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## Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



**CERAMIC DIELECTRIC RESONANCE ANTENNA**  
**For IEEE 802.11a 5.2GHz**

**Product Specification<sup>1</sup> (Preliminary)**

**QUICK REFERENCE DATA**

Central Frequency	5.265 GHz*
Bandwidth	210 MHz**
Frequency Range	5.160 ~ 5.370 GHz**
Gain	5 dBi Max**
VSWR	2.0 max
Polarization	Linear Polarization
Impedance	50Ω
Operating Temperature	-55~125 °C

\* Central frequency will shift 5 ~20 MHz down when a non-metal cover is placed

\*\* Based on ground size 15 \* 10 mm size

**1. Solder Land Pattern**

Figure	Dimension	Remark	
	S1	0.5±0.15mm	---
	D1	9.0±0.15 mm	---
	D2	4.0±0.15 mm	---
	D3	6.0±0.15 mm	---
	D4	9.0±0.15 mm	---
	F1	1.0±0.15 mm	Feed Pad
	F2	0.4±0.15mm	Feed Pad
	F3	4.0±0.15 mm	Feed Pad

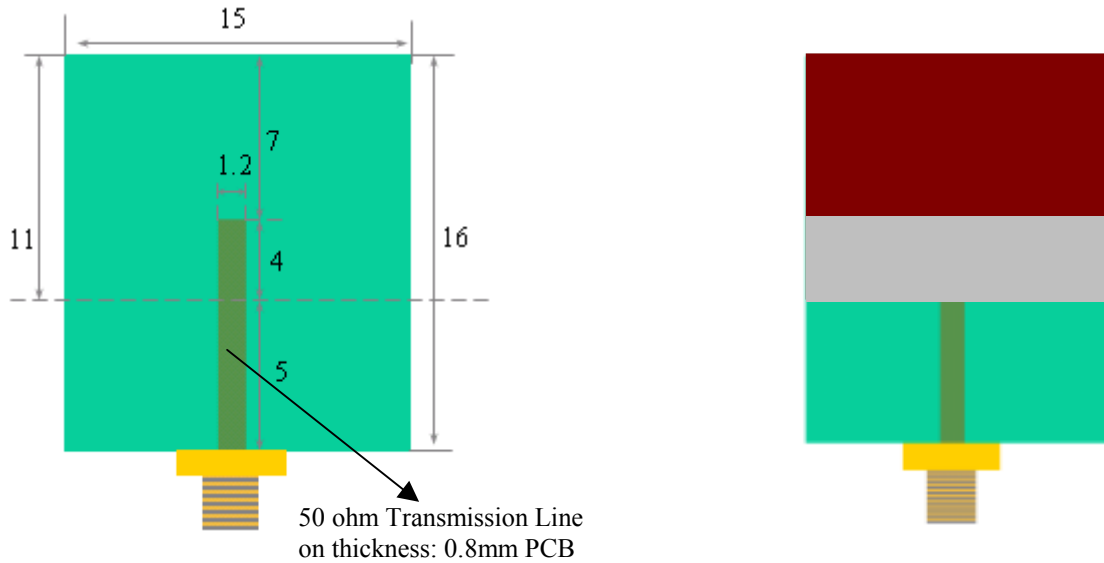
R&D	Print date 01/12/13		Preliminary use only			
	<b>Ceramic Dielectric Resonance Antenna for IEEE 802.11a 5.2GHz</b>		<b>4313 213 06158</b>		2001-3-29	
					2001-6-19 2001-7-10	
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## 2.Mechanical Data

