

ANTENNA PRODUCTS

DATA SHEET

1.575 GHz / GPS Circular Polarized Ceramic Antenna (Pin Type) 12*12*4 mm

2007 April, Rev.5

12*12*4 mm Pin Feed Ceramic Antenna for GPS Application				CAN4313422031581B				— ▶	1	Dec. 23, 03	
								— ▶	2	May., 06	
								— ▶	3	Nov.2006	
BY / 製定者	Sunwiun	SUPER / 原圖編號	C.T. Lee	TLL.SH / 共頁	12	PAGE/ 頁	1	SH nr.	— ▶	4	March, 2007
CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

CERAMIC ANTENNA (CIRCULAR POLARIZATION PIN FEED TYPE) FOR GLOBAL POSITIONING SYSTEMS (GPS) (1.575G Hz)

Product Specification¹

QUICK REFERENCE DATA

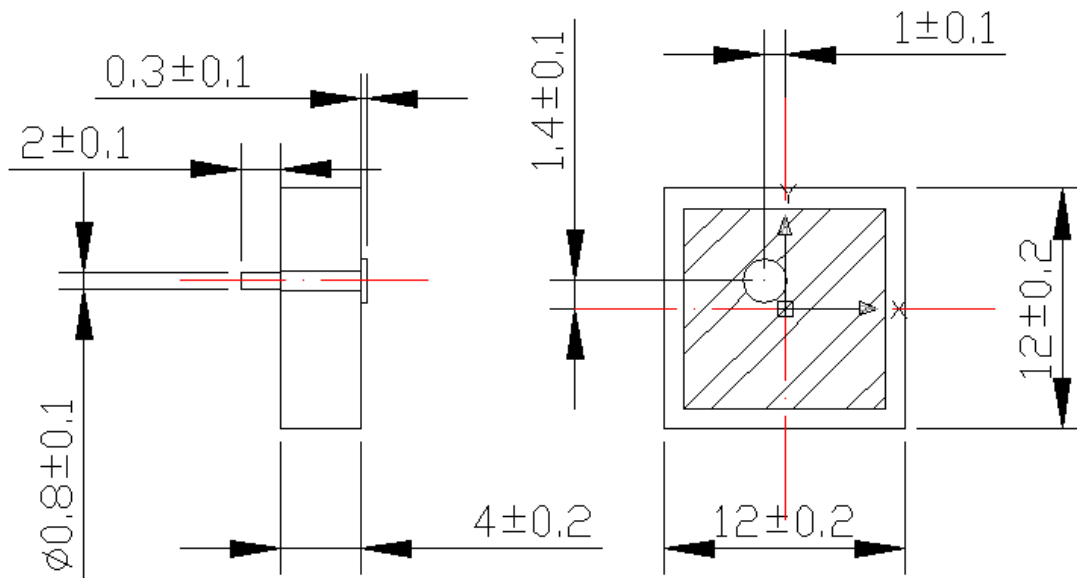
Central Frequency	1.575 GHz*
Bandwidth	9 MHz*
Gain	1 dBi
VSWR	2.5 max
Polarization	Right Hand Circular Polarization
Axis Ratio	<3dB
Impedance	50Ω
Operating Temperature	-25~125 °C



* Central frequency will shift 5 MHz down when a non-metal cover is placed

** Based on ground size 30 * 30 mm size

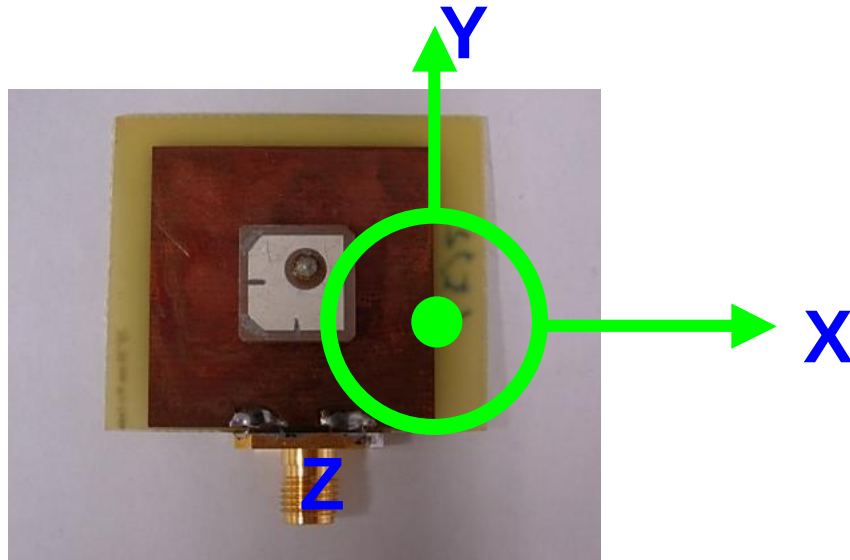
1. MECHANICAL DATA (12 * 12 * 4 mm)



