JIAXING GLEAD ELECTRONICS CO.,LTD.

APPROVAL SHEET

PRODUCT NAME	CUSTOMER APPROVED BY
DAMTA4E10G11_K5M_K5M	
CUSTOMER NAME OR MODEL	APPROVED DATE

SPECIFICATION

Product Name: DAMTA4E10G11_K5M_K5M

Description: GPS/GLONASS:2.8-5V/12.5mA/30dB/ L1=5M/ SMBA(FAKRA-C)
GSM:L2=5M/ SMBA(FAKRA-D)

(Typical Value)

VERSION INFORMATION

VERSION	DATE	REVISION DESCRIPTION	PREPARED	CHECKED	APPROVED
V1.0	2012/11/22	NEW ISSUED	闫文力	高生	葛伟平

PREPARED BY	CHECKED BY	APPROVED BY
闫文力	高生	葛伟平

Electronics GLEAD 佳利电子

PRODUCT SPECIFICATION

PRODUCT NAME	Prepared date	Page
DAMTA4E10G11_K5M_K5M	2012/11/22	2/6
Prepared by	Checked by	Approved by
闫文力	高生	葛伟平

1.Electrical Characteristics(GPS)

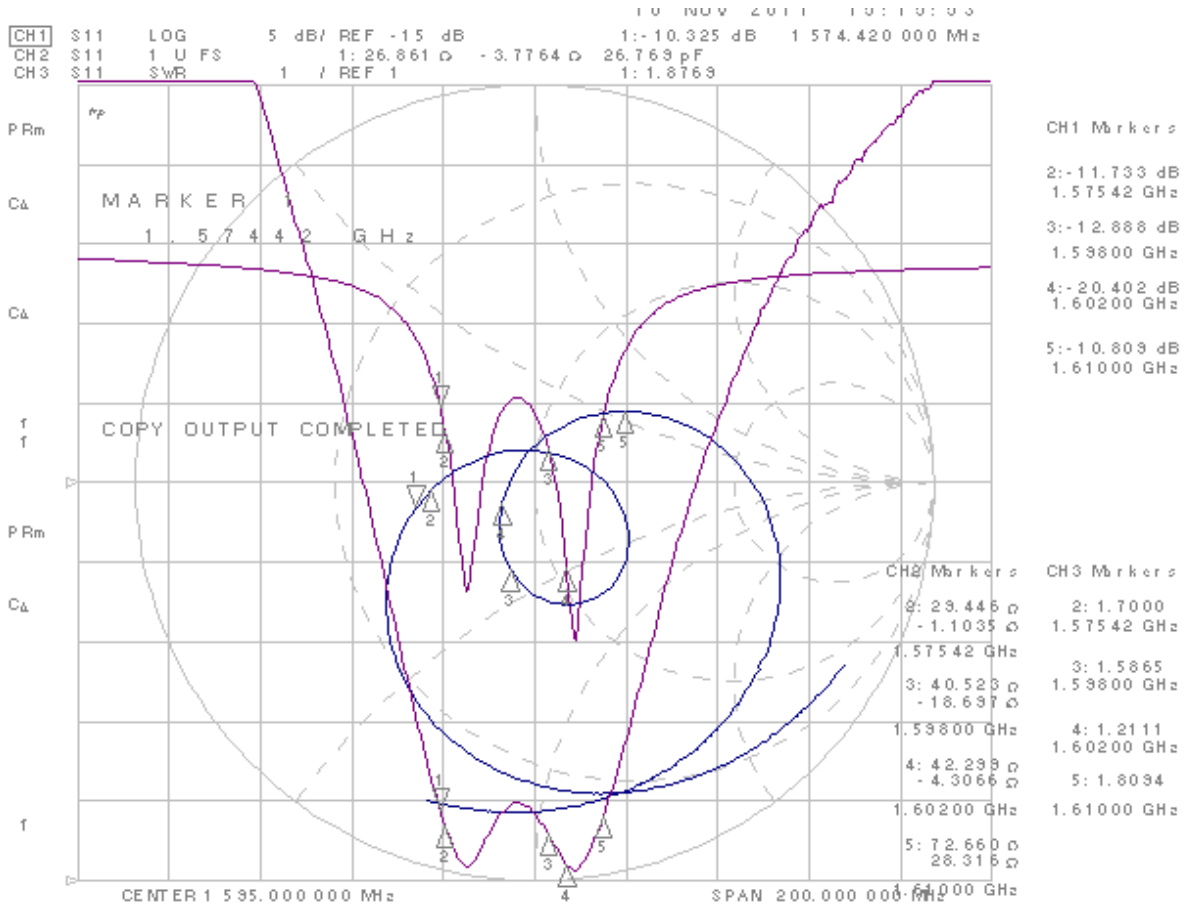
1.1Antenna		
1	Antenna model	25*25*4
2	Frequency Range	1575.42MHz±5 MHz 1602 MHZ±8MHZ
3	V.S.W.R	1.5:1
4	Band Width	➢ 10 MHz for GPS ➢ 20MHZ for glonass
5	Impendence	50 ohm
6	Gain	5dBic Based on 7×7cm ground plane
7	Polarization	RHCP
1.2 LNA		
1	Frequency Range	1595MHz±23 MHz
2	DC Voltage	2.8-5.0V
3	Gain (Typical)	30dB (Without cable +25℃±10℃)
4	Output VSWR (Typical)	2.0
5	Noise Figure (Typical)	1.4(+25℃±10℃)
6	DC current (Typical)	12.5mA(At3.0V)

