



### Features


- ◇ For IF SAW filter
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ RoHS compliant (2002/95/EC), Pb-free

### Specifications

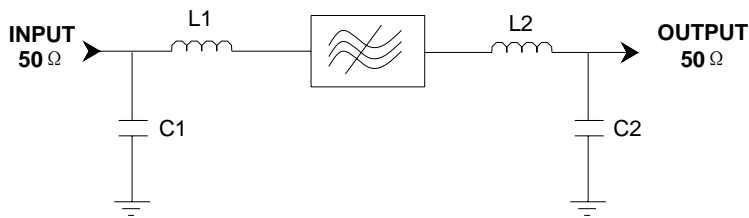
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	114	-
Insertion Loss	dB	-	10	11.5
1 dB Bandwidth	MHz	3	3.5	-
3 dB Bandwidth	MHz	4	4.26	-
40 dB Bandwidth	MHz	-	6.84	9
Passband Variation( $f_0 \pm 1.5\text{MHz}$ )	dB	-	0.5	-
Group Delay Variation( $f_0 \pm 1.5\text{MHz}$ )	nsec	-	70	100
Phase Linearity( $f_0 \pm 1.5\text{MHz}$ )	deg	-	4	5
Absolute Delay	usec	-	1.27	-
Ultimate Rejection	$f_0 - 4.5\text{MHz}$	dB	40	-
	$f_0 + 4.5\text{MHz}$	dB	40	-
Material Temperature coefficient	KHz/°C	-2.05		
Substrate Material	-	112LT		
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	SMD13.3*6.5A			

#### 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	LBT11404	
		Rev. Date	2008-04-28	
		Ver.	1.0	Page

### Matching Configuration

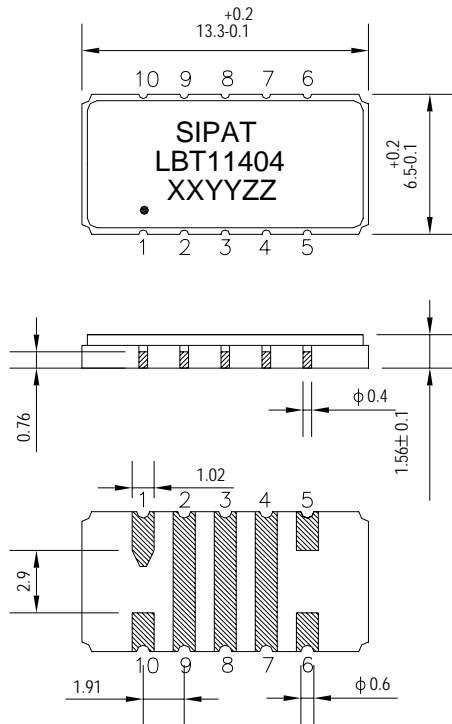


**L1=(180+18)nH L2=(180+12)nH**  
**C1=C2=47pF**  
**Source/Load Impedance=50 ohm**

Notes - Component values may change depending on board layout.

www.DataSheet4U.com

### Package Dimension



#### Pad Configuration:

Input 10  
Output 5  
Ground All Others

#### Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT11404: Part Number
- 4) XXYYZZ: Date Code

