

**Remote Signal Taiwan**

Tel : +886 3 435 0688 Fax : +886 3 435 0308

info@remote-signal.com.tw

## ***2.4 GHz Chip Antenna***

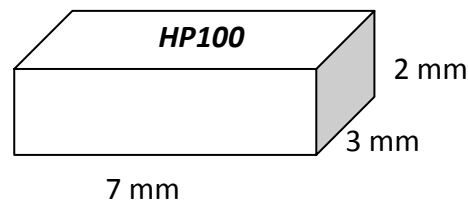


**HP100**

Patent pending

## 2.4 GHz Chip Antenna: HP100

HP100 is designed for Bluetooth<sup>®</sup>, Zigbee, RFID, WLAN 802.11b/g, remote controller, and other wireless devices operating at the ISM 2.4 GHz band. Our goal is offering a low-cost antenna solution with the advantages of integration flexibility, small form factor, and high performance.



HP100 is supplied in tape and reel packaging.

### Chip antenna specifications:

Frequency: 2400-2500 MHz

Radiation efficiency: > 50%

Peak Gain > 0 dBi

VSWR < 2:1

Polarization: Linear

Weight: 0.1 g

Operating temp.: -40 to + 85°C

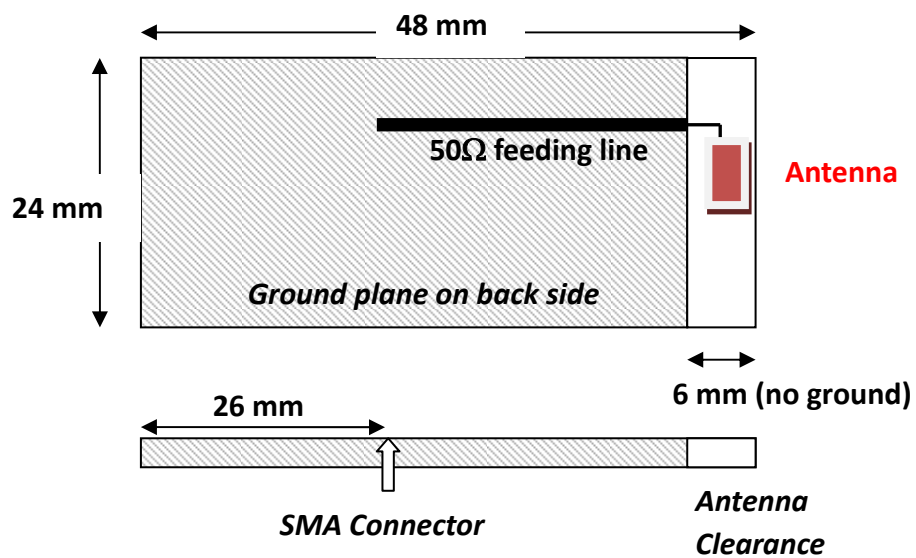
Impedance with matching: 50Ω

Dimension: 7x3x2 mm

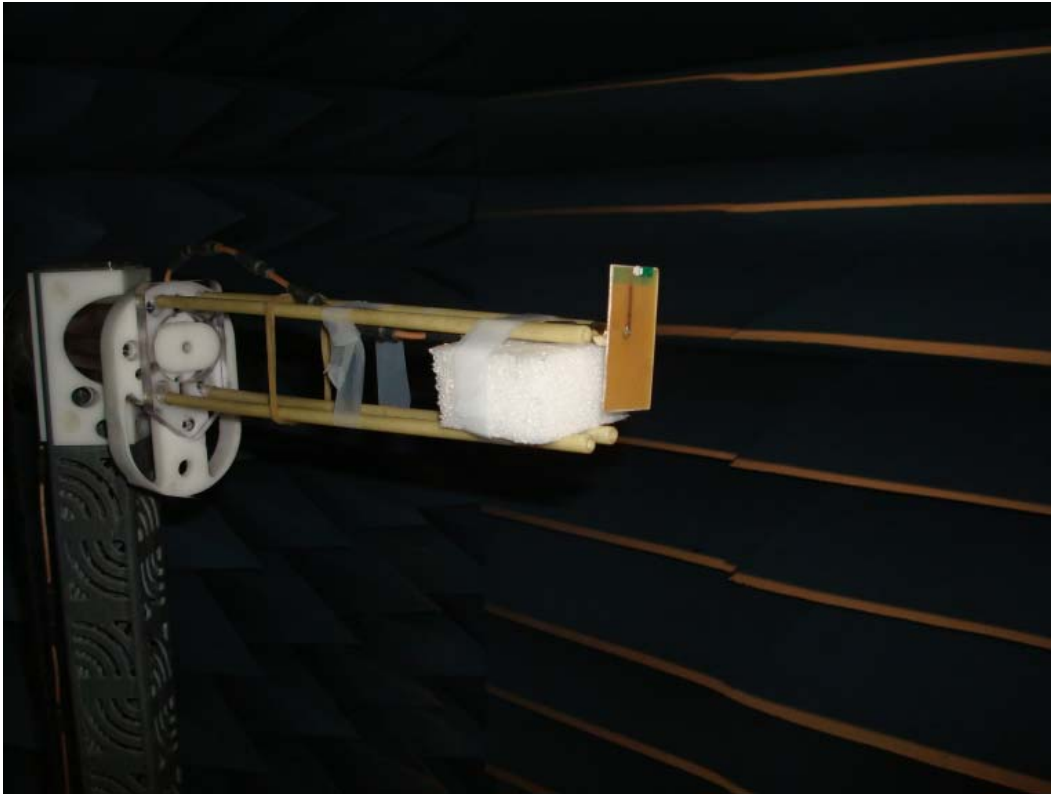
## ELECTRICAL PERFORMANCE

### Evaluation Board:

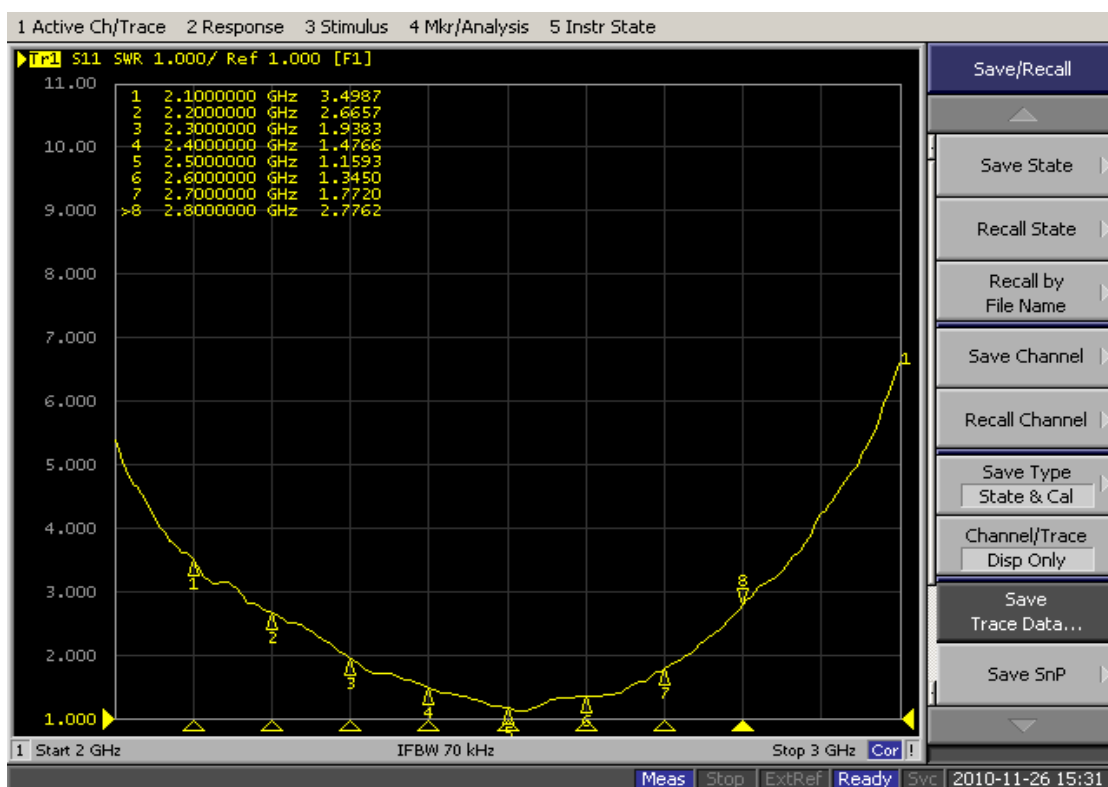
#### Dimension



## Configurations for performance measurements



### ● VSWR

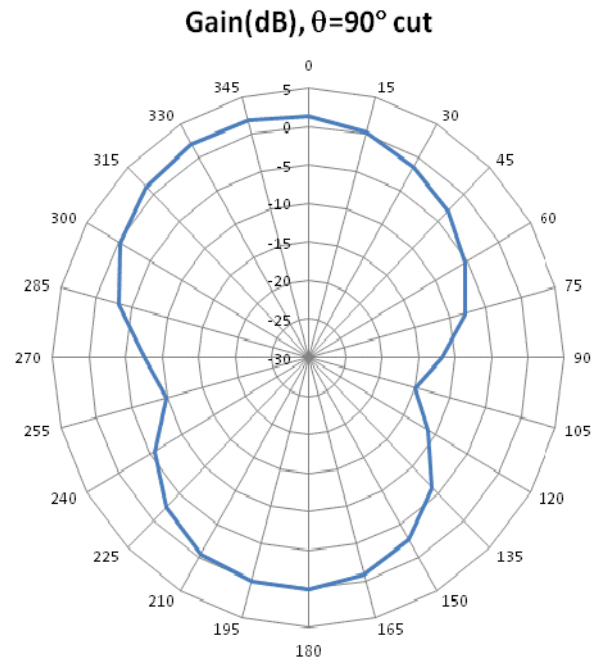
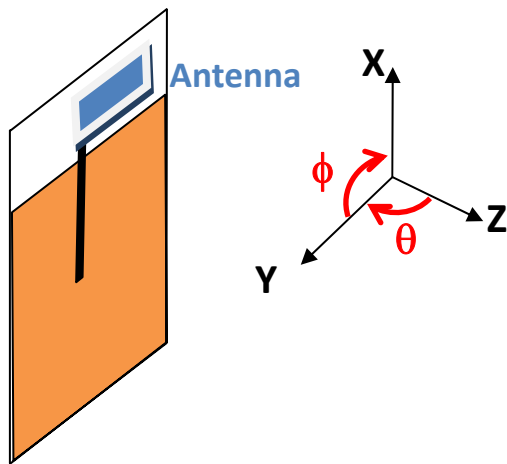


