

JIAXING GLEAD ELECTRONICS CO.,LTD.

## APPROVAL SHEET

<b>PRODUCT NAME</b>	<b>CUSTOMER APPROVED BY</b>
DAMGN4X10_K5M	
<b>CUSTOMER NAME OR MODEL</b>	<b>APPROVED DATE</b>

### SPECIFICATION

Product Name: **DAMGN4X10\_K5M**

Description: 2.8-5V/13.5mA/30dB/500cm (L) / SMBA (FAKRA-C)  
(Typical Value)

### VERSION INFORMATION

VERSION	DATE	REVISION DESCRIPTION	PREPARED	CHECKED	APPROVED
V1.0	2012. 04. 12	NEW ISSUED			

<b>PREPARED BY</b>	<b>CHECKED BY</b>	<b>APPROVED BY</b>

<b>PRODUCT NAME</b>	<b>Prepared date</b>	<b>Page</b>
DAMGN4X10_K5M	2012. 04. 12	2/7
<b>Prepared by</b>	<b>Checked by</b>	<b>Approved by</b>
Shen jie	Yan wen li	Gao sheng

## 2、Electrical Characteristics

### 2.1 Antenna

1	Antenna model	DAS1575 (25*25*4)
2	Frequency Range	1575. 42MHz ± 3 MHz 1602MHz ± 8 MHz
3	V. S. W. R	1. 5:1
4	Band Width	> 8 MHz for GPS > 16MHz for GLONASS
5	Impedence	50 ohm
6	Gain	5dBi Based on 7×7cm ground plane
7	Polarization	RHCP

### 2.2 LNA

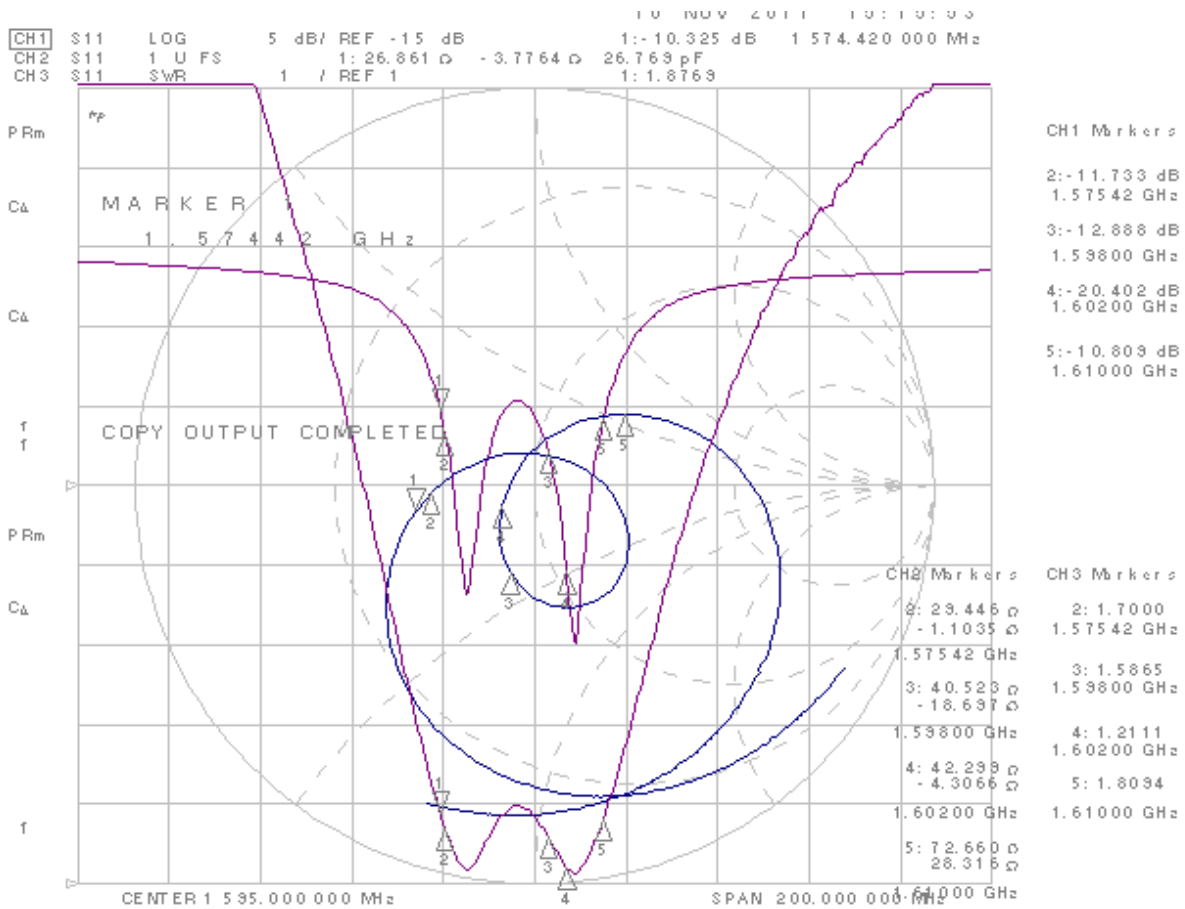
1	Frequency Range	1595MHz ± 23MHz
2	DC Voltage	2. 8-5. 0V
3	Gain	30dB
4	Outband Rejection (Absolute value)	≥20dB (fo+100MHZ)
		≥25dB (fo-100MHZ)
5	Output VSWR	2. 0 max
6	Noise Figure	1. 5 max
7	DC current	13. 5 mA (at 3. 0V)