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

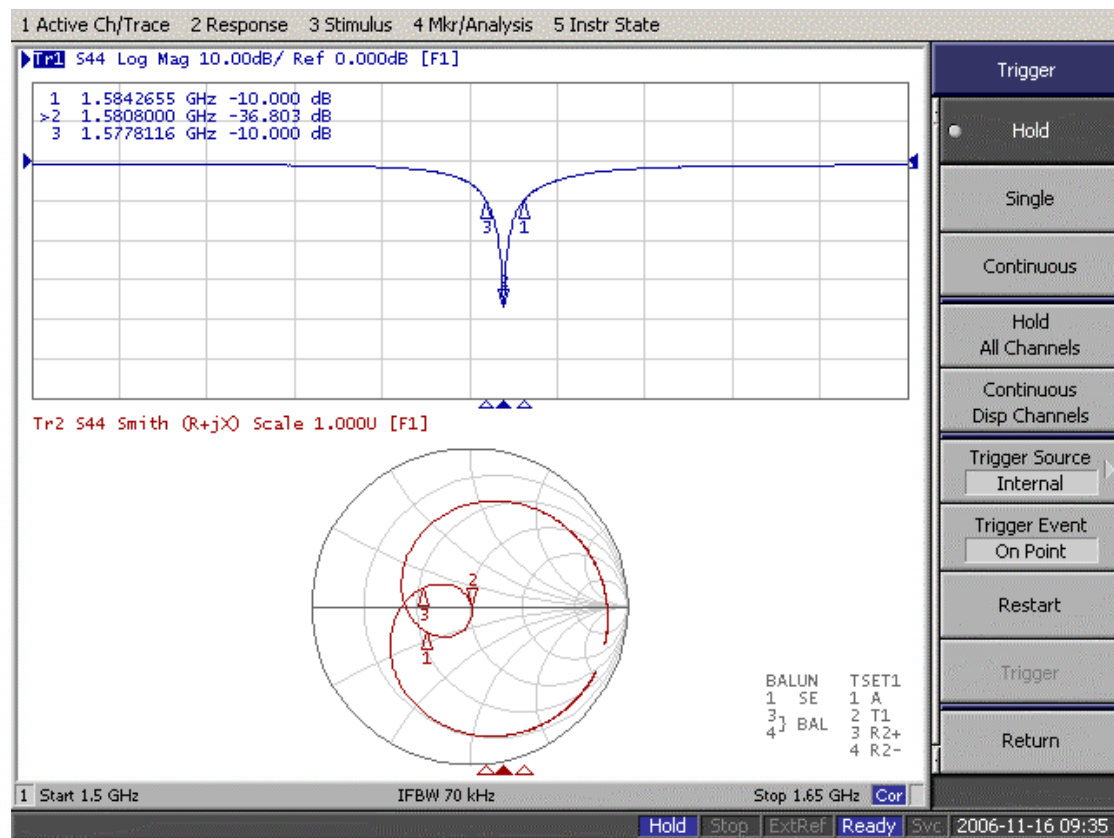
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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

Appearance of demo board (30x30mm ground plane)