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## ● Radiation Pattern

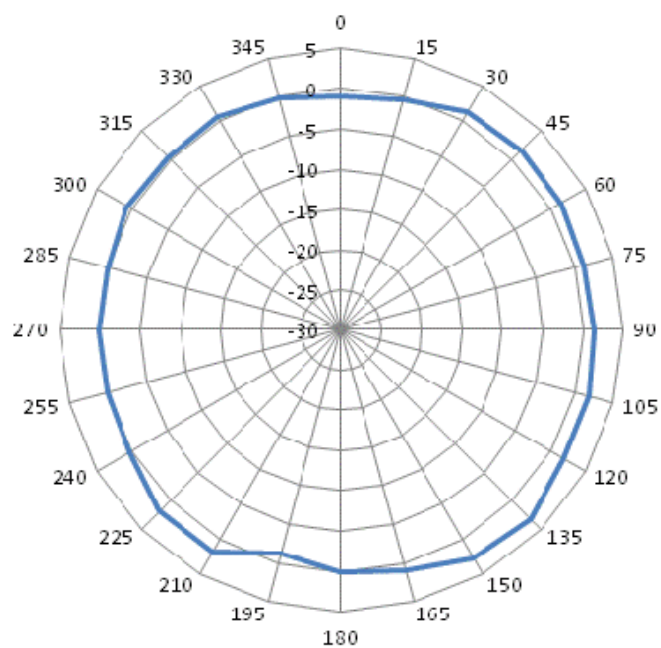


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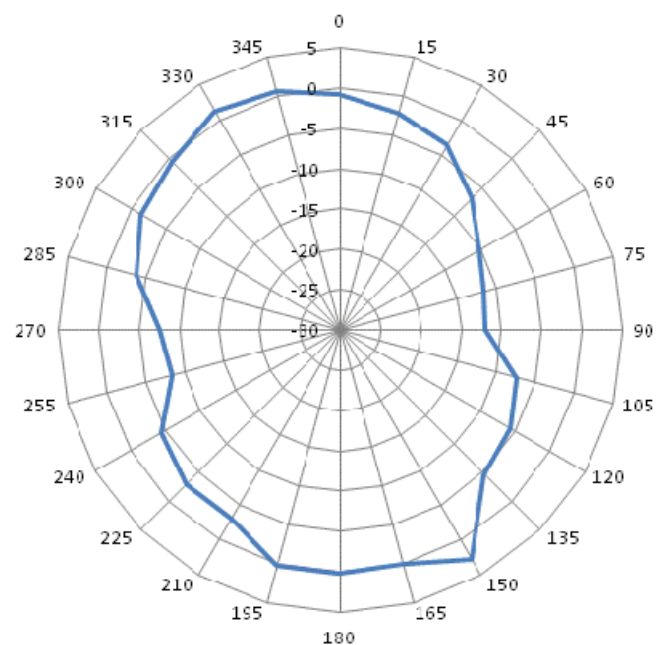
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Gain(dB),  $\phi=0^\circ$  cut



