



### Features


- ◇ For GSM Rx IF applications
- ◇ High attenuation
- ◇ Single-ended or Balanced operation
- ◇ Ceramic Surface Mount Package
- ◇ RoHS compliant (2002/95/EC), Pb-free

### Specifications

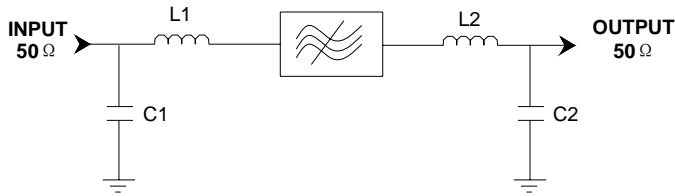
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	71	-
2 dB Bandwidth	MHz	0.18	0.34	-
3 dB Bandwidth	MHz	0.22	0.37	-
5 dB Bandwidth	MHz	-	0.4	0.5
20 dB Bandwidth	MHz	-	0.58	0.7
30 dB Bandwidth	MHz	-	0.73	1
35 dB Bandwidth	MHz	-	0.84	1.4
40 dB Bandwidth	MHz	-	1.08	5
Group Delay Variation( $f_0 \pm 0.11\text{MHz}$ )	nsec	-	500	1500
Minimum Insertion Loss within passband at ambient temperature	dB	-	6.6	7.3
Minimum Insertion Loss within passband over temperature range	dB	-	6.6	8.5
Ultimate Rejection	10~68.5MHz	dB	40	-
	73.5~130MHz	dB	40	-
Material Temperature coefficient	KHz/°C	0.071		
Substrate Material	-	Qz		
Ambient Temperature	°C	25		
Operating Temperature Range	°C	-40	-	+85
Storage Temperature Range	°C	-45	-	+105
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	SMD1365A			

#### Notes:

1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
4. This is the optimum impedance in order to achieve the performance show.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBS07101L	
		Rev. Date	2008-02-18	
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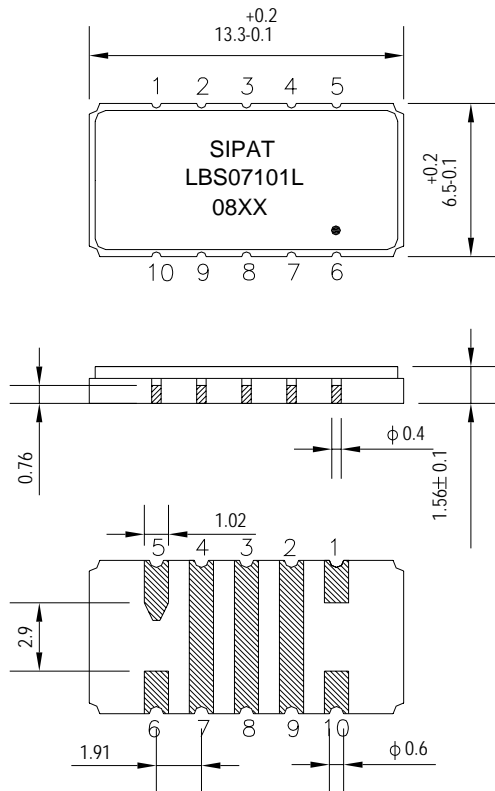
### Matching Configuration



$L1 = (470 + 47) \text{ nH}$     $L2 = (470 + 12) \text{ nH}$   
 $C1 = (56 + 15) \text{ pF}$     $C2 = (47 + 27) \text{ pF}$   
**Source/Load Impedance = 50 ohm**

Notes - Component values may change depending on board layout.

### Package Dimension



#### Pad Configuration:

Input    6  
Output    10  
Ground   All Others

#### Marking Configuration:

- 1) •: Pad Number 6 Index
- 2) SIPAT: Manufacturer Name
- 3) LBS07101L: Part Number
- 4) 08XX: Date Code

