

# Bluetooth / WLAN / WiFi Antenna

Ceramic Chip Antenna (ground cleared under antenna)

Pulse Part Number: **W3300**



## Features

- Omni directional radiation
- Low profile
- Compact size W x L x H (3.2 x 1.6 x 1.1 mm)
- Low weight (33 mg)
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product

## Applications

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

## Electrical specifications @ +25 °C

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

## W3300 Bluetooth / WLAN / WiFi

*Typical performance (test board size 80x37 mm, PWB ground clearance area 4.00 x 6.25 mm)*

Frequency Range [MHz]	Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance [Ω]	Operating Temperature [°C]
2400 – 2483.5	2,2 (peak) 1,9 (band edges)	75 / -1,3 (peak) 70 / -1,6 (band edges)	-11	50	-40 to +85

### Pulse Finland Oy

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Fax: +358 207 935 501

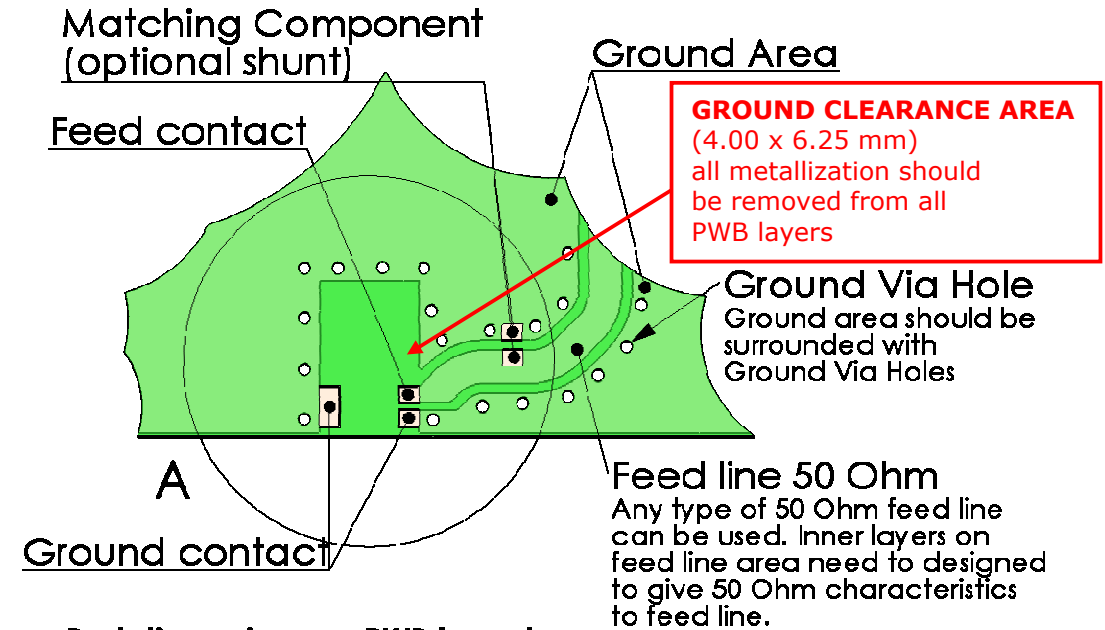
Domicile: Kempele  
Business ID: 1933992-8  
firstnamelastname@pulseeng.com  
www.pulseeng.com/antennas



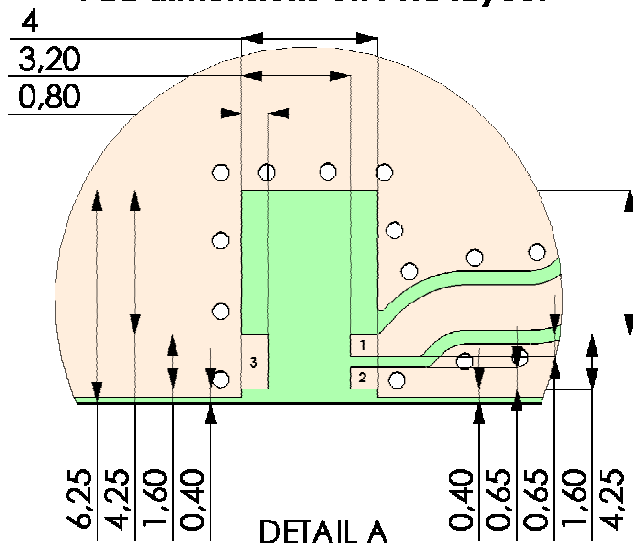
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## Terminal Configuration