Gain(dB),  $\phi=90^\circ$  cut



## ● Antenna Gain and Efficiency within the 2.4-2.5 GHz band

Peak Gain = 3.65 dB

Average Gain = 3.43 dB

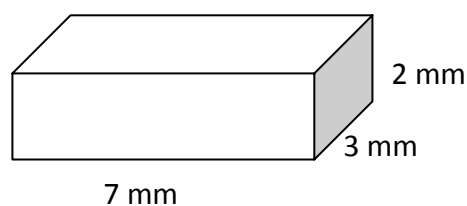
Peak Efficiency = 89.18 %

Average Efficiency = 84.99 %

## Mechanical Characteristics

### Antenna Dimension and Footprint

#### Dimension:



50Ω feed  
line

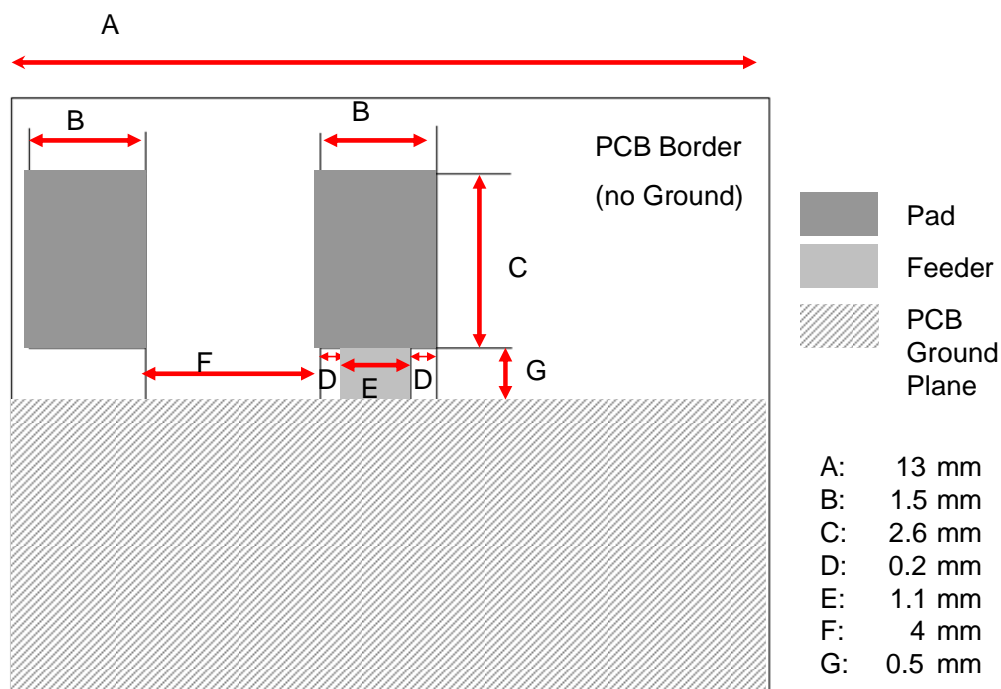


50Ω feed  
line

