

# 1.9GHz Rx Diversity Ceramic Antenna

Pulse Part Number CW3029



## Features

- Omni directional radiation
- Low profile
- Compact size W x L x H (10 x 3.2 x 2 mm)
- Low weight (310 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

- PCS
- 1.93 – 1.99GHz

## Electrical specifications @ +25 ° C

*Note: Electrical characteristics depend on test board (GP) size and antenna positioning on GP and Ground Clearance area size.*

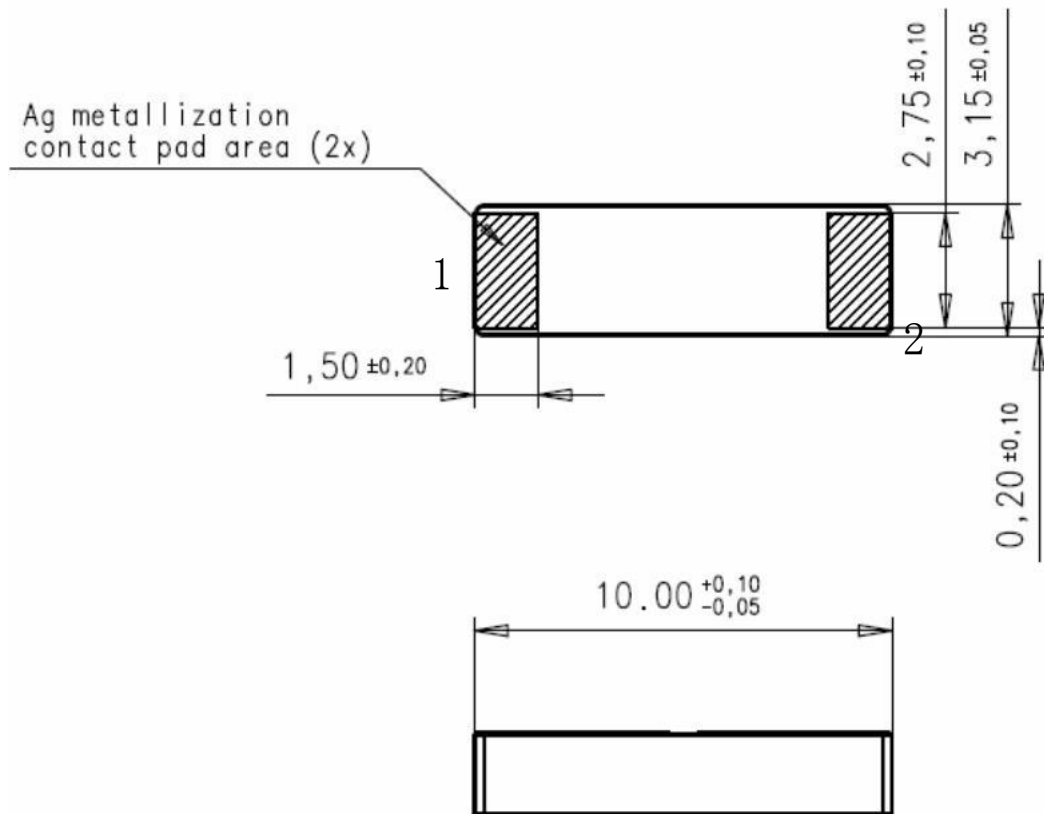
*Typical performance (testboard size 80x37 mm, PWB ground clearance area 10.60 x 6.25 mm)*

Frequency Range [MHz]	Linear Max Gain [dBi]	Return loss min. [dB]	Efficiency [%]/[dB]	Impedance [ $\Omega$ ]	Operating Temperature [ $^{\circ}$ C]
1930 – 1990	2 (peak) 1.3 (band edges)	-10	80 / -1(peak) 70 / -1.55(band edges)	50	-40 to +85

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## Terminal Configuration and antenna dimensions

