

ANTENNA PRODUCTS

DATA SHEET

1.575 GHz Circular Polarized Pin Feed Ceramic GPS Antenna (15*15*4 mm)

March, 2007, Rev.5

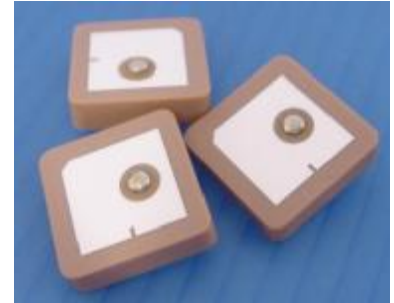
15*15*4 mm Pin Feed Ceramic Antenna for GPS Application				CAN 431342303158 1B				—	1	Dec. 23, 02	
								▶	2	Apr. 21, 03	
								—	3	Aug,2006	
BY / 製 定 者	Sunwiun.hu	SUPER / 原圖編號	C.T.Lee	TLL.S H/ 共頁	13	PAGE/ 頁	1	SH nr.	—	4	Nov. 2006
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**CERAMIC ANTENNA (CIRCULAR POLARIZATION PIN FEED TYPE)
FOR GLOBAL POSITIONING SYSTEMS (GPS) (1.575 GHz)**

Product Specification¹

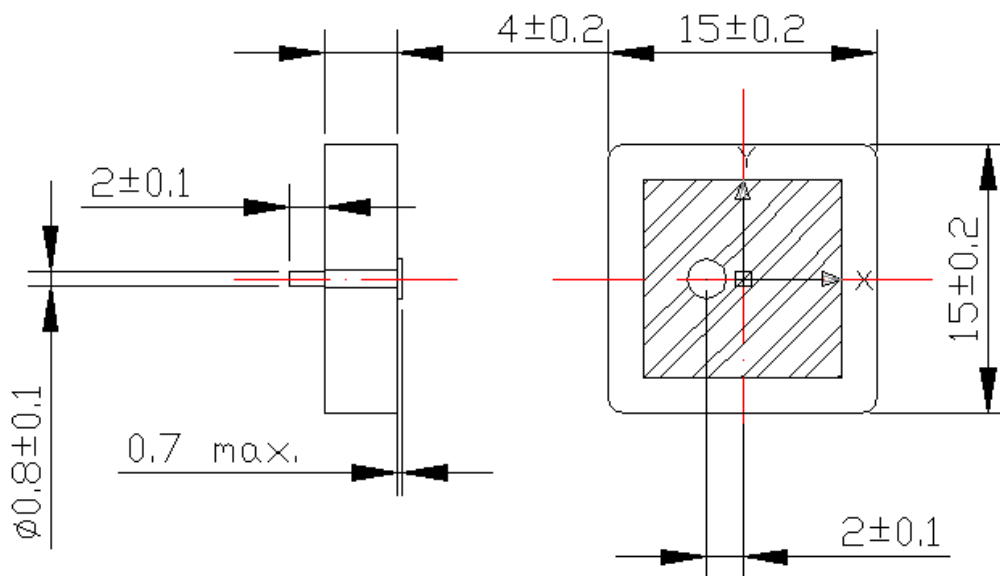
QUICK REFERENCE DATA

Central Frequency	1.575 GHz*
Bandwidth	8 MHz min**
Gain	2.5 dBi Max**
VSWR	2.0 max
Polarization	Right Hand Circular Polarization
Axis Ratio	less than 3dB for the centre frequency
Impedance	50Ω
Operating Temperature	-55~125 °C



* Central frequency will shift 5 MHz down when a non-metal cover is placed
 ** Based on ground size 40 * 40 mm size