#### Footprint on PCB:

#### Suggestion 1: Referring to evaluation board

## Suggestion 2:



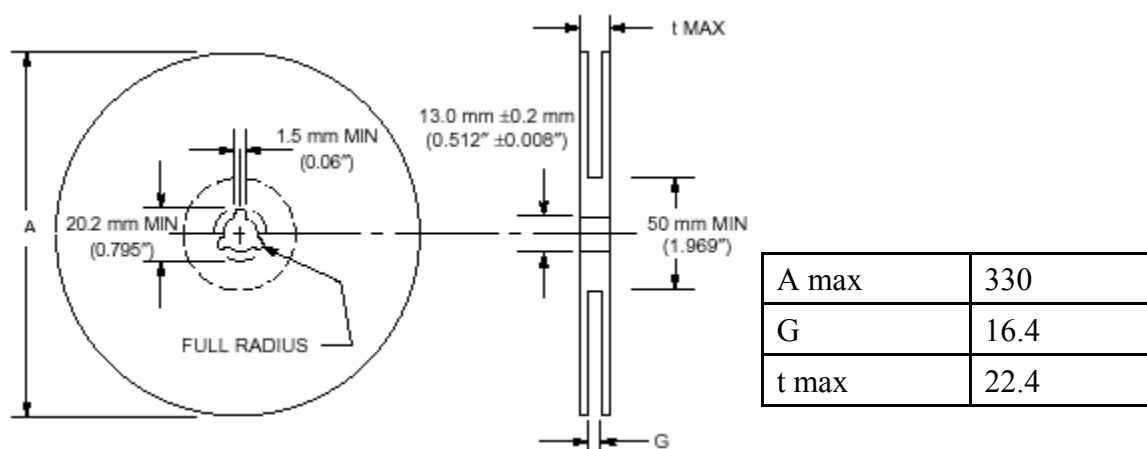
## Packaging dimensions:

The HP100 chip antenna is available in reel and tape packaging.

**All dimensions are in millimetres (mm)**

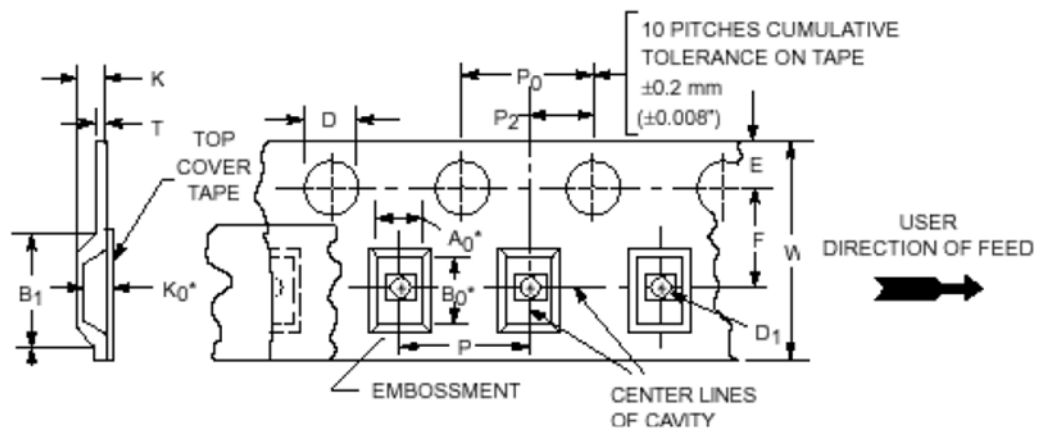
### Reel :

**Reel Capacity : 2500 antennas**





## Tape :



Tape width	16	Wmax	16.3
A0	3.8	E	1.7
B0	7.8	F	7.5
K0	2.3	K	2.6 max
B1	8.2 max	P	8.0
D	1.5	P0	4.0
D1	1.5 min	P2	2.0