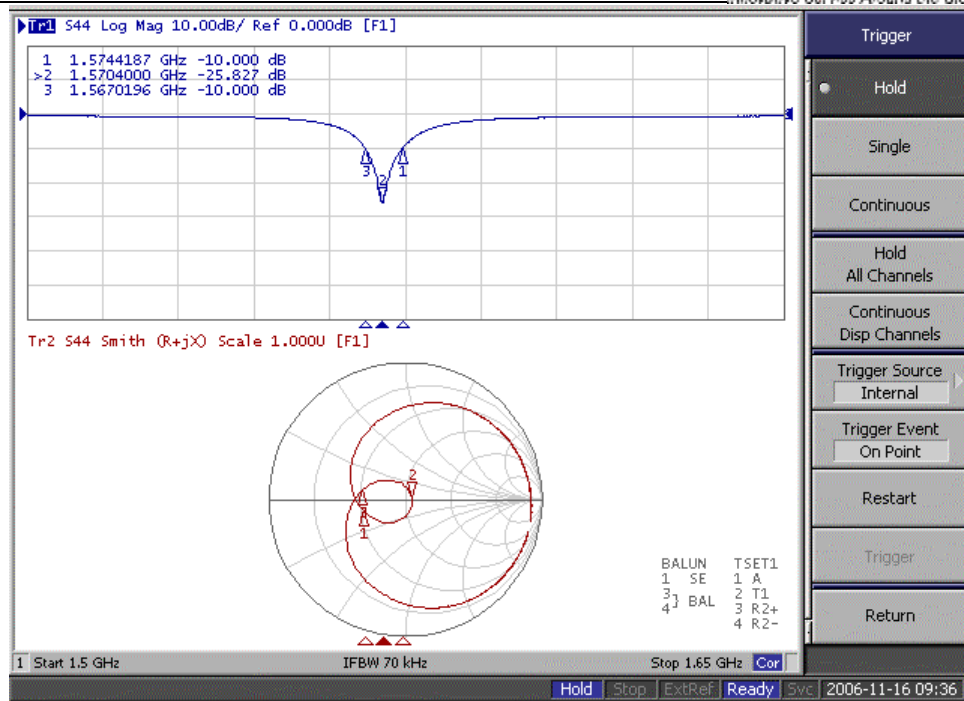
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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

Return Loss and Smith Chart (with 30 * 30 mm square Ground Plane)

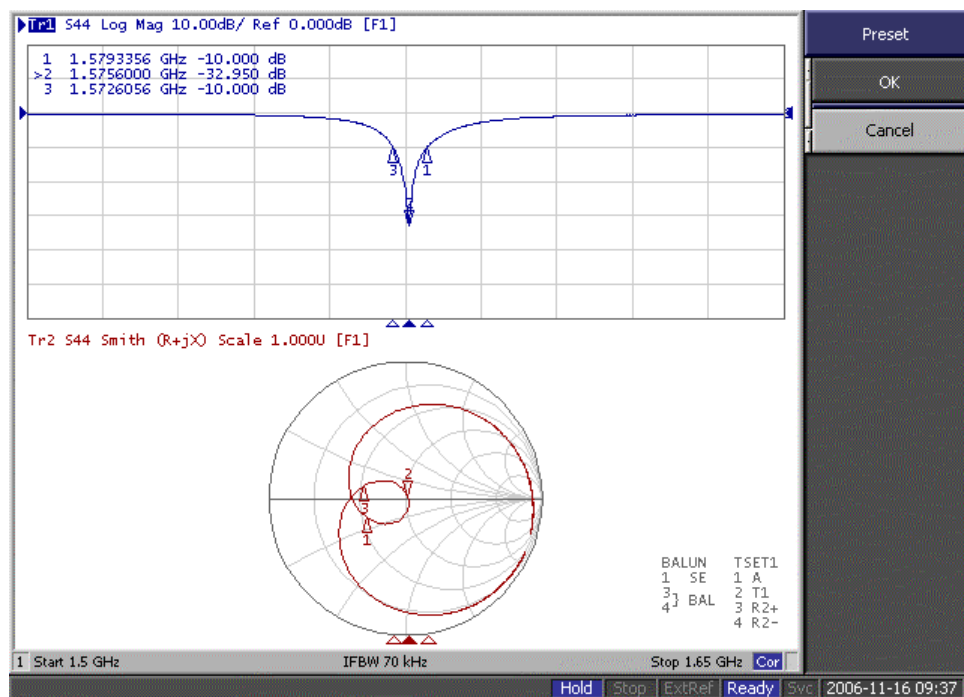


No tape

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CHECK				DATE / 日 期		March, 2007			— ▶	5	2007/04



