

# **PF1004**

## **Chip Antenna for Wireless Application**

**(Preliminary Information)**

## PF1004 Chip Antenna

### ◆ Features

- Size : 10mm(L)X4mm(W)X3.0mm(H)
- Light weight and low profile
- Linear Polarization
- Lead (Pb) Free

### ◆ Applications

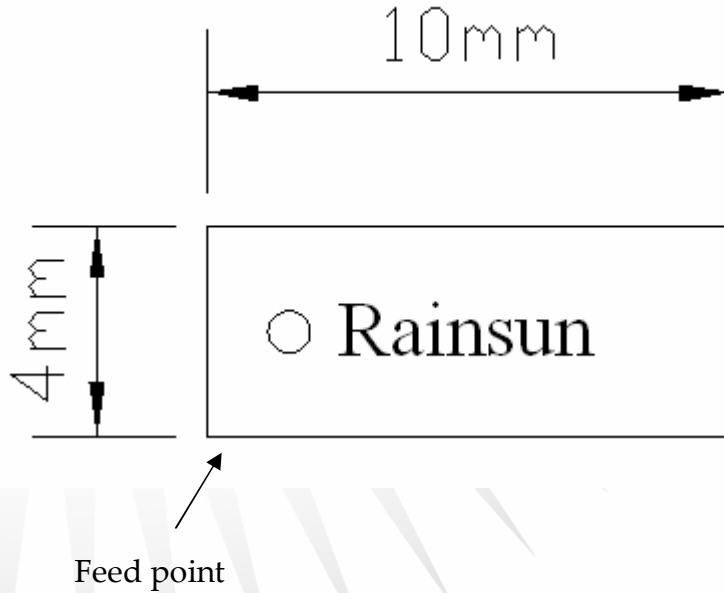
- 2.4 GHz & 5~6GHz Wireless communication
- 802.11a/b/g/n WLAN device, WLAN Router
- Netbook

## Specifications

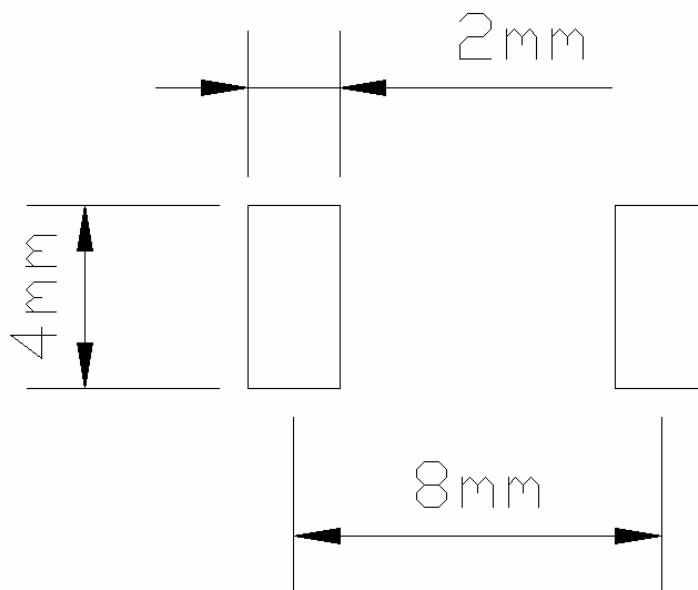
Frequency range	2.45G & 5~6GHz
Peak gain	3 dBi
Operation temperature	-40 ~ +85 °C
Storage temperature	-40 ~ +100 °C
VSWR	2 (Max)
Input Impedance	50 Ohm
Power handling	5W (Max)
Polarization	Linear
Soldering pad	Natural tin

