

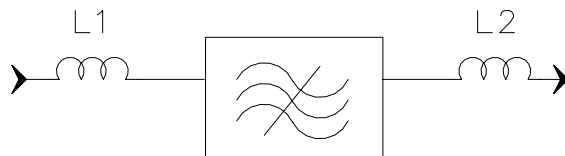
### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.8	70	70.2
Insertion Loss	dB	-	7.5	8.5
1 dB Bandwidth	MHz	6.2	6.23	-
3 dB Bandwidth	MHz	7	7.22	-
30 dB Bandwidth	MHz	-	10.4	10.6
Passband Variation	dB	-	0.8	1
Phase Linearity ( $F_0 \pm 3\text{MHz}$ )	degree	-	7	10
Group delay Variation ( $F_0 \pm 3\text{MHz}$ )	nsec	-	60	125
Ultimate Rejection				
78MHz~95MHz	dB	38	40	
45MHz~63MHz		47	50	
Absolute Delay	usec	-	1.03	-
Material Temperature coefficient	KHz/°C		-6.58	
Ambient Temperature	°C		25	
Package Size	SMP-53 (13.3 x 6.5 mm 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

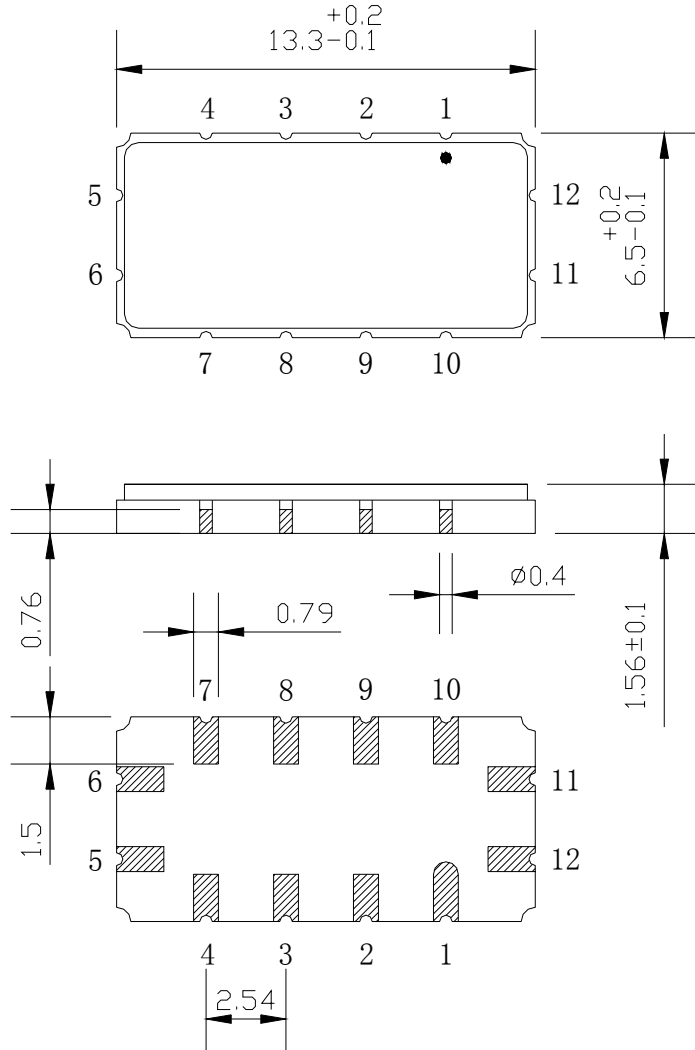


**L1 = 120nH L2 = 150nH**  
**Source/Load Impedance = 50 ohm**


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	LB070DS12	
		Rev. Date	2005-7-18	
		Rev.	1.0	Page

