



### Features


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

### Specifications

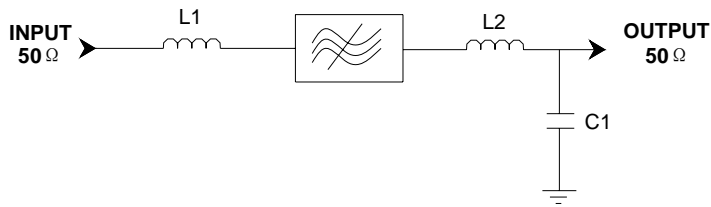
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	140	-
Insertion Loss	dB	-	8	15
1 dB Bandwidth	MHz	14	16.73	-
3 dB Bandwidth	MHz	-	19.27	-
Passband Variation( $f_0 \pm 7\text{MHz}$ )	dB	-	0.6	1
Absolute Delay	usec	-	0.61	-
Ultimate Rejection	@ $f_0 \pm 14\text{MHz}$	12	30	-
	@ $f_0 \pm 28\text{MHz}$	40	56	-
Material Temperature coefficient	KHz/°C	-13.16		
Substrate Material	-	YZ LN		
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	-	1		
Package Size	SMD7.0*5.0			

#### 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	LBN140A05	
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### Matching Configuration



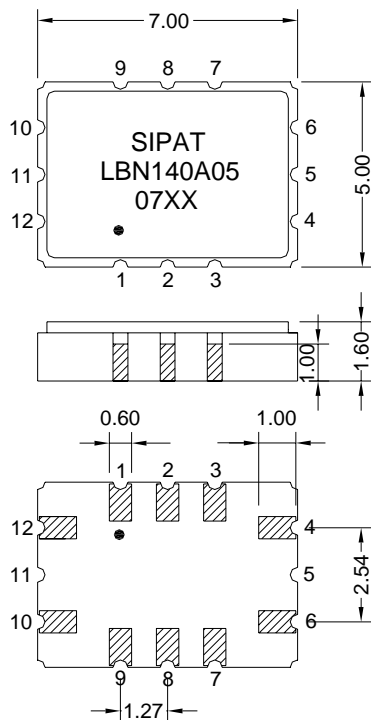
**L1=68nH L2=82nH**

**C1=47pF**

**Source/Load Impedance=50 ohm**

Notes - Component values may change depending  
on board layout.

### Package Dimension



#### Pad Configuration:

Input 10

Output 4

Ground All Others

#### Marking Configuration:

1) •: Pad Number 1 Index

2) SIPAT: Manufacturer Name

3) LBN140A05: Part Number

4) 07XX: Date Code

**Package: SMD7.0\*5.0**

**Unit: mm**

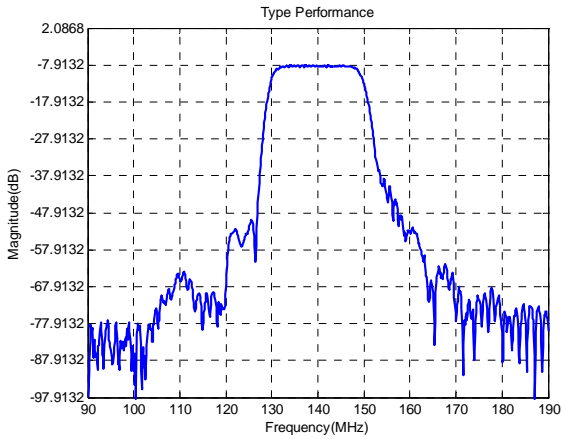


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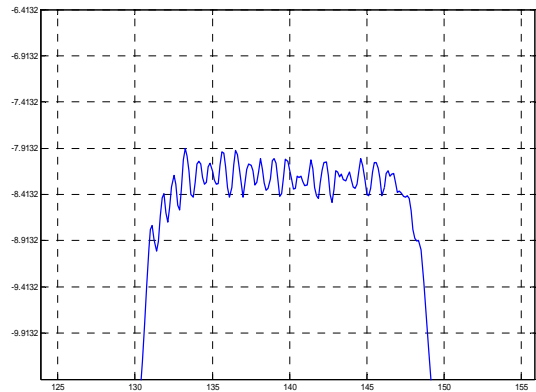
*Typical Performance*

Frequency Respond



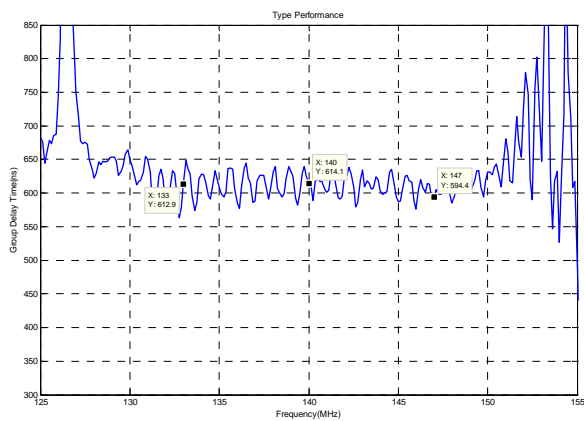
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



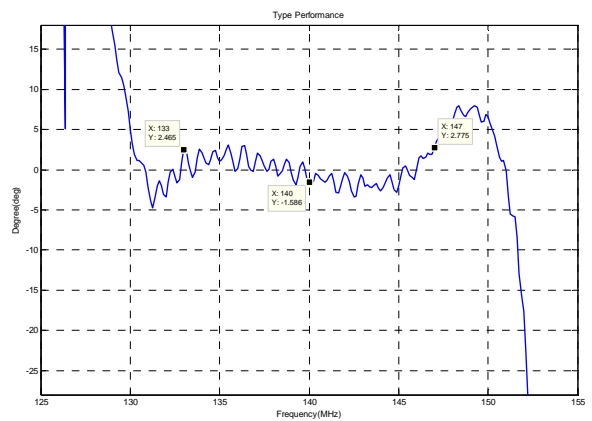
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation( $f_0 \pm 7\text{MHz}$ )



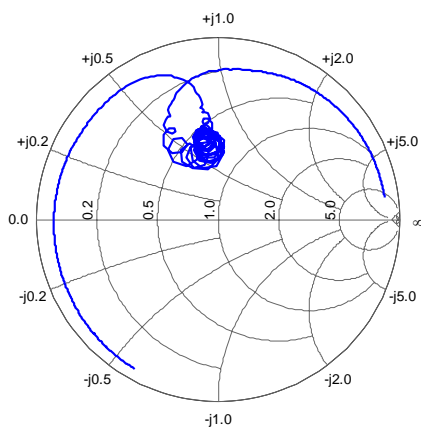
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity( $f_0 \pm 7\text{MHz}$ )

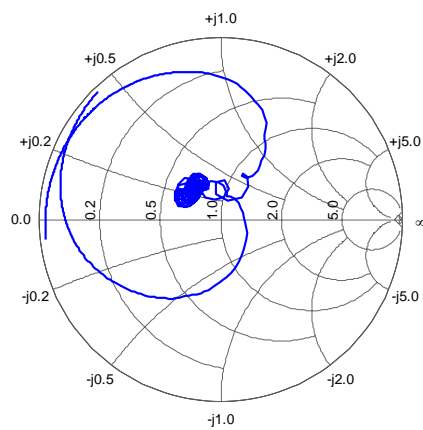


Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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