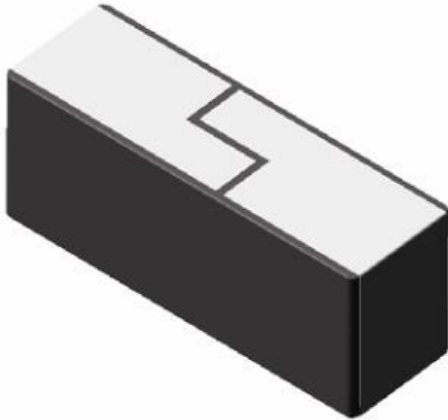


850 MHz Rx Diversity Ceramic Antenna

Pulse Part Number CW3031



Features

- Omni directional radiation
- Low profile
- Compact size W x L x H (10 x 3.2 x 4 mm)
- Low weight (600 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

Applications

- GSM/CDMA 850MHz
- 869 – 894 MHz

Electrical specifications @ +25 ° C

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

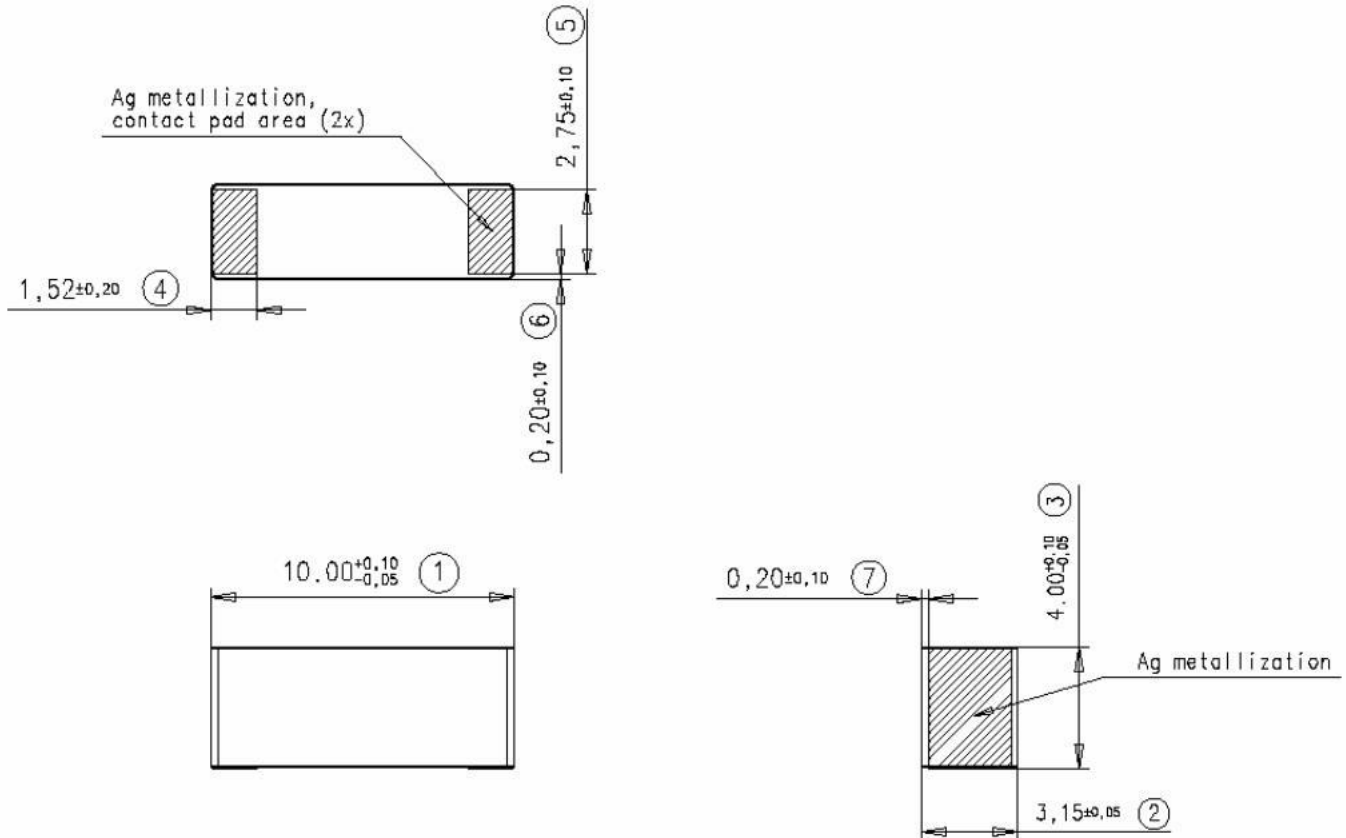
Typical performance (testboard size 100x37 mm, PWB ground clearance area 10.60 x 8.25 mm)