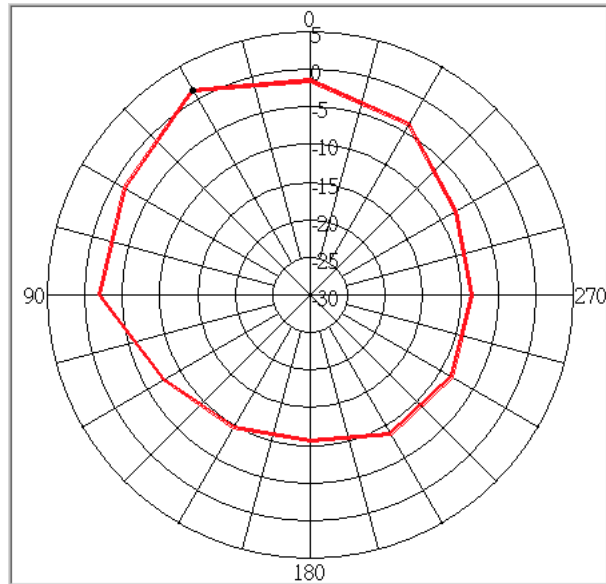
With tape and Liner



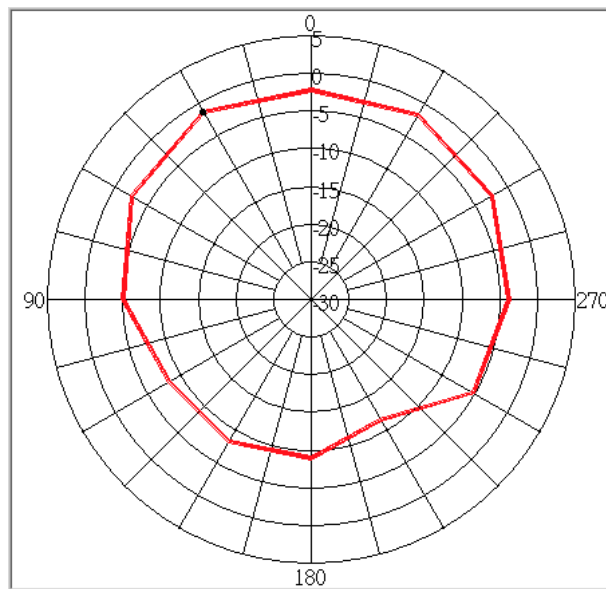
With tape but without Liner

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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

2D Circular gain measurement (with 30 *30 mm square Ground Plane)



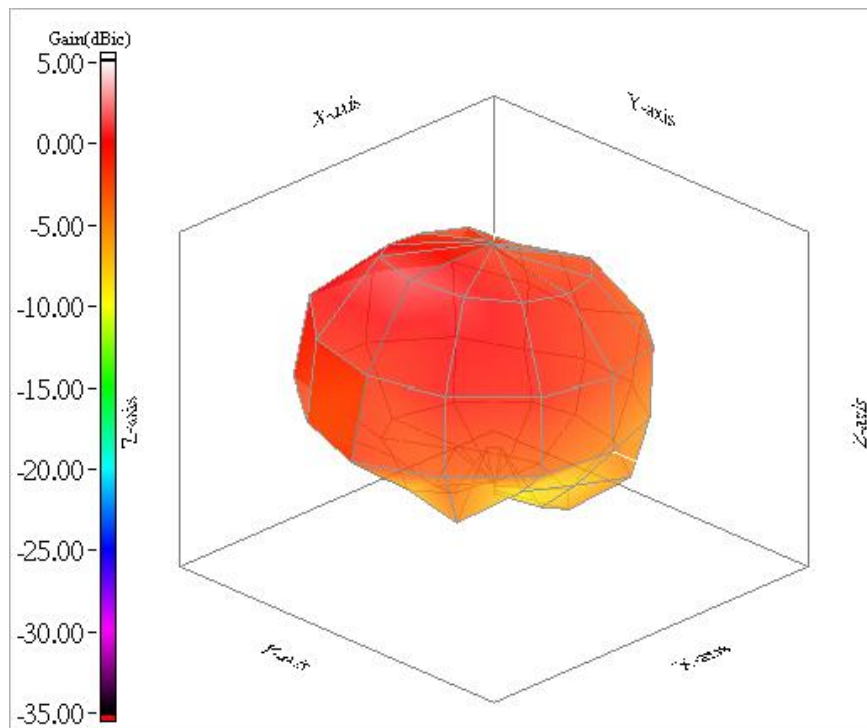
Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