Package: SMD1365A

Unit: mm



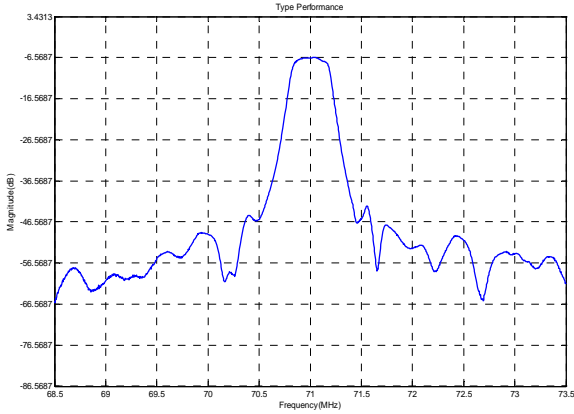
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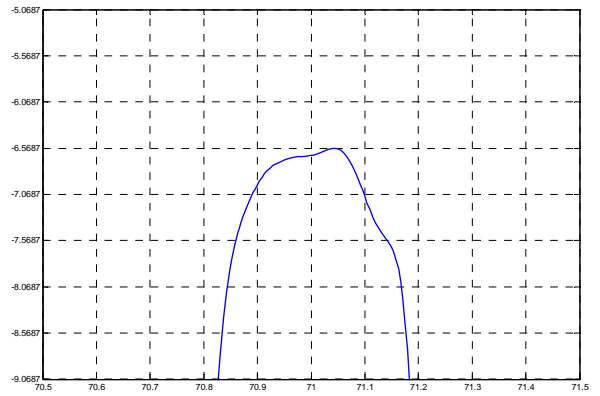
Typical Performance

Frequency Respond



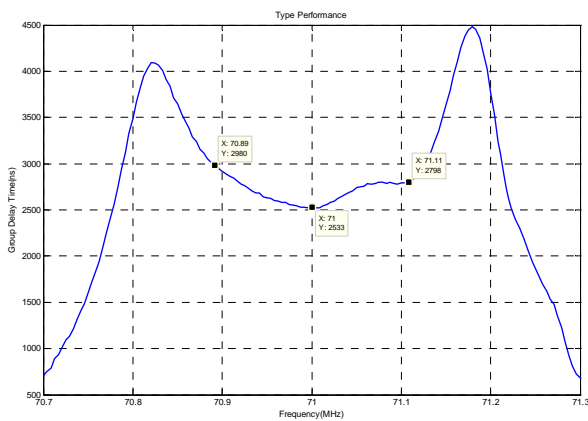
Horizontal: 0.5MHz/Div Vertical: 10dB/Div

Passband Respond



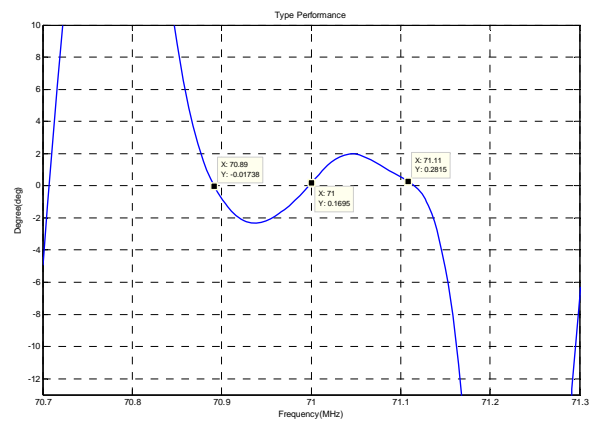
Horizontal: 0.1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 0.11$ MHz)



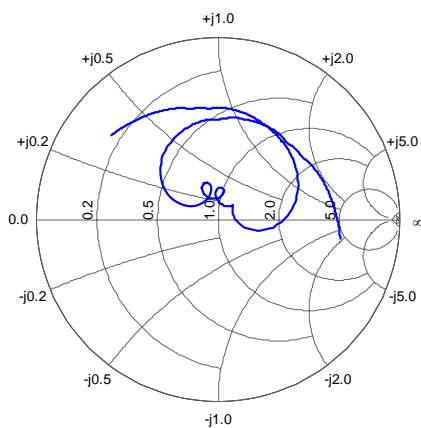
Horizontal: 0.1MHz/Div Vertical: 500ns/Div

Phase Linearity( $f_0 \pm 0.11$ MHz)

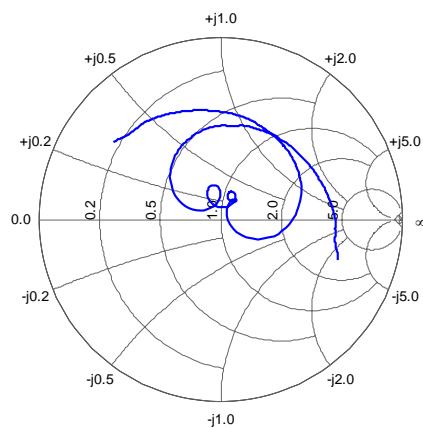


Horizontal: 0.1MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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