Package: SMD13.3\*6.5A

Unit: mm

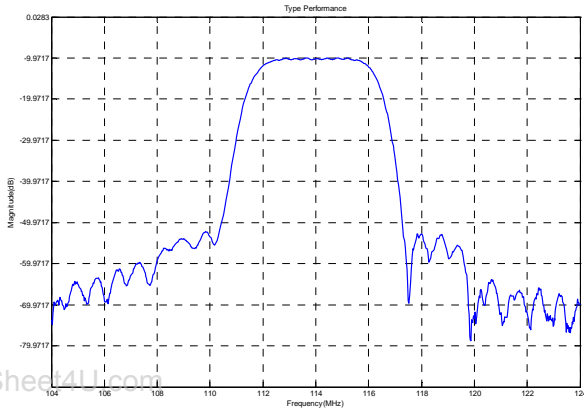


**SIPAT Co., Ltd.**  
( CETC No.26 Research Institute )  
#14 Nanping Huayuan Road,  
Chongqing, China, 400060

Part Number	LBT11404	
Rev. Date	2008-04-28	
Ver.	1.0	Page 2/3

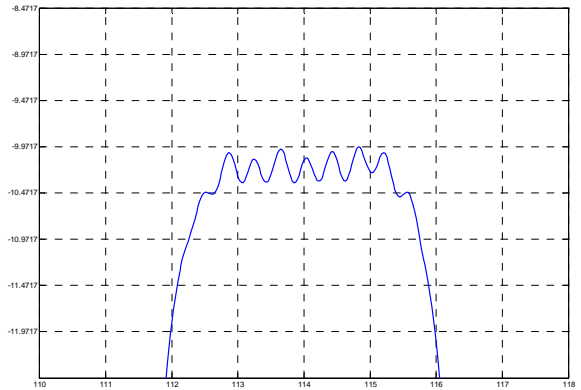
Typical Performance

Frequency Respond



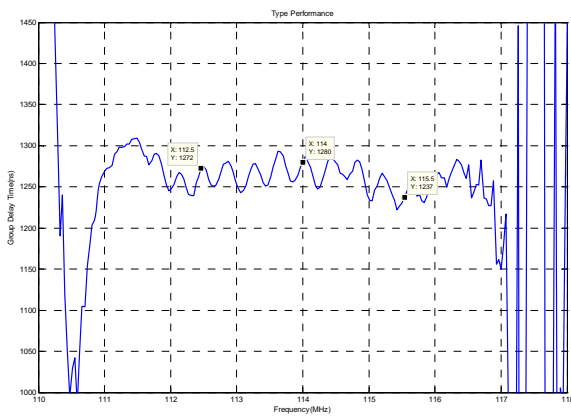
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Respond



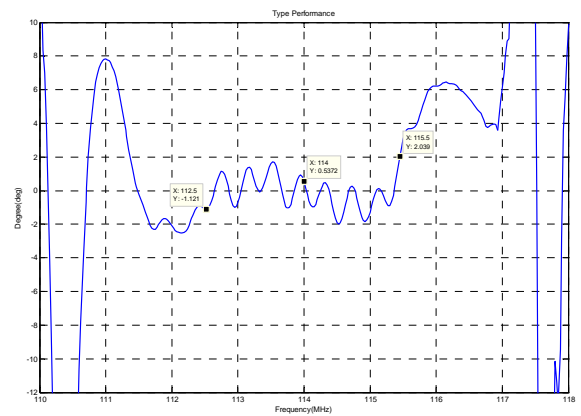
Horizontal: 1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 1.5\text{MHz}$ )



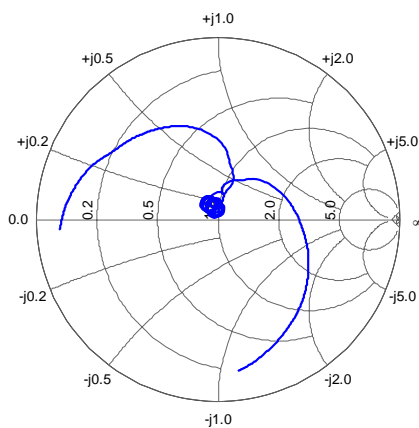
Horizontal: 1MHz/Div Vertical: 50ns/Div

Phase Linearity( $f_0 \pm 1.5\text{MHz}$ )

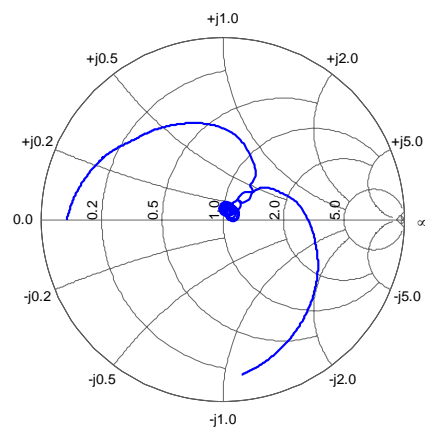


Horizontal: 1MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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

Part Number	LBT11404	
Rev. Date	2008-04-28	
Ver.	1.0	Page 3/3