

# 850MHz RX Diversity Helical SMD Antenna

Pulse Part Number CW3117



## Features

- Low profile (2.5 mm, embedded to board)
- Snap in fixing to board
- Compact size W x L x H (12.4 x 8 x 2.5 mm)
- Low weight (400 mg)
- Lead Free materials
- Fully SMD compatible
- Glue needed between antenna and PWB
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

- GSM 850 Band

## 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 100 x 40 mm, PWB ground clearance area 8.00 x 40.00 mm)*

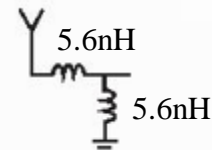
Frequency Range [MHz]	Linear Max Gain [dBi]	Return loss min. [dB]	Efficiency [%]/[dB]	Impedance [ $\Omega$ ]	Operating Temperature [ $^{\circ}$ C]
869 – 894	0(peak) -1.3(band edges)	-9	55/-2.6(peak) 40/-4(band edges)	50	-40 to +85

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

Measured on the 100 x 40 mm test board with matching circuit.



## Typical Return Loss S11/ impedance

### RX Diversity

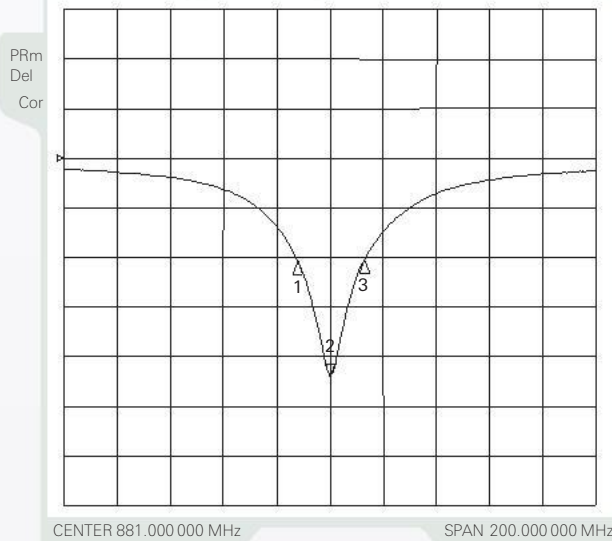
4 Oct 2006 14:52:08

CH1Markers

1. -10.379 dB 869.000 MHz
2. -22.048 dB 881.000 000 MHz
3. -10.204 dB 894.000 MHz

CH1 S11 LOG

5 dB/REF 0 dB



### RX Diversity

24 Aug 2006 12:31:19

CH1Markers

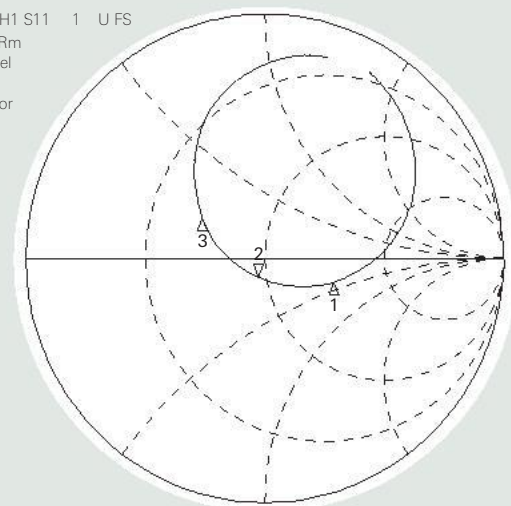
1. 88.105 Ω -19.090 Ω 869.000 MHz
2. 46.920 Ω -7.2852 Ω 24.797 pF 81.000 000 MHz
3. 27.967 Ω 10.135 Ω 894.000 MHz

