

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
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**CERAMIC ANTENNA (CIRCULAR POLARIZATION PIN FEED TYPE)
FOR GLOBAL POSITIONING SYSTEMS (GPS) (1.575 GHz)**

Product Specification¹



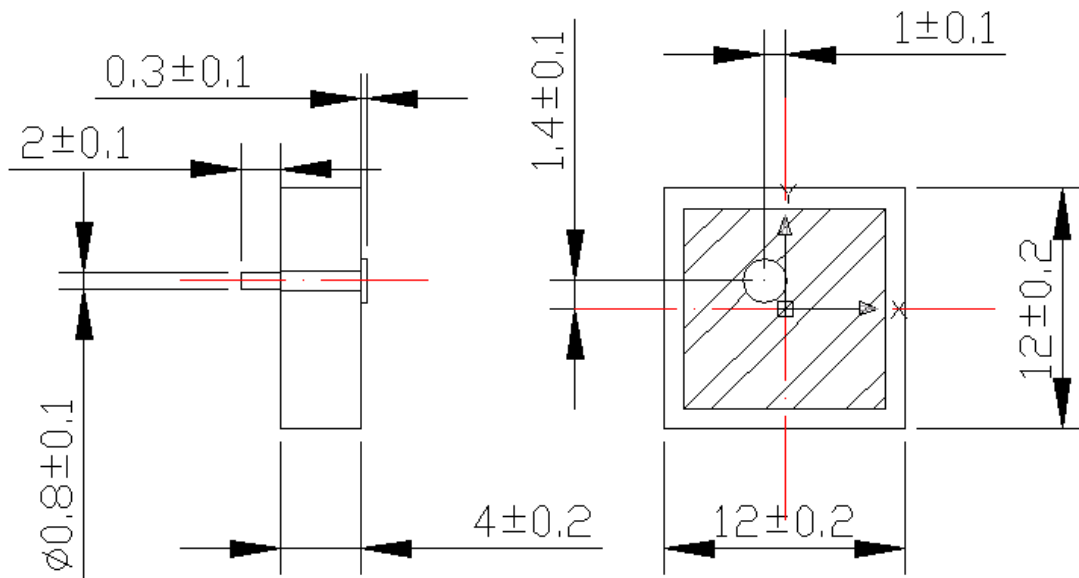
QUICK REFERENCE DATA

Central Frequency	1.575 GHz*
Bandwidth	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

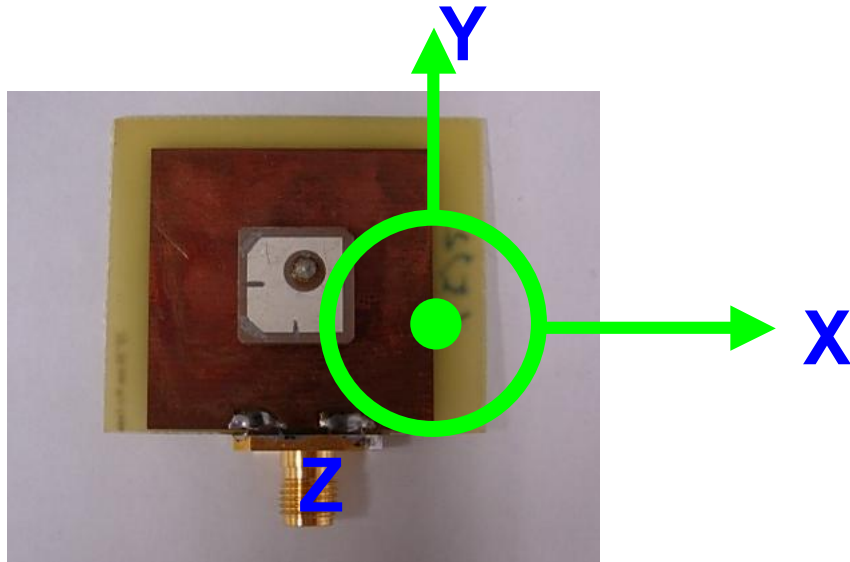
1. MECHANICAL DATA (12 * 12 * 4 mm)