2.Electrical Characteristics(GSM)

1	Working Frequency	GSM900:820-960MHZ GSM1800:1710-1880MHZ GSM1900:1850-1990MHZ UMTS:1900-2170MHZ
2	V.S.W.R	2:1
3	Impendence	50 ohm
4	Peak Gain	1dbi@900MHZ 2dbi@1800MHZ 2.5dbi@1900MHZ 3dbi@2000MHZ
5	Azimuth	Omni-directional
6	Polarization	Linear Polarization

PRODUCT NAME	Prepared date	Page
DAMTA4E10G11_K5M_K5M	2012/11/22	3/6
Prepared by	Checked by	Approved by
闫文力	高生	葛伟平

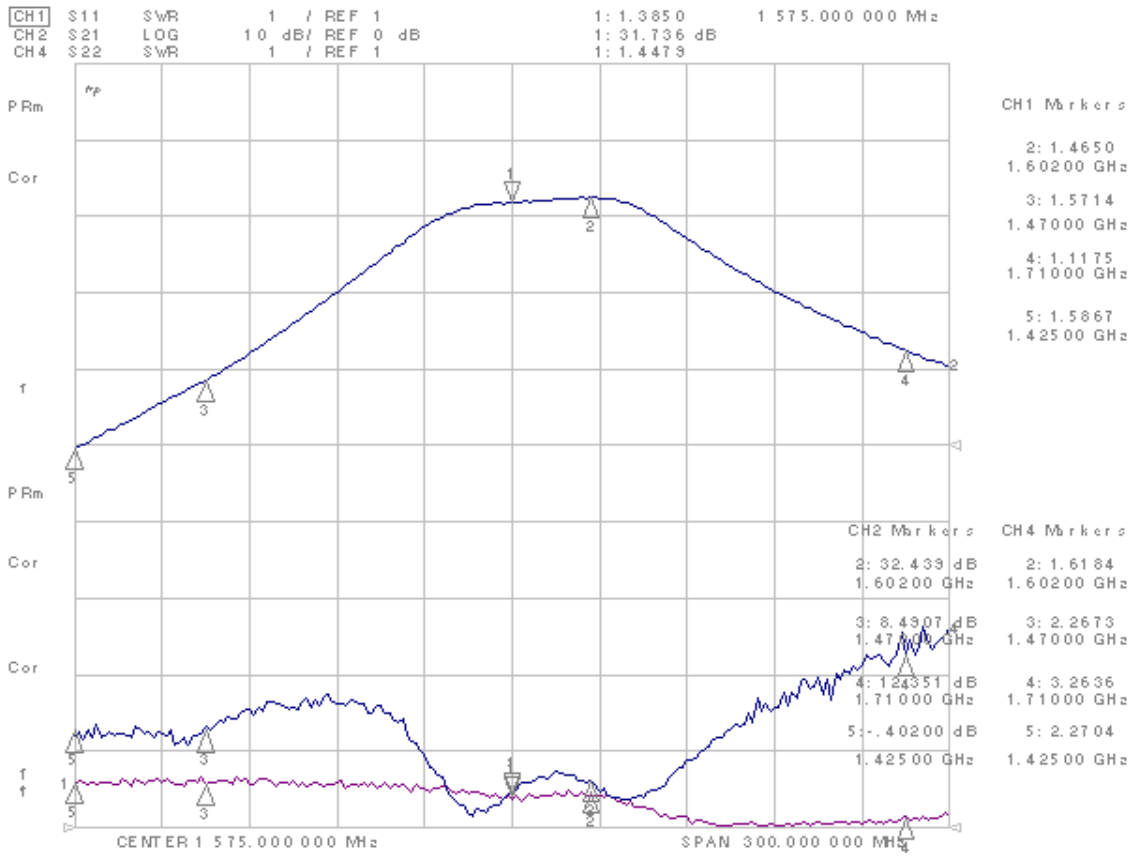
3.Patch Test curve



Test condition:27x27mm ground

PRODUCT NAME	Prepared date	Page
DAMTA4E10G11_K5M_K5M	2012/11/22	4/6
Prepared by	Checked by	Approved by
闫文力	高生	葛伟平