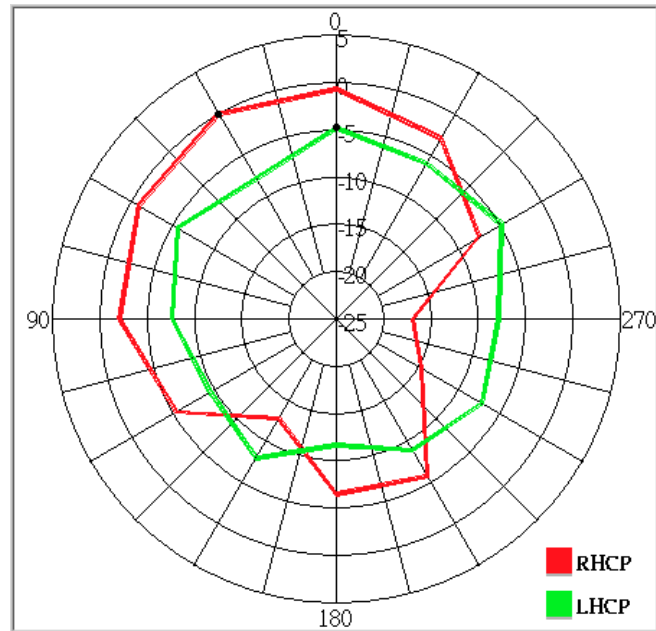
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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

3D Circular gain measurement

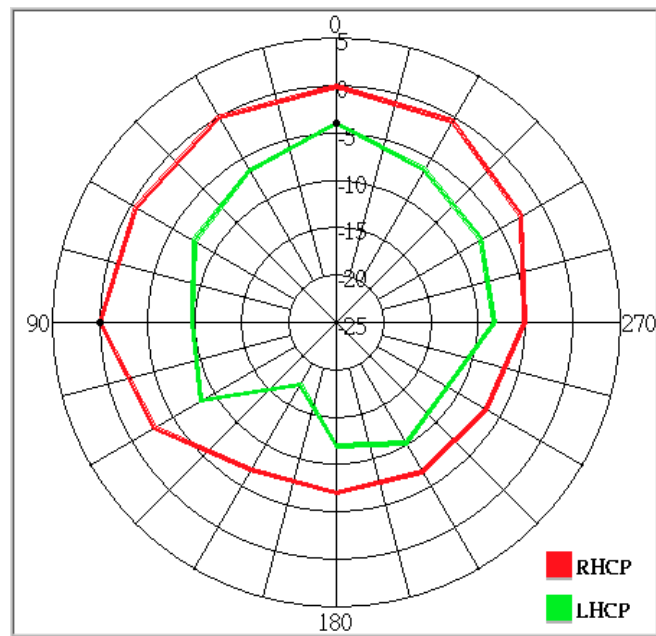


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								— ▶	3	Nov.2006	
BY / 製定者	Sunwiun	SUPER / 原圖編號	C.T. Lee	TLL.SH / 共頁	12	PAGE/ 頁	7	SH nr.	— ▶	4	March, 2007
CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

Circular gain 2D pattern for AR measurement



Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

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Ceramic Antenna
for GPS Application

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Sunwiun

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原圖編號

C.T.
Lee

TLL.SH
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12

PAGE/
頁

8

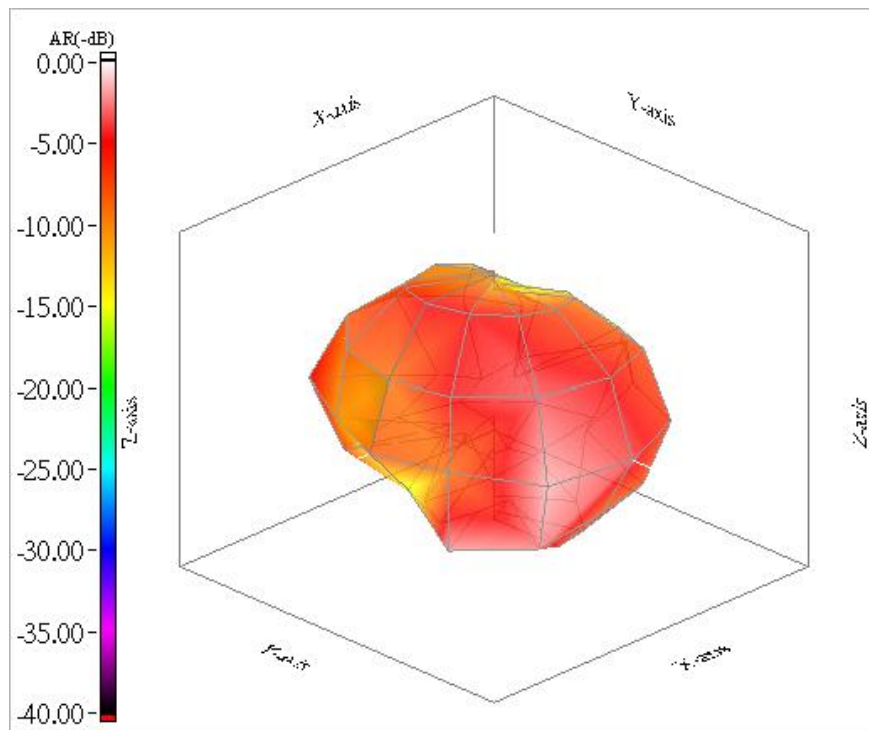
SH nr.

