
Product: SMD Patch Antenna

Part Number: GLSY02

Issue Date:

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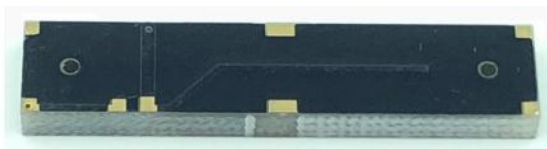
Features

1. Small Size 37.0 X 8 X 3mm SMD Patch Antenna
2. Low energy loss, High antenna efficiency
3. High stability under conditions of temperature and humidity changes

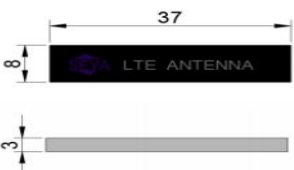
Applications

LTE/4G/3G/2G/WCDMA/GSM/CDMA/NB-IoT band for internal antenna using.

Structure



Dimensions

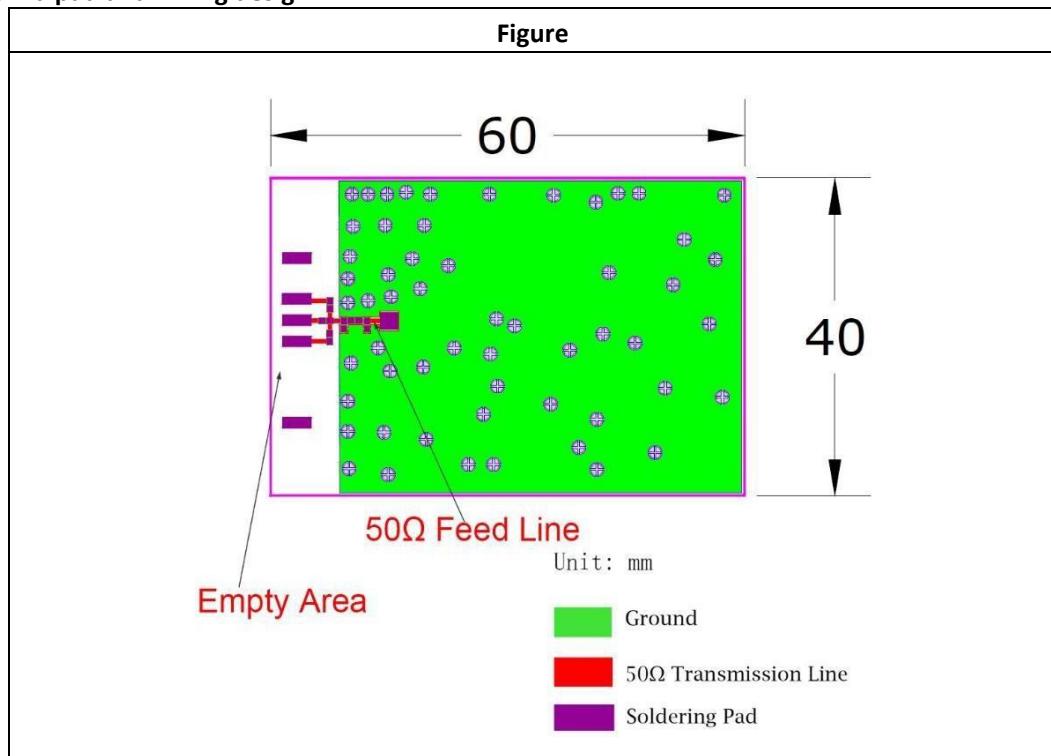
3 views drawing	Symbol	Size(mm)
	L	37.0±0.2
	w	8±0.1
	T	3±0.1