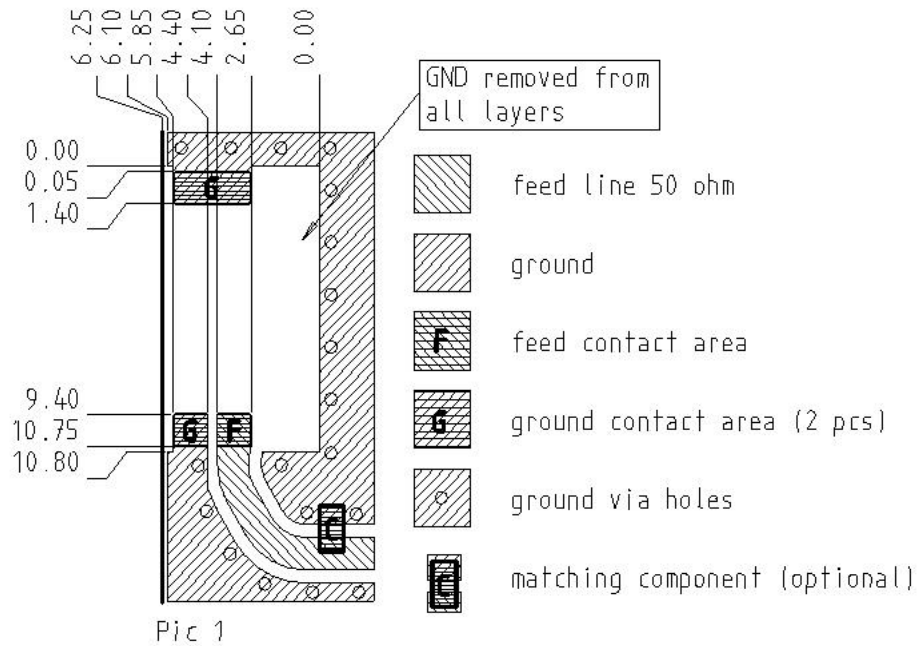


No.	Terminal Name	Terminal Dimensions
1	Feed / GND	1.5 x 2.75 mm
2	Feed / GND	1.5 x 2.75 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND		

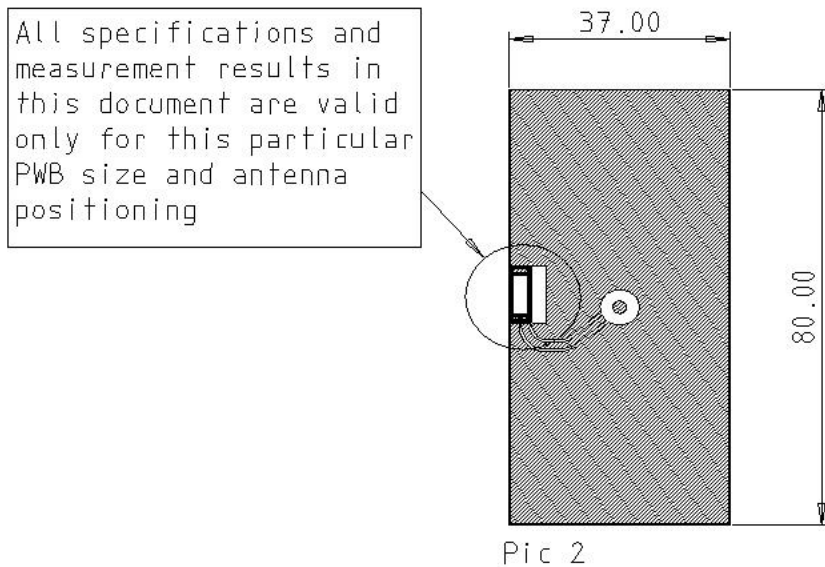
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## Recommended test board layout



Feed line should be designed to match 50  $\Omega$  characteristic impedance, depending on PWB material and thickness.



Matching and tuning component values depend on application and surrounding mechanics / Materials.