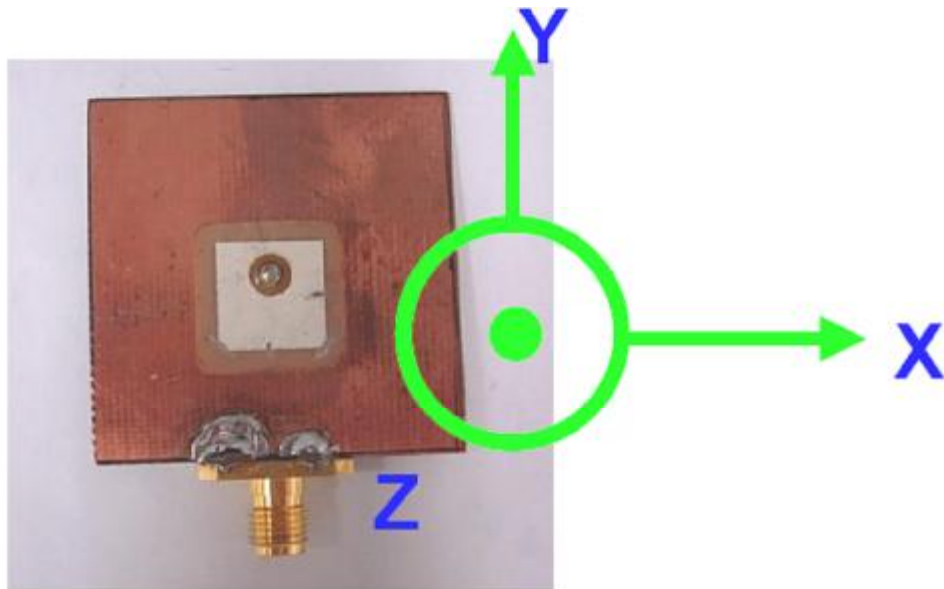
MECHANICAL DATA (15 * 15 * 4 mm)



¹ All the technical data and information contained herein are subject to change without prior notice

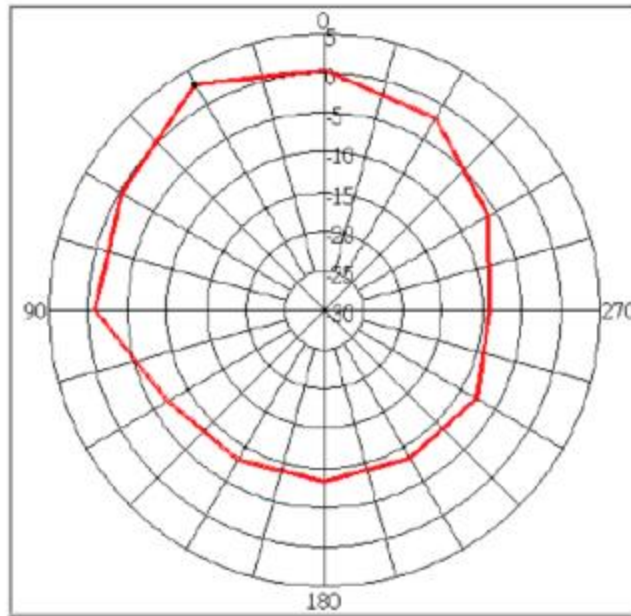
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Appearance of Demo Board (40x40mm)

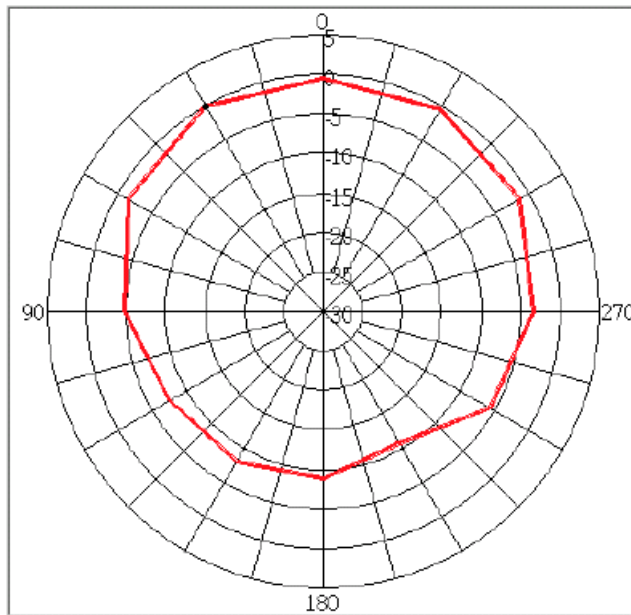


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Directivity Chart (with 40 * 40 mm square Ground Plane)