## 3、Material

1	Antenna	Dielectric Ceramics
2	PCB	FR4
3	Shielding	Tinplate
4	RF Cable	RG174 Attenuation : 1. 3dB/m
		L=500±10CM
5	RF Connector	SMBA (FAKRA-C)
6	Circular magnets	Φ15*2mm

<b>PRODUCT NAME</b>	Prepared date	Page
DAMGN4X10_K5M	2012. 04. 12	3/7
Prepared by	Checked by	Approved by
Shen jie	Yan wen li	Gao sheng

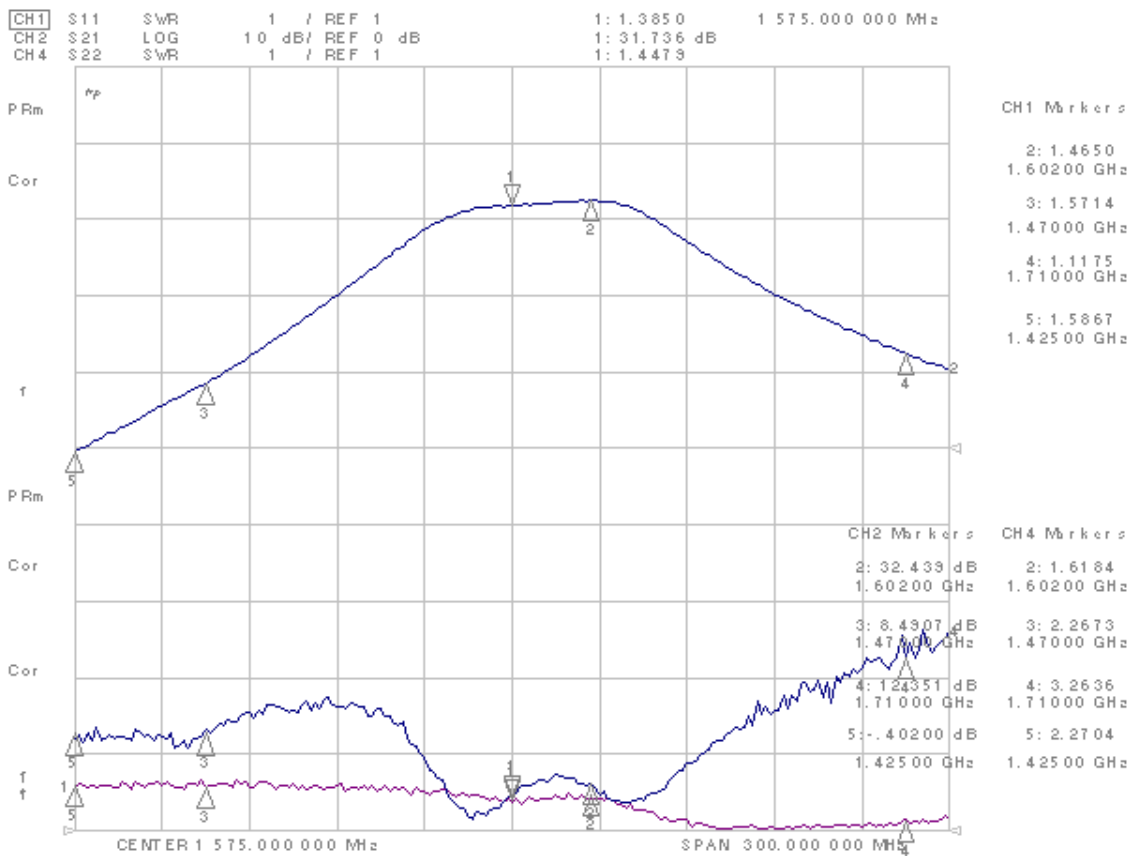
