





SPECIFICATION

Product Name	MULTILAYER CHIP ANTENNA
Customer	INGSTEL
Model Name	IA203
Customer Code.	
Provider	RadiAnt
Part Code.	RC0801-0000AA

Buyer	Submitted	Checked		Approved
RadiAnt	Submitted	Checked	Checked	Approved
				

– Table of Contents –

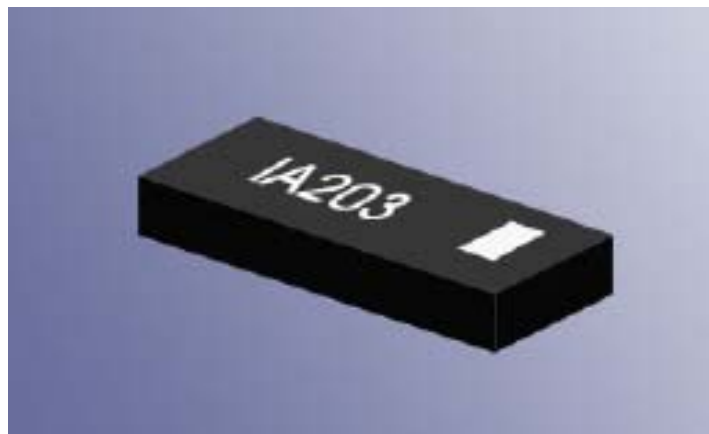
1. Product History	3
2. Specifications	4
3. Electric Performance Data	5
4. Drawing	9
5. Construction	9
6. Packing	10
7. Certification of RoHS	11

1. Product History

LIST					
NO	Data	Front	After	Change	REV
1	2009.04.01			Approval	0
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

2. Specifications

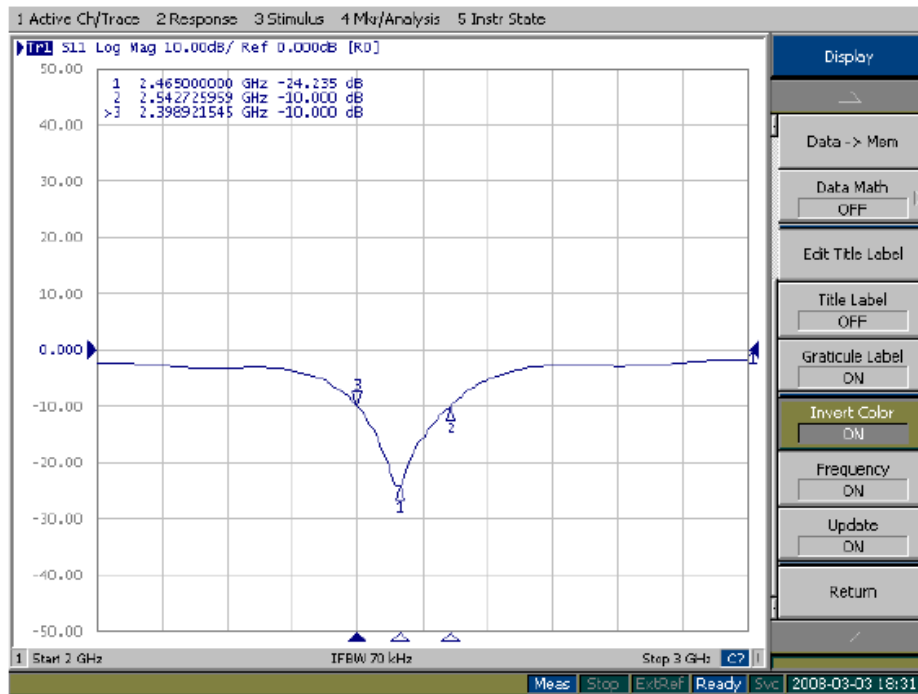
TYPE	Specifications
Frequency	2.4 ~ 2.483GHz
Dimension	5.2 x 2.0 x 1.2 (mm)
Impedance	50Ω
Polarization	Linear
V.S.W.R	2.0
Gain	Typical Gain = 2 dBi
Operating Temperature	-25 ~ +85 ℃
Weight	0.03g