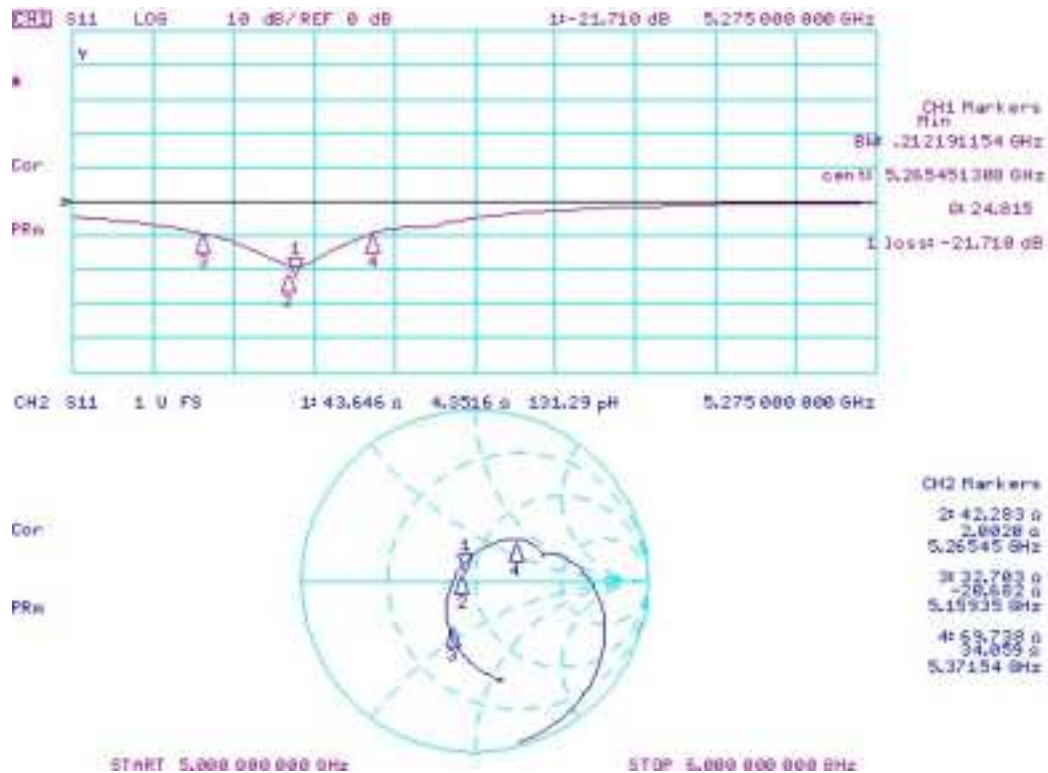
Figure	Dimension	Port	
<p style="text-align: center;">Back View</p> <p style="text-align: center;">Top View</p>	L	10.0±0.1 mm	---
	W	10.0±0.1 mm	---
	T	2.4±0.15 mm	---
	F1	1.0±0.15 mm	Feed Pad
	F2	3.0±0.15 mm	Feed Pad
	S1	0.5±0.15 mm	Solder Pad
	D1	4.0±0.15 mm	Solder Pad
	D2	9.0±0.15 mm	---
	D3	6.0±0.15 mm	---
	D4	4.0±0.15 mm	---

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### 3. Test Board Dimension (Unit: mm)



### 4. Return Loss and Smith Chart on Test Board



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**ORDERING INFORMATION: 12NC Ordering Code**

The CP mode GPS antennas may be ordered by using the 12 NC ordering code. These code numbers can be determined by the following rules:

4313 2 13 06 158  
F C MS T A

F. Family Code

**43** = Antenna

C. Packing Type Code

**13** = bulk packaging, 1000 pcs

M. Materials Code

**2** = High Frequency Material

S. Size Code

**13** = 12 \* 12 \* 4 mm

T. Tolerance

**06** = 6 M Hz Band Width

A. Working Frequency

**158** = 1.58 GHz

**Example: 12NC 4313 213 06158**  
 Product description: Antenna (43) by 1000 pcs bulk (13) of High Frequency Material (2), Size 12\*12\*4 mm (13);  
 Tolerance (06) of 6 MHz Band Width (VSWR<2)  
 Working Frequency (158) = 1.58G Hz

**ORDERING INFORMATION: Method II- by Clear Text Code (Temporary)**

The antennas may be ordered by using the 16-digit clear text ordering code. These code numbers can be determined by the following rules:

<b>AN1580069012121B (Clear Text Code Example)</b>						
AN	1580	06	90	1212	1	B
Product	Central Freq.	Bandwidth	Material	Size	Quantities	Packing
AN= Antenna	1580=1.58GHz	06= 6MHz	90=K90	1212=12*12*4 mm	1 = 1K	B = Bulk

R&D	Print date 01/12/13		Preliminary use only			
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