SPECIFICATION

PART NO：	**GL2012H2450-D06**
CUSTOMER PART NO：	
CUSTOMER APPROVED BY：	
APPROVED DATE：	

RoHS Compliant Parts

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Prepared by：	Checked by ：	Approved by：
Formed	Document Version V1.5)	

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Version rejigger track record

Version	更改记录 Rejigger	Prepared	Approve	Date
V1.0				2015.2.30

1 INTRODUCTION

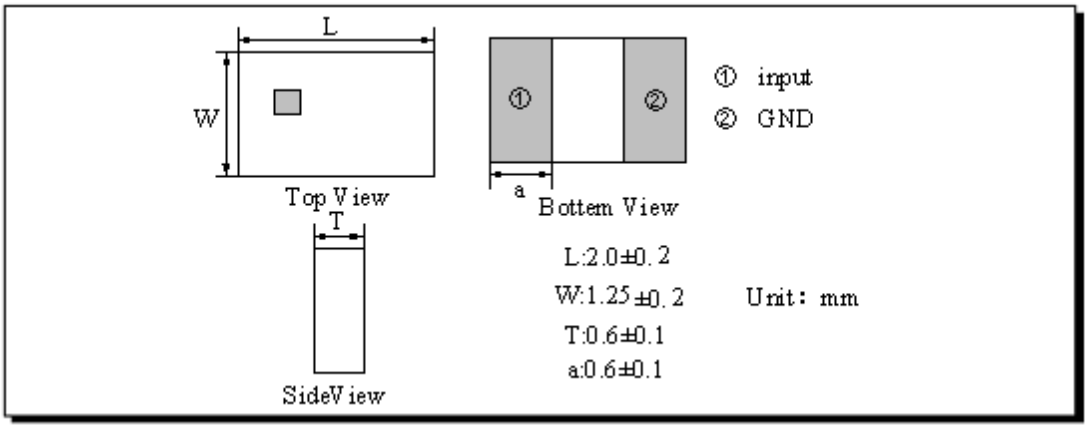
"GLEAD" Microwave Multi-Layer Ceramic Antenna LA series are designed to be used in WLAN、WiFi、Bluetooth、PHS、 Multiple-band Mobile phone antenna, FM, etc and compact size SMD chip design.

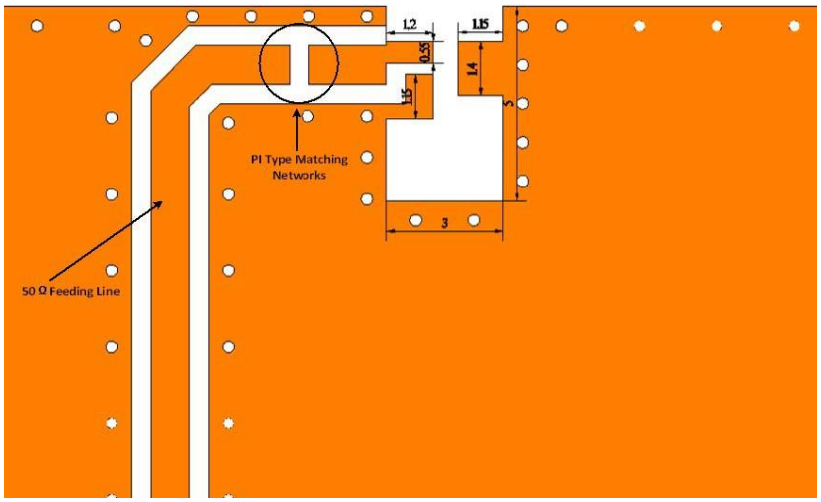
2 Part Number

GL 2012 H 2450 – D06

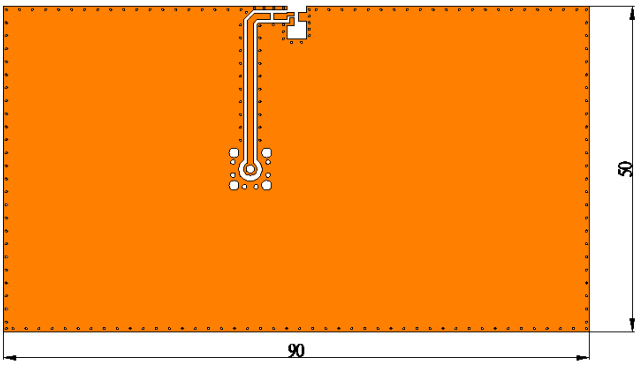
D06 /Product Name:D06
/ Antenna Frequency: 2450 MHz
H /Via Design Series
/Size：2.0×1.25×0.6
/Multi-layer Antenna

