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!

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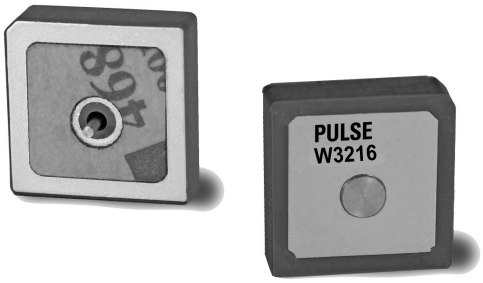
GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216



Pulse is pleased to announce the W3216 GPS and GLONASS patch antenna to compliment our growing range of tracking antenna products. This small 0.5 x 0.5 inch (13 x 13 mm) ceramic patch antenna is .2 inches (5 mm) high and has a pinthrough mount. The underside of the antenna has double-sided tape for adhesion to the customer board.

Operating at 1.575 GHz, (L1 GPS band) and 1.598-1.606 GHz (GLONASS), the W3216 patch provides circularly polarized radiation patterns to connect to satellite systems. Reported performance is based on a ground plane of 2 x 2 inches (50 x 50 mm) delivering a gain of -2 dBic at Zenith. Increasing the size of the ground plane can significantly boost the actual application gain. Contact Pulse for applications support to get the best performance from your Navigation system.

Features
- 1.575 and 1.598-1.609 GHz
- GPS L1 Band and GLONASS
- 0.5 x 0.5 inch (13 x 13 mm) Patch
- RoHS Compliant Product

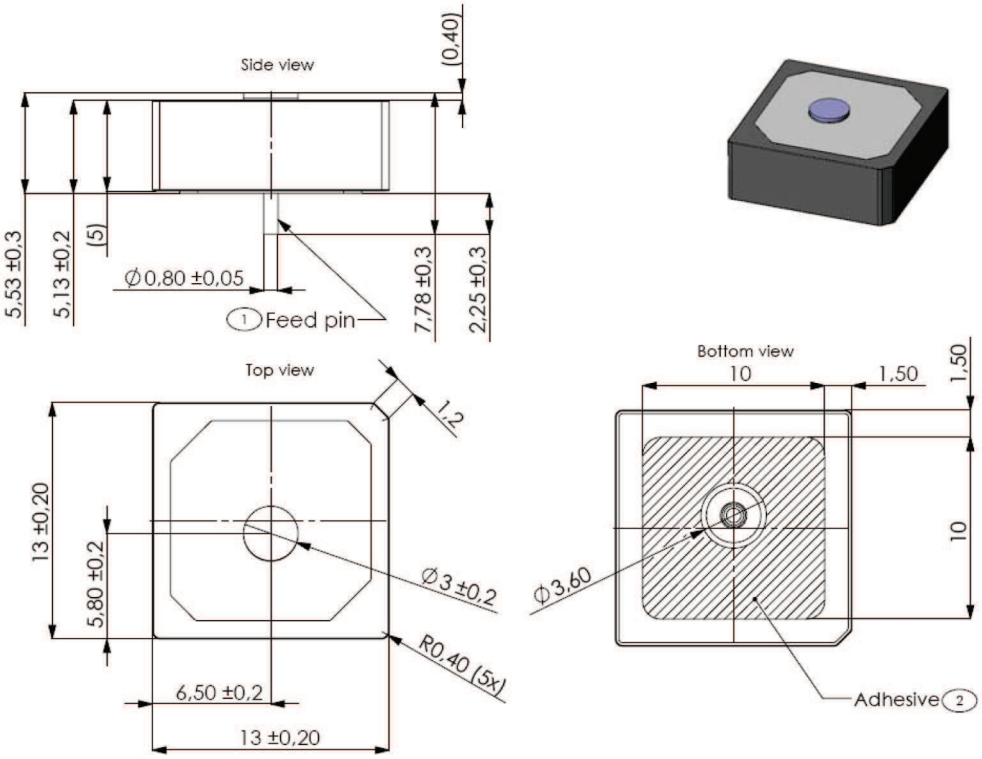
Applications
- Vehicle navigation and location
- Personal handheld tracking systems
- Health care and medical devices
- Small portable tracking equipment

Electrical Specifications

	Frequency 1 [GHz]	1.575
	Frequency 2 [GHz]	1.598 - 1.606
	Nominal Impedance [Ω]	50
VSWR	Frequency 1	1.4
VSWR	Frequency 2	2.3
Gain	Frequency 1 [dBi avg]	-2
Gain	Frequency 2 [dBi avg]	-2
Effi-ciency	Vertical Plane [Freq 1]	60%
Effi-ciency	Vertical Plane [Freq 2]	60%
	Polarization	RHCP

GPS L1 Band & GLONASS Ceramic Patch Antenna

Pulse Part Number W3216



No.	Item	Description
1	Feed Pin	Silver plated brass
2	Adhesive	0.13 mm thick double sided tape

Notes:

Feed pin manual soldering conditions:
- 300° C max soldering iron temperature, 5 seconds max
- Typical lead free solders are applicable

Electrode silver metallization may tarnish if antenna is stored/used in corrosive environment, especially where chloride, sulphur or sulfide, alkali or acid salts exist in the air. Corrosive gases may cause oxidation of electrodes and reduce solderability.

