

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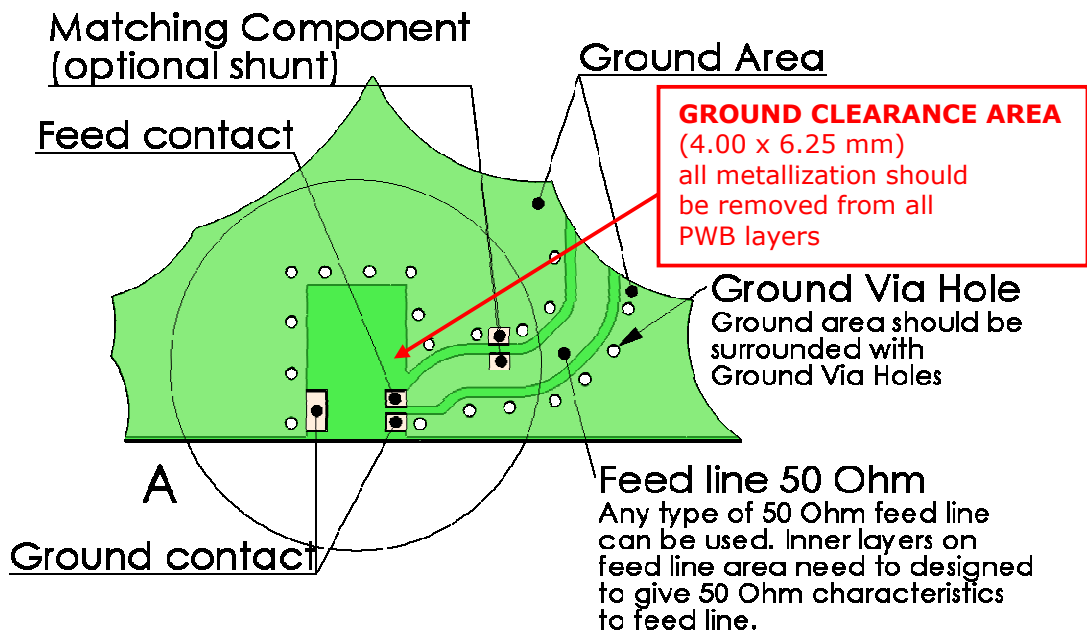
Domicile: Kempele
Business ID: 1933992-8
firstnamelastname@pulseeng.com
www.pulseeng.com/antennas



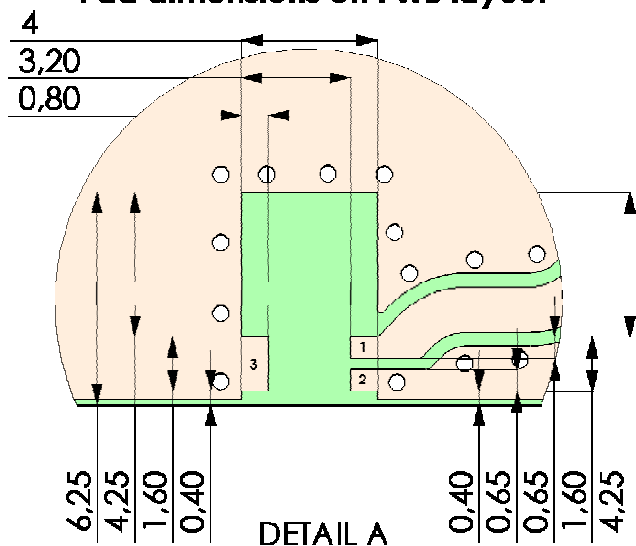
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Terminal Configuration