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

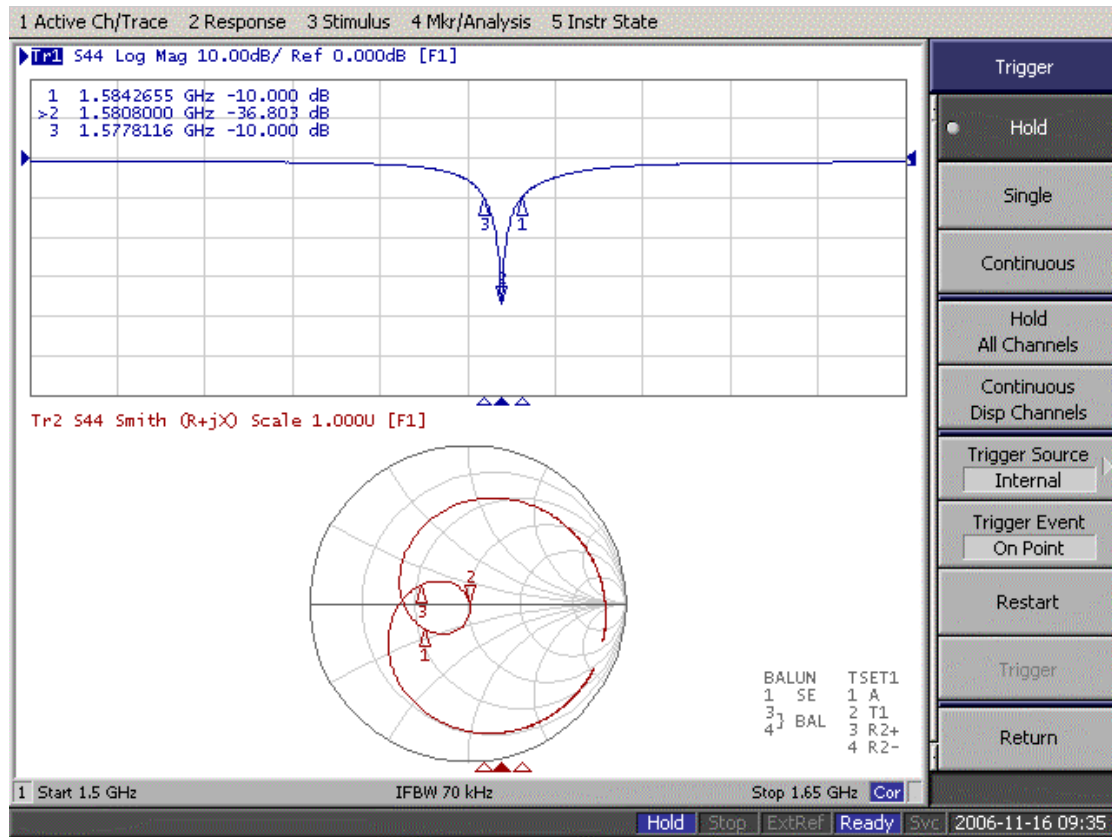
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Appearance of demo board (30x30mm ground plane)