GPS L1 Band & GLONASS Ceramic Patch Antenna

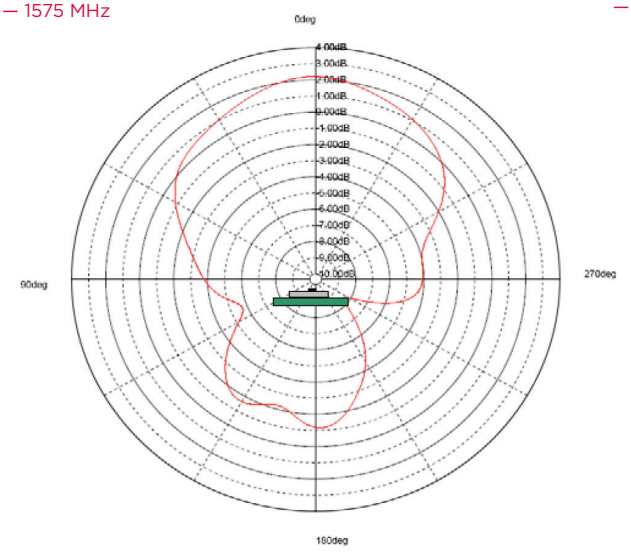
Pulse Part Number W3216

GPS Band Radiation Patterns

Typical Free Space Radiation Patterns – Measured on 50 x 50 mm ground plane

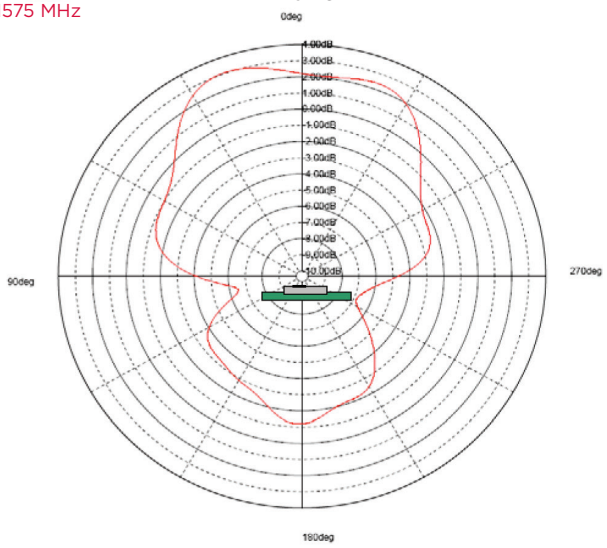
XZ Plane

— 1575 MHz



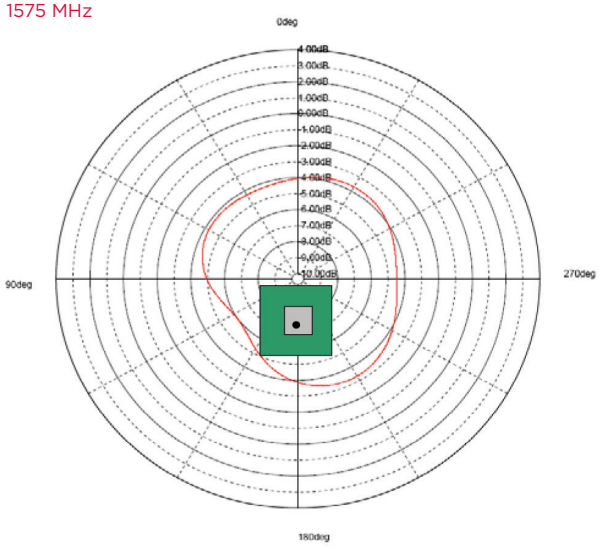
ZY Plane

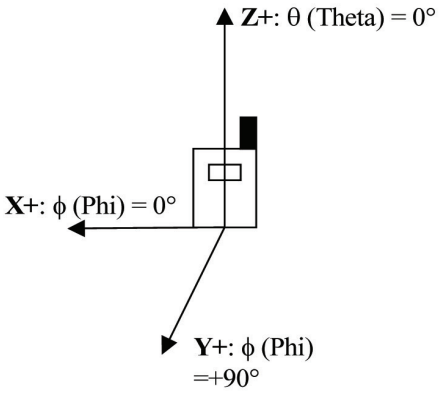
— 1575 MHz



Vertical Plane

— 1575 MHz





GPS L1 Band & GLONASS Ceramic Patch Antenna