Frequency Range [MHz]	Linear Max Gain [dBi]	Return loss min. [dB]	Efficiency [%]/[dB]	Impedance [Ω]	Operating Temperature [$^{\circ}$ C]
869 – 894	2.3 (peak) 0.2 (band edges)	-5.5	75 / -1.25(peak) 45 / -3.5(band edges)	50	-40 to +85

850 MHz Rx Diversity Ceramic Antenna

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Terminal Configuration and antenna dimensions

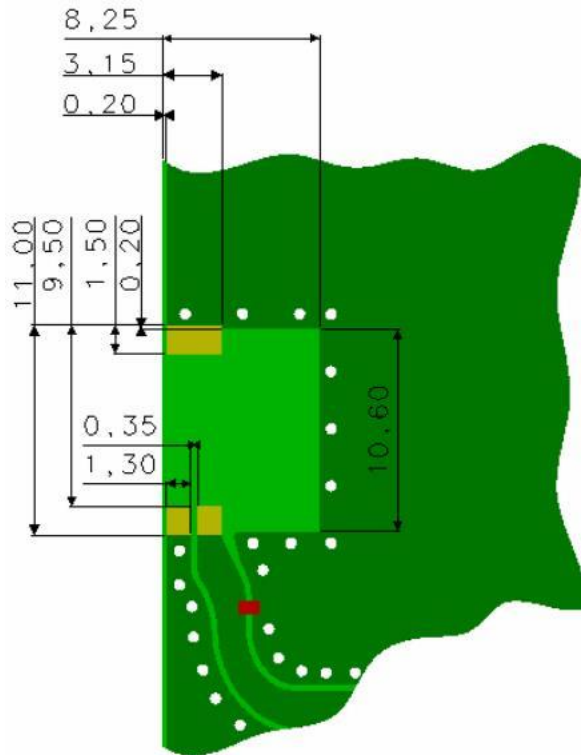


No.	Terminal Name	Terminal Dimensions
1	Feed / GND	1.5 x 2.75 mm
2	Feed / GND	1.5 x 2.75 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND		

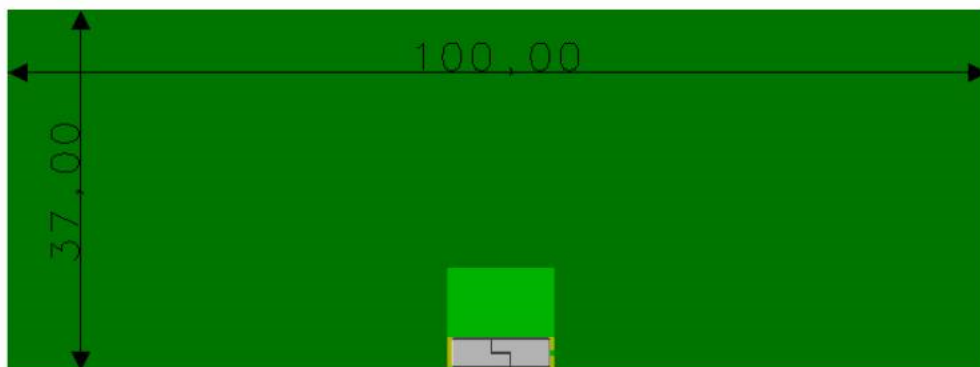
850 MHz Rx Diversity Ceramic Antenna

Pulse Part Number CW3031

Recommended test board layout



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



Matching and tuning component values depend on application and surrounding mechanics / materials. All specifications and measurement results in this document are valid only for this particular size PWB and antenna positioning.

