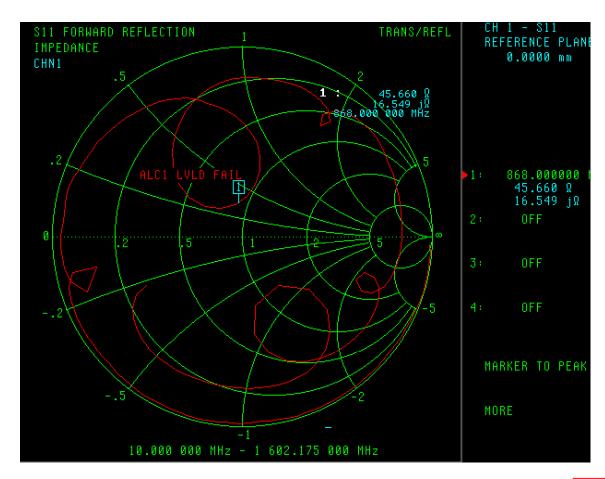


# Bent Leg Version

### Mechanical Detail



### Performance Data — SMITH CHART



## **BEAD Antenna**



#### Performance Data — VSWR



## Performance Data — RETURN LOSS



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#### **ROHS Directive** 2002/95/EC

Specifies certain limits for hazardous substances
WEEE Directive

#### 2002/96/EC

Waste Electrical & Electronic Equipment.
This product must be disposed of through a licensed WEEE collection point.
RF Solutions Ltd fulfils its WEEE obligations by membership

of an approved compliance scheme.

Environment Agency producer registration number WEE/JB0104WV

Waste Batteries and Accumulators Directive

## 2006/66/EC Where batteries are fitted, before recycling the product, the

batteries must be removed and disposed of at a licensed collection point.

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