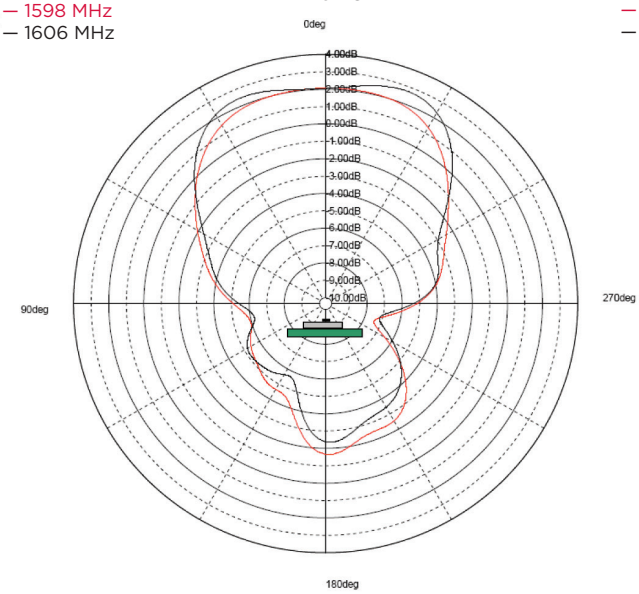
Pulse Part Number W3216

GLONASS Band Radiation Patterns

Typical Free Space Radiation Patterns – Measured on 50 x 50 mm ground plane

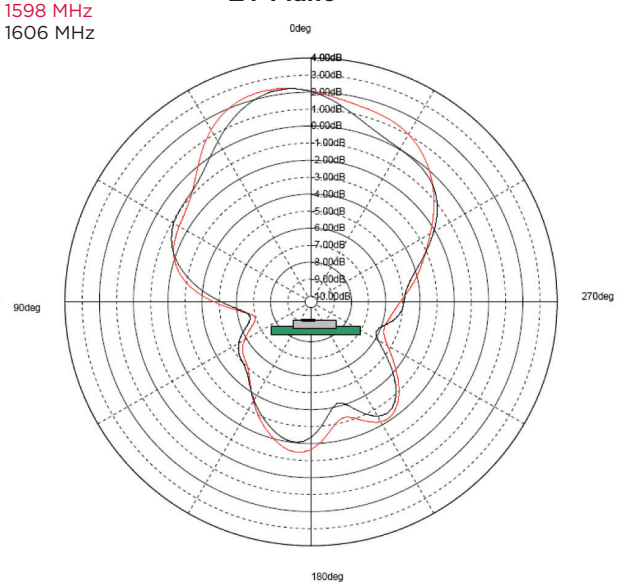
XZ Plane

— 1598 MHz
— 1606 MHz



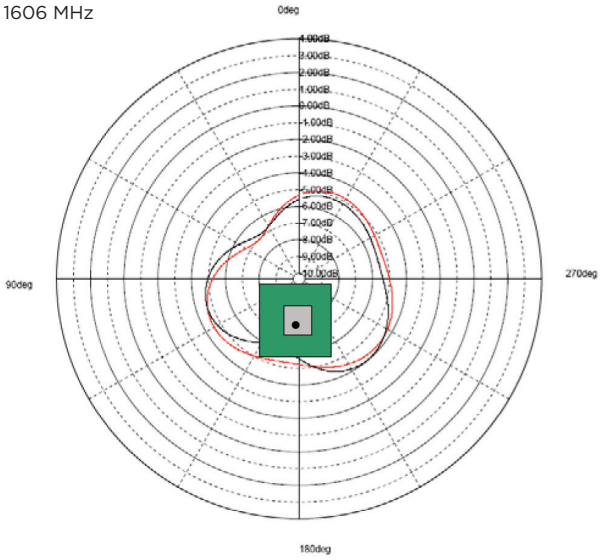
ZY Plane

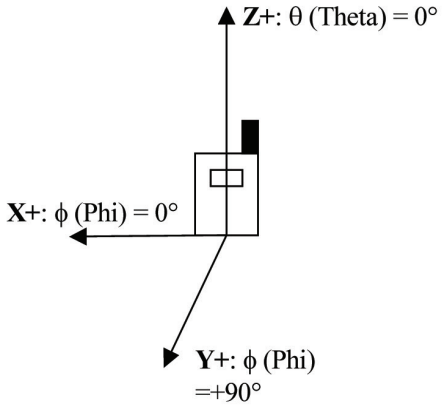
— 1598 MHz
— 1606 MHz



Vertical Plane

— 1598 MHz
— 1606 MHz





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