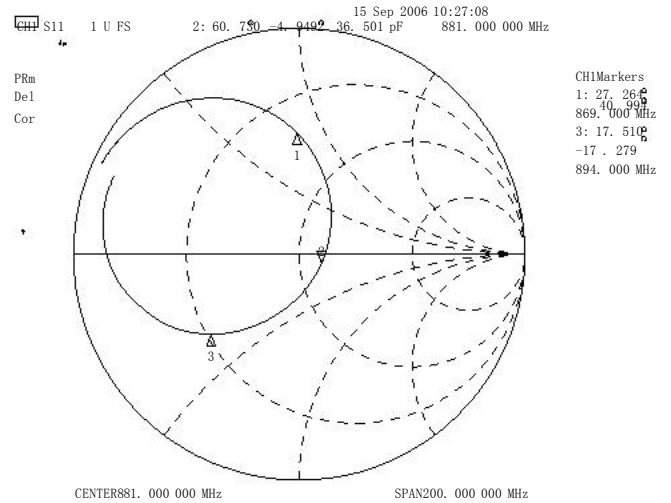
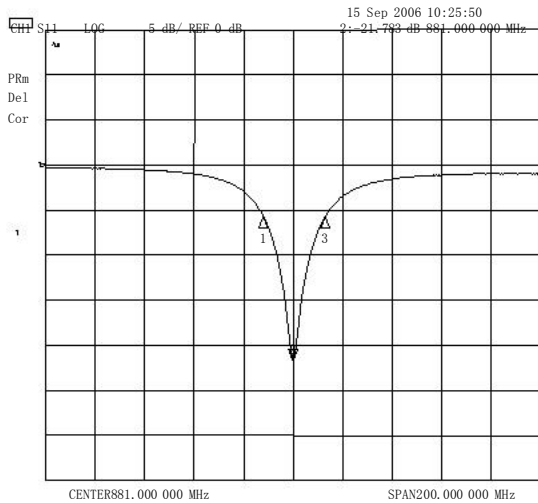
850 MHz Rx Diversity Ceramic Antenna

Pulse Part Number CW3031

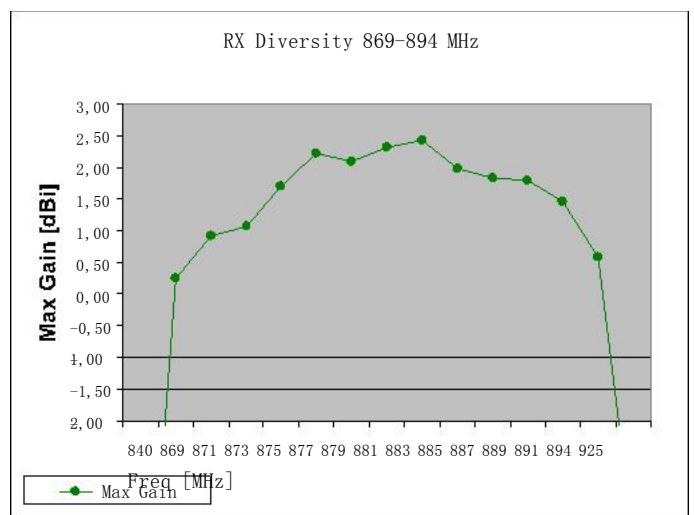
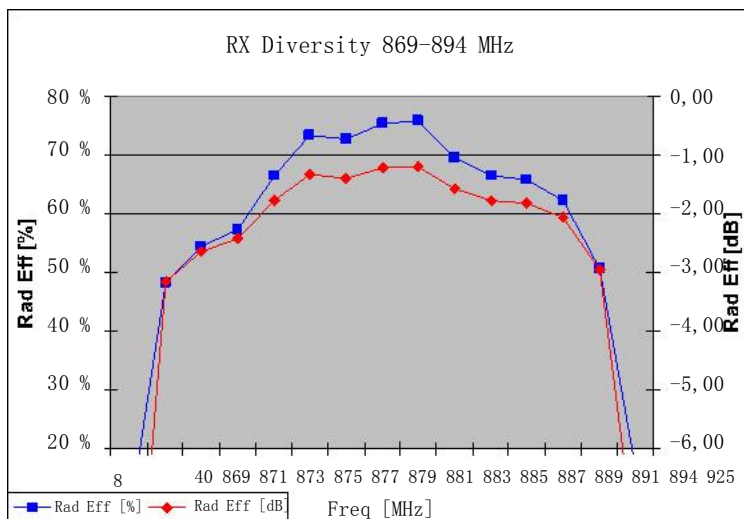
Typical Electrical Characteristics (T=25 °C)