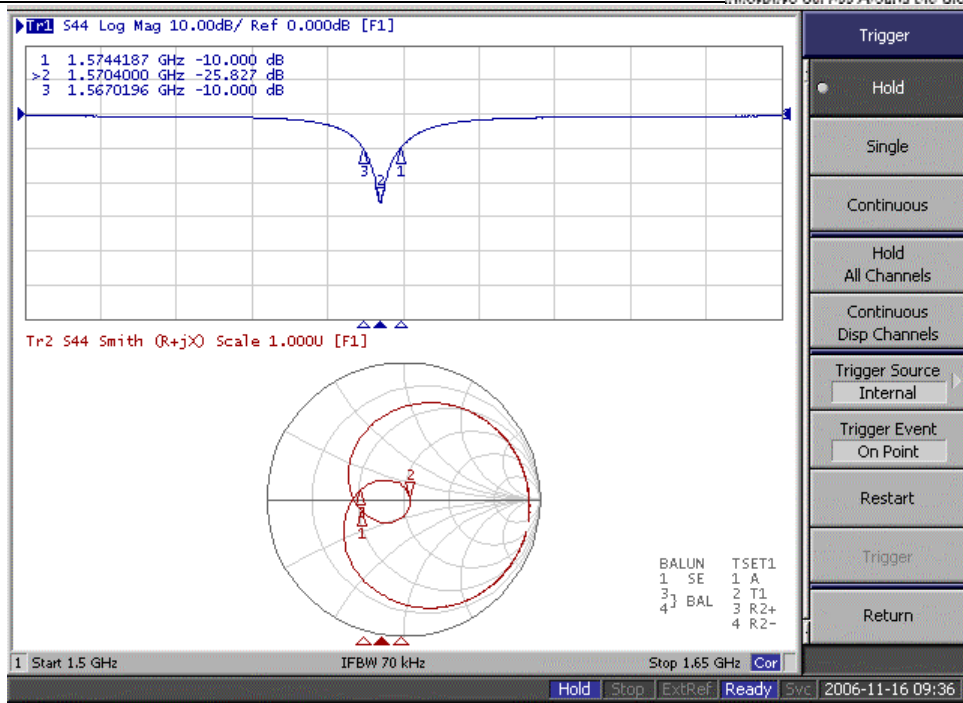
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Return Loss and Smith Chart (with 30 * 30 mm square Ground Plane)

