



# Perseus Tech. International Corp.

Golden Tech. Tower  
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## The GPS LTCC Chip Antenna( 1.575GHz) (GPS002)

The Global Position System(GPS) is one of the major wireless application in the near future. GPS can be applied in many 3C product, such as, cell-phone, PDA, etc. to provide the position information.

The GPS LTCC chip antenna(1.575GHz) by the *Perseus Tech. Int'l Corp.* is especially design for GPS facility application. The small-embedded antenna provides the most reliable, ease to use and adjustment-free antenna technology to solve the problem during assembly and implement by developer.

The details of antenna specification are as followings:

Part NO. : GPS002	
ITEM	SPECIFICATION
Size	5.5 x 3.0 x 1.5 mm
Central frequency	1575 MHz
Bandwidth	50 MHz
Peak gain	3 dBi
Normal gain	0.5 dBi
VSWR	2.0(Max.)
Power handling	3W(Max.)
Polarization	Linear
Azimuth Beamwidth	Omni-directional
Feed Point Impedance	50 $\Omega$
Weight	0.14 g

Note: **GPS**                      **002**  
-----  
**Series**                      **Series number**  
**Name**

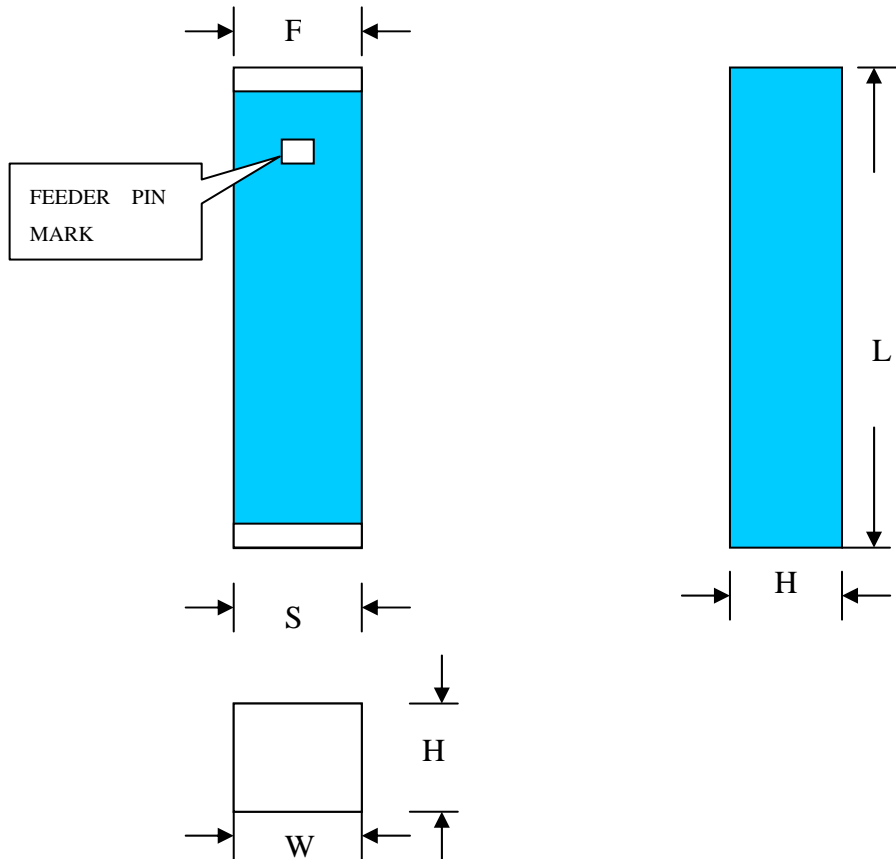


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## Mechanical Specification of Chip Antenna

(GPS002)