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

Typical Return Loss S11/ impedance



Free space efficiency and maximum gain

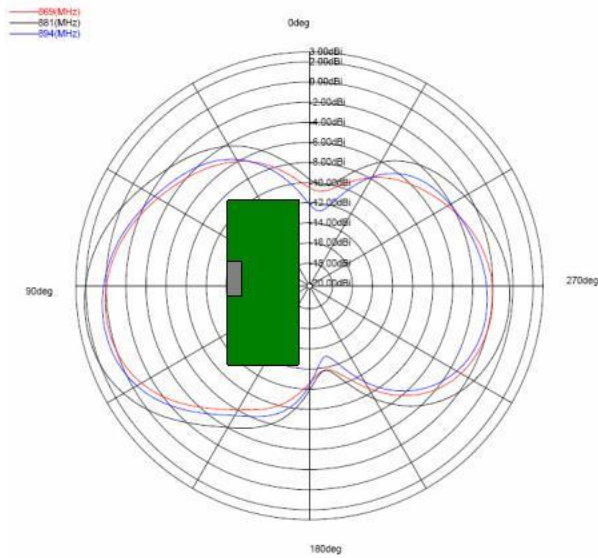


850 MHz Rx Diversity Ceramic Antenna

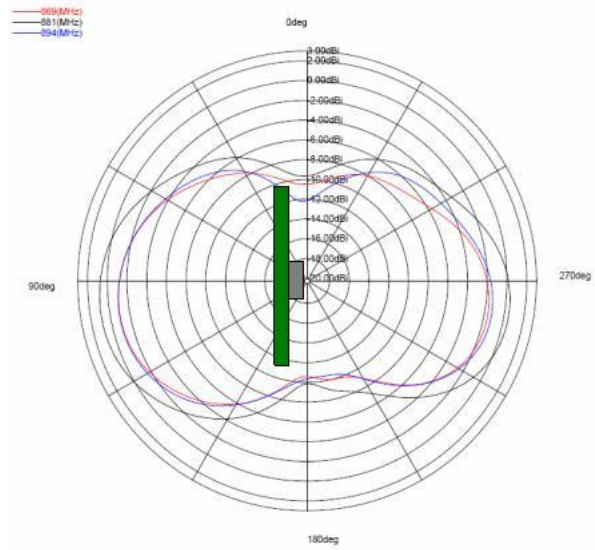
Pulse Part Number CW3031

Typical Free Space Radiation Patterns

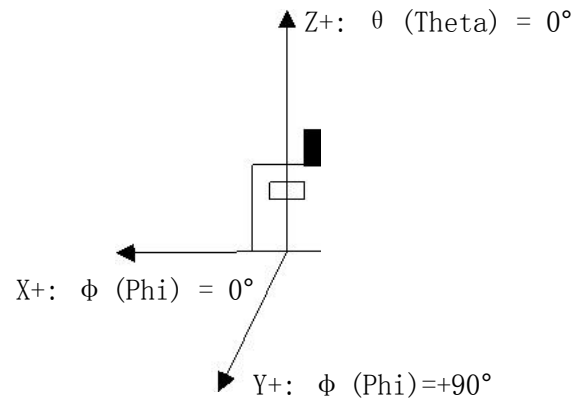
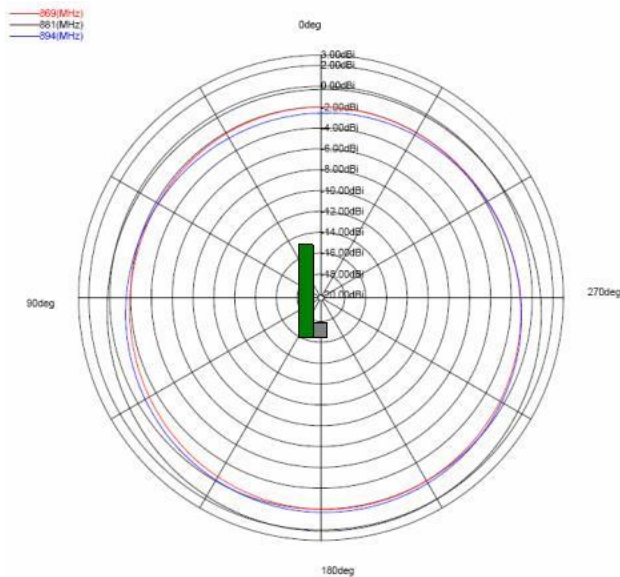
XZ-PLAN



ZY-PLANE



XY-PLANE



Contact: mobiledeviceantenna.sales@pulseelectronics.com