

## Excellent Integrated System Limited

Stocking Distributor

Click to view price, real time Inventory, Delivery & Lifecycle Information:

[Pulse Electronics Corporation](#)  
[W3118A](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

# 850 MHz RX Diversity Helical SMD Antenna

Ground cleared under antenna, clearance area 6.00 x 11.00 mm. Pulse Part Number: W3118A



## Features

- Vertical mount on board
- Compact size W x L x H (2.5 x 8 x 8 mm)
- Low weight (390 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
- 869-894 MHz

*Engineering samples available*

## Electrical specifications @ +25 °C

*Note: Electrical characteristics depend on test board (GP) size*

*and antenna positioning on GP and Ground Clearance area size.*

## ISM 900MHz

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]	Efficiency [%] / [dB]	Return Loss min. [dB]	Impedance [Ω]	Operating Temperature [°C]
869 – 894	0 (peak) -1.4 (band edges)	52 / -2.9 (peak) 38 / -4.2 (band edges)	-9	50	-40 to +85

W3118A Datasheet version 1.3. 850 MHz RX Diversity Helical SMD Antenna (06/08).

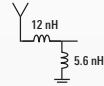
# 850 MHz RX Diversity Helical SMD Antenna

Ground cleared under antenna, clearance area 6.00 x 11.00 mm. Pulse Part Number: W3118A

## 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

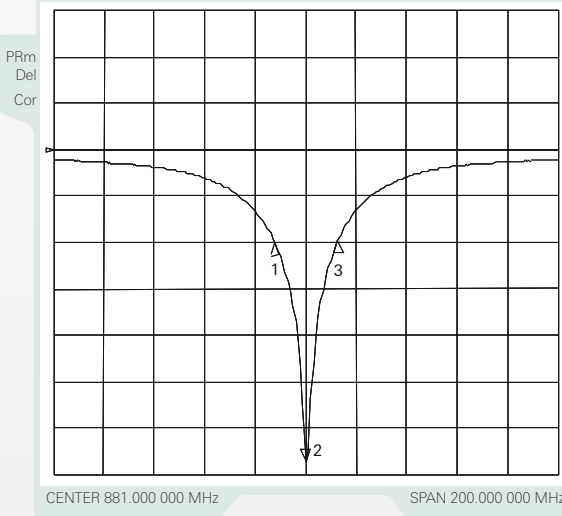
4 Oct 2006 09:39:39

CH1 Markers

- 1. -10.092 dB 869.000 MHz
- 2. -33.592 dB 881.000 MHz
- 3. -9.8007 dB 894.000 MHz

CH1 S11 LOG

5 dB/REF 0 dB



### RX Diversity

4 Oct 2006 09:39:50

CH1 Markers

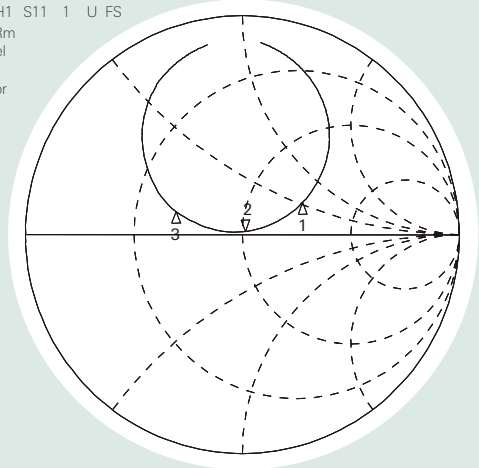
- 1. 83.031 Ω 27.129 Ω 869.000 MHz
- 2. 51.447 Ω 1.4590 Ω 881.000 MHz
- 3. 26.118 Ω -6.1191 Ω 894.000 MHz

CH1 S11 1 U FS

PRm

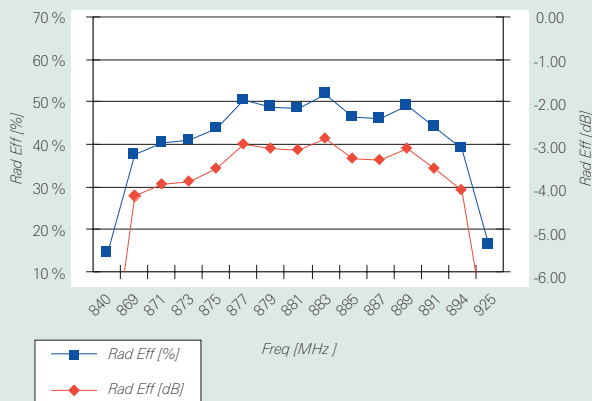
Del

Cor

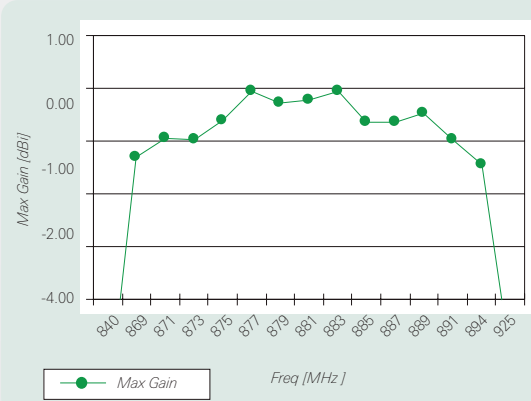


Free space efficiency and maximum gain

### RX Diversity 869-894 MHz



### RX Diversity 869-894 MHz



W3118A Datasheet version 1.3. 850 MHz RX Diversity Helical SMD Antenna (06/08).

# 850 MHz RX Diversity Helical SMD Antenna

Ground cleared under antenna, clearance area 6.00 x 11.00 mm. Pulse Part Number: W3118A

## Typical Free space Radiation Patterns