### PWB Layout



### Pad dimensions on PWB layout

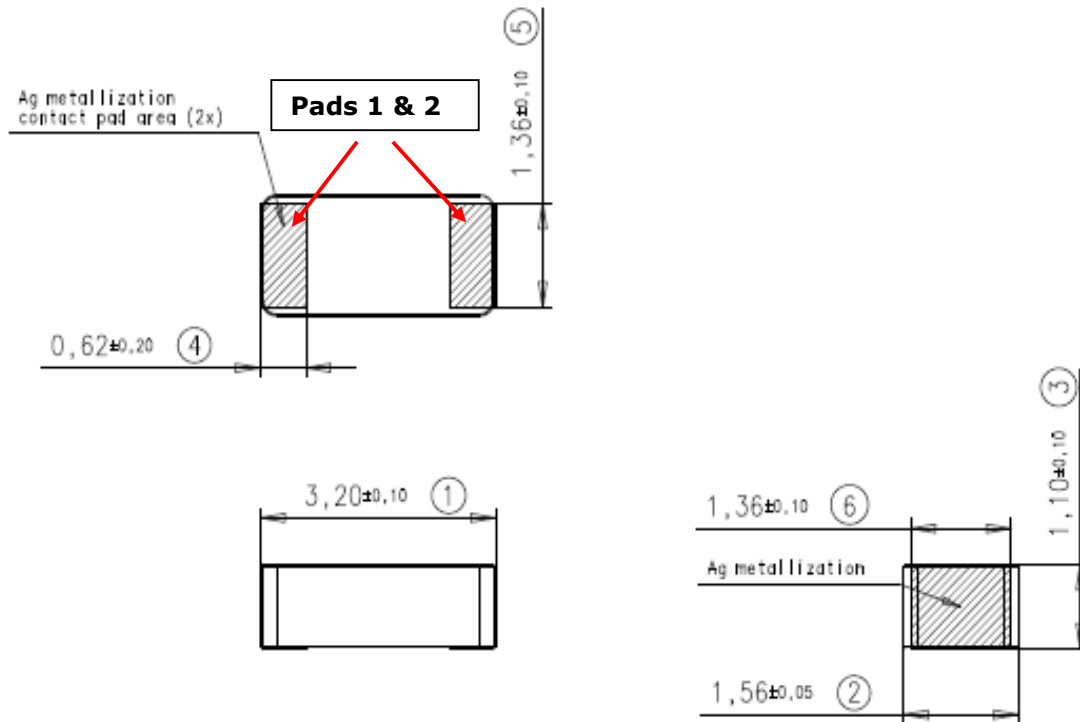


PWB manufacturing requirements according to IPC-A-600 revision G or similar

PWB features		
No.	Terminal Name	Terminal Dimensions
1	Feed	0.8 x 0.65 mm
2	GND	0.8 x 0.65 mm
3	GND	0.8 x 1.60 mm

## Terminal Configuration

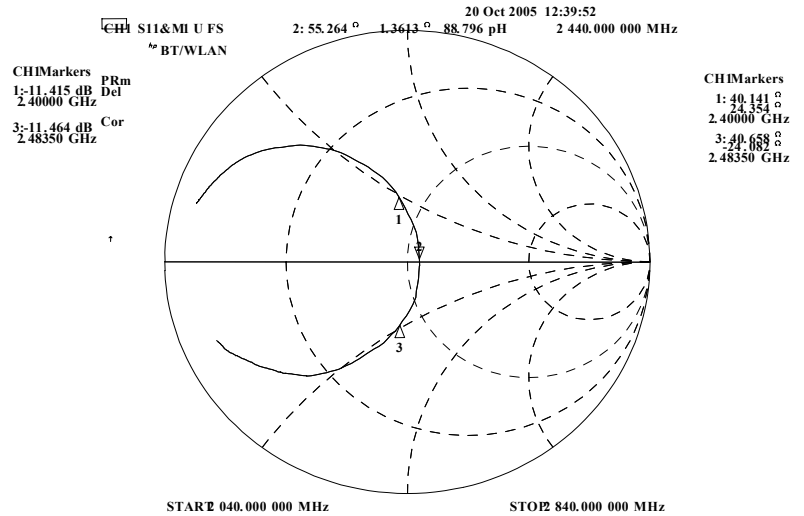
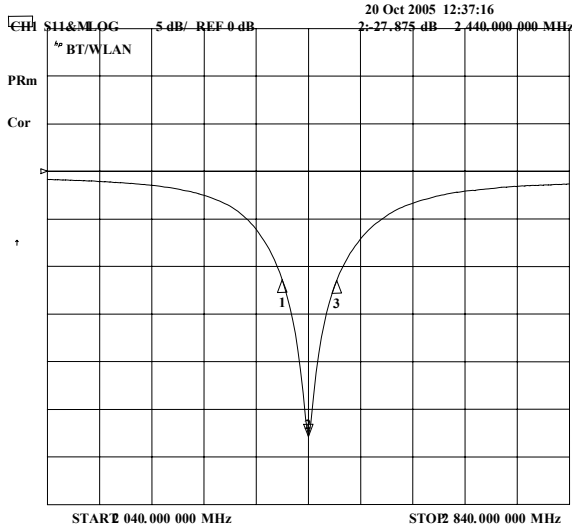
### Antenna soldering pads



