# 1.575GHz GPS Ceramic Chip Antenna

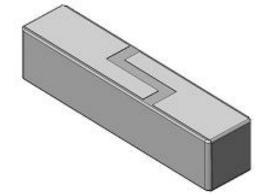
(Ground cleared under antenna, clearance area 7.80 mm x 5.25 mm)
Pulse Part Number: W3062A



- Omni directional radiation
- Low profile
- Compact size W x L x H (7 x 1.6 x 1.6 mm)
- Low weight (86 mg)
- Lead free materials
- Fully SMD compatible
- Lead free soldering compatible
- Tape and reel packing
- RoHS Compliant Product



- GPS L1 band
- 1.575 GHz



## Electrical specifications @ +25 °C

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

#### **GPS**

Typical performance (testboard size 80 x 37 mm, PWB ground clearance area **7.80 mm x 5.25 mm**)

Frequency Range [MHz]	RHCP Gain [dBic]	Linear Max Gain [dBi]	Efficiency [%] / [dB]	Return loss min. [dB]	Impedance $[\Omega]$	Operating Temperature [°C]
1575.42 +/- 10	0 (peak) -0,5 (band	2,5 (peak) 2 (band	80 / -1 (peak) 75 / -1,25	-10	50	-40 to +85
	edges)	edges)	(band edges)			

#### Pulse Finland Oy

Takatie 6 90440 Kempele, Finland

Tel: +358 207 935 500 Fax: +358 207 935 501 Domicile: Kempele Business ID: 1933992-8

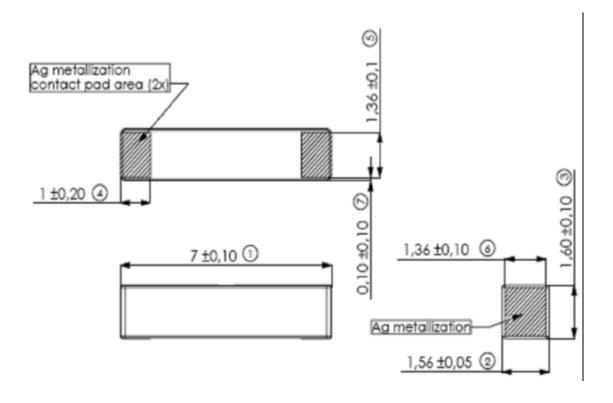
firstnamelastname@pulseeng.com www.pulseeng.com/antennas



# **GPS Ceramic Chip Antenna**

(Ground cleared under antenna, clearance area 7.80 mm x 5.25 mm)

## terminal configuration and dimensions



Antenna features					
No.	Terminal Name	Terminal Dimensions			
1	Feed / GND	1.00 x 1.36 mm			
2	Feed / GND	1.00 x 1.36 mm			

Antenna is symmetrical.

Either of terminals 1 or 2 can be Feed / GND

#### Pulse Finland Oy

Domicile: Kempele Business ID: 1933992-8

<u>firstnamelastname@pulseeng.com</u> <u>www.pulseeng.com/antennas</u>



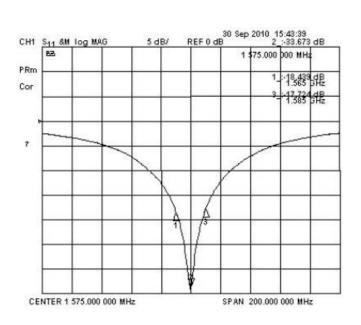
## **GPS Ceramic Chip Antenna**

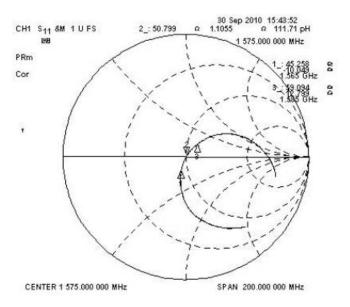
(Ground cleared under antenna, clearance area 7.80 mm x 5.25 mm)

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

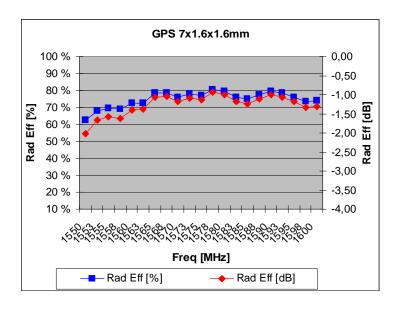
Measured on the 80 x 37mm test board. Matched with 2.2pF shunt capasitor