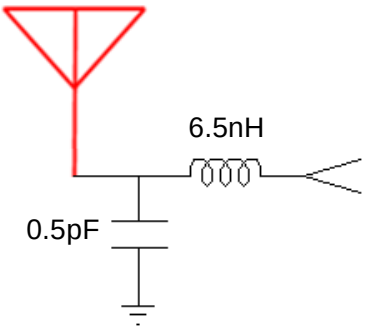
3 Dimensions（Unit：mm）





4 Evaluation Board and Matching Circuits

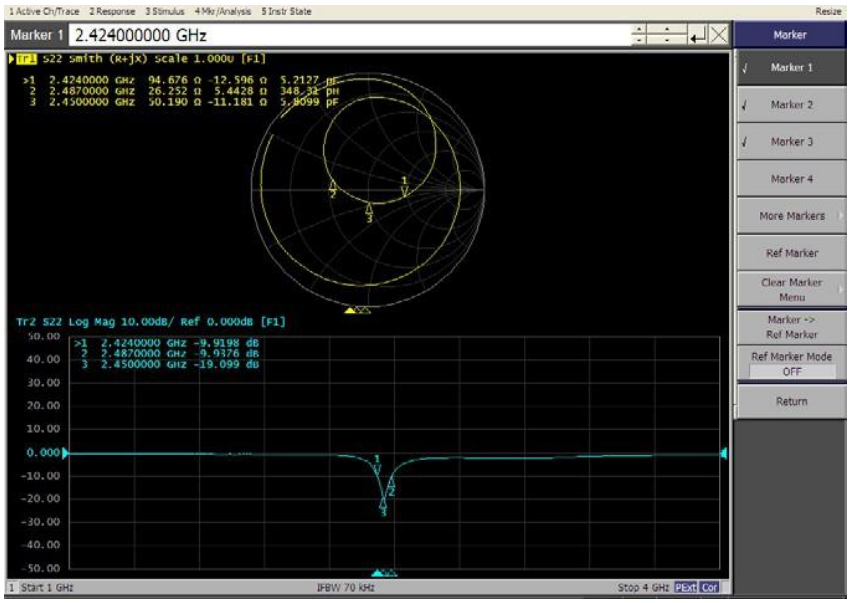




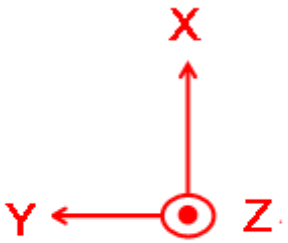
5 Electrical Characteristics

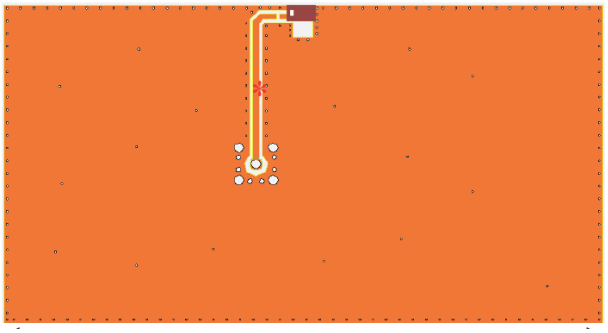
No.	Item （项目）	Specifications （特性）
5.1	Working Central Frequency 中心工作频率 (After matching)	2450 MHz
5.2	Band Width 通带宽度	65MHz typ.
5.3	Peak Gain 峰值增益	2.7 dBi
5.4	V.S.W.R (in BW) 驻波比	≤2.0
5.5	Polarization 极化方式	Linear 线性
5.6	Azimuth Beam width 方位角	Omni-directional 全向
5.7	Impedance 阻抗	50 Ω

