

# 1.8 GHz RX Diversity Ceramic Antenna

Ground cleared under antenna, clearance area 10.60 x 6.25 mm

Pulse Part Number: W3028



## Features

- Omnidirectional 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

- GSM 1800 MHz band (PCN/DSC)
- 1.805-1.88 GHz

## Electrical specifications @ +25 °C

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

## RX Diversity 1805-1880 MHz

Typical performance (test board size 80 x 37 mm, PWB ground clearance area 10.60 x 6.25 mm)

Frequency Range [MHz]	Linear Max Gain [dBi]	Efficiency [%] / [dB]	Return Loss min. [dB]	Impedance [ $\Omega$ ]	Operating Temperature [°C]
1805 – 1880	2.5 (peak) 2 (band edges)	80 / -1 (peak) 70 / -1.55 (band edges)	-9	50	-40 to +85

### Pulse Antennas

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

Measured on the 80 x 37 mm test board

### Typical Return Loss S11/impedance

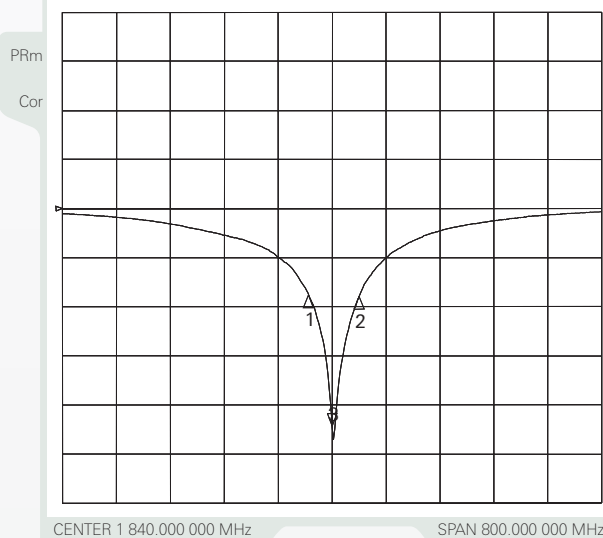
#### GSM 1800 RX Diversity

14 Sep 2006 16:03:47

CH1Markers

- 1. -12.328 dB 1.80500 GHz
- 2. -12.528 dB 1.88000 GHz
- 3. -31.039 dB 1.840.000 000 MHz

CH1 S11 LOG 7 dB/REF 0 dB



#### GSM 1800 RX Diversity

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CH1Markers

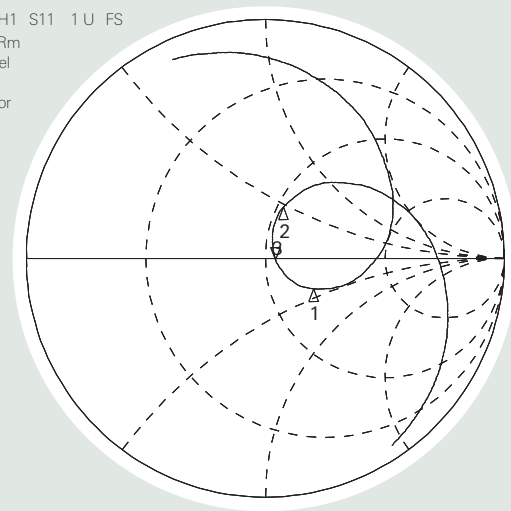
- 1. 72.148 Ω -19.449 Ω 1.80500 GHz
- 2. 52.619 Ω 23.828 Ω 1.88000 GHz
- 3. 54.514 Ω -646.48m Ω 133.80 pF 1 840.000 000 MHz

CH1 S11 1 U FS

PRm

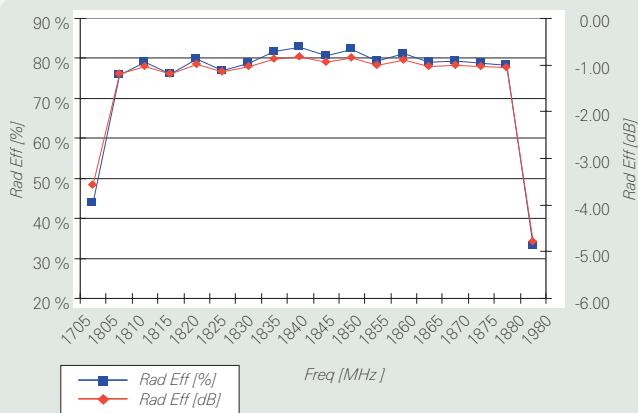
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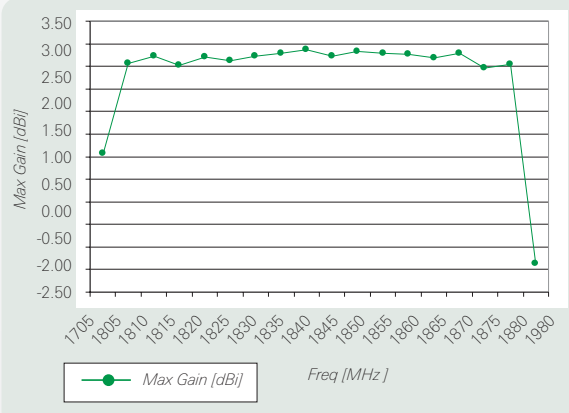