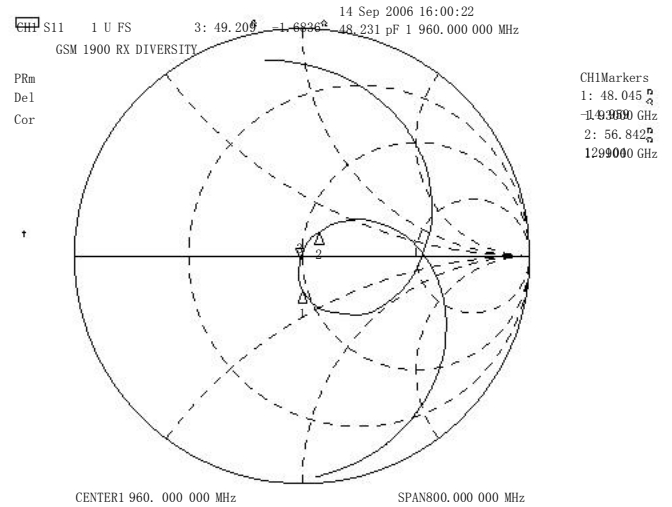
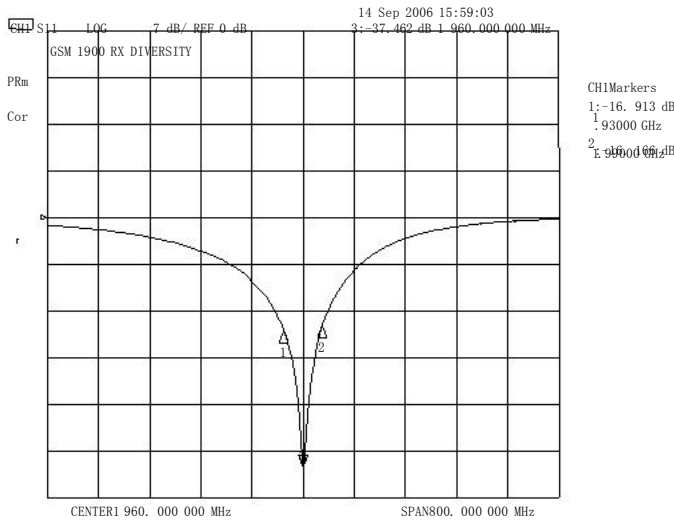
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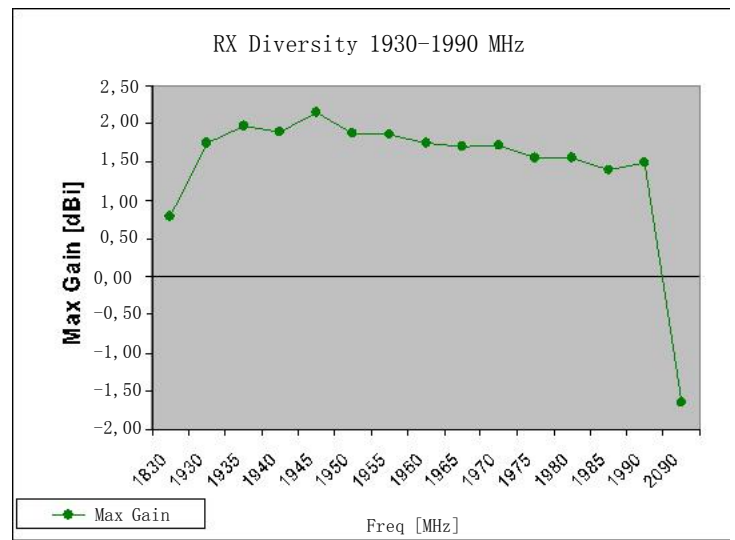
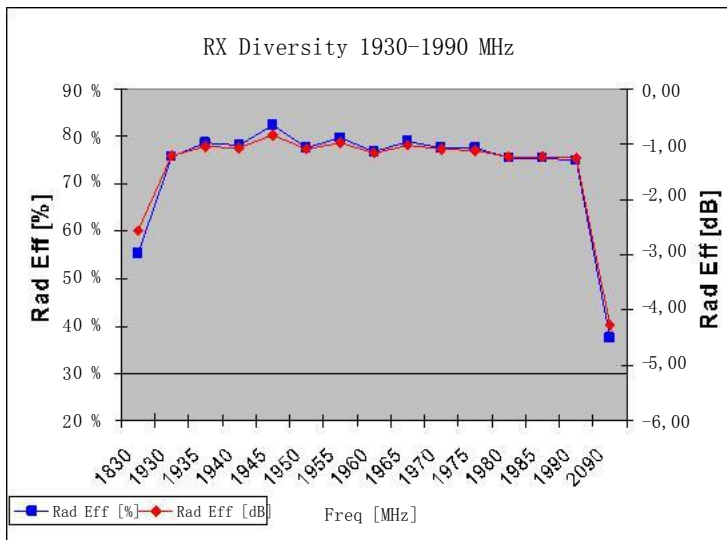
## Typical Electrical Characteristics (T=25 °C)

Measured on the 80 x 37mm test board without matching circuit

### Typical Return Loss S11/ impedance



### Free space efficiency and maximum gain



Contact: [mobiledeviceantenna.sales@pulseelectronics.com](mailto:mobiledeviceantenna.sales@pulseelectronics.com)

