# ISM 900MHz Helical SMD-Antenna

Ground cleared under antenna, clearance area 8.00 x 40.00 mm. Pulse Part Number: W3113



#### **Features**

- Low profile (2.5mm, embedded 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**

- 900MHz ISM Band Systems 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 | Max Gain                        | Efficiency                                 | Return loss | Impedance $[\Omega]$ | Operating        |
|-----------------|---------------------------------|--|-------------|----------------------|------------------|
| [MHz]           | [dBi]                           | [%] / [dB]                                 | min. [dB]   |                      | Temperature [°C] |
| 902 – 928       | 0.8 (peak)<br>-0.3 (band edges) | 66 / -1.8 (peak)<br>51 / -2.9 (band edges) | -10         | 50                   | -40 to +85       |

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## ISM 900MHz Helical SMD-Antenna

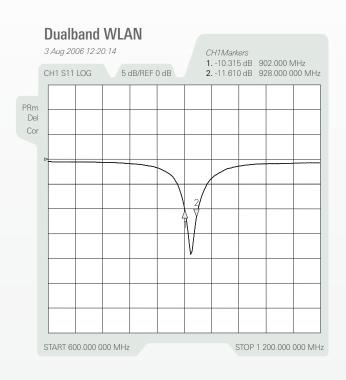
Ground cleared under antenna, clearance area 8.00 x 40.00 mm. Pulse Part Number: W3113

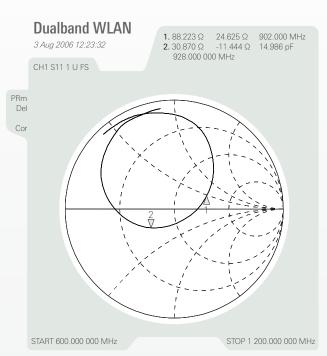
## Typical Electrical Characteristics (T=25 °C)

Typical Return Loss S11/ impedance,

measured on the 100 x 40 mm test board with matching circuit

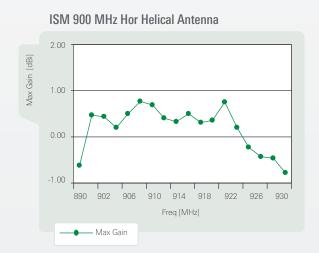






Free space efficiency and maximum gain, PWB ground clearance area 8.00 x 40.00 mm

#### ISM 900 MHz Hor Helical Antenna 0.00 70 % Rad Eff [%] -0.50 -1.00 -1.50 -2.00 -2.50 -3.00 -3.50 906 910 914 918 922 926 Freq [MHz] Rad Eff [%] → Rad Eff [dB]



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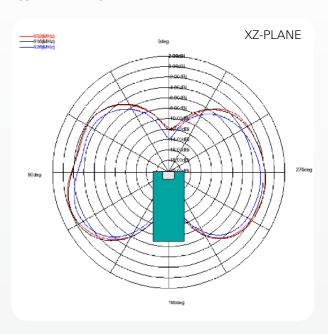
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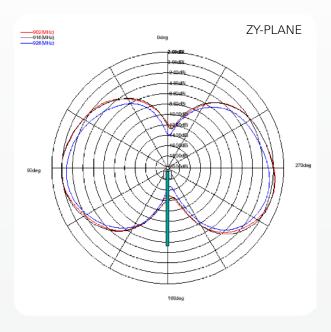


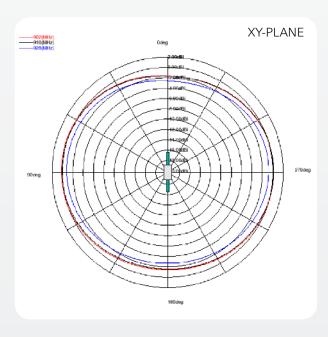
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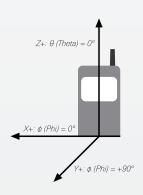
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## Typical Free space Radiation Patterns









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