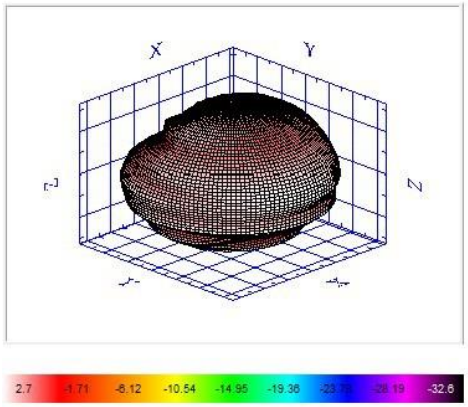
6 Characteristic curve



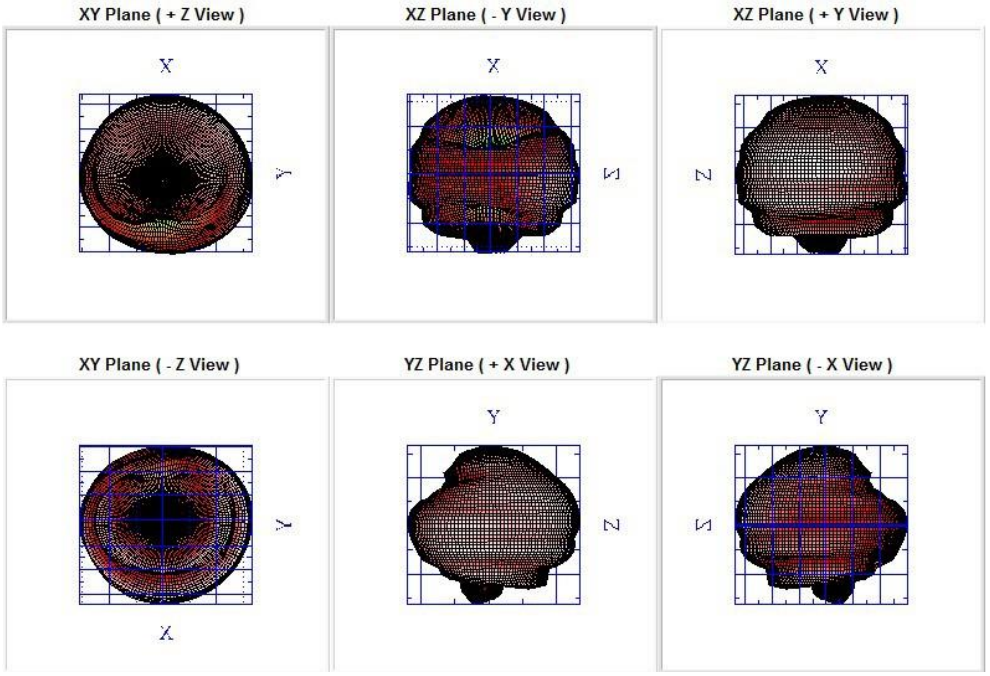
7 Radiation Pattern







Frequency (MHz)	TRP (dBm)	Efficiency (%)
2450.00	-1.38	72.7
Peak EIRP (dBm)	**Max. Power (dBm)**	**Directivity (dBi)**
2.7	2.7	4.09
NHPRP +/- 45 (dBm)	**Min. Power (dBm)**	**Average Gain (dB)**
-2.41	-32.6	-1.38
NHPRP +/- 30 (dBm)	**Avg. Power (dBm)**	**Upper Hem. (dBm)**
-3.45	-1.13	-3.84
E-Theta Peak Gain (dBi)	**Max. / Min. Ratio (dB)**	**Lower Hem. (dBm)**
1.85	35.3	-5.02
E-Phi Peak Gain (dBi)	**Max. / Avg. Ratio (dB)**	**Upper Hem. (%)**
2.23	3.83	41.26
E-Total Peak Gain (dBi)	**Min. / Avg. Ratio (dB)**	**Lower Hem. (%)**
2.7	-31.47	31.45