PWB Layout



Pad dimensions on PWB layout

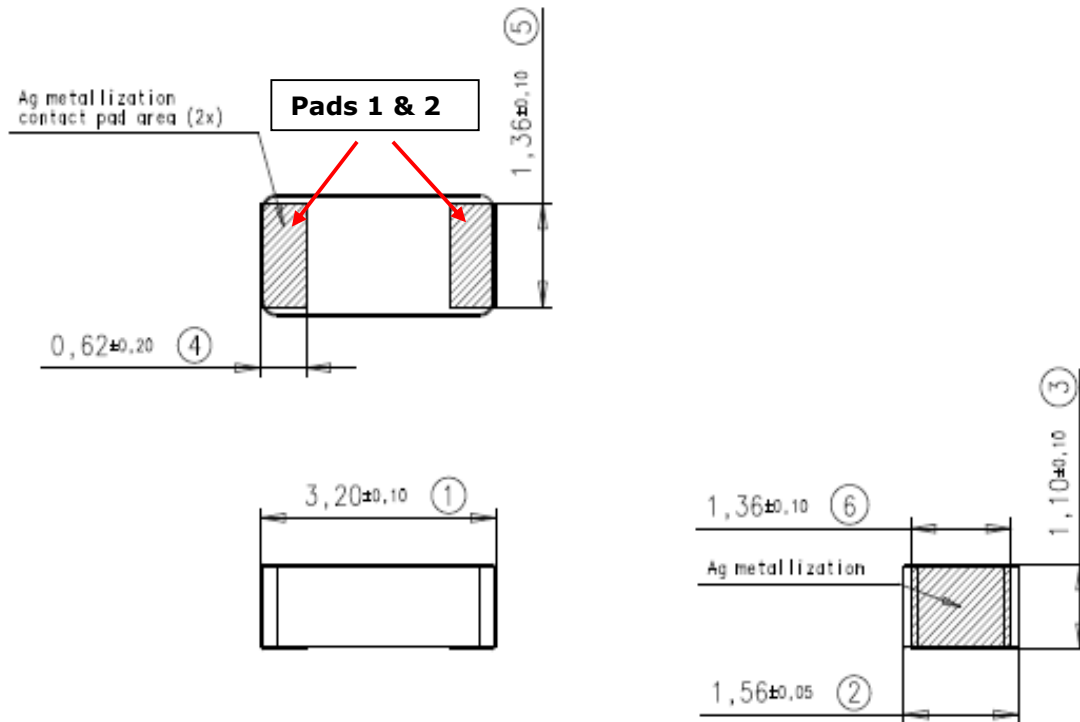


PWB manufacturing requirements according to IPC-A-600 revision G or similar

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

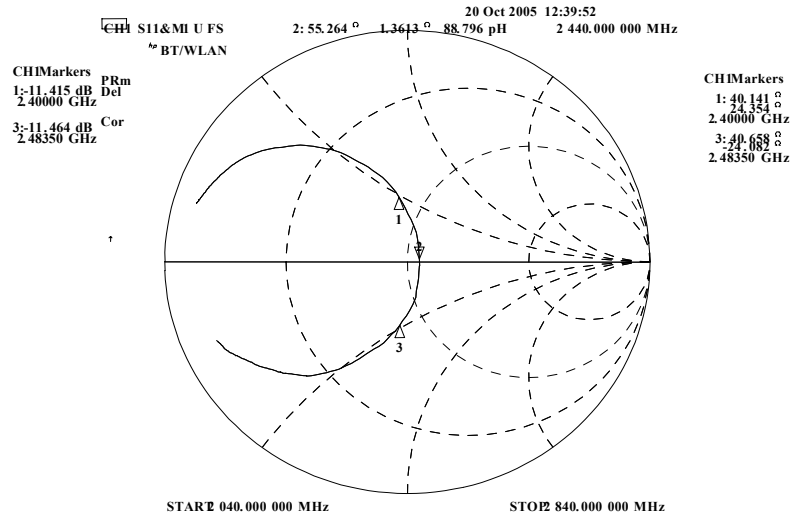
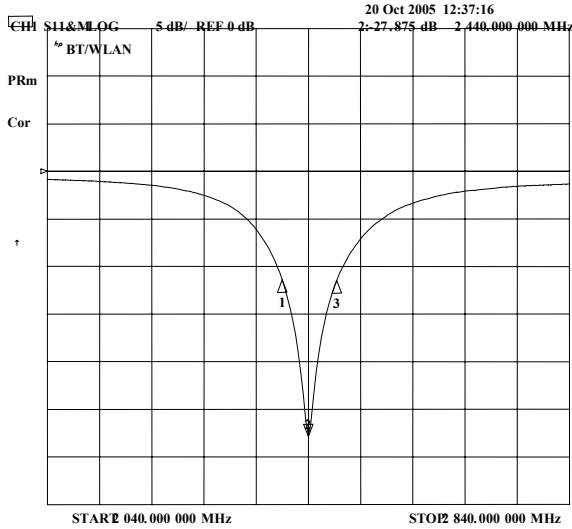
Antenna soldering pads



