



### Features

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

### Specifications

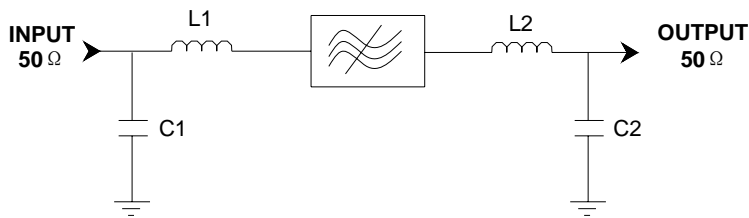
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	95.9	96	96.1
Insertion Loss	dB	-	12.4	16
1 dB Bandwidth	MHz	5	5.51	-
3 dB Bandwidth	MHz	-	6.26	-
15 dB Bandwidth	MHz	-	7.68	8
40 dB Bandwidth	MHz	-	9.41	-
50 dB Bandwidth	MHz	-	13.27	-
Passband Variation( $f_0 \pm 2.5\text{MHz}$ )	dB	-	0.5	0.8
Group Delay Variation( $f_0 \pm 2.5\text{MHz}$ )	nsec	-	65	80
Phase Linearity( $f_0 \pm 2.5\text{MHz}$ )	deg	-	4	-
Absolute Delay	usec	-	1.24	-
Ultimate Rejection	40~87MHz	dB	43	55
	111~150MHz	dB	43	59
Material Temperature coefficient	KHz/°C	-1.73		
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*6.5			

#### 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	LBT09611	
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		Ver.	1.0	Page 1/3

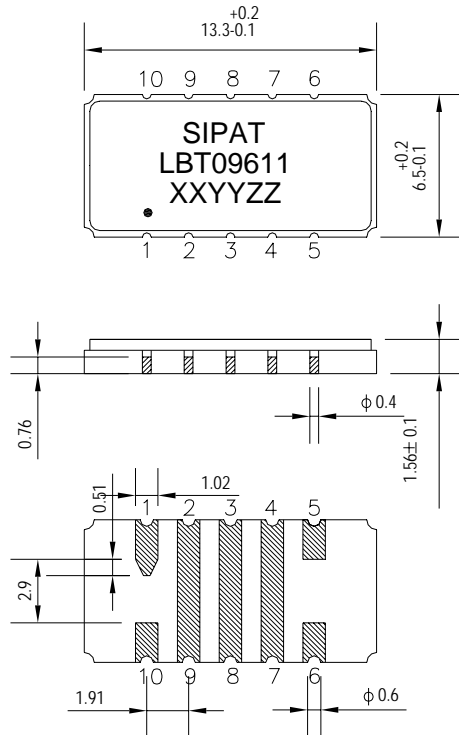
### Matching Configuration



**L1=(220+22)nH L2=150nH**  
**C1=39pF C2=82pF**  
**Source/Load Impedance=50 ohm**

Notes - Component values may change depending  
on board layout.

### Package Dimension



#### Pad Configuration:

Input: 10  
Output: 5  
Ground: All Others

#### Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT09611: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3\*6.5