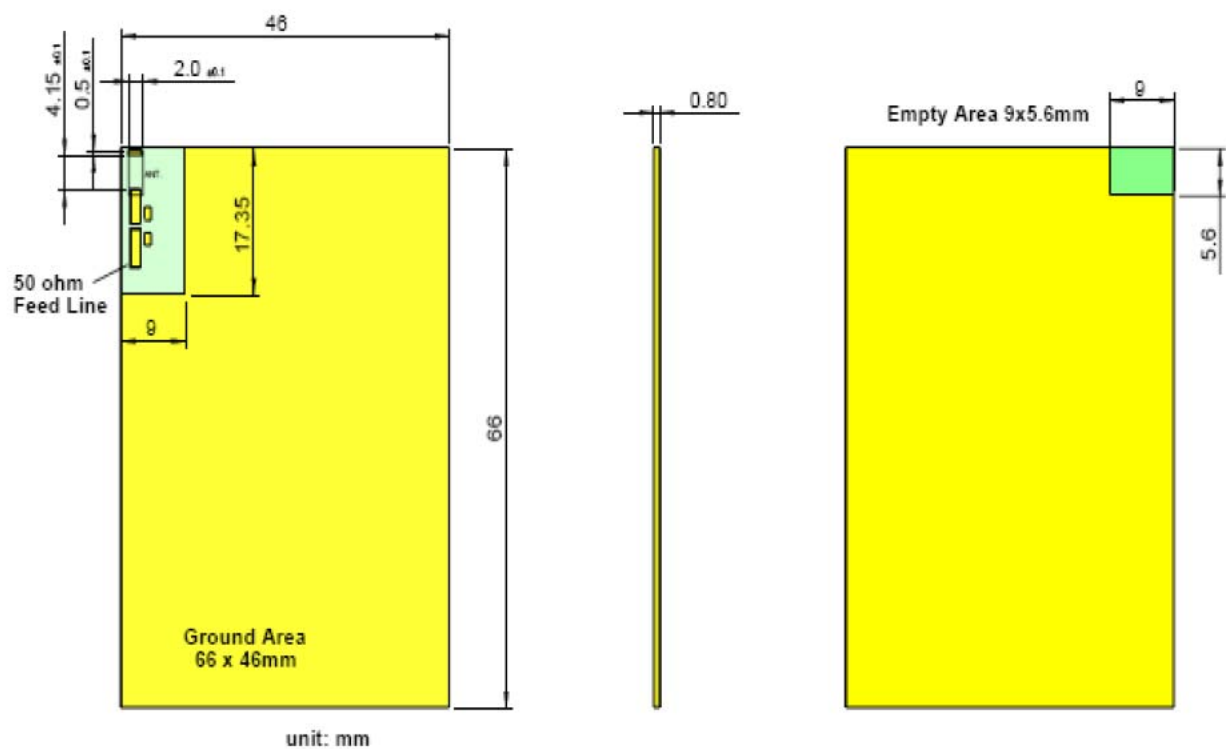
<IA203>

3. Electric Performance Data

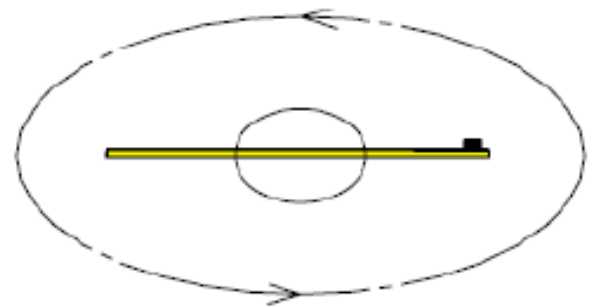
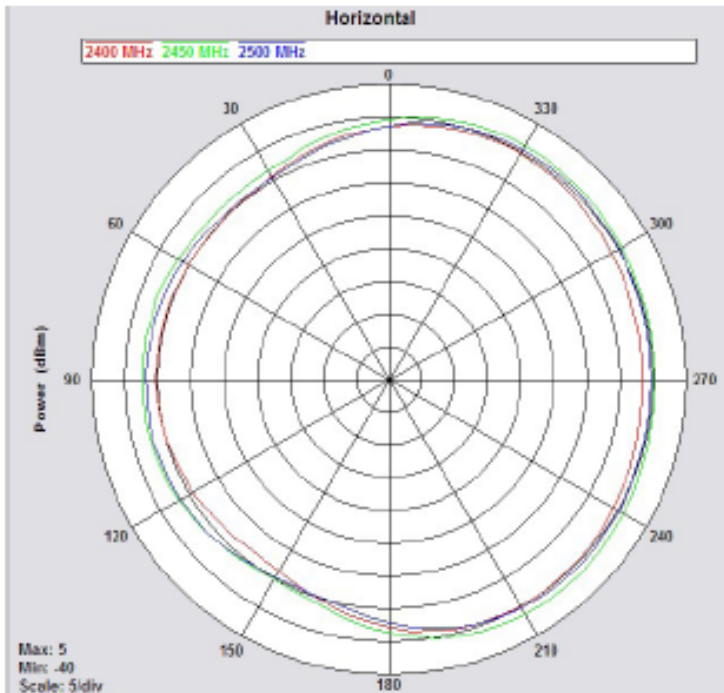
3.1 S11