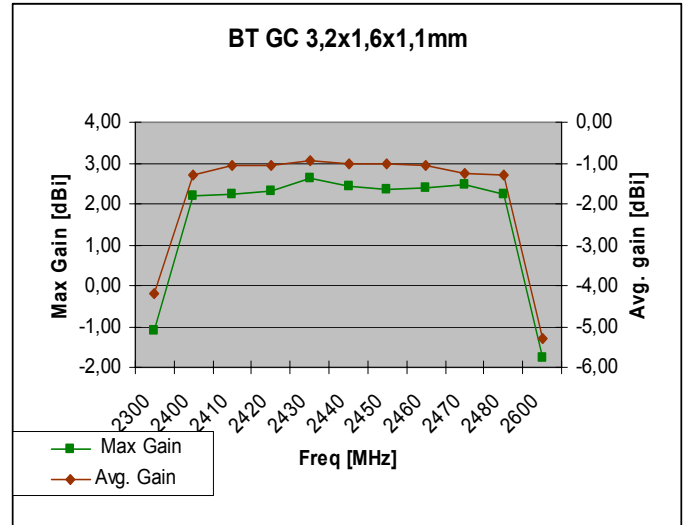
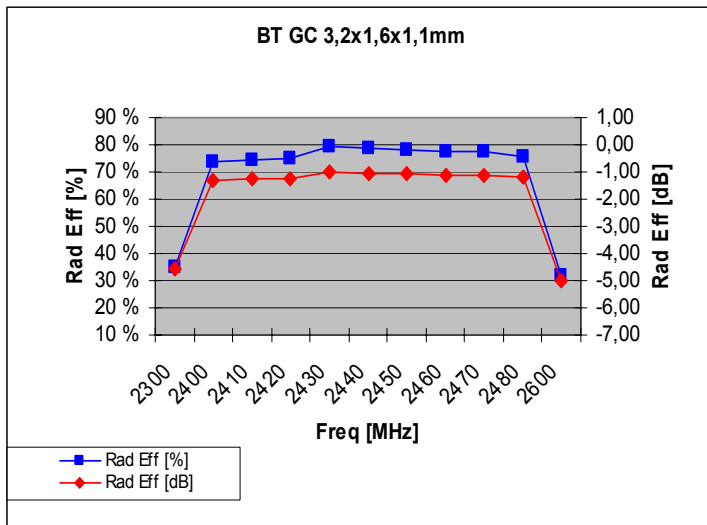
Antenna features		
No.	Terminal Name	Terminal Dimensions
1	Feed / GND	0.62 x 1.36 mm
2	Feed / GND	0.62 x 1.36 mm
Antenna is symmetrical. Either of terminals 1 or 2 can be Feed / GND		

Typical Electrical Characteristics (T=25 °C)