Package Dimension

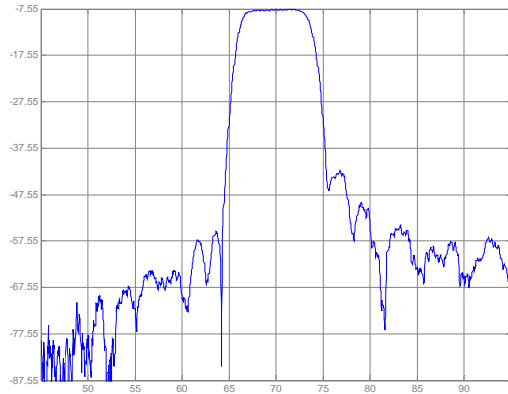


**Input:11**  
**Output:5**

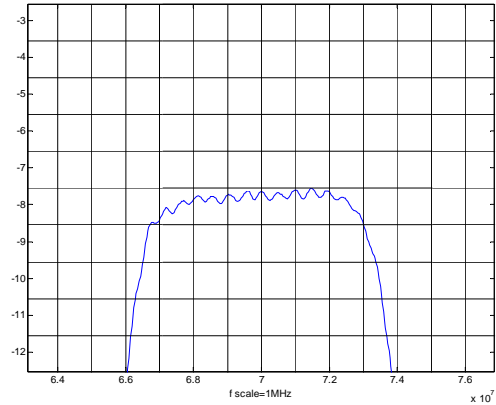
	<b>SIPAT Co., Ltd.</b> ( CETC No. 26 Research Institute ) Nanping Huayuan Road No. 14 Chongqing, China, 400060	Part Number	LB070DS12	
		Rev. Date	2005-7-18	
		Rev.	1.0	Page

*Typical Performance*

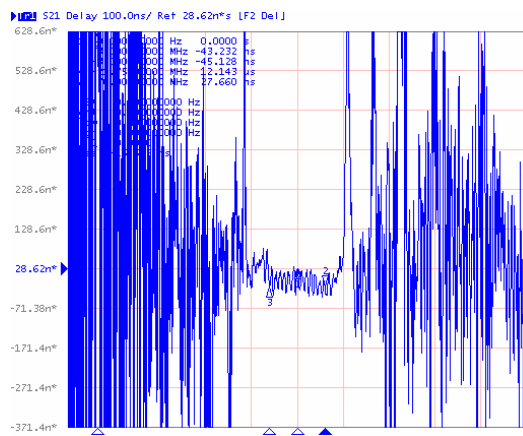
Frequency Respond



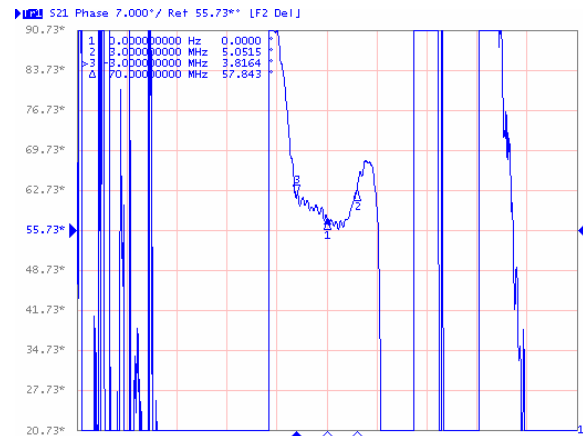
Passband Respond



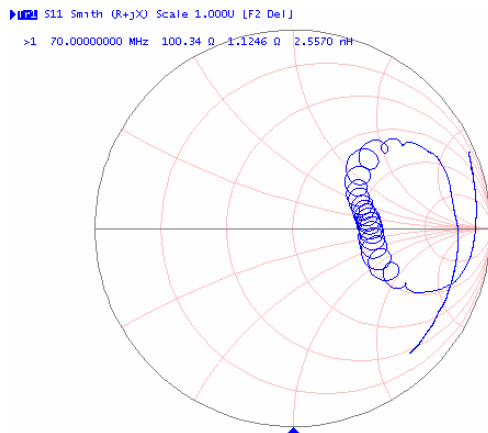
Group delay Variation ( $F_0 \pm 3\text{MHz}$ )



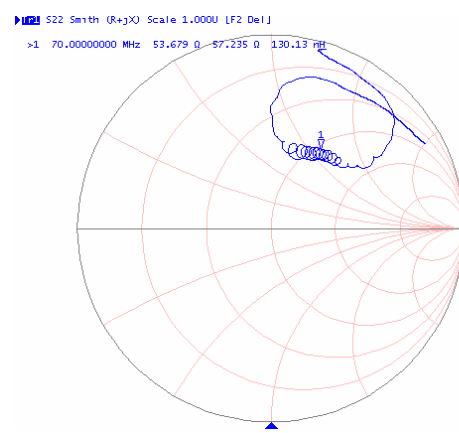
Phase Linearity ( $F_0 \pm 3\text{MHz}$ )



Smith Chart S11



Smith Chart S22



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

Part Number	LB070DS12	
Rev. Date	2005-7-18	
Rev.	1.0	Page 3/3