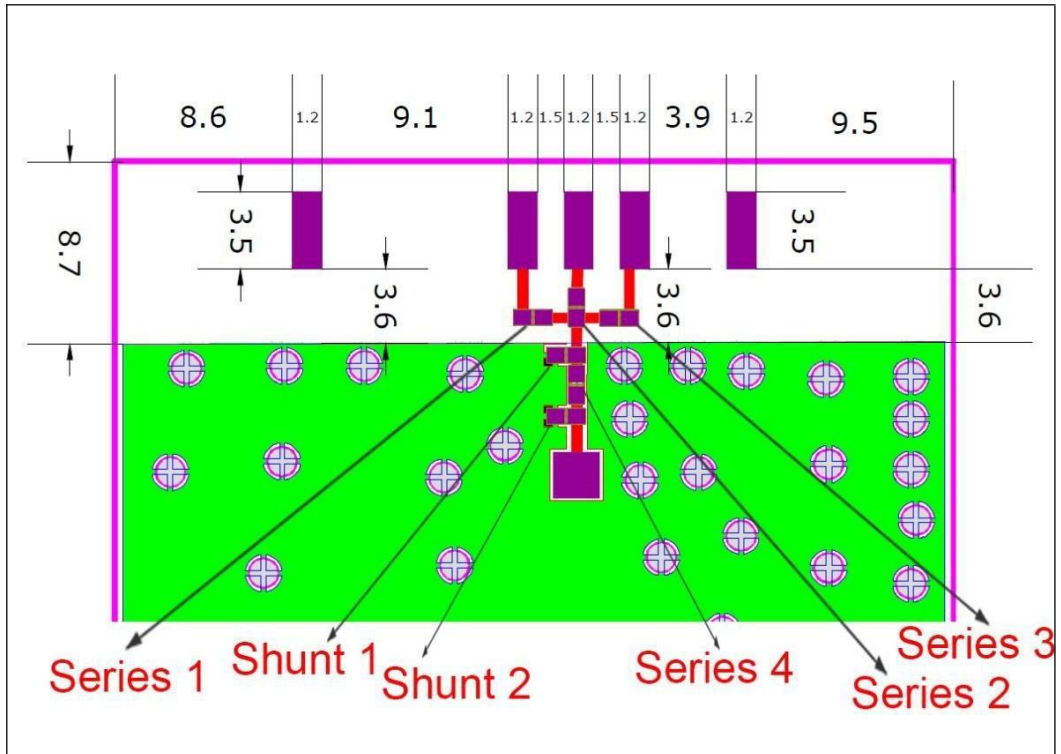
Electrical Specifications

GLSY02	Specification	
Working Frequency-MHz	700-2700	
Impedance	50Ω	
Efficiency	(700-960MHz)	58%
	(1710-2170MHz)	71%
	(2300-2700Mhz)	71%
VSWR	<3.5	
Operation Temperature	-40°C~+85°C	
Power Capacity	4W	

The working frequency need be adjusted to working band with matching circuit.

