



Features

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

Specifications

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	@ $f_0\pm 14\text{MHz}$	dB	12	30	-
	@ $f_0\pm 28\text{MHz}$	dB	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:

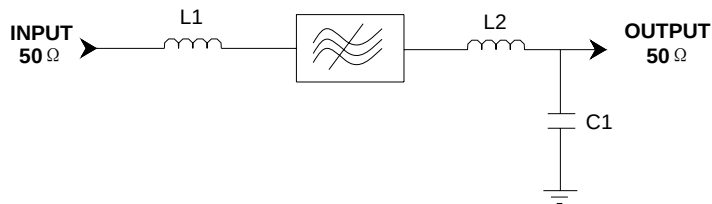
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
- This is the optimum impedance in order to achieve the performance show.



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Part Number	LBN140A05	
Rev. Date	2008-01-07	
Ver.	2.0	Page 1/3

Matching Configuration



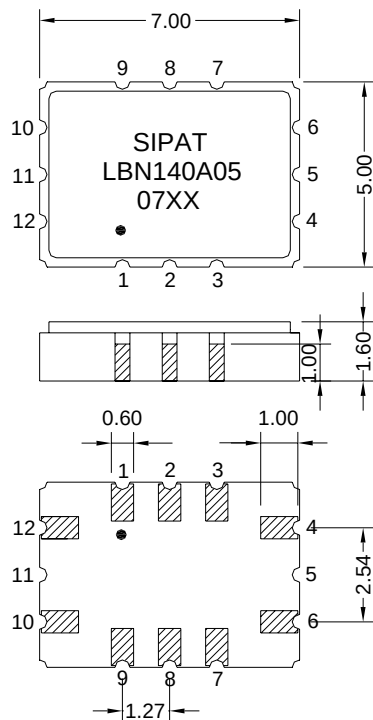
L1=68nH L2=82nH

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



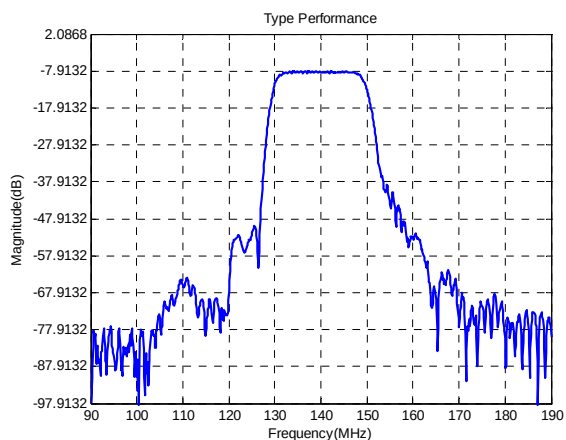
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Typical Performance

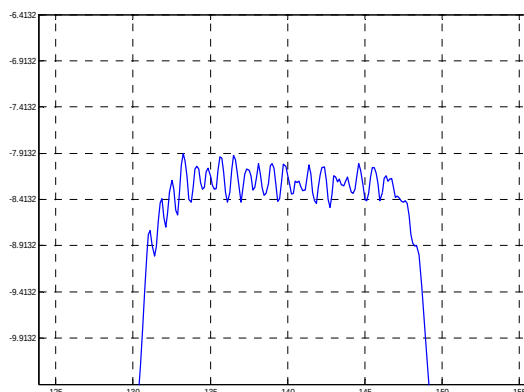
Frequency Respond



Horizontal: 10MHz/Div

Vertical: 10dB/Div

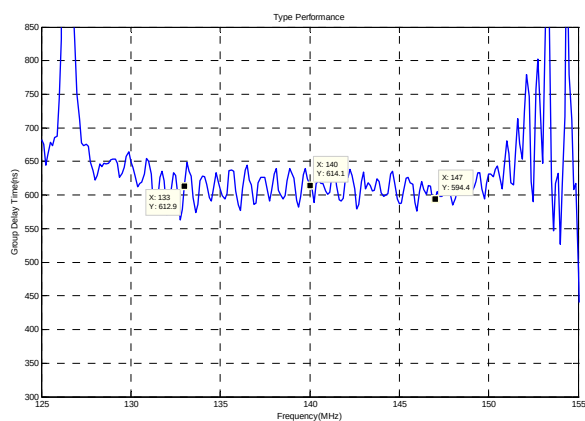
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

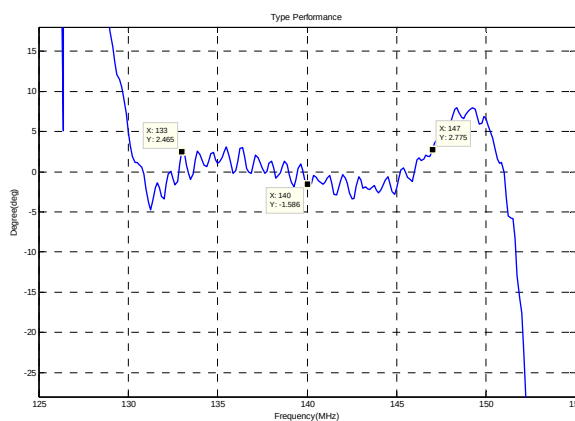
Group Delay Variation($f_0 \pm 7\text{MHz}$)



Horizontal: 5MHz/Div

Vertical: 50ns/Div

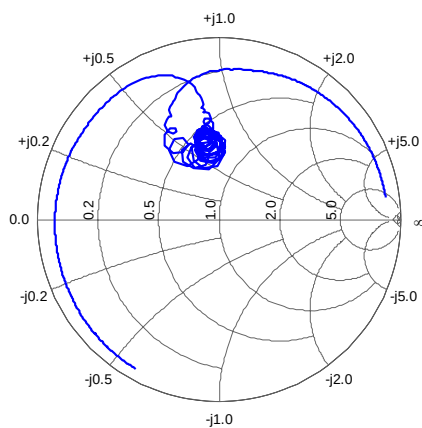
Phase Linearity($f_0 \pm 7\text{MHz}$)



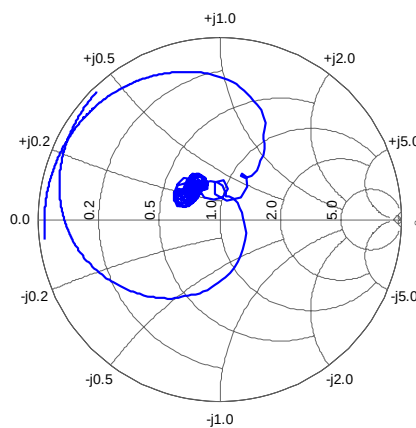
Horizontal: 5MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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Page 3/3