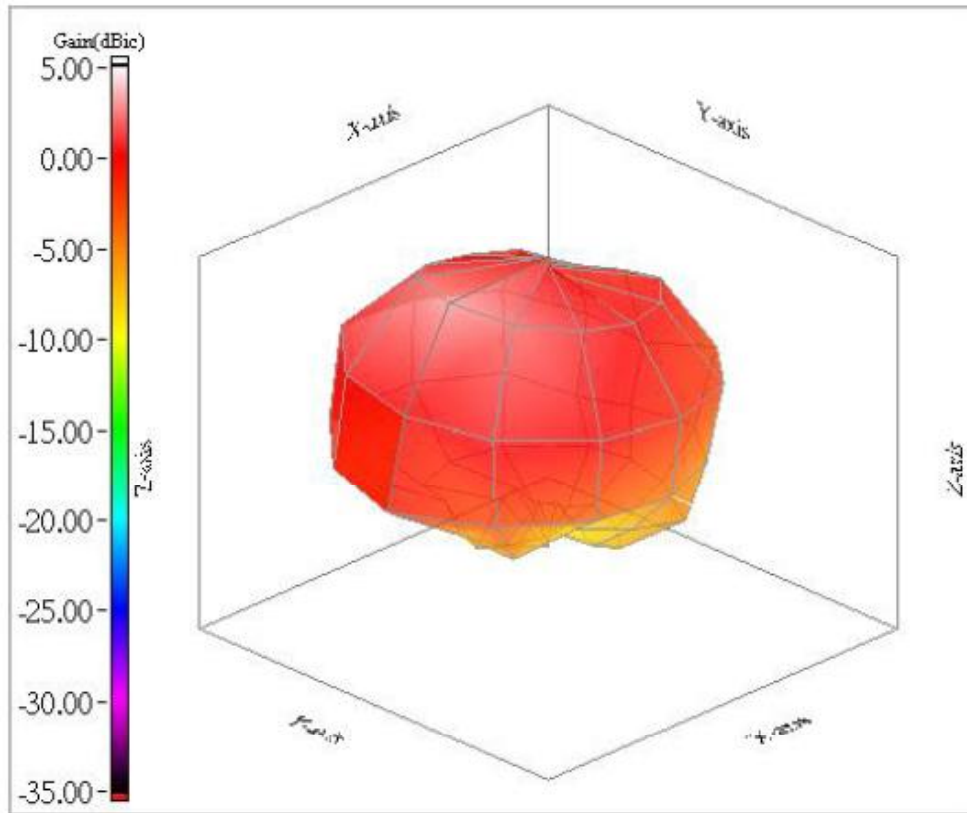
Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

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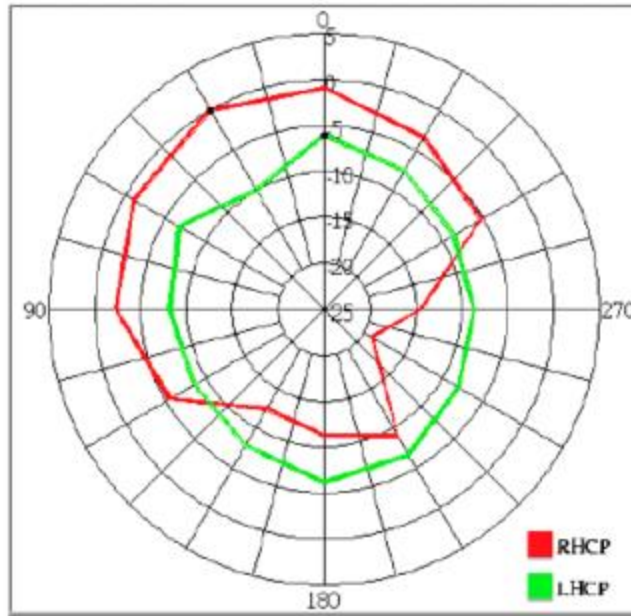
3D Radiation Pattern



