

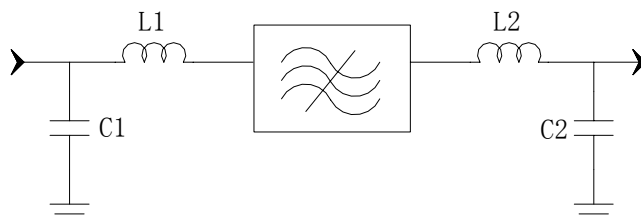
### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.92	70	70.08
Insertion Loss	dB	-	11.3	15
1 dB Bandwidth	MHz	0.7	0.8	-
3 dB Bandwidth	MHz	1	1.1	-
40 dB Bandwidth	MHz	-	2.76	3
Passband Variation	dB	-	0.2	1
Absolute Delay	usec	-	1.585	-
Group Delay Variation( $f_0 \pm 0.3\text{MHz}$ )	nsec	-	50	500
Phase Linearity( $f_0 \pm 0.3\text{MHz}$ )	deg	-	2.2	11.95
Material Temperature coefficient	KHz/°C	-1.26		
Ambient Temperature	°C	25		
Package Size	SMP-53A (13.3x6.5mm Nominal Footprint)			

#### Notes:

1. All specifications are based on the test circuit shown
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over 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

### Matching Configuration




$$L1=L2=120\text{nH}$$

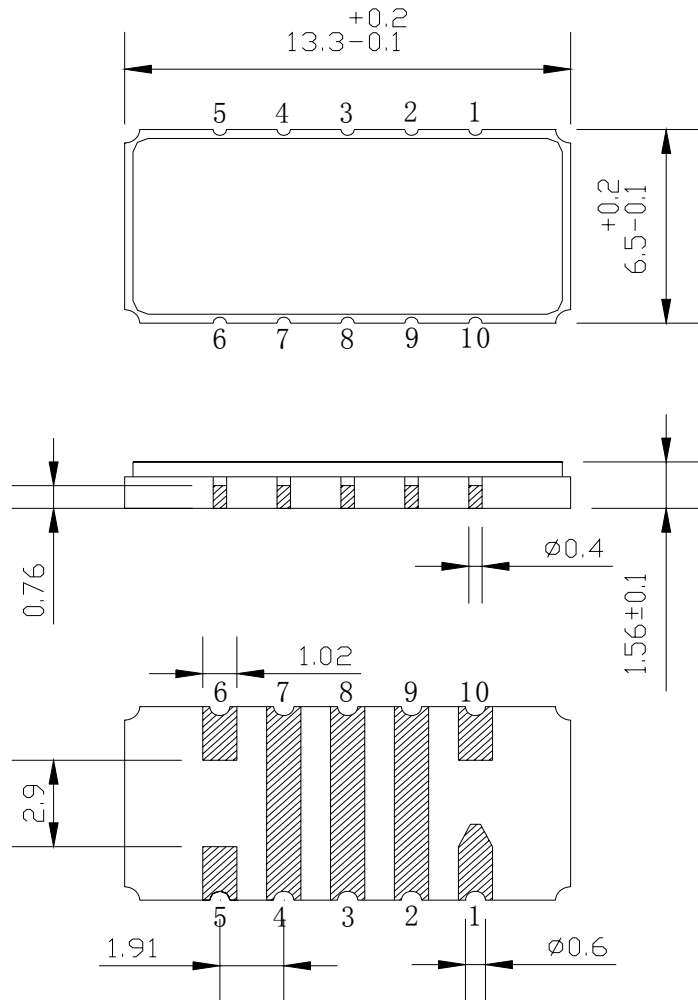
$$C1=C2=36\text{pF}$$

Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

	<b>SIPAT Co., Ltd.</b> ( CETC No. 26 Research Institute ) Nanping Huayuan Road No. 14 Chongqing, China, 400060	Part Number	LB070DS02	
		Rev. Date	2005-9-30	
		Rev.	1.0	Page