CH1 S11 1 UFS

PRm

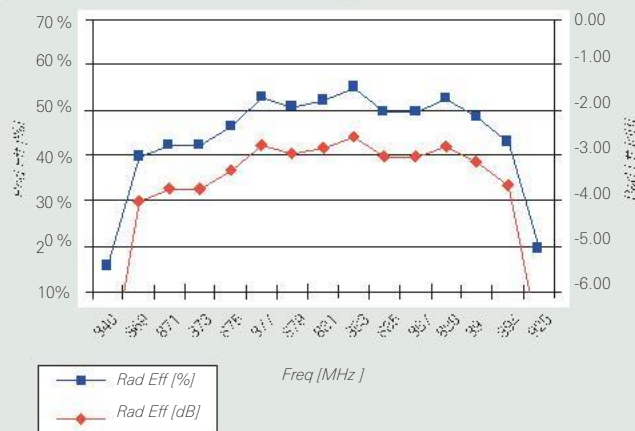
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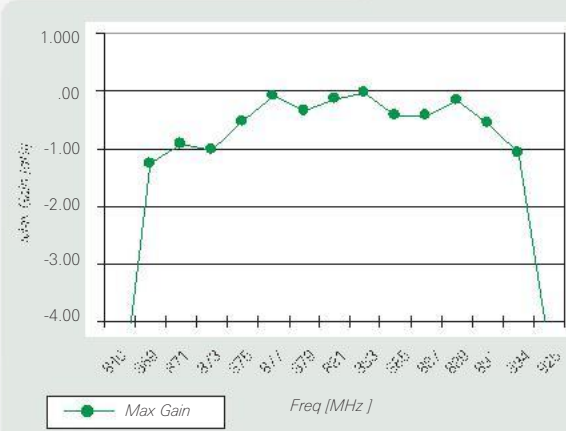


## Free space efficiency and maximum gain

### RX Diversity 869-894 MHz



### RX Diversity 869-894 MHz

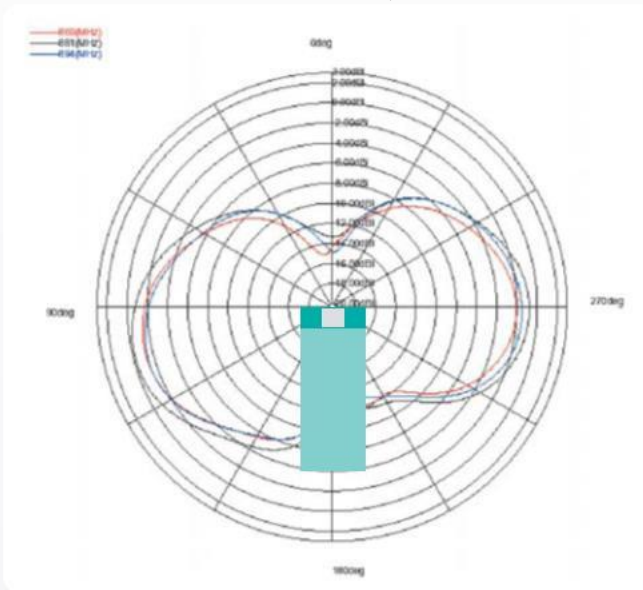


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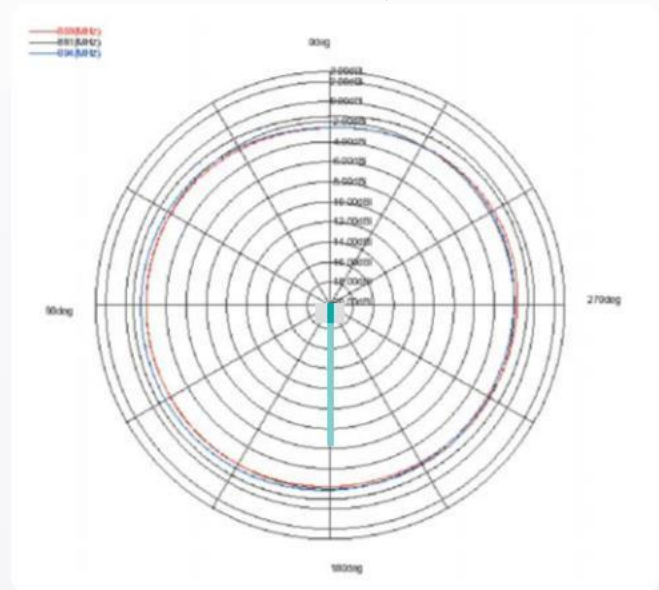
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## Typical Free Space Radiation Patterns

XZ-PLANE



ZY-PLANE



XY-PLANE