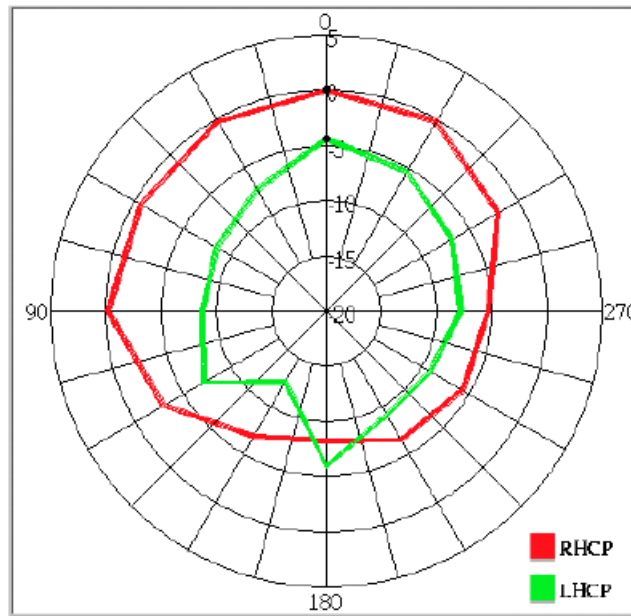
3D Circular Gain

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The Measurement of AR value