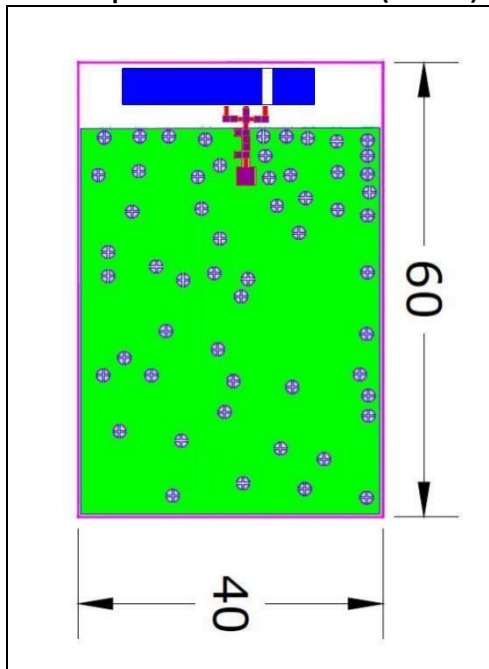
Antenna pad and wiring design



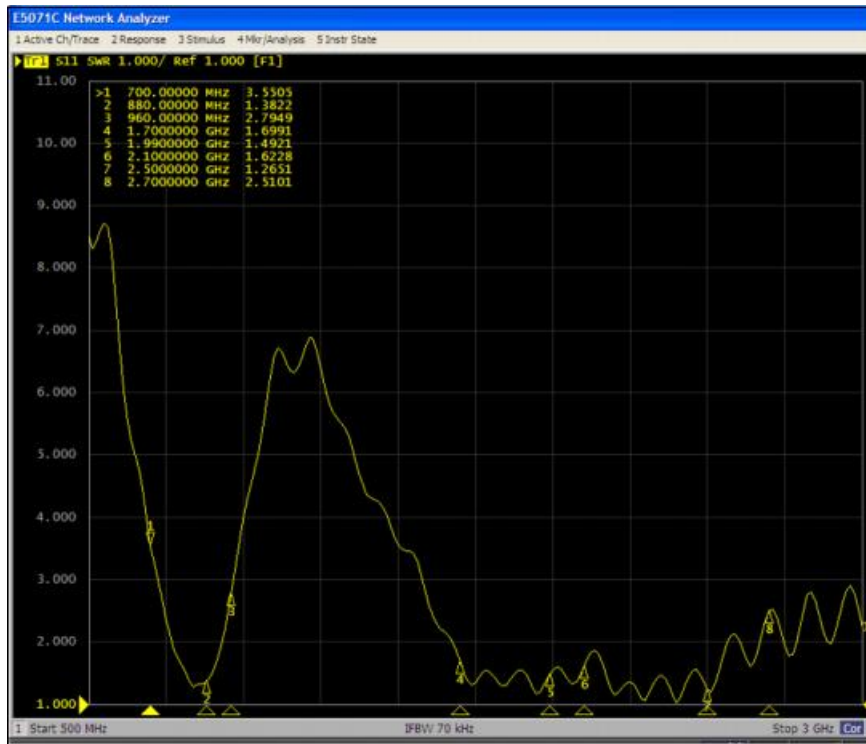


Matching parts data		
	Series 1	22nh
	Series 2	2.2nh
	Series 3	4.3nh
	Shunt 1	18nh
	Series 4	0Ω
	Shunt 2	NC

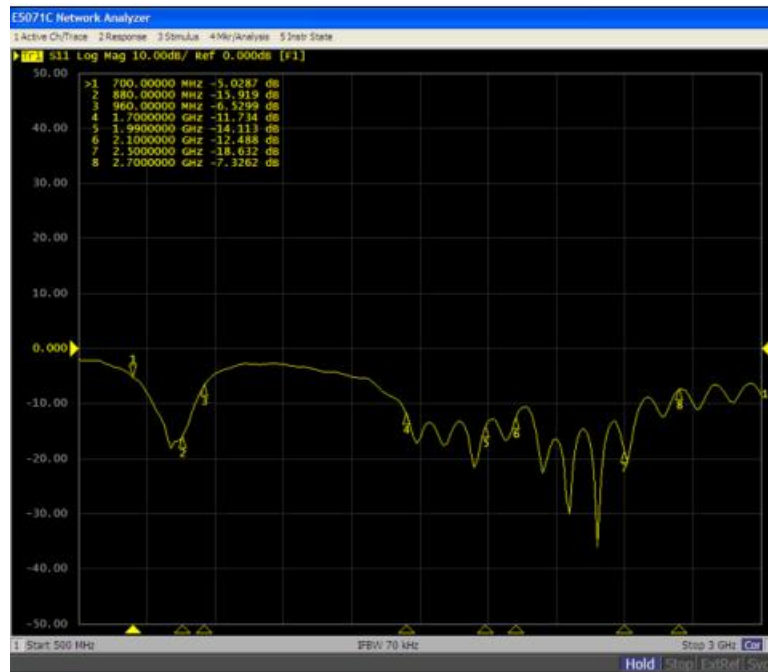
Antenna performance on board (1.0mm)



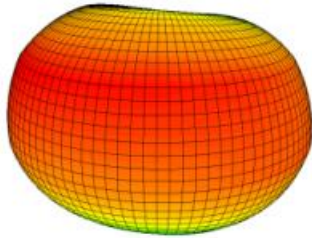
Antenna VSWR feature 1



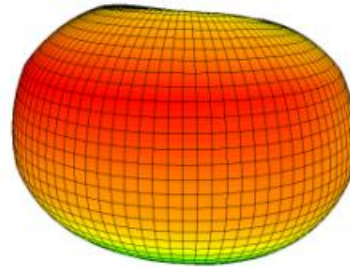
Antenna VSWR feature 2



Efficiency and Peak Gain

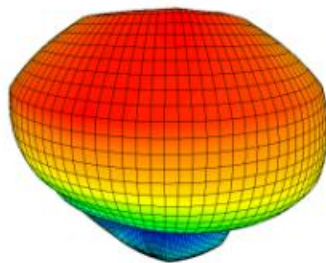


824MHZ

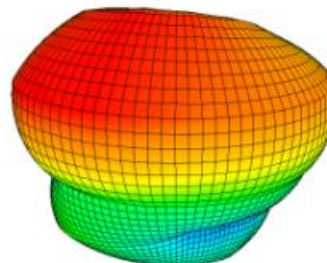


960MHZ

参数\频率(mhz)	824	915	960
Peak Gain(dBi)	-0.52	0.12	-0.31
Efficiency(%)	54.12	58.13	52.37