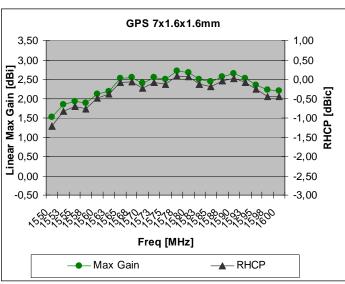
### Typical Return Loss S11/ impedance





#### Free space efficiency, maximum gain and RHCP





## Pulse Finland Oy

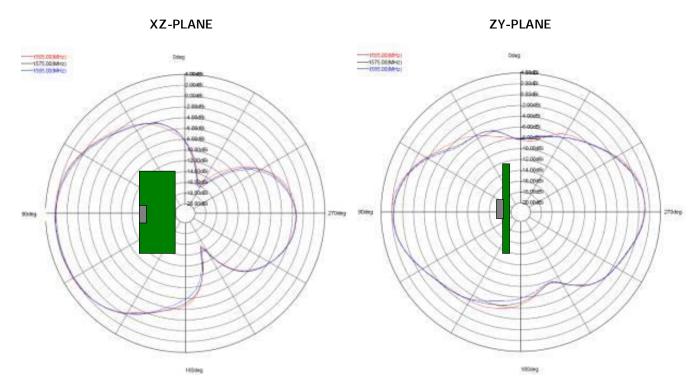
Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 Domicile: Kempele Business ID: 1933992-8 firstnamelastname@pulseeng.com www.pulseeng.com/antennas



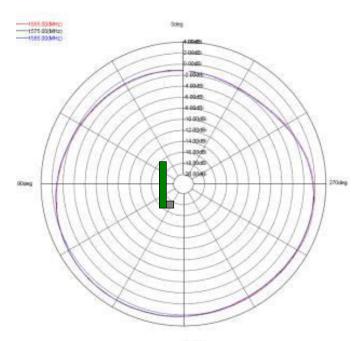
# **GPS Ceramic Chip Antenna**

(Ground cleared under antenna, clearance area 7.80 mm x 5.25 mm)

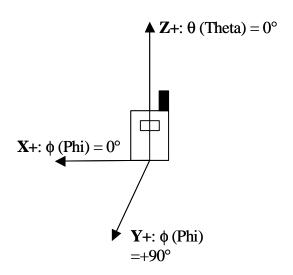
### Typical Free space Radiation Patterns



#### **XY-PLANE**

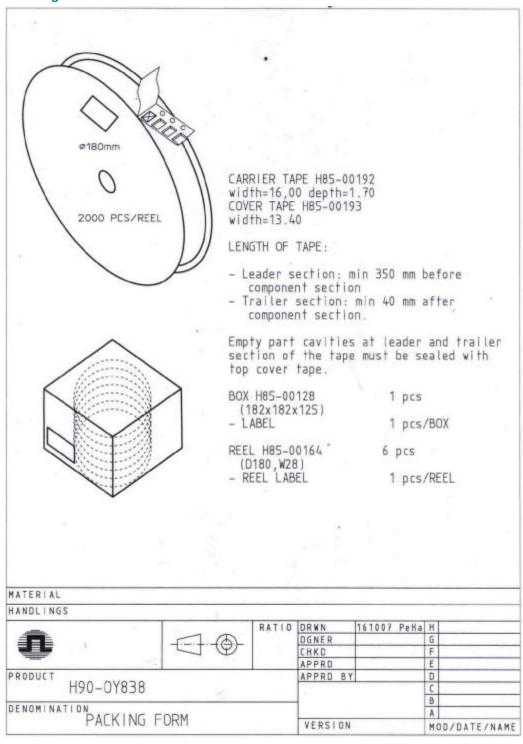


90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 Durnicrie: Kerripere Business ID: 1933992-8 firstnamelastname@pulseeng.com www.pulseeng.com/antennas





## Packing form



#### Pulse Finland Oy

Takatie 6 90440 Kempele, Finland Tel: +358 207 935 500 Fax: +358 207 935 501 Domicile: Kempele Business ID: 1933992-8 firstnamelastname@pulse

firstnamelastname@pulseeng.com www.pulseeng.com/antennas