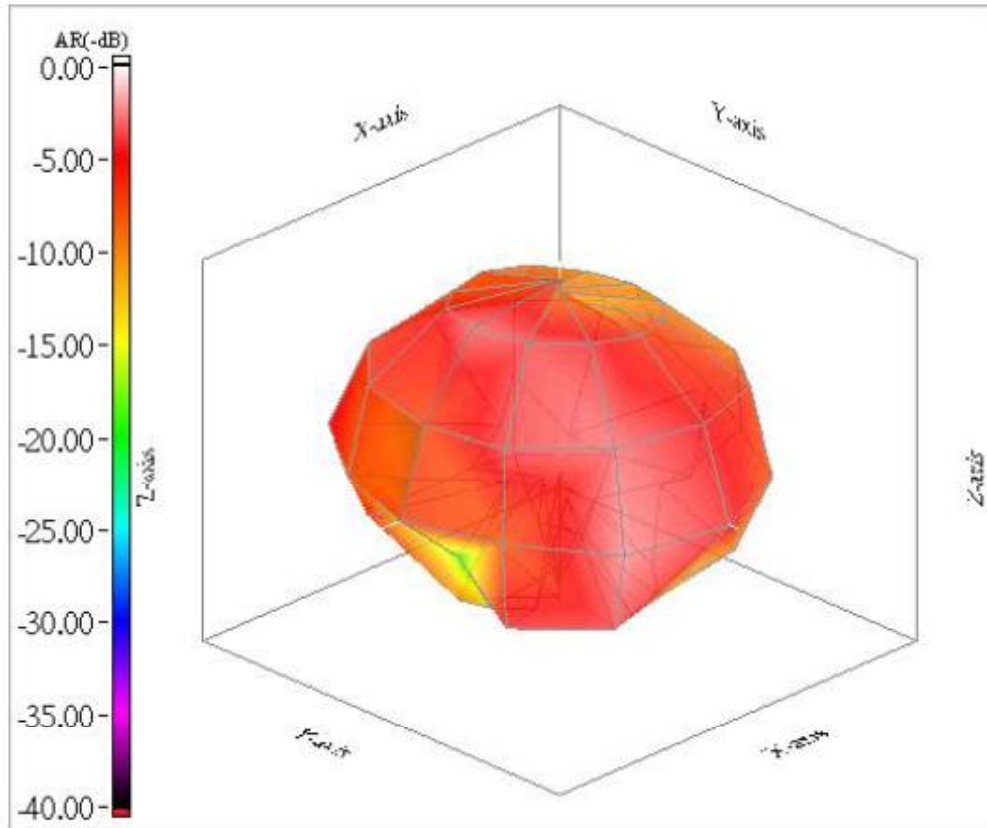


X-Z Plane



Y-Z Plane

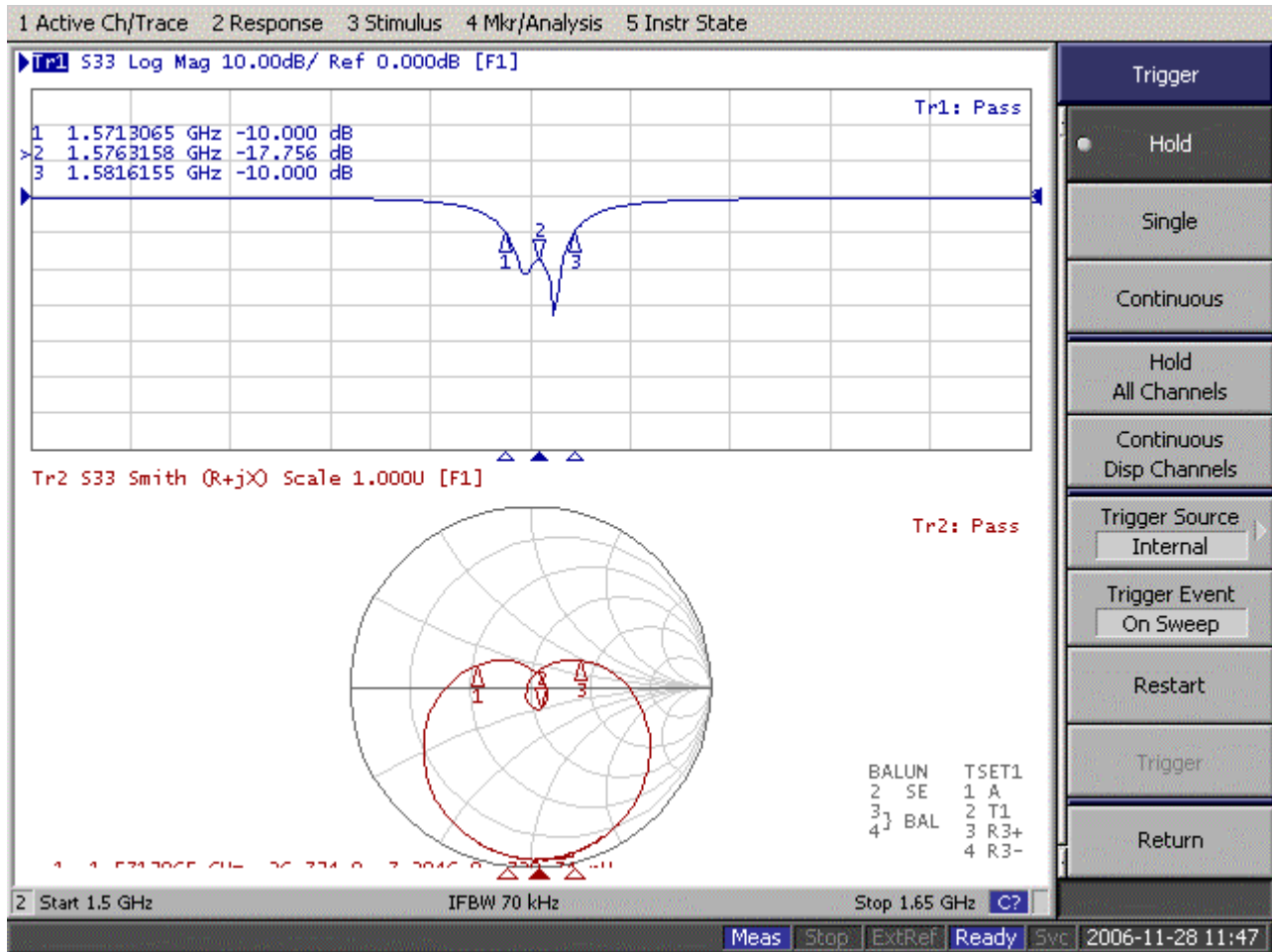
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3D Axial Ratio