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3D Axial Ratio



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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

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:

CAN 43 13 4 22 03 158 1B
 F C M S T A P

CAN = Yageo Part No. for Antenna

F. Family Code

43 = Antenna

C. Packing Type Code

13 = bulk packaging

M. Materials Code

4 = High Frequency Material

S. Size Code

22 = 12 * 12 * 4 mm by pin feed

T. Type

03 = Pin Feed Type

A. Working Frequency

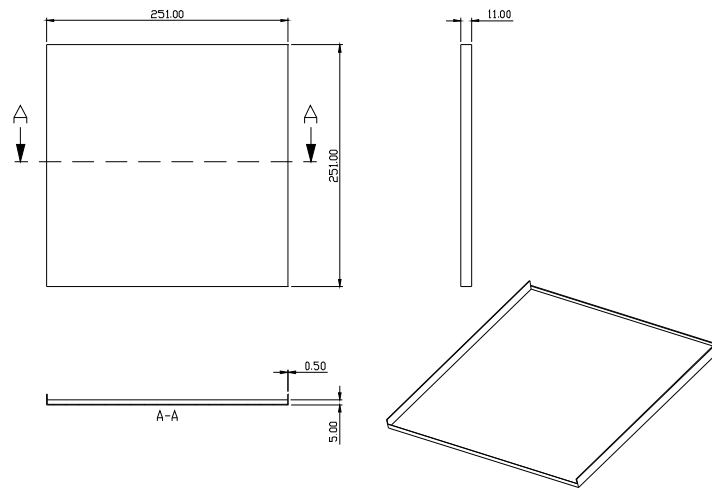
158 = 1.575 GHz

P. Packing Type Code

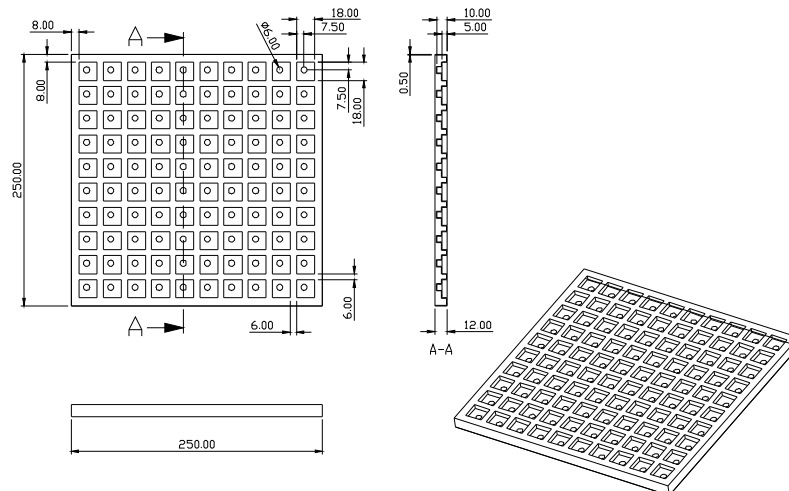
1B = bulk packaging

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CHECK				DATE / 日 期		March, 2007			— ▶	5	2007/04

6.Packing Information



Cover Tray



Bottom Tray

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CHECK				DATE / 日期		March, 2007			— ▶	5	2007/04

Revision Control:

Revision	Date	Content	Remark
1	Dec. 23, 2003	New Issued	
2	May, 2006	Modify measuring graph and add 3D chart	
3	November, 2006	Modify measuring graph	
4	March, 2007	Updated the circular gain measurement	
5	April, 2007	Add graph of demo board	

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