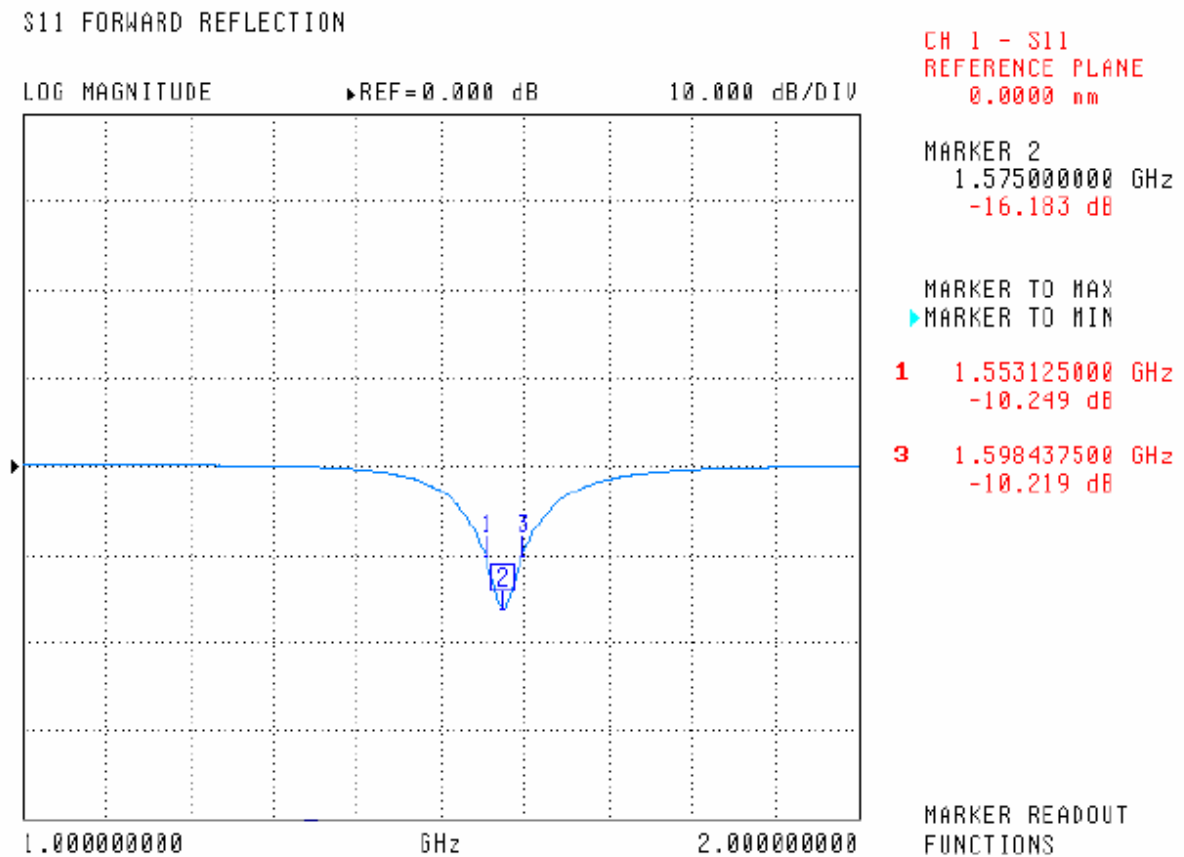
ITEM	DIMENSION	PORT
L	5.5 mm	-
W	3.0 mm	-
H	1.5 mm	-
F	----- mm	Feed termination
S	----- mm	Solder termination



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## Return Loss of GPS002





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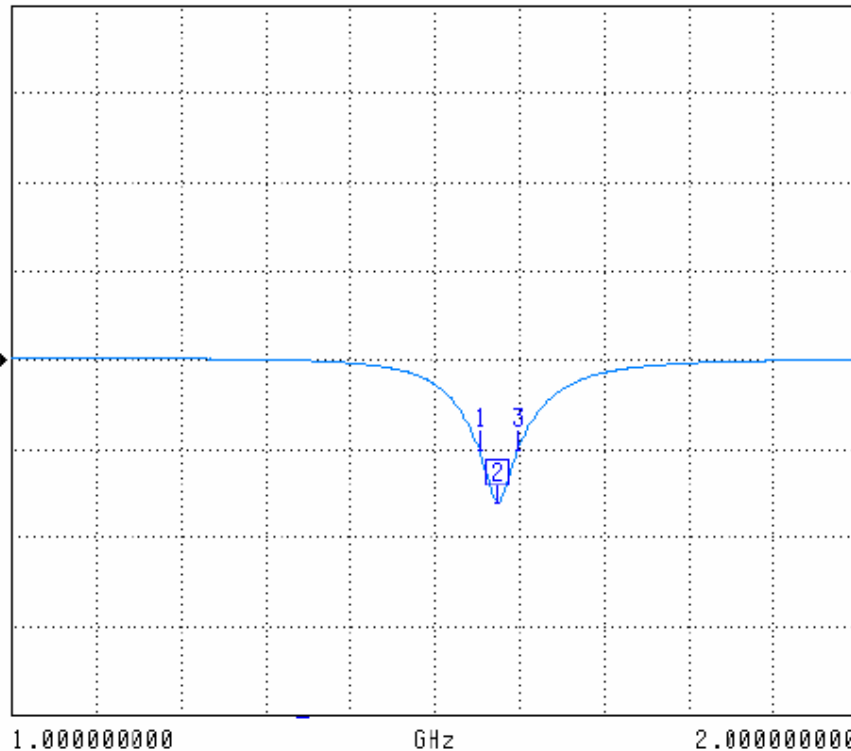
## Smith Chart of GPS002

S11 FORWARD REFLECTION

LOG MAGNITUDE

REF = 0.000 dB

10.000 dB/DIV



CH 1 - S11  
REFERENCE PLANE  
0.0000 mm

MARKER 2  
1.575000000 GHz  
-16.183 dB

MARKER TO MAX  
▶ MARKER TO MIN

**1** 1.553125000 GHz  
-10.249 dB

**3** 1.598437500 GHz  
-10.219 dB

MARKER READOUT  
FUNCTIONS