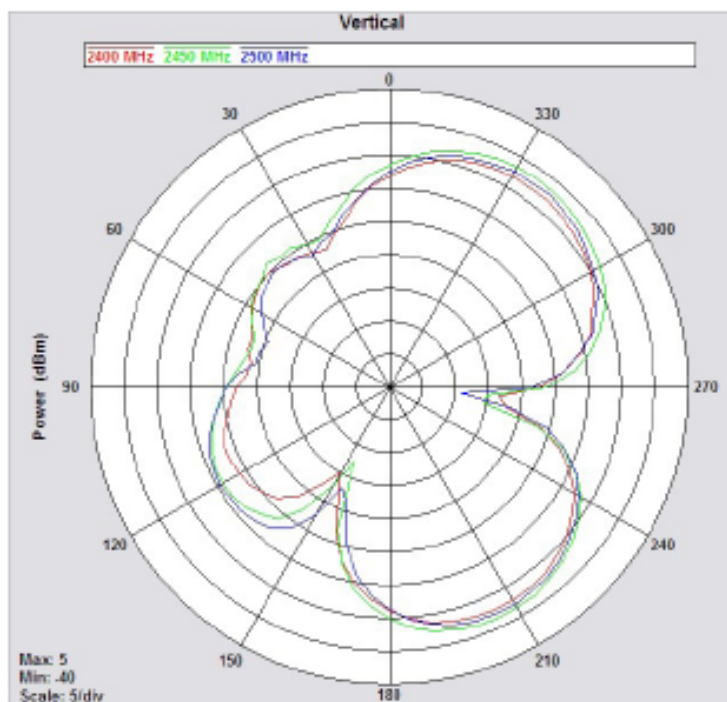
3.2 Empty Area



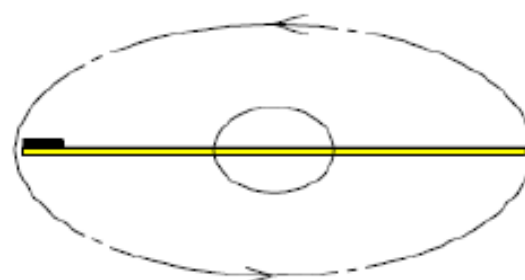
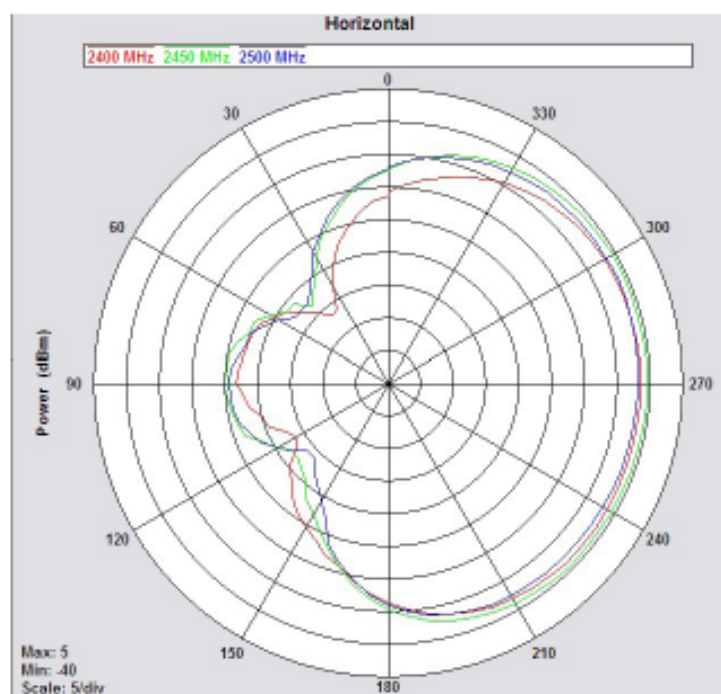
3.3 GAIN PATTERN (X-Z PLANE)