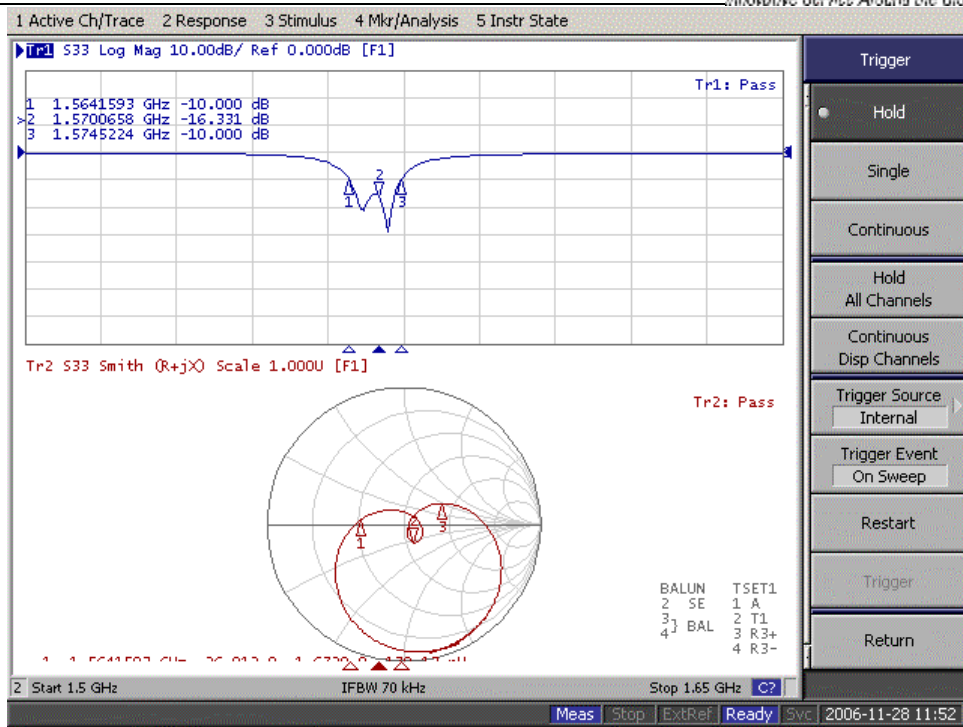
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Return Loss and Smith Chart (with 40 * 40 mm square Ground Plane)

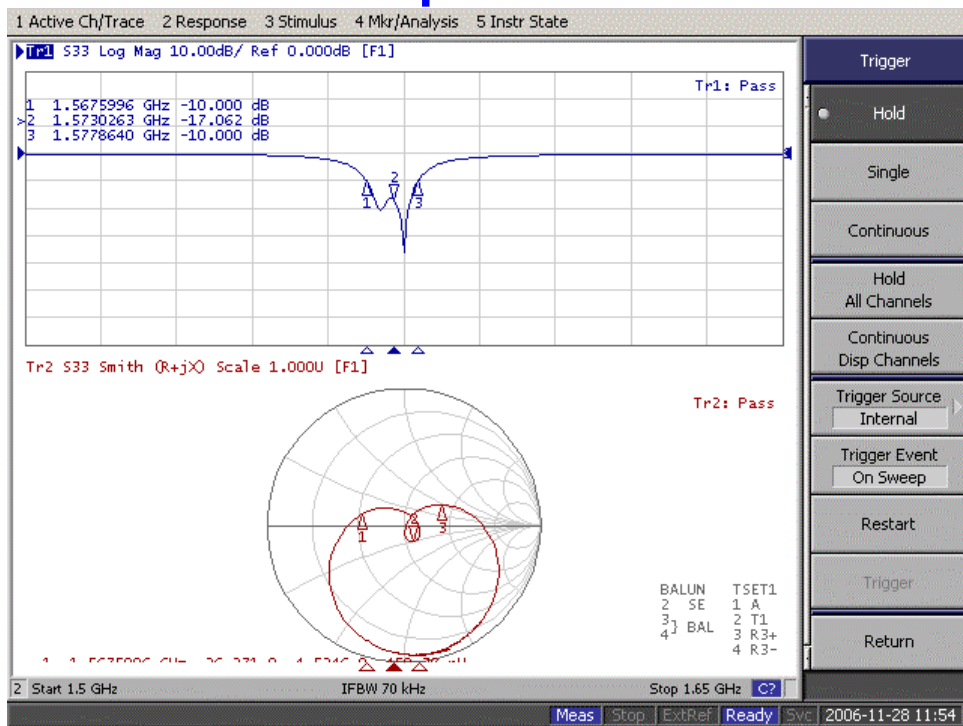


No tape

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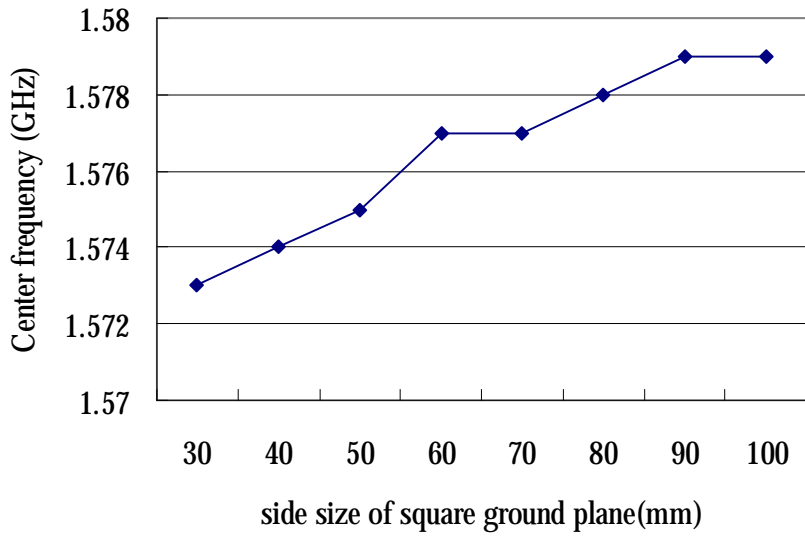
With tape and Liner