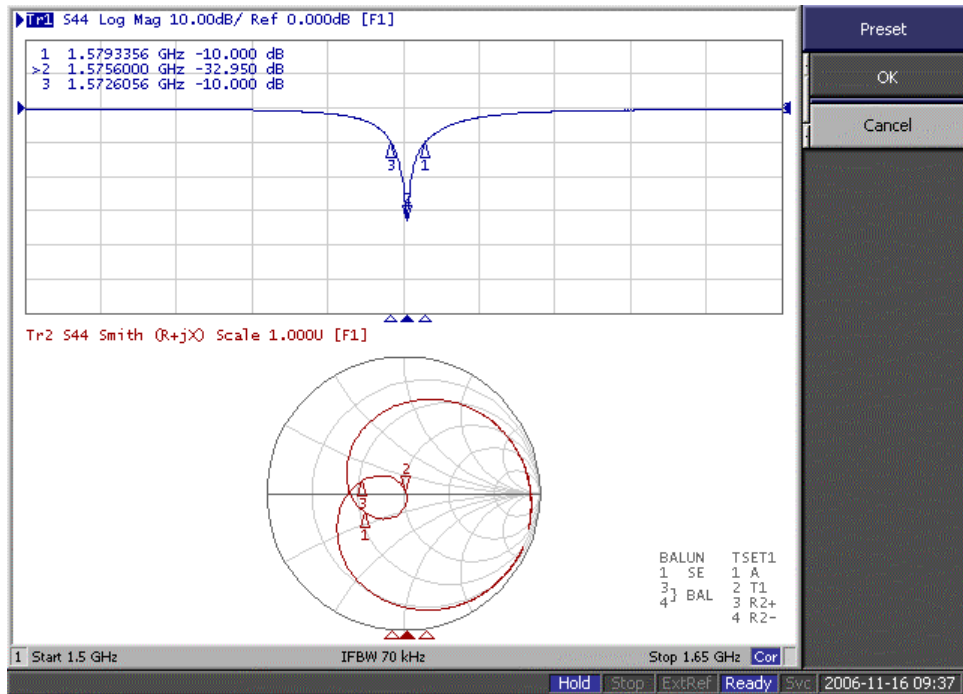


No tape

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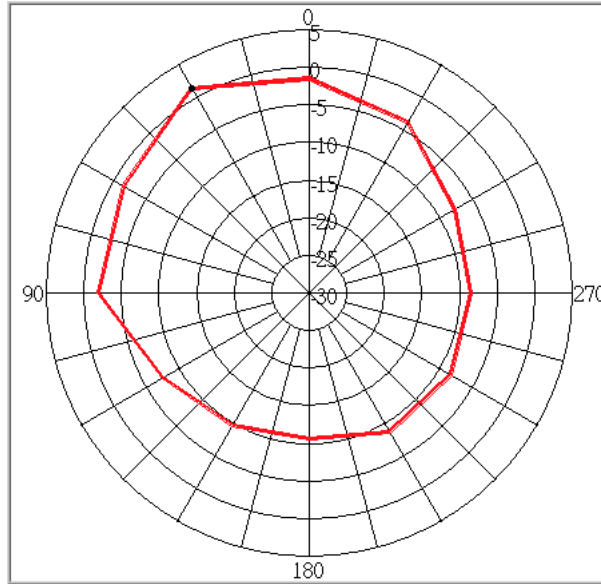
With tape and Liner



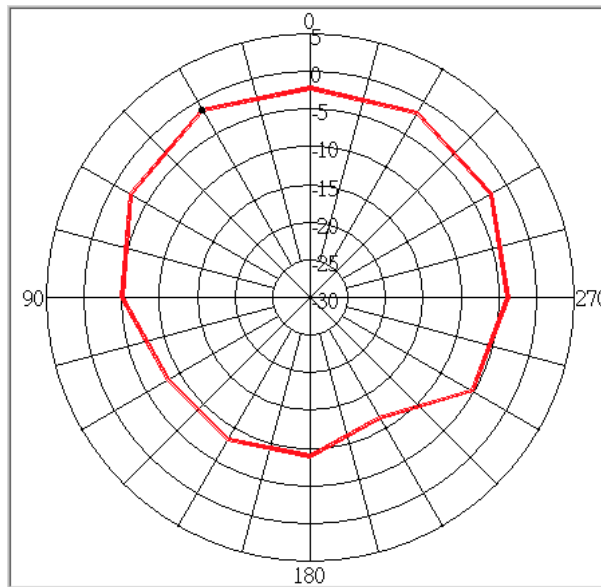
With tape but without Liner

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



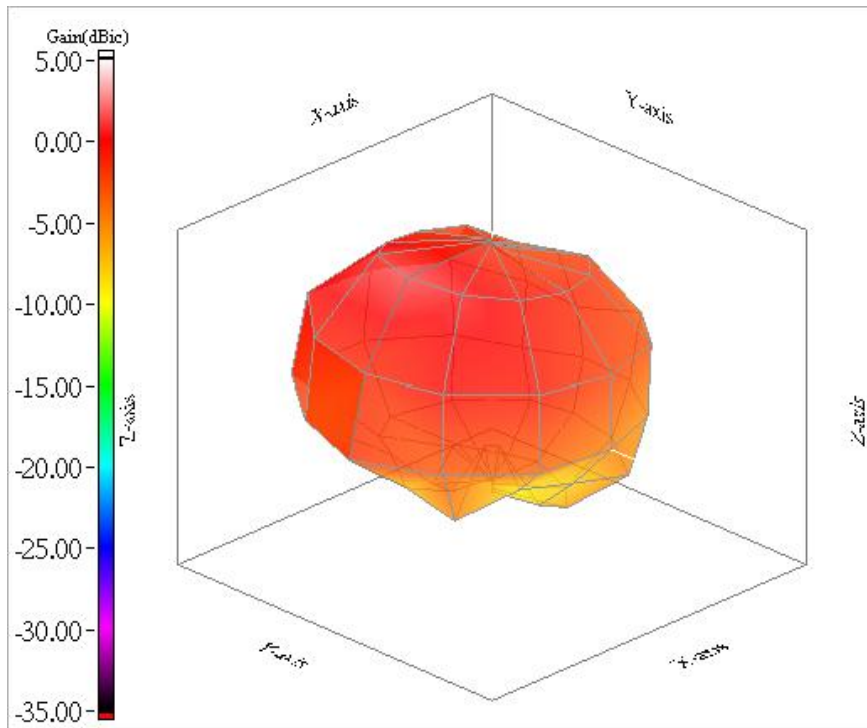
Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

