## imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



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 x L x H (5.0 x 2.5 x 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 x 40 mm, PWB ground clearance area 7.5 x 5.5 mm) Values below are measured inside typical mobile phone chassis including all mechanics

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

Pulse Finland Oy Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 www.pulseeng.com/antennas

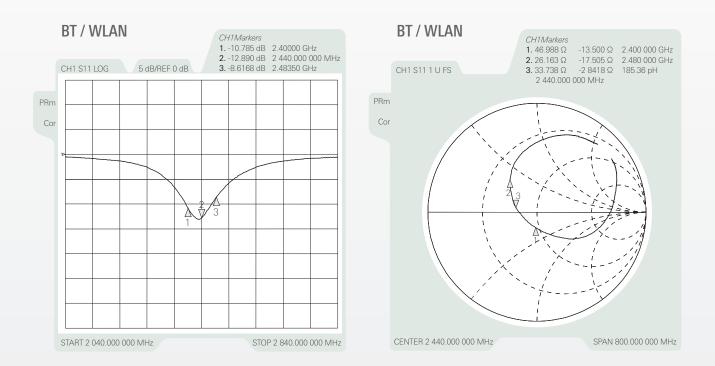


© 2007. All Rights Reserved

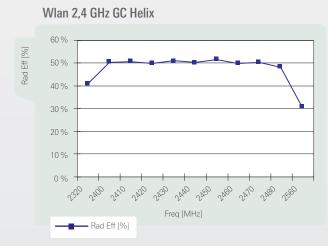
Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108

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

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



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



Wlan 2,4 GHz GC Helix



Pulse Finland Oy Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 www.pulseeng.com/antennas

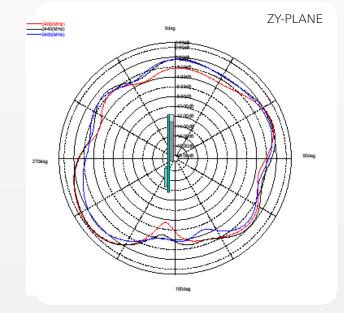


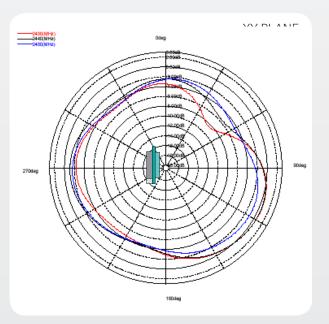
© 2007. All Rights Reserved

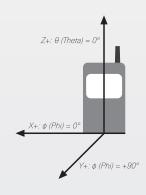
Ground cleared under antenna, clearance area 7.50 x 5.50 mm. Pulse Part Number: W3108

# XZ-PLANE

**Typical Free space Radiation Patterns** 









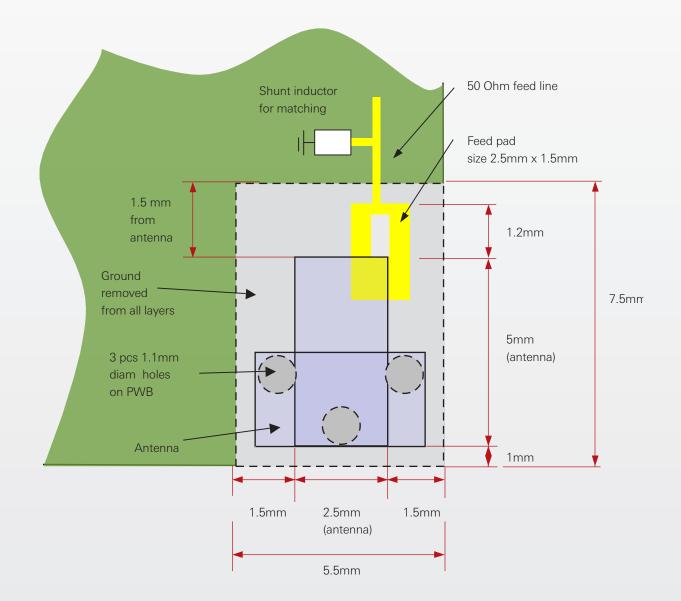
Pulse Finland Oy Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 www.pulseeng.com/antennas

#### © 2007. All Rights Reserved.

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.



Pulse Finland Oy Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 www.pulseeng.com/antennas



© 2007. All Rights Reserved