#### 4、Patch Test curve



Test condition:27x27mm ground

<b>PRODUCT NAME</b>	Prepared date	Page
DAMGN4X10_K5M	2012. 04. 12	4/7
Prepared by	Checked by	Approved by
Shen jie	Yan wen li	Gao sheng

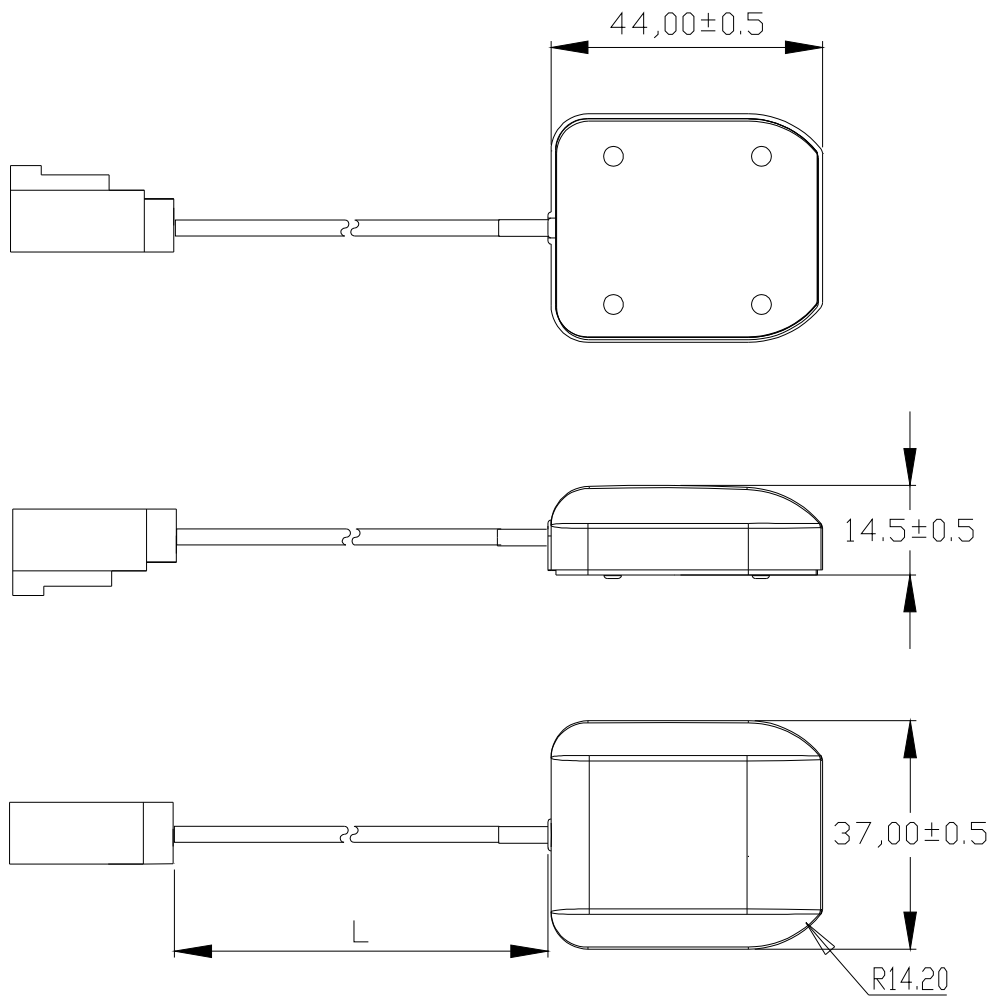
### 5、LNA Test curve



Test condition: DC 3.0V

PRODUCT NAME	Prepared date	Page
DAMGN4X10_K5M	2012. 04. 12	5/7
Prepared by	Checked by	Approved by
Shen jie	Yan wen li	Gao sheng