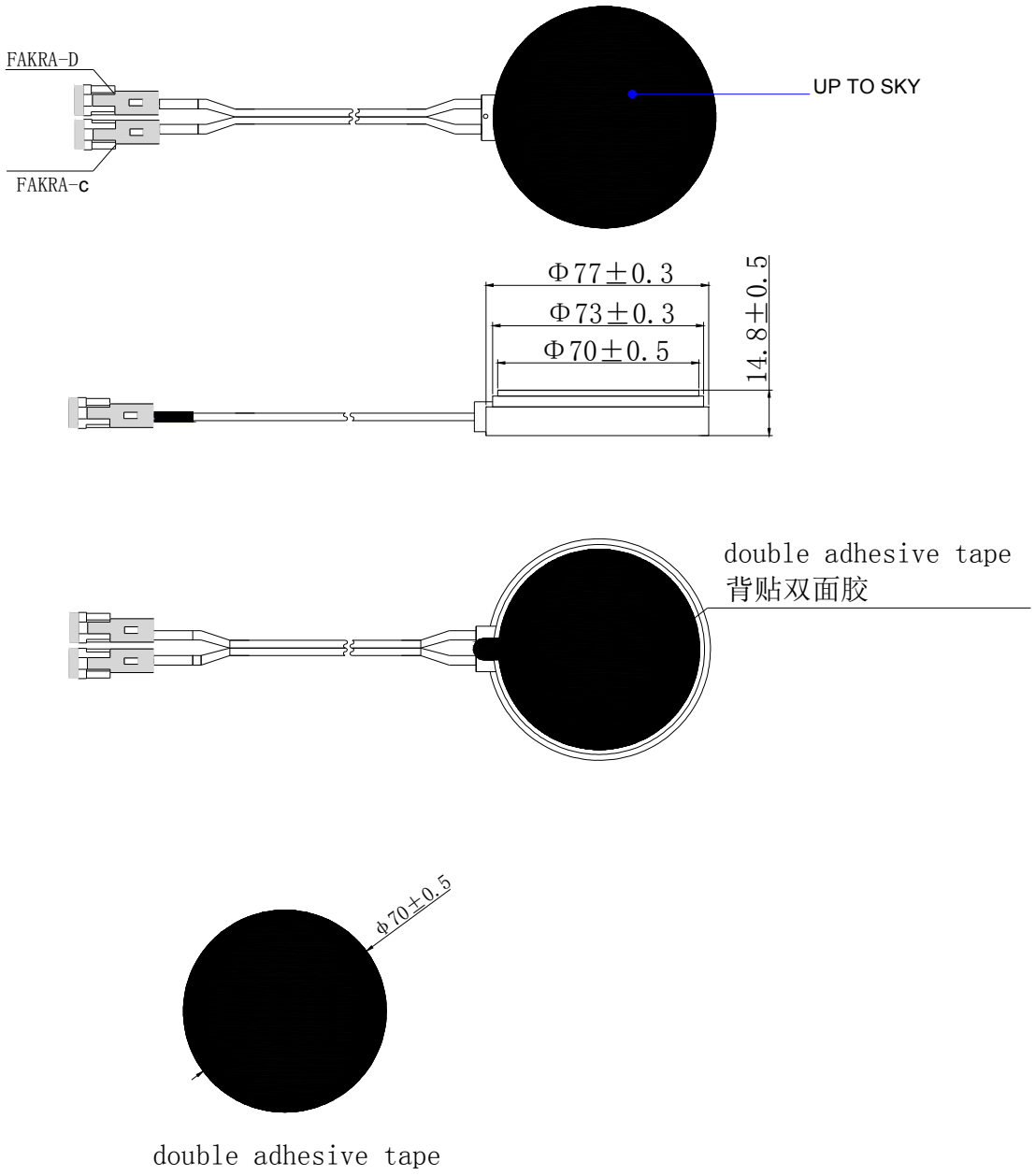
4.LNA Test curve



Test condition: DC 3.0V

PRODUCT NAME	Prepared date	Page
DAMTA4E10G11_K5M_K5M	2012/11/22	5/6
Prepared by	Checked by	Approved by
闫文力	高生	葛伟平

5.Structure（Unit:mm）



6. 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
DAMTA4E10G11_K5M_K5M	2012/11/22	6/6
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7.Material

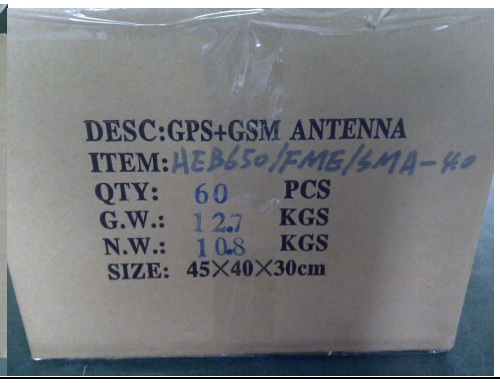
RoHS

No	Part Name	SPEC
1	Antenna	Dielectric Ceramics
2	PCB	FR4
3	Shielding	Tinplate
4	RF Cable	L1=500±10CM L2=500±10CM
5	RF Connector	GPS: SMBA(FAKRA-C) GSM: SMBA(FAKRA-D)
6	Housing Type	Y
7	Assemblage	Ultrasound Welding

8.Notes

Electrostatic sensitive device, Observe precautions for handling.

9. Packing

ach carton includes 60 PCS antenna, Each lattice put 1PCS antenna,

6 layers per carton , the size of carton is 450 × 400×300