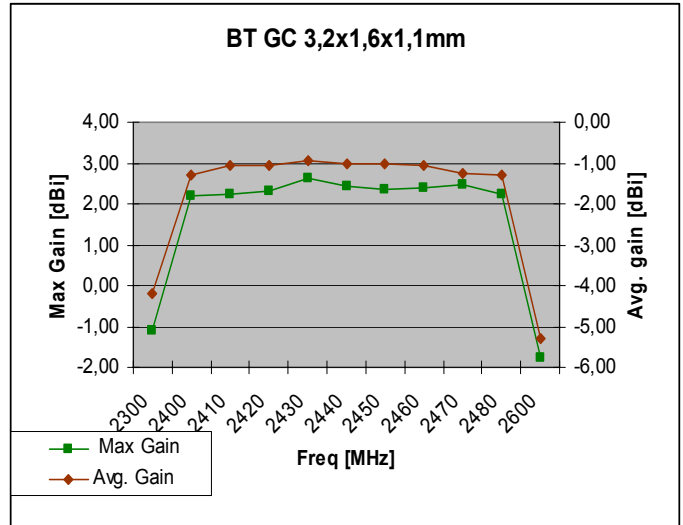
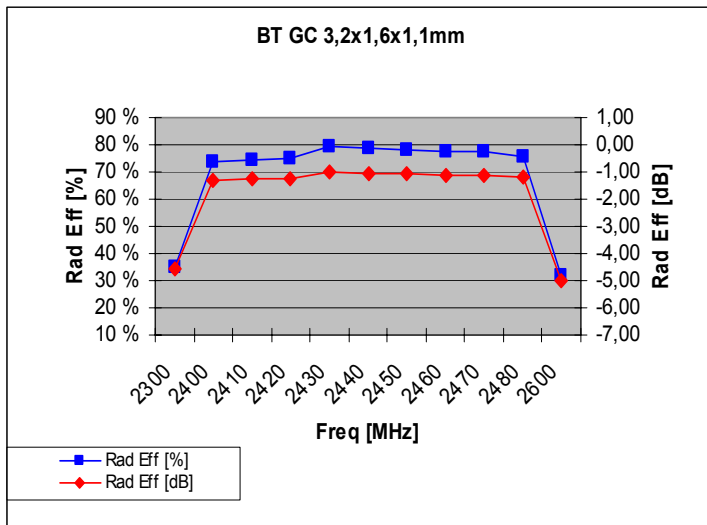
Antenna features		
No.	Terminal Name	Terminal Dimensions
1	Feed / GND	0.62 x 1.36 mm
2	Feed / GND	0.62 x 1.36 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND		