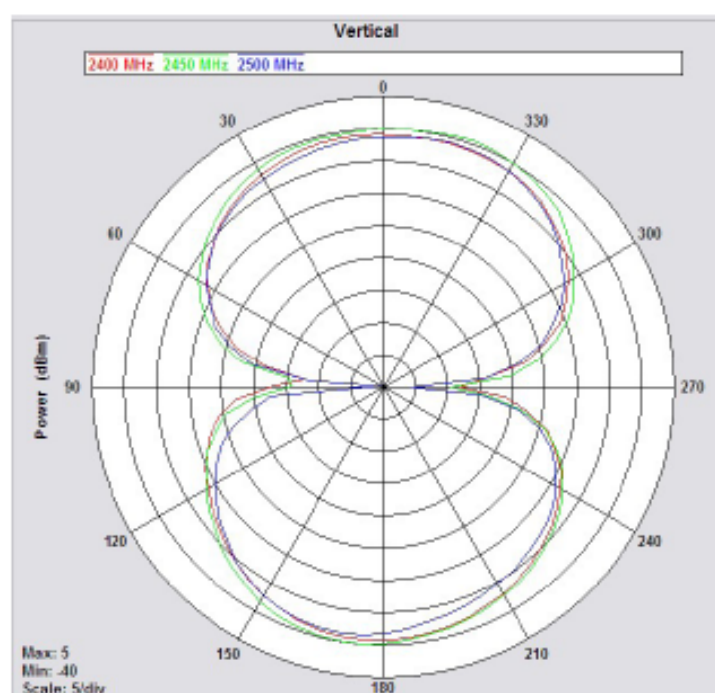
X-Z PLANE



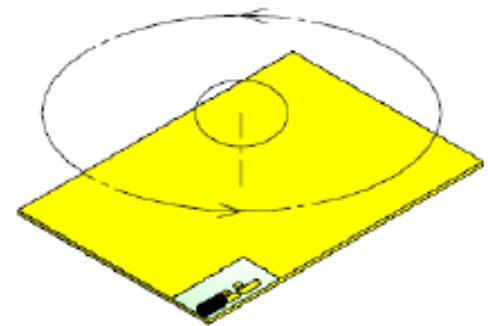
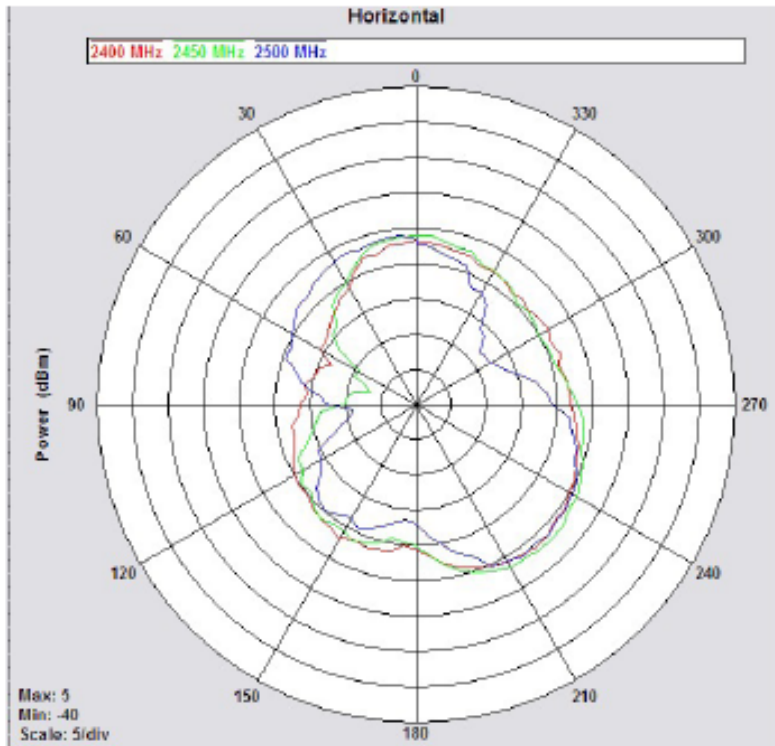
3.4 GAIN PATTERN (Y-Z PLANE)