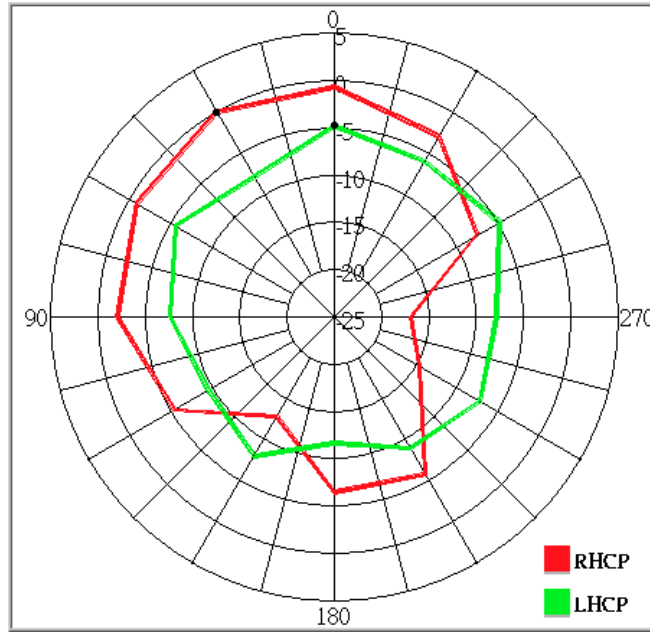
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3D Circular gain measurement

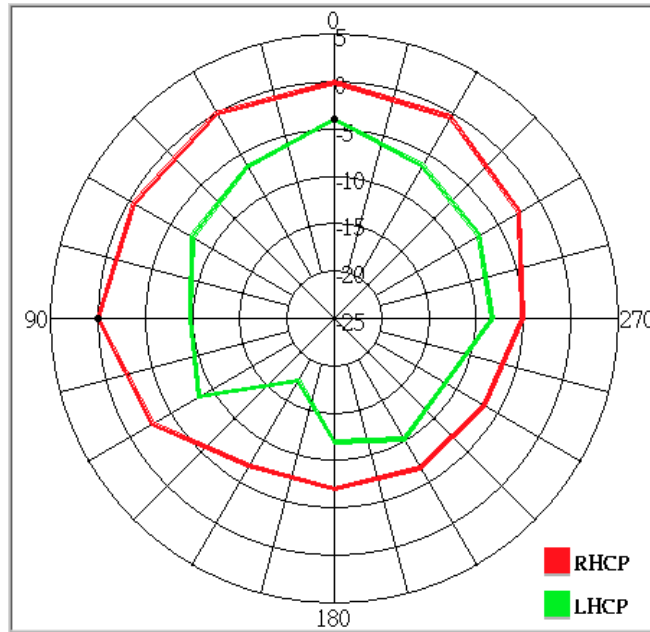


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Circular gain 2D pattern for AR measurement