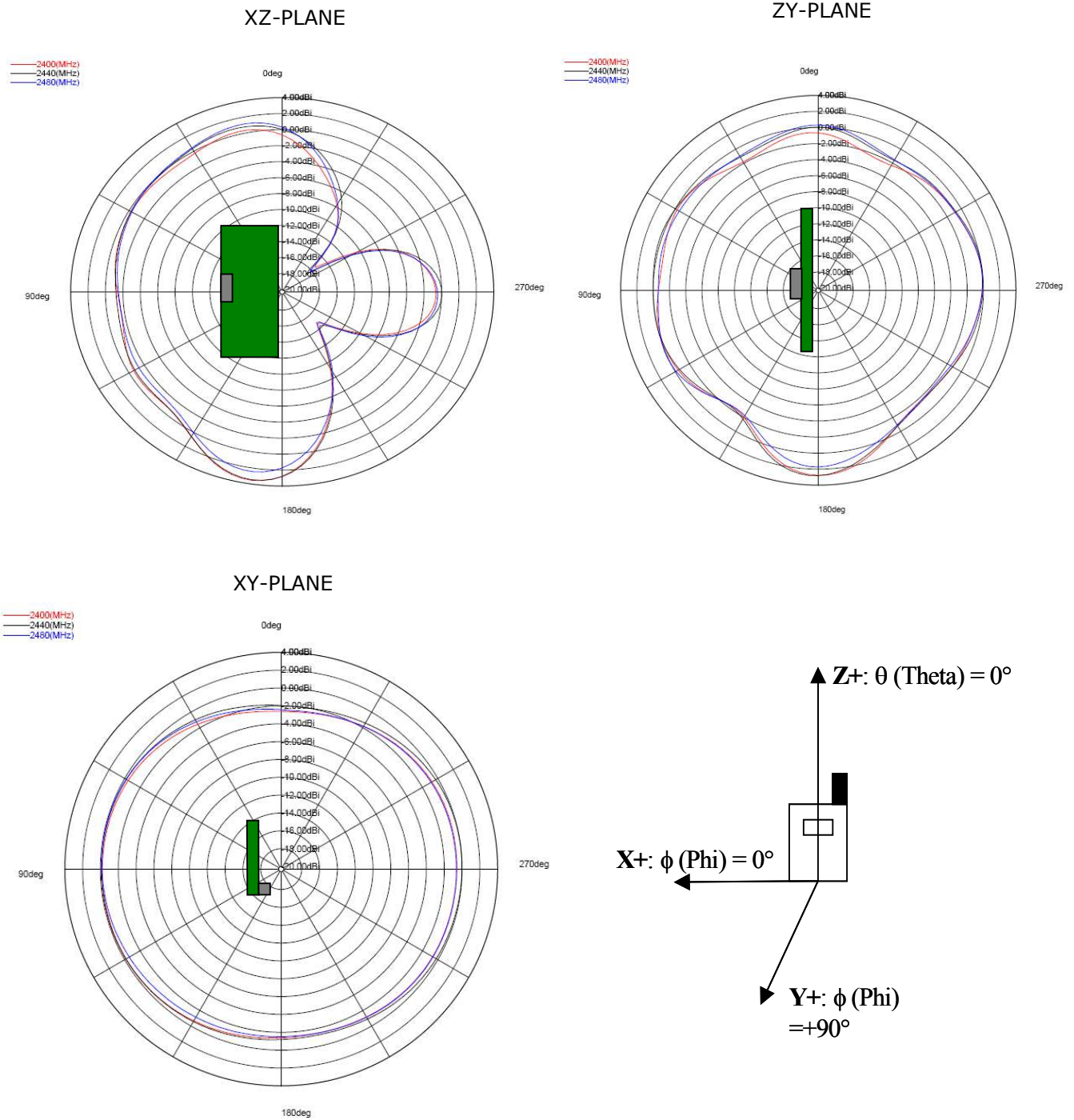
Typical Return Loss S11/ impedance, measured on the test board



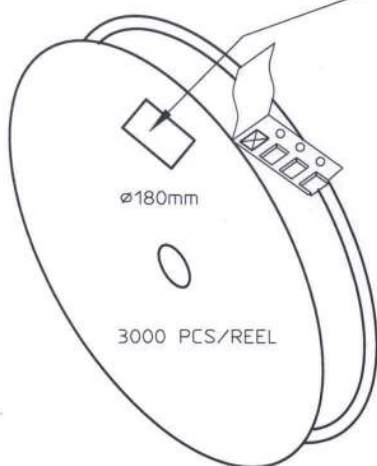
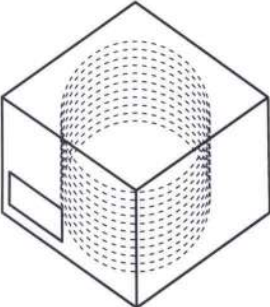
Free space efficiency and maximum gain / PWB ground clearance area
4.00 x 6.25 mm



Typical Free space Radiation Patterns



Packing form

REEL LABEL INFORMATION:

- TRACEABILITY
- QUANTITY
- PRODUCT CODE


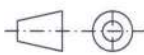
CARRIER TAPE H85-00125
width=8,00 depth=1,22
COVER TAPE H85-00126
width=5,60

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