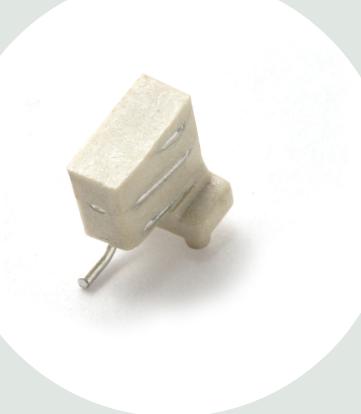
Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108



#### **Features**

- Low profile (5.5 mm)
- Compact size W  $\times$  L  $\times$  H (5.0  $\times$  2.5  $\times$  5.5 mm)
- Low weight (140 mg)
- Lead Free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

#### **Applications**

- IEEE 802.11b/g
- Bluetooth
- WiFi
- 2.4 GHz WLAN
- 2.4 GHz ISM Band Systems
- ZigBee IEEE 802.15.4

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.

#### 2.4 GHz WiFi

Typical performance (testboard size  $100 \times 40$  mm, PWB ground clearance area  $7.5 \times 5.5$  mm) Values below are measured inside typical mobile phone chassis including all mechanics

Frequency Range [MHz]	Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance $[\Omega]$	Operating Temperature [°C]
2400 – 2483.5	1.5	50 / -3	-8	50	-40 to +85

Takatie 6

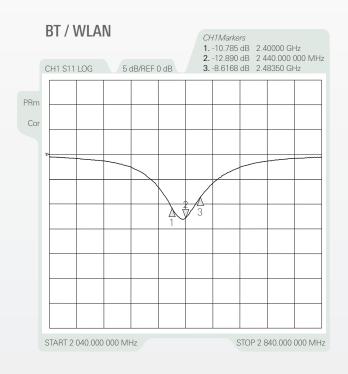
90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 www.pulseeng.com/antennas

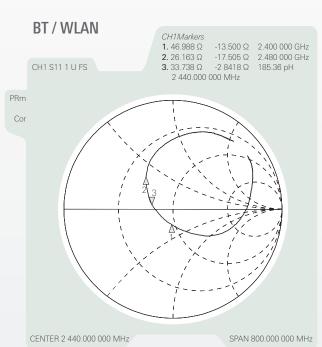


Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108

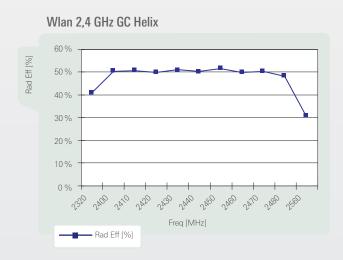
#### Typical Electrical Characteristics (T=25 °C)

Measured on basic chassis including PWB, display, battery and plastic covers. Chassis size abt.  $17 \times 40 \times 100$  mm. Typical Return Loss S11/ impedance





Free space efficiency and maximum gain, PWB ground clearance area 6.00 x 11.00 mm





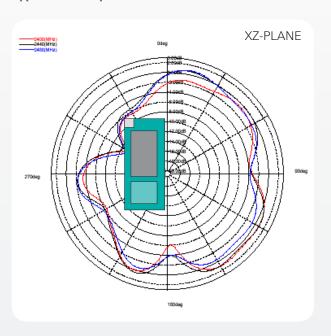
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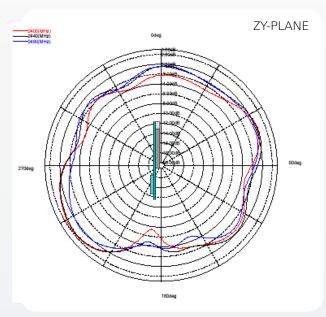
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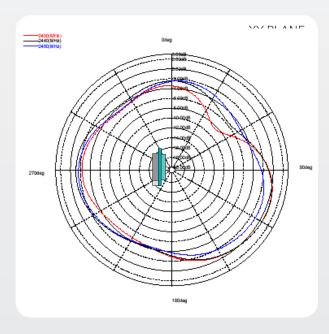


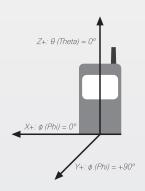
Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108

### Typical Free space Radiation Patterns









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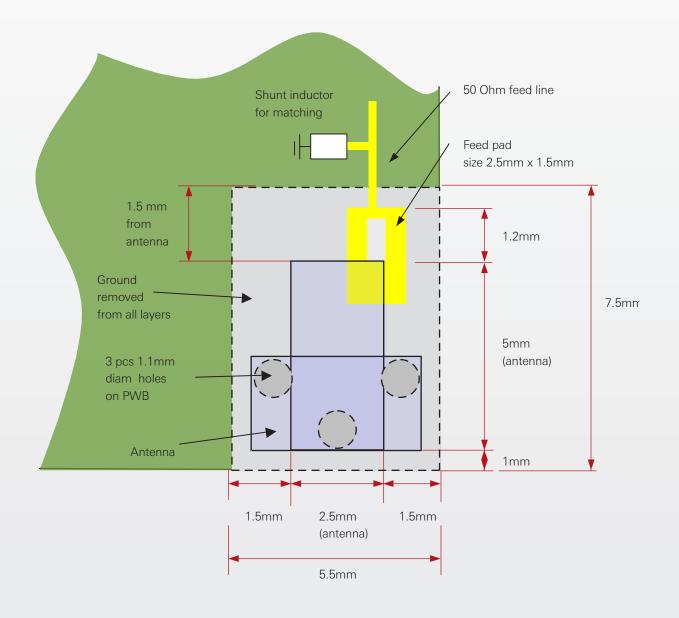
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Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108

### Recommended pad layout and guard distances

Feed line should be designed to mach 50  $\Omega$  characteristic impedance, depending on PWB material and thickness.



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