8 Post Dependability Tolerance

Post Dependability Tolerance (Refer to the table)

No.	Item （项目）	Post Dependability Tolerance (可靠性试验后允许附加误差)
8.1	Central Frequency 中心频率	±5 MHz
8.2	Band Width 通带宽度	±5 MHz
8.3	Gain 增益	±0.1 dBi
8.4	V.S.W.R (in BW) 驻波比	±0.1

9 Dependability Test

Temperature range 25 ±5℃
Relative Humidity range 55~75%RH
Operating Temperature range -
40℃~+85℃Storage Temperature range -40℃~+85℃

9.1 Vibration Resist

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after applied to the vibration of 10 to 55Hz with amplitude of 1.5mm for 2 hours each in X , Y and Z directions.

9.2 Drop Shock

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after dropping onto the hard wooden board from the height of 100cm for 3 times each facet of the 3 dimensions of the device.

9.3 Solder Heat Proof

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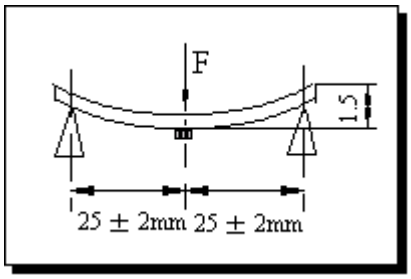
The device should be satisfied after preheating at 120℃~150℃ for 120 seconds and dipping in soldering Sn at 255℃+10℃ for 5 ±0.5 seconds，or electric iron 300℃-10℃ for 3 ±0.5 seconds，without damnify.

9.4 Adhesive Strength of Termination

The device have no remarkable damage or removal of the termination after horizontal force of 5N(≦0603)；10N(>0603)with 10±1 seconds.

9.5 Ben ding Resist Test



Weld the product to the center part of the PCB with the thickness 1.6 ± 0.2mm as the illustration shows, and keep exerting force arrow-w ard on it at speed of :1mm/S , and hold for 5 ±1S at the position of 1.5mm bending distance , so far , any peeling off of the product metal coating should not be detected .

9.6 Mois ture Proof。

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to the temperature 60 ±2℃and the relative humidity 90~95% RH for 96 hours and 1~2 hours recovery time under normal condition.

9.7 High Temperature Endurance

The device should satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to temperature 85 ±5℃ for 96 ±2 hours and 1~2 hours recovery time under normal temperature.

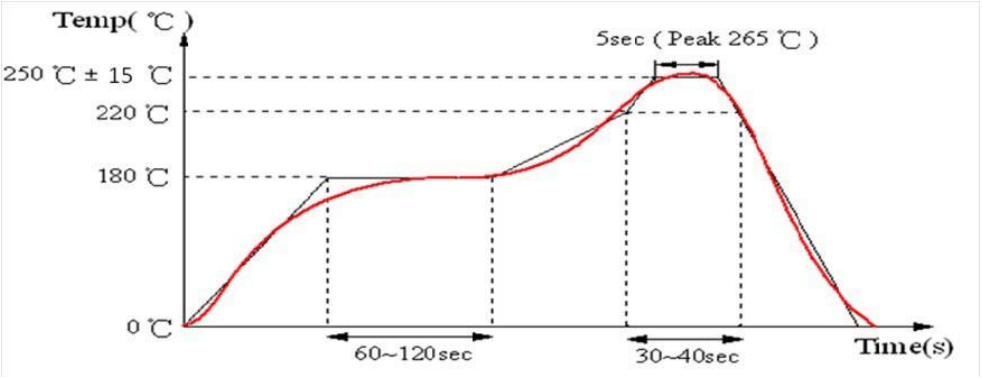
9.8 Low Temperature Endurance

The device should also satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to the temperature -40℃±5℃ for 96 ±2 hours and to 2 hours recovery time under normal temperature.