6、Structure (unit: mm)



<b>PRODUCT NAME</b>	Prepared date	Page
DAMGN4X10_K5M	2012. 04. 12	6/7
Prepared by	Checked by	Approved by
Shen jie	Yan wen li	Gao sheng

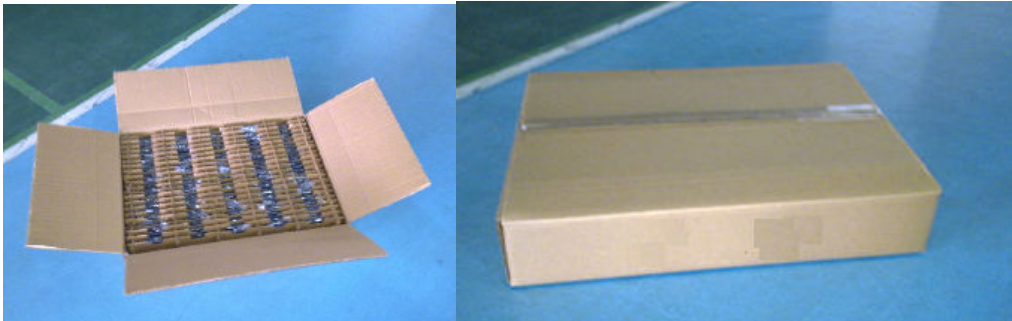
## 7、 Reliability Test

Item	Test Condition	Limit
Humidity Test	The device is subjected to 93±2% relative humidity 40±2℃ ±3℃ for 48h, then dry out at 25℃ ±5℃ and less than 65% relative humidity for 12h.	After test, specimen shall meet electrical requirements
High Temperature Storage	after leaving at 85℃ for 16h, provided it would be measured after 2h leaving in 25℃ ±5 ℃ and less than 65% relative humidity.	After test, specimen shall meet electrical requirements
Low Temperature Storage	After leaving at -40℃ for 16 h, provided it would be measured after 2h leaving in 25℃ ±5 ℃ and less than 65% relative humidity.	After test, specimen shall meet electrical requirements
High Temperature Operation	Operating the device at 80℃ and 3.0Vfor 2h,	After test, specimen shall meet electrical requirements
Low Temperature Operation	Operating the device at -40℃ and 3.0Vfor 2h,	After test, specimen shall meet electrical requirements
Vibration	Subject the device to Sinusoidal vibration for 2h each in x, y and z axis with the amplitude of 1.5mm (max), the frequency shall be varied uniformly between the limits of 10Hz~55Hz~10Hz.	After test, specimen shall meet electrical requirements
Free Fall	Handling the product at the 1000mm dropped 3 times with random fall surface,	Mechanical damage such as breaks shall not occur. After test, specimen shall meet electrical requirements

PRODUCT NAME	Prepared date	Page
DAMGN4X10_K5M	2012. 04. 12	7/7
Prepared by	Checked by	Approved by
Shen jie	Yan wen li	Gao sheng

**8、 Packing (If there are other customers packaging requirements specified in the order)**

Each carton includes 100 PCS antenna, Each lattice put 1PCS antenna, the size of carton is 630 \* 460 \* 105 mm.



**9、 Note**

- 1、 This product specification guarantees the quality of our product as a single unit. Please make sure that your product is evaluated and confirmed against your specifications when our product is mounted to your product.
- 2、 The product will get free warranty for three months since the date of purchase users operate in the correct way; users will have to pay cost of the materials and maintaining fee out of the condition.
- 3、 Electrostatic sensitive device. Observe precautions for handling.