Package Dimension



**Input:10**  
**Output:5**

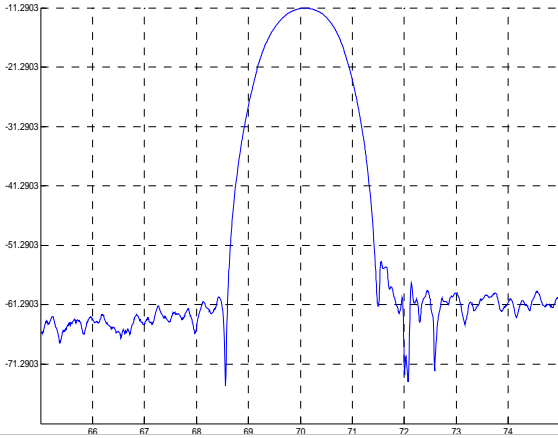


**SIPAT Co., Ltd.**  
( CETC No. 26 Research Institute )  
Nanping Huayuan Road No. 14  
Chongqing, China, 400060

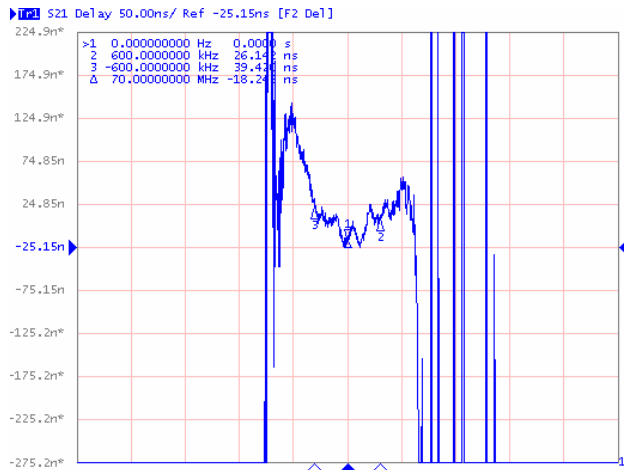
Part Number	LB070DS02	
Rev. Date	2005-9-30	
Rev.	1.0	Page 2/3

Typical Performance

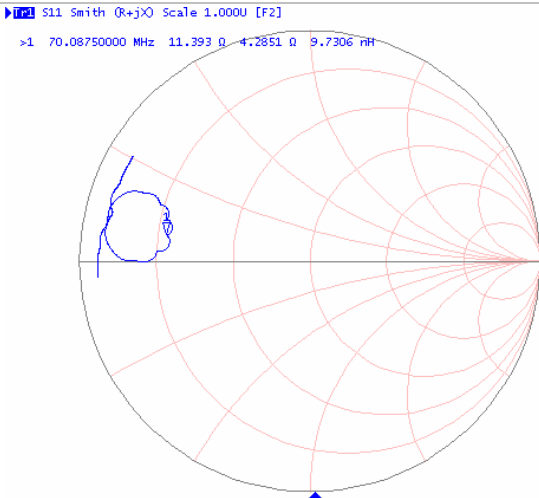
Frequency Respond



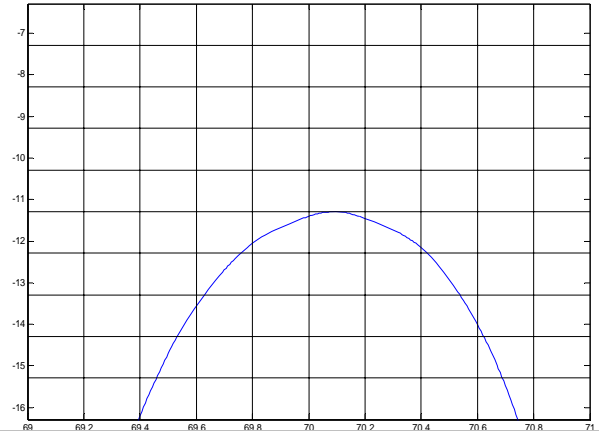
Group Delay Variation( $f_0 \pm 0.6\text{MHz}$ )



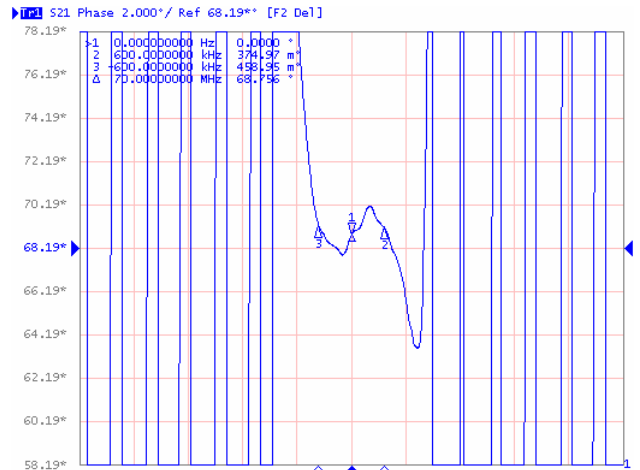
Smith Chart S11



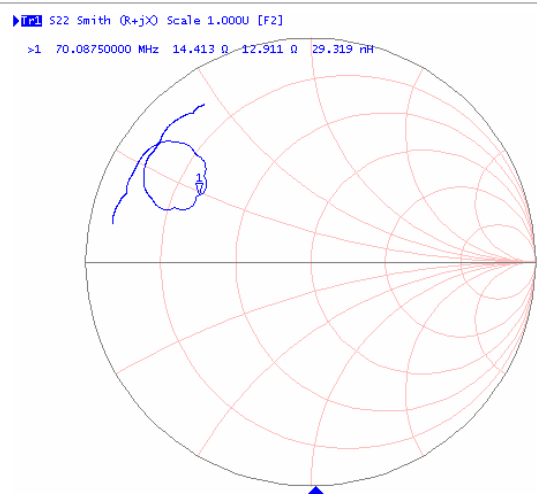
Passband Respond



Phase Linearity( $f_0 \pm 0.6\text{MHz}$ )



Smith Chart S22



**SIPAT Co., Ltd.**  
( CETC No. 26 Research Institute )  
Nanping Huayuan Road No. 14  
Chongqing, China, 400060

Part Number	LB070DS02	
Rev. Date	2005-9-30	
Rev.	1.0	Page 3/3