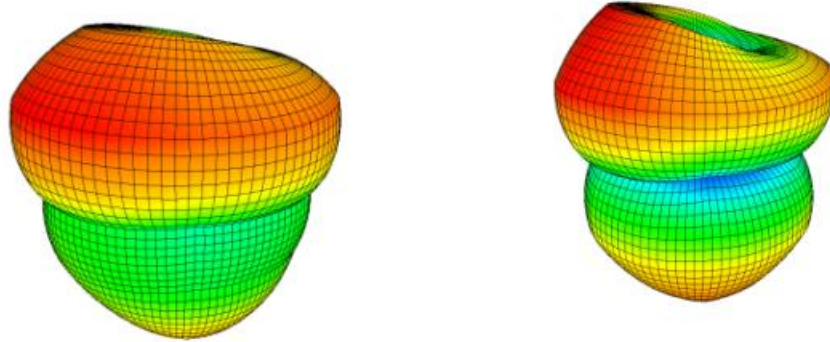


1710MHZ



2170MHZ

参数\频率(mhz)	1710	1809	1908	2170
Peak Gain(dBi)	1.03	1.15	1.13	1.07
Efficiency(%)	68.56	71.12	70.91	69.32

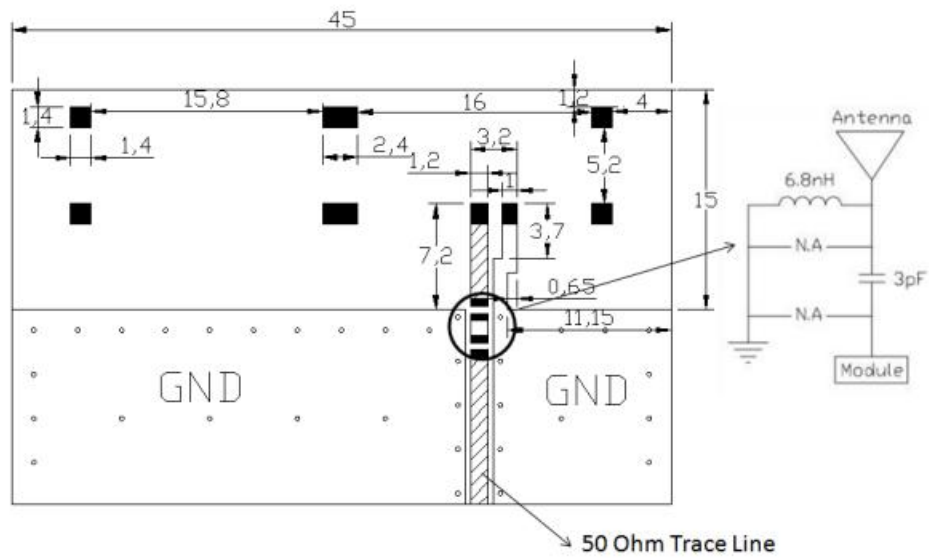


参数\频率(mhz)	2100	2500	2700
Peak Gain(dBi)	2.13	2.35	2.96
Efficiency(%)	77.71	65.14	63.5

Dimension and Terminal Configuration



Recommend foot print for Evaluation Board




Efficiency and radiation diagram

Efficiency, radiation graph, gain and other performance are based on the design of the test board. Antenna specification characteristics test data is based on tests

PCB board size and test direction as shown below. The following data were obtained in ETS 3D microwave anechoic testing

Packing:

包裝步驟與規範如下:	
1. 產品照片	2. 天线25PCS/扎, 100PCS装6*8"PE袋 (预估数量)
	
3. XXX PCS装一箱, 可根据订单数量及可装箱数量进行包装。	4. 放入纸箱内打好包装带贴上相應的標籤
	

Storage Environment

Temperature: -10°C~+40°C

Humidity : 30% -70% relative humidity

Keep the product away from corrosive gases, such as sulfur. Chlorine gas or acid may lead to oxidation of product electrodes resulting in poor welding ability.

The product should be placed in the toolbox and protected from moisture and dust. Products should be stored in the warehouse and avoid heat, vibration, direct sunlight. Products should be stored under closed condition