### Free space efficiency and maximum gain

#### RX Diversity 1805–1880 Mhz



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### Pulse Antennas

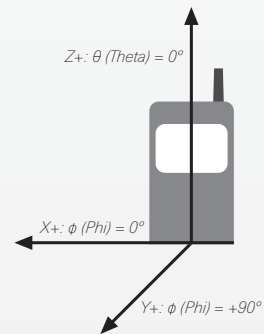
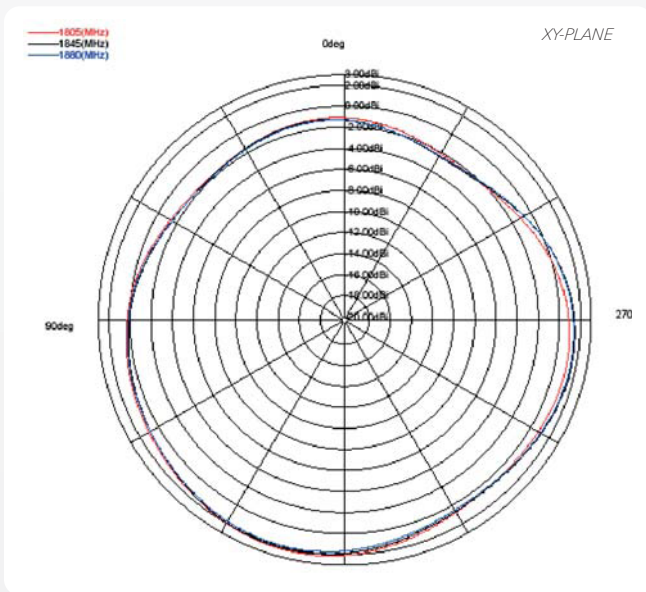
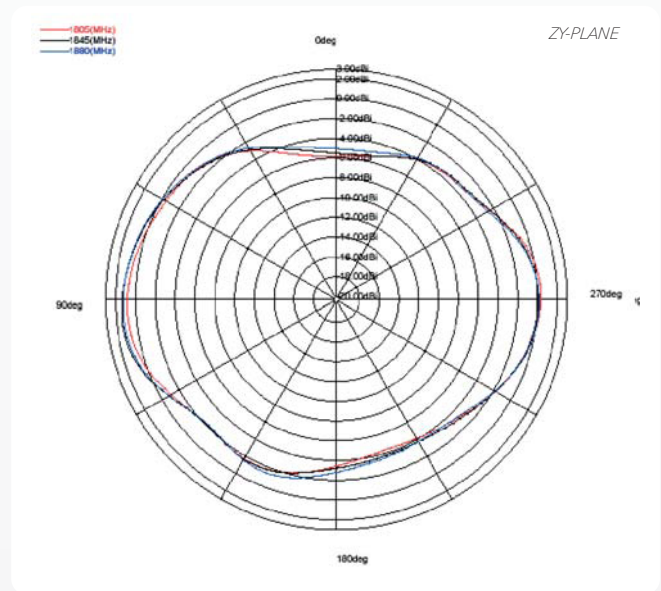
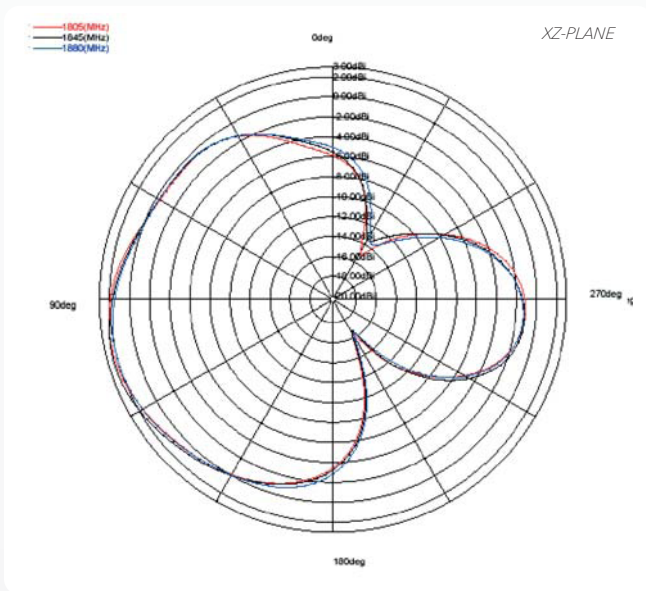
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## Typical Free Space Radiation Patterns



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