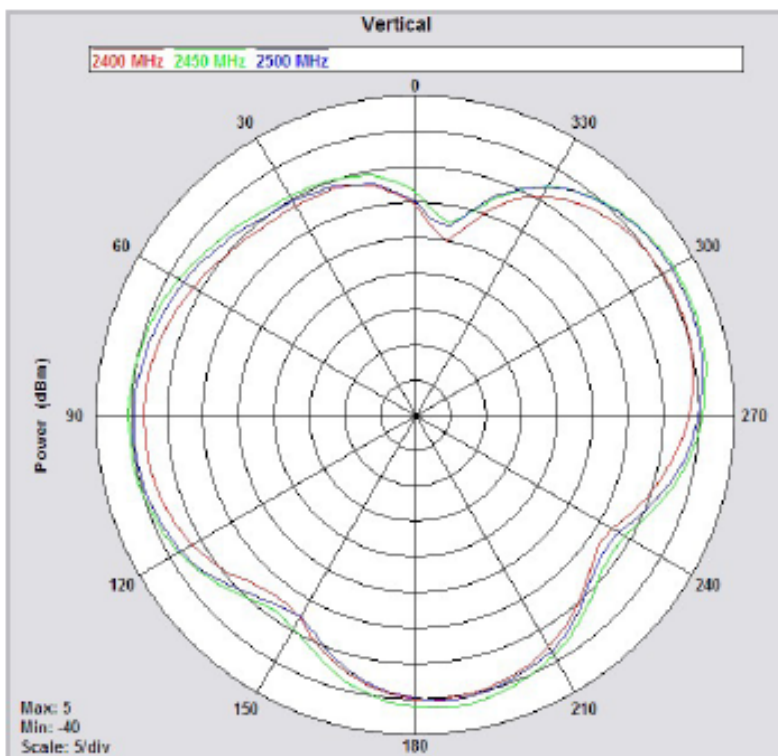
Y-Z PLANE



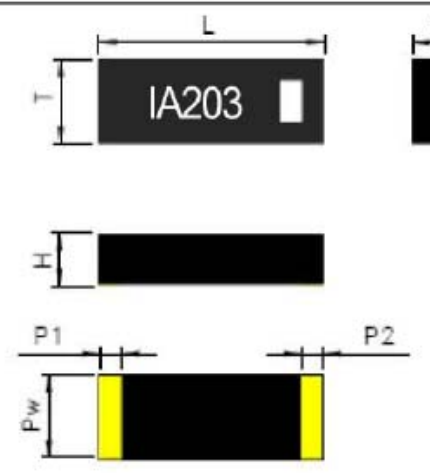
3.5 GAIN PATTERN (X-Y PLANE)