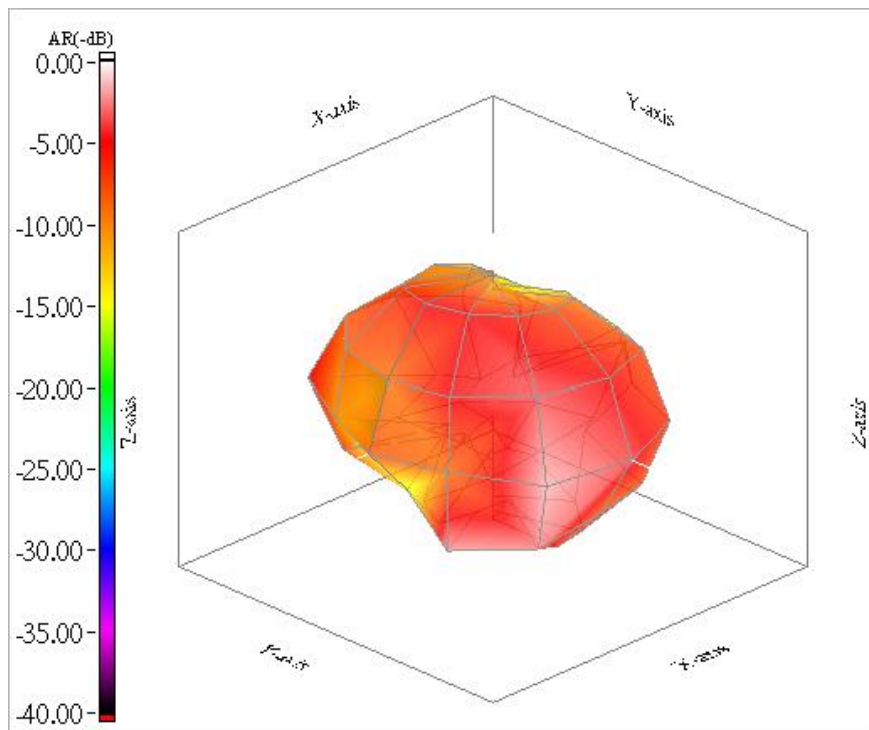
Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

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3D Axial Ratio



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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:

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

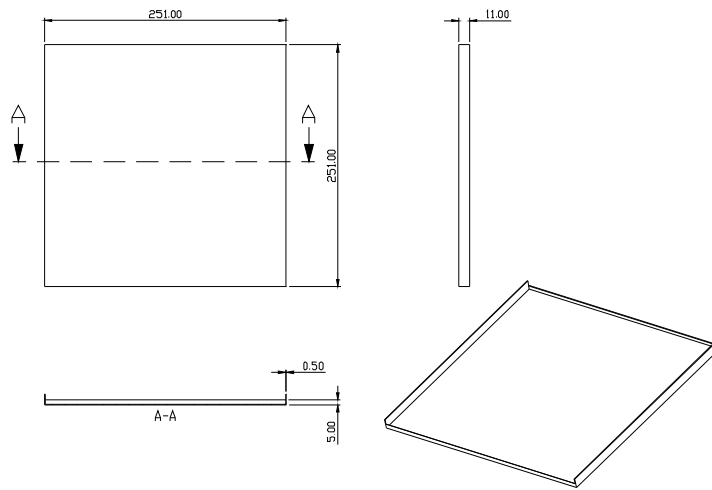
T. Type
03 = Pin Feed Type

A. Working Frequency
158 = 1.575 GHz

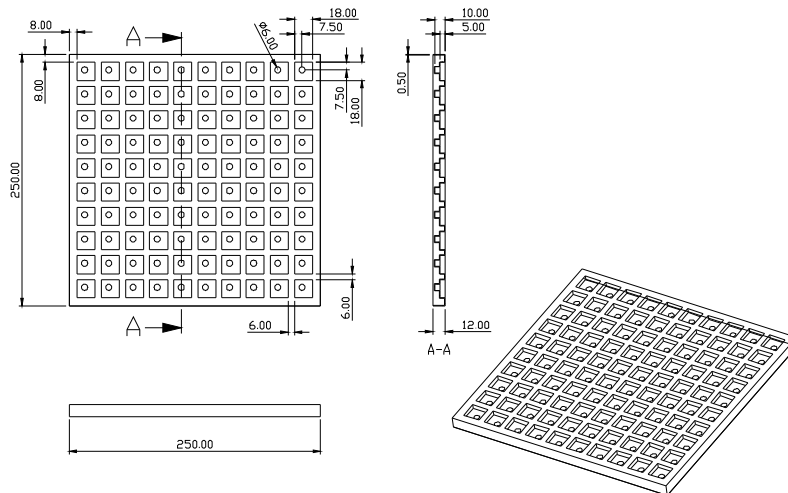
P. Packing Type Code
1B = bulk packaging

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6.Packing Information



Cover Tray



Bottom Tray

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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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