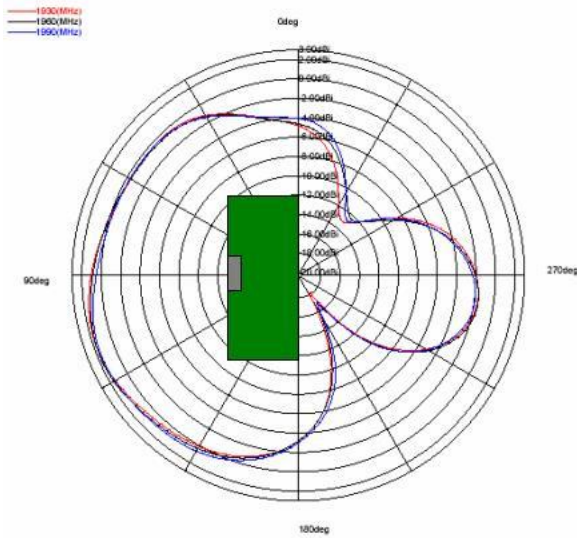


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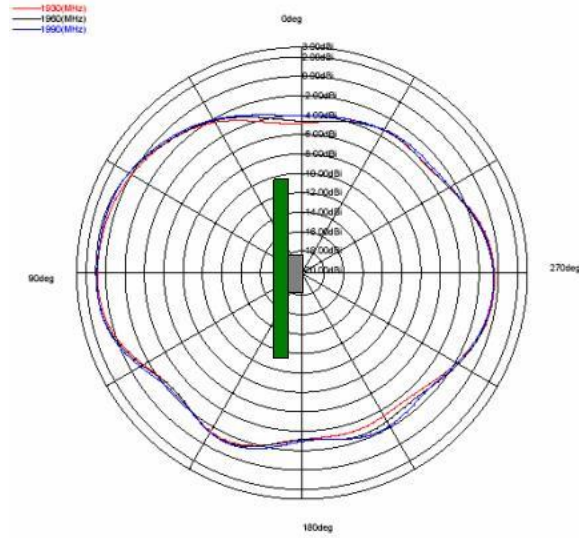
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## Typical Free Space Radiation Patterns

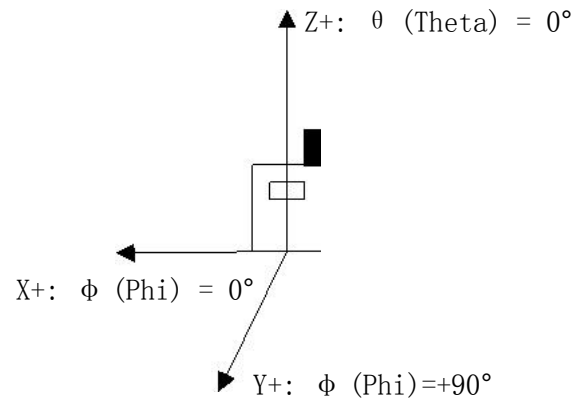
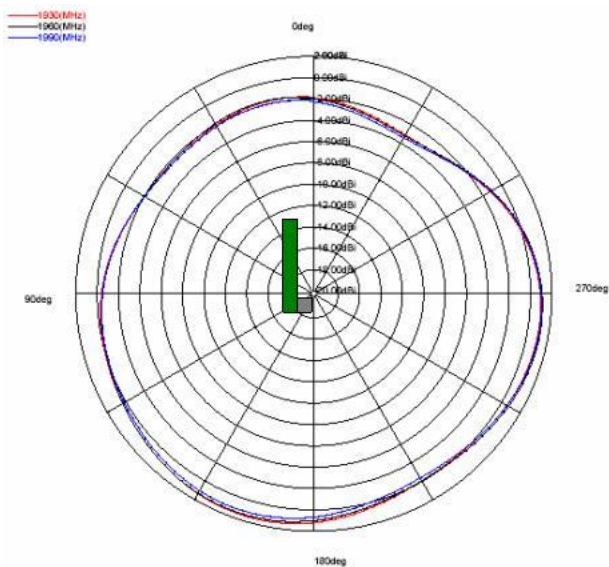
XZ-PLAN



ZY-PLANE



XY-PLANE



Contact: [mobiledeviceantenna.sales@pulseelectronics.com](mailto:mobiledeviceantenna.sales@pulseelectronics.com)