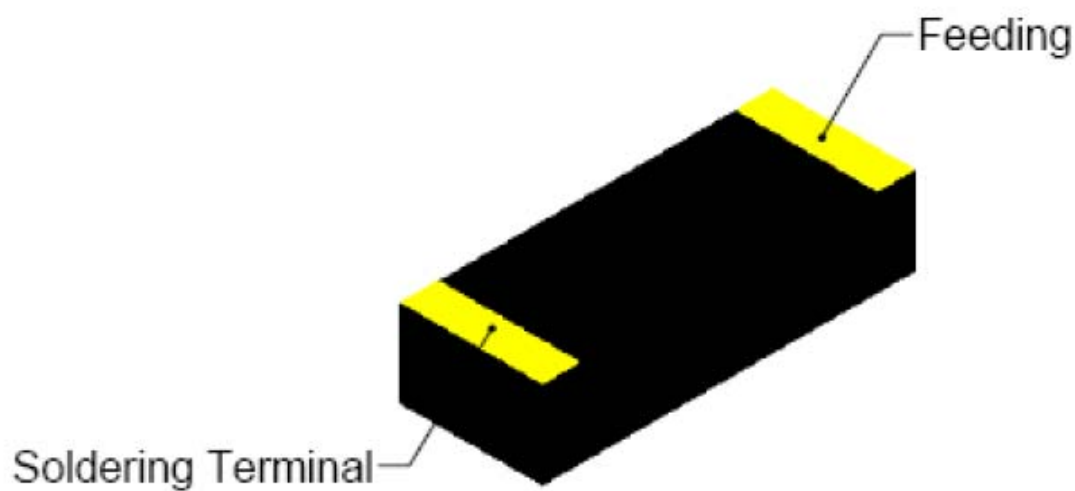
X-Y PLANE



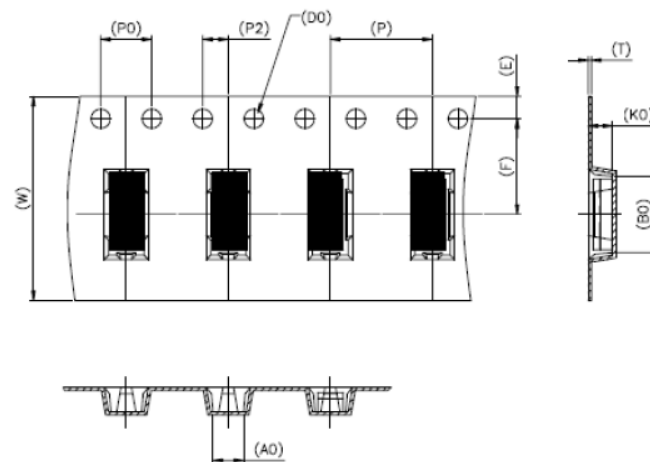
4. Drawing

Figure	Dimension		Pad Definition
	L	$5.2 \pm 0.1 \text{ mm}$	-
	T	$2 \pm 0.1 \text{ mm}$	-
	H	$1.2 \pm 0.2 \text{ mm}$	-
	Pw	$2 \pm 0.1 \text{ mm}$	Pad Width
	P1	$0.5 \pm 0.1 \text{ mm}$	Soldering Terminal
	P2	$0.5 \pm 0.1 \text{ mm}$	Feeding

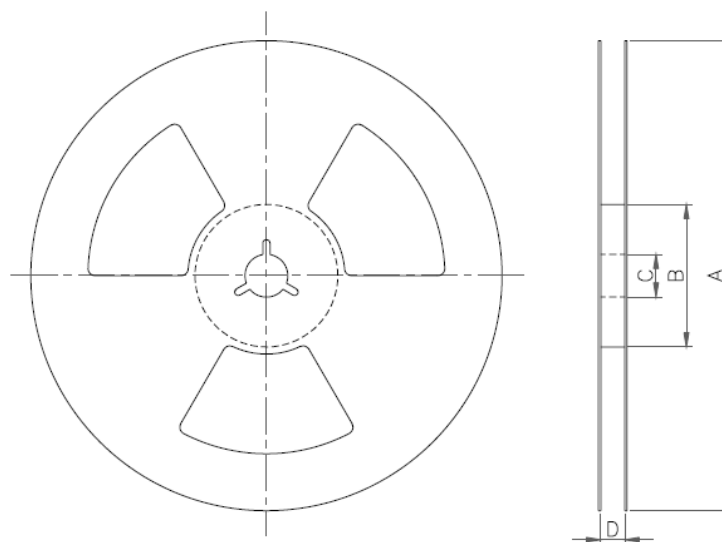
5. Construction



6.Packing



Index	W	E	F	T	P	K0
Dimension(mm)	16.00 ± 0.30	1.75 ± 0.10	7.50 ± 0.10	0.25 ± 0.05	8.00 ± 0.10	1.90 ± 0.10
Index	P0	P2	D0	A0	B0	
Dimension(mm)	4.00 ± 0.10	2.00 ± 0.10	Φ1.50	2.40 ± 0.10	6.00 ± 0.10	



Index	A	B	C	D
Dimension(mm)	Φ330	Φ100	Φ13.5	17.0 ± 0.5

Taping Quantity: MOQ=4K pieces per 13" reel.

