

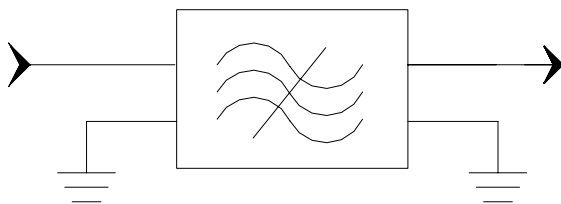
### Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	69.95	70	70.05
Insertion Loss	dB	-	24.8	28
3 dB Bandwidth	MHz	6.2	6.32	-
40 dB Bandwidth	MHz	-	6.92	7
50 dB Bandwidth	MHz	-	6.98	-
Passband Variation	dB	-	0.7	1.5
Absolute Delay	usec	-	3.83	-
Ultimate Rejection	dB	50	55	-
Material Temperature coefficient	KHz/°C	-6.58		
Ambient Temperature	°C	25		
Package Size	DIP3512 (35.2x12.7x5.2mm3)			

#### 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

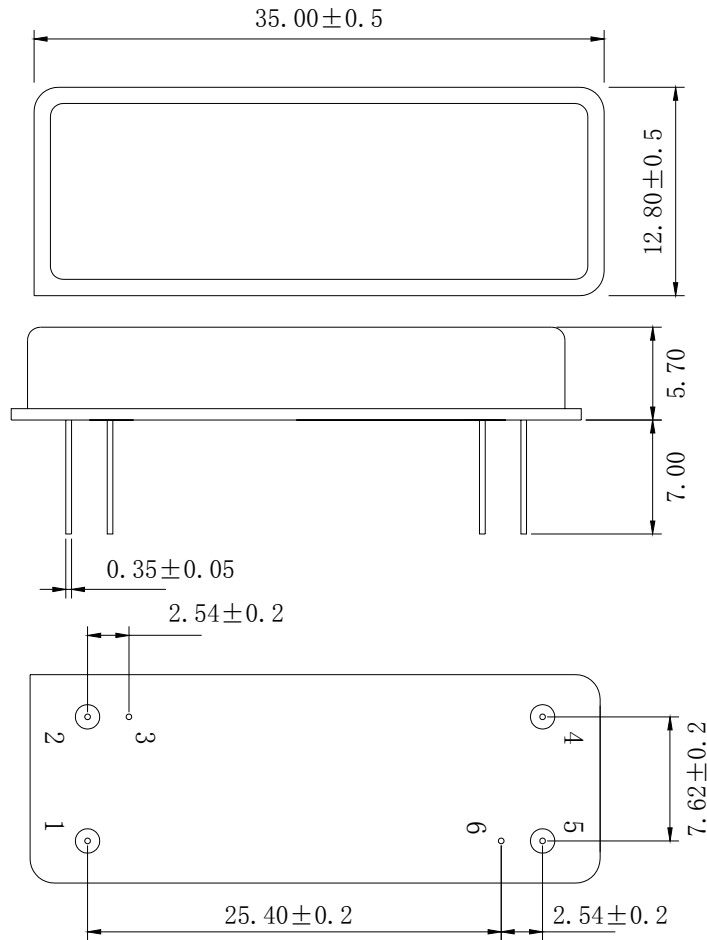


**Source/Load Impedance=50 ohm**


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	LBN7056	
		Rev. Date	2006-4-13	
		Rev.	1.0	Page

*Package Dimension*

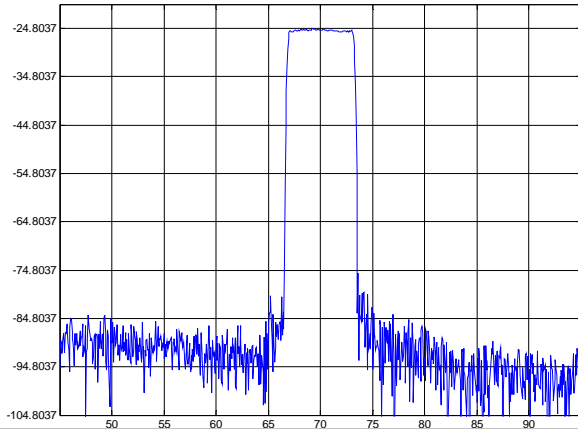


**Input:1**  
**Output:5**

	<b>SIPAT Co., Ltd.</b> ( CETC No. 26 Research Institute ) Nanping Huayuan Road No. 14 Chongqing, China, 400060	Part Number	LBN7056	
		Rev. Date	2006-4-13	
		Rev.	1.0	Page