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

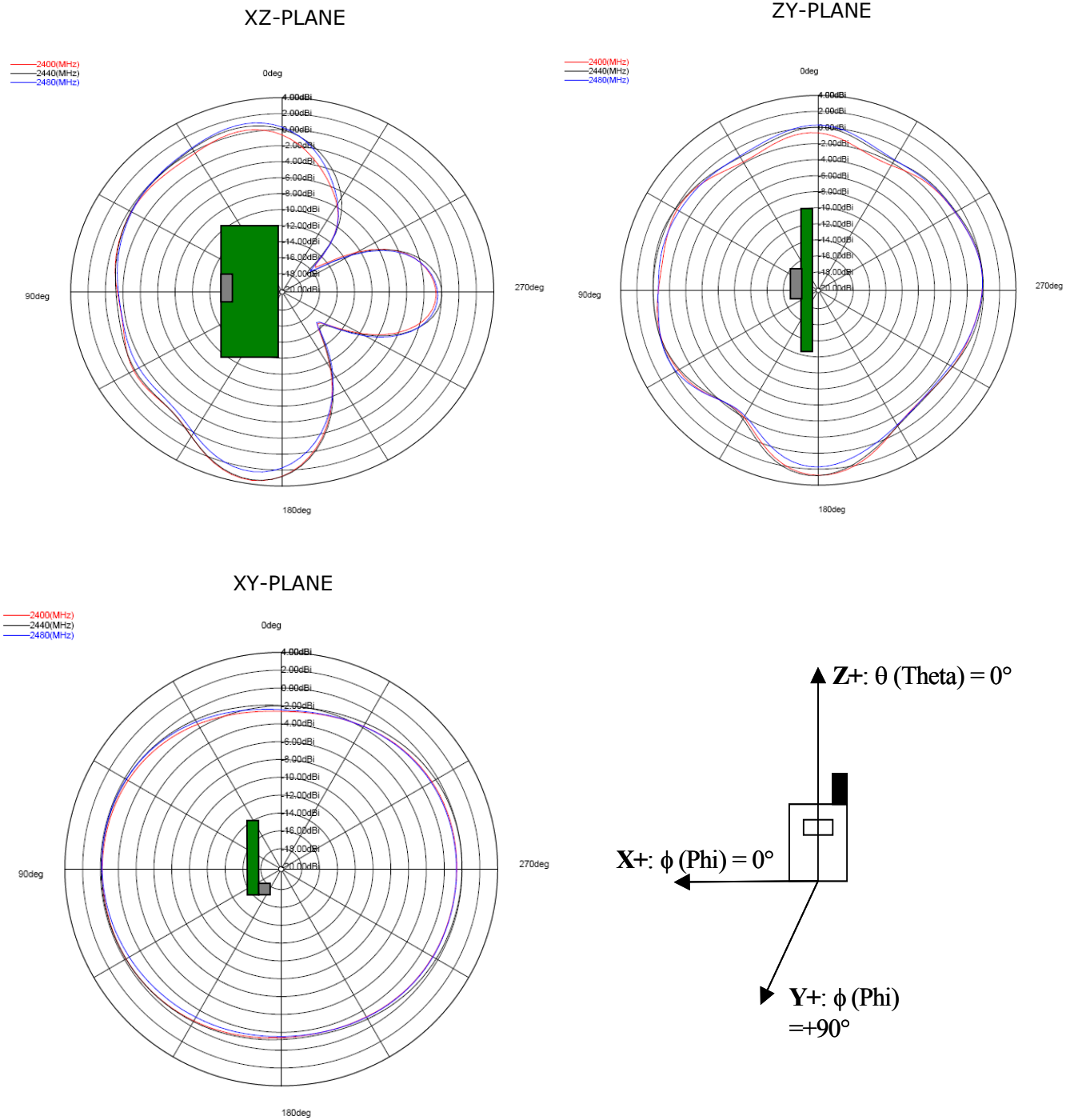
Typical Return Loss S11/ impedance, measured on the test board



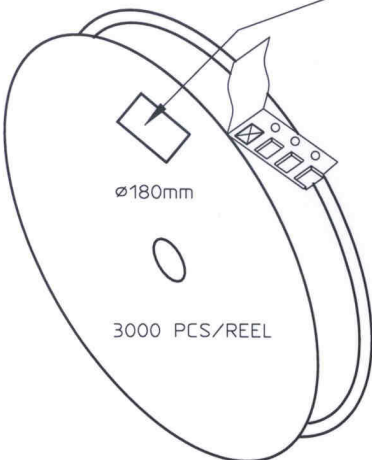
Free space efficiency and maximum gain / PWB ground clearance area  
**4.00 x 6.25 mm**



## Typical Free space Radiation Patterns



**Packing form**

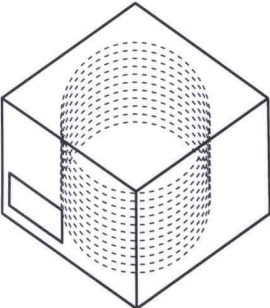


REEL LABEL INFORMATION:  
 - TRACEABILITY  
 - QUANTITY  
 - PRODUCT CODE


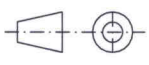
CARRIER TAPE H85-00125  
 width=8,00 depth=1,22  
 COVER TAPE H85-00126  
 width=5,60

LENGTH OF TAPE:  
 - Leader section: min 350 mm before component section  
 - Trailer section: min 40 mm after component section.

Empty part cavities at leader and trailer section of the tape must be sealed with top cover tape.



BOX H85-00128 (182x182x132)	1 pcs
- LABEL	1 pcs/BOX
REEL H85-00127 (D180, W12)	10 pcs
- REEL LABEL	1 pcs/REEL

MATERIAL			
HANDLINGS			
		RATIO	DRWN 090507 PeHa H
			DGNER
			CHKD
			APPRD
			APPRD BY
PRODUCT	H90-OY805		C
DENOMINATION	PACKING FORM		B
			A
		VERSION	MOD/DATE/NAME