## Dimension

### Top view



### PCB Foot printer

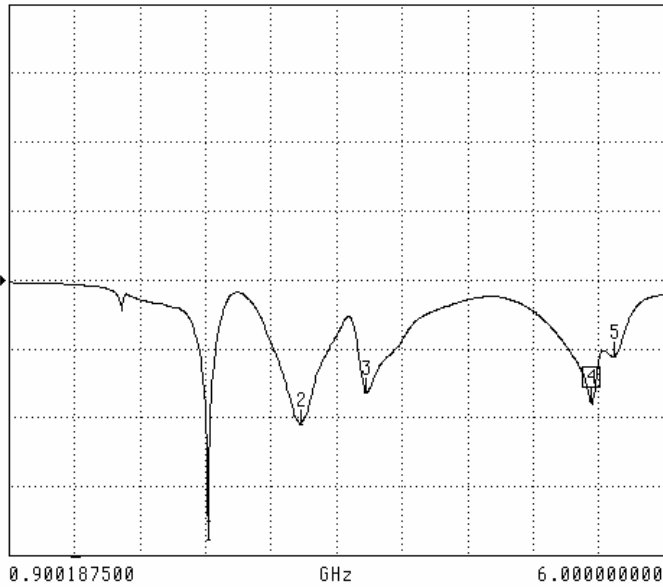


# Typical Electrical Characteristics

## Return loss

S11 FORWARD REFLECTION

LOG MAGNITUDE REF=0.000 dB 10.000 dB/DIV



CH 1 - S11  
 REFERENCE PLANE  
 0.0000 mm

MARKER 4  
 5.432125000 GHz  
 -17.781 dB

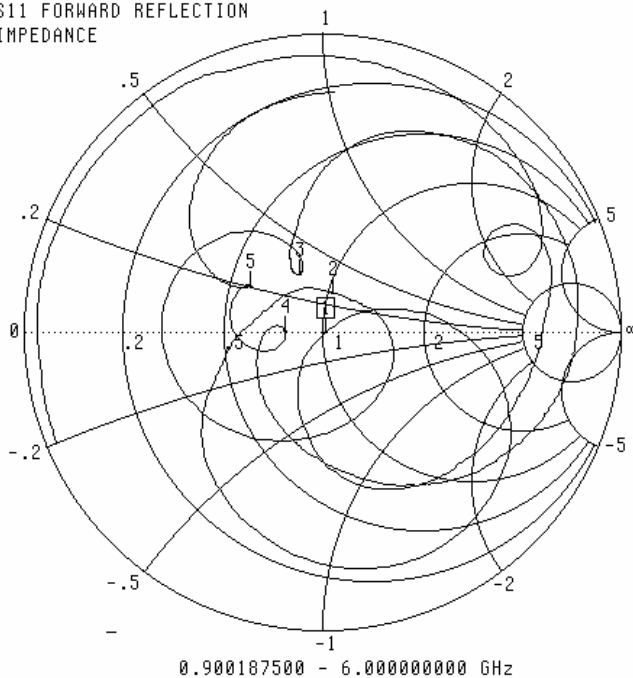
MARKER TO MAX  
 MARKER TO MIN

- 1 2.452625000 GHz  
-37.749 dB
- 2 3.179062500 GHz  
-21.002 dB
- 3 3.684250000 GHz  
-16.357 dB
- 5 5.609125000 GHz  
-11.181 dB

MARKER READOUT  
 FUNCTIONS

## Smith Chart

S11 FORWARD REFLECTION  
 IMPEDANCE



CH 1 - S11  
 REFERENCE PLANE  
 0.0000 mm

MARKER 1  
 2.452625000 GHz  
 51.607 Ω  
 -465.298 jΩ

MARKER TO MAX  
 MARKER TO MIN

- 2 3.190125000 GHz  
52.250 Ω  
13.648 jΩ
- 3 3.699000000 GHz  
40.373 Ω  
16.051 jΩ
- 4 5.424750000 GHz  
39.131 Ω  
168.208 jΩ
- 5 5.594375000 GHz  
29.522 Ω  
9.744 jΩ

MARKER READOUT  
 FUNCTIONS