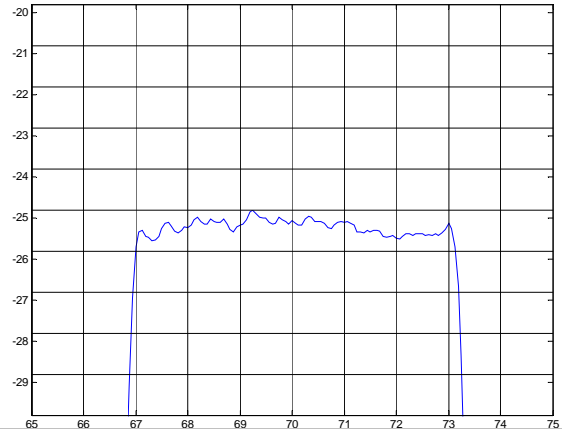
Typical Performance

Frequency Respond



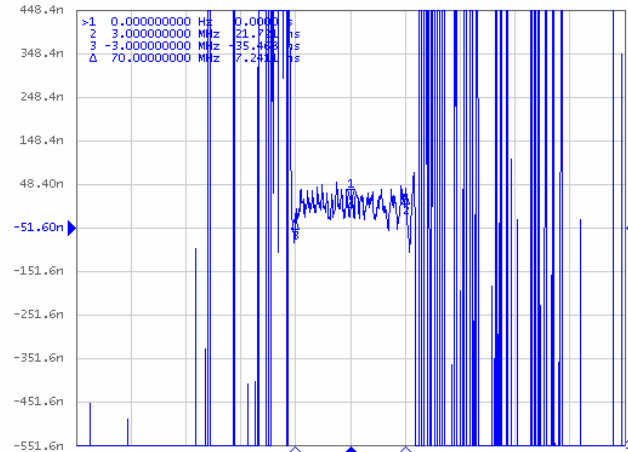
Group Delay Variation( $f_0 \pm 3\text{MHz}$ )

Passband Respond



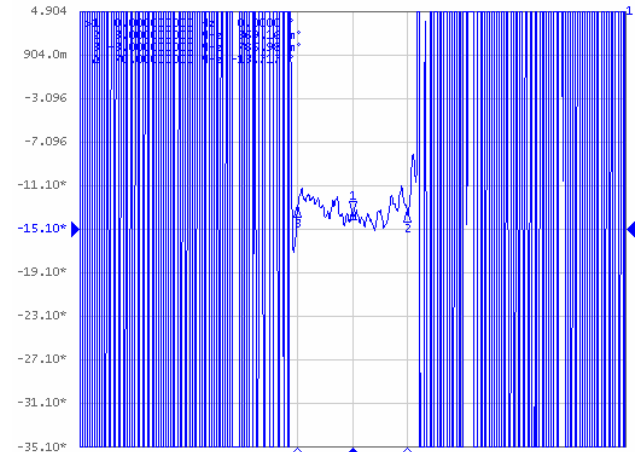
Phase Linearity( $f_0 \pm 3\text{MHz}$ )

S21 Delay 100.0ns/ Ref -51.60ns [Del]



Smith Chart S11

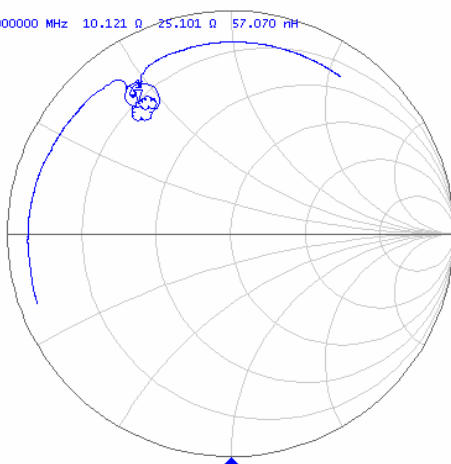
S21 Phase 4.000°/ Ref -15.10° [Del]



Smith Chart S22

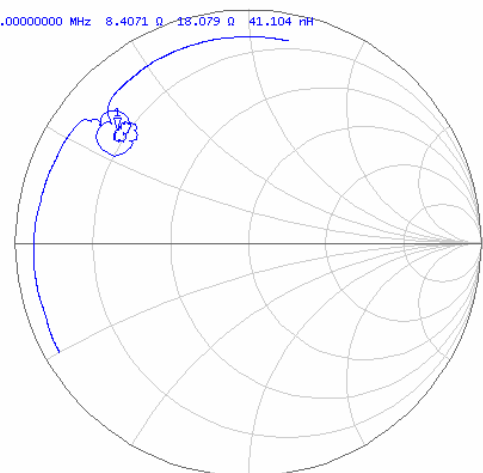
S11 Smith (R+jX) Scale 1.000U

>1 70.00000000 MHz 10.121 Ω 25.101 Ω 57.070 nH



S22 Smith (R+jX) Scale 1.000U

>1 70.00000000 MHz 8.4071 Ω 18.079 Ω 41.104 nH



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

Part Number	LBN7056	
Rev. Date	2006-4-13	
Rev.	1.0	Page 3/3