9.9 Temperature Cycle Test

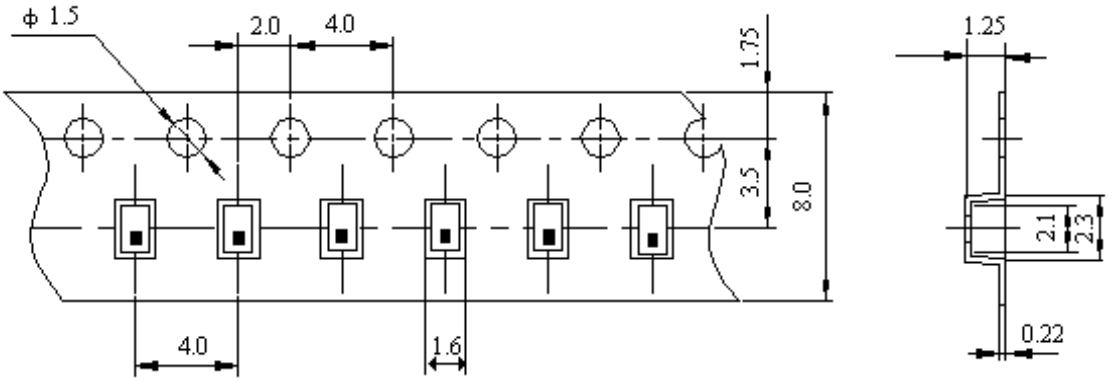
The device should also satisfy the electrical characteristics specified in paragraph 8.1~8.4 after exposed to the low temperature -40℃ and high temperature +85℃ for 30 ±2 min each by 5 cycles and 1 to 2 hours recovery time under normal temperature.

10 Reflow Soldering Standard Condition



11 Packaging and Dimensions

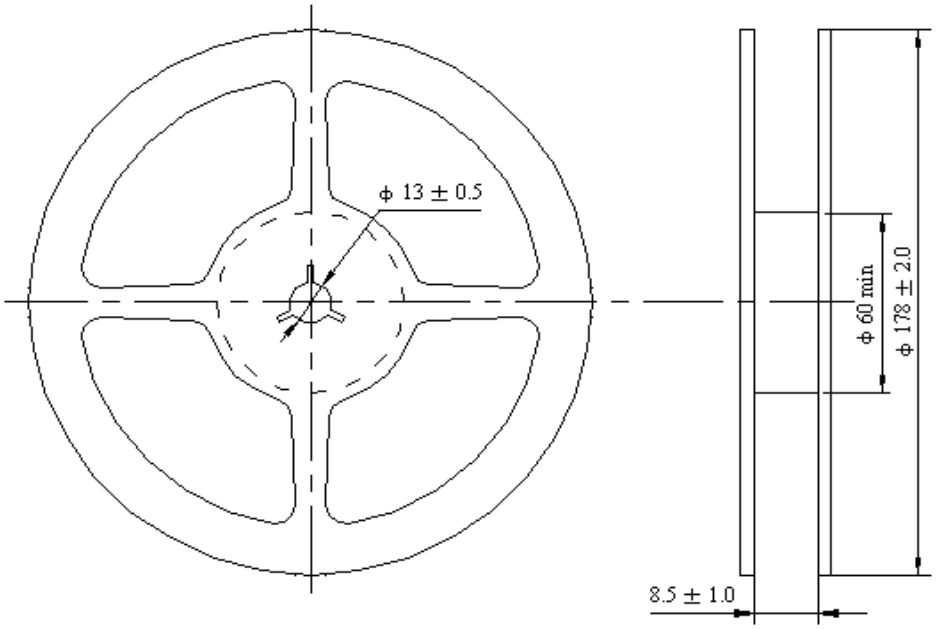
11.1 Plastic Tape



Remarks for Package：

Reserve a length of 150~200mm for the trailer of the carrier and 250~300 mm for the leader of the carrier and further 250mm of cover tape at the leading part of the carrier.

11.2 Reel (4000 pcs/Reel)



11.Storage Period

Product should be used within six months of receipt.

MSL 1 / Storage Temperature Range : <30 degree C, Humidity : <85%RH