With tape but without Liner

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Center frequency v.s Ground plane (For example: 1.574GHz)



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ORDERING INFORMATION: 12NC Ordering Code

The antennas may be ordered by using the Yageo ordering code. These code numbers can be determined by the following rules:

CAN43 13 4 23 03 158 1B
 F C M S T A P

F. Family Code

CAN 43 = Antenna

C. Packing Type Code

13 = bulk packing

M. Materials Code

4 = High Frequency Material

S. Size code

23 = 15*15*4 mm

T. Type

03 = Pin Feed Type 3

A. Working Frequency

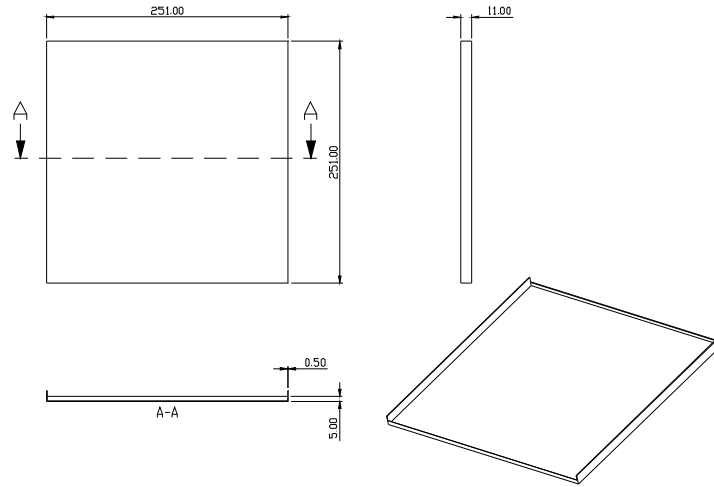
158 = 1.575 GHz

P. Packing Type Code

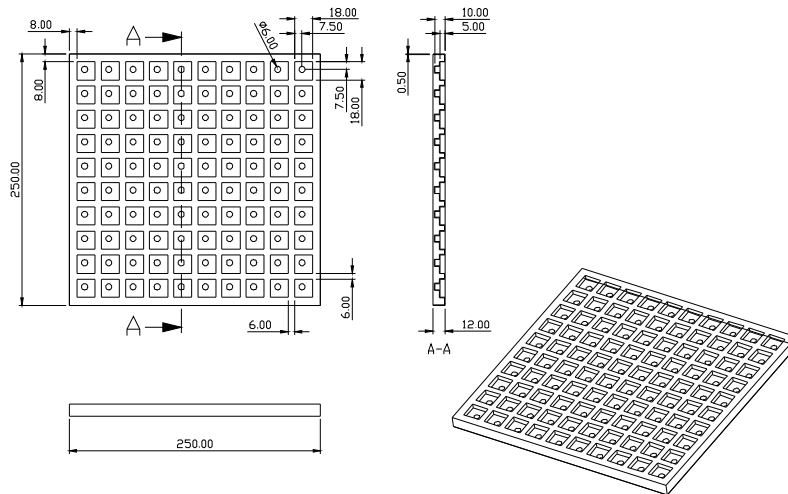
1B = bulk packing

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Packing Information



Cover Tray



Bottom Tray

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Revision Control:

Revision	Date	Content	Remark
1	Dec. 23, 2002	New Issued	
2	April 21, 2003	Dimension Tolerance, Packing style, and product picture	
3	Aug, 2006	Modification of measuring graph	
4	Nov. 2006	Modification of measuring graph	
5	March. 2007	Modification of radiation pattern and gain	

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