7.Certification of RoHS



Test Report

No. : CE/2008/50727 Date : 2008/05/12 Page : 1 of 3

H & H TECHNOLOGY CO., LTD.
NO. 99, ANCHUNG RD., HSINTIEN CITY, TAIPEI COUNTY 23154, TAIWAN.

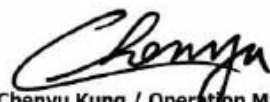


The following sample(s) was/were submitted and identified by/on behalf of the client as :

Sample Description	:	2.4g ANT
Style/Item No.	:	IXXXX
Sample Receiving Date	:	2008/05/05
Testing Period	:	2008/05/05 TO 2008/05/12

=====

Test Requested	:	In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.
Test Method	:	With reference to IEC 62321/2nd CDV (111/95/CDV) Procedures for the Determination of Levels of Regulated Substances in Electrotechnical Products. (1) Determination of Cadmium by ICP-AES. (2) Determination of Lead by ICP-AES. (3) Determination of Mercury by ICP-AES. (4) Determination of Hexavalent Chromium for non-metallic samples by UV/Vis Spectrometry. (5) Determination of PBB and PBDE by GC/MS.
Test Result(s)	:	Please refer to next page(s).


Chenyu Kung / Operation Manager
 Signed for and on behalf of
SGS TAIWAN LTD.
 Chemical Laboratory – Taipei

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full, without prior written permission of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this report is unlawful and offenders may be prosecuted to the fullest extent of the law.
 SGS TAIWAN LIMITED NO. 136-1, Wu Kung Road, WuKu Industrial Zone, Taipei county, Taiwan.
 T(886-2) 22993939 T(886-2) 2299-3237 www.sgs.com.tw



Test Report

No. : CE/2008/50727 Date : 2008/05/12 Page : 2 of 3

H & H TECHNOLOGY CO., LTD.

NO. 99, ANCHUNG RD., HSINTIEN CITY, TAIPEI COUNTY 23154, TAIWAN.



Test results by chemical method (Unit: mg/kg)

Test Item (s):	Method (Refer to)	Result	MDL
		No.1	
Cadmium (Cd)	(1)	n.d.	2
Lead (Pb)	(2)	n.d.	2
Mercury (Hg)	(3)	n.d.	2
Hexavalent Chromium Cr(VI) by alkaline extraction	(4)	n.d.	2
Sum of PBBs	(5)	n.d.	-
Monobromobiphenyl		n.d.	5
Dibromobiphenyl		n.d.	5
Tribromobiphenyl		n.d.	5
Tetrabromobiphenyl		n.d.	5
Pentabromobiphenyl		n.d.	5
Hexabromobiphenyl		n.d.	5
Heptabromobiphenyl		n.d.	5
Octabromobiphenyl		n.d.	5
Nonabromobiphenyl		n.d.	5
Decabromobiphenyl		n.d.	5
Sum of PBDEs (Mono to Nona) (Note 4)		n.d.	-
Monobromodiphenyl ether		n.d.	5
Dibromodiphenyl ether		n.d.	5
Tribromodiphenyl ether		n.d.	5
Tetrabromodiphenyl ether		n.d.	5
Pentabromodiphenyl ether		n.d.	5
Hexabromodiphenyl ether		n.d.	5
Heptabromodiphenyl ether		n.d.	5
Octabromodiphenyl ether		n.d.	5
Nonabromodiphenyl ether		n.d.	5
Decabromodiphenyl ether		n.d.	5
Sum of PBDEs (Mono to Deca)		n.d.	-

TEST PART DESCRIPTION:

NO.1 : 2.4g ANT <XXXX>

- Note :
1. mg/kg = ppm
 2. n.d. = Not Detected
 3. MDL = Method Detection Limit
 4. According to 2005/717/EC DecaBDE is exempt.
 5. "-" = Not Regulated

The content of this PDF file is in accordance with the original issued reports for reference only. This Test Report cannot be reproduced, except in full,



Test Report

No. : CE/2008/50727 Date : 2008/05/12 Page : 3 of 3

H & H TECHNOLOGY CO., LTD.
NO. 99, ANCHUNG RD., HSINTIEN CITY, TAIPEI COUNTY 23154, TAIWAN.



** End of Report **