Unit: mm

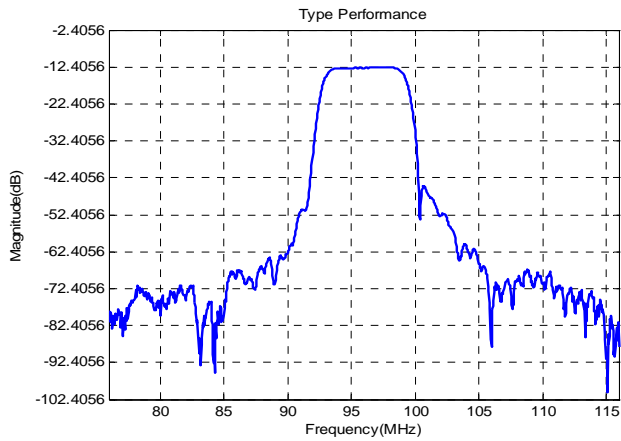


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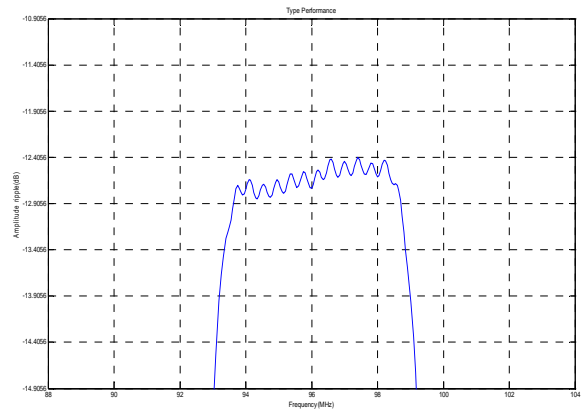
Typical Performance

Frequency Respond



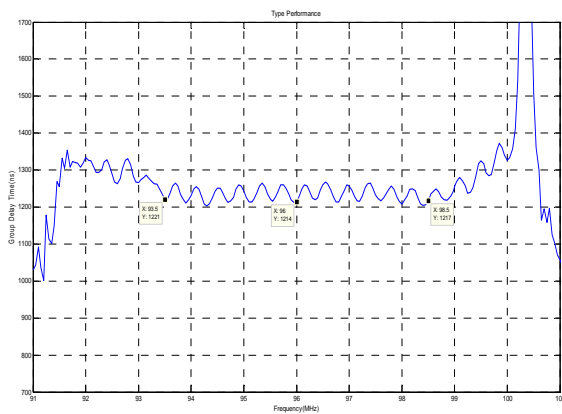
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



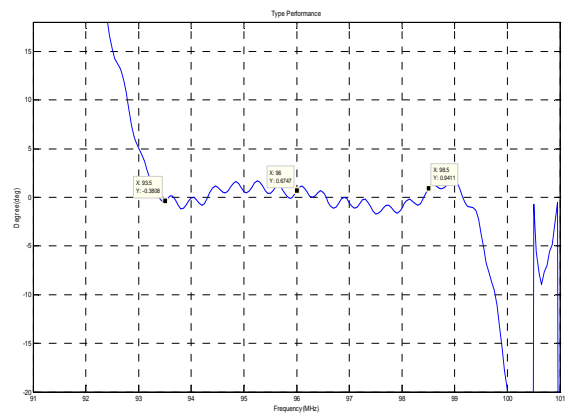
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±2.5MHz)



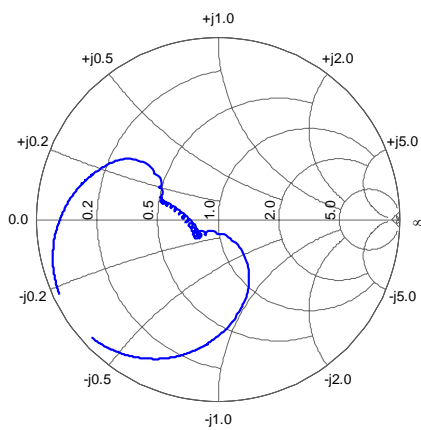
Horizontal: 1MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±2.5MHz)

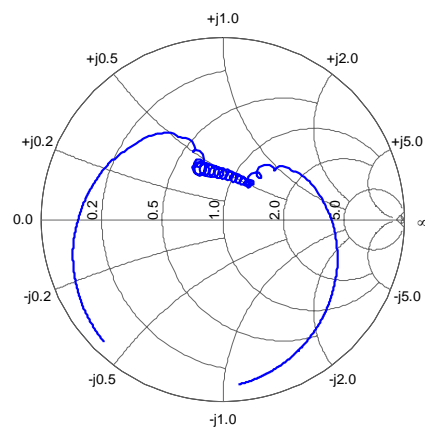


Horizontal: 1MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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