



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Ceramic Surface Mount Package
- ✧ Small size

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.75	140	140.25
Insertion Loss	dB	-	18	26
1 dB Bandwidth	MHz	26.4	26.73	-
3 dB Bandwidth	MHz	28	28.5	-
40 dB Bandwidth	MHz	-	34.33	36
50 dB Bandwidth	MHz	-	34.99	36.4
Passband Variation	dB	-	0.8	1
Phase Linearity(f0±13MHz)	deg	-	9	12
Group Delay Variation(f0±13MHz)	nsec	-	45	50
Absolute Delay	usec	-	0.8	-
Ultimate Rejection	dB	50	56	-
Material Temperature coefficient	KHz/°C	-11.48		
Substrate Material	-	128LN		
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	SMD13.3*6.5A			

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	LBN140A04		
Rev. Date	2007-08-31		
Ver.	1.0	Page 1/3	

Matching Configuration

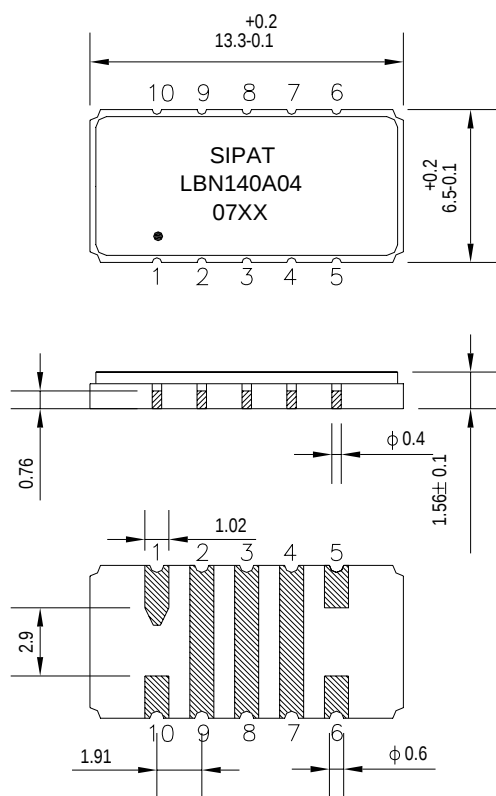


L1=82nH L2=100nH

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) LBN140A04: Part Number
- 4) 07XX: Date Code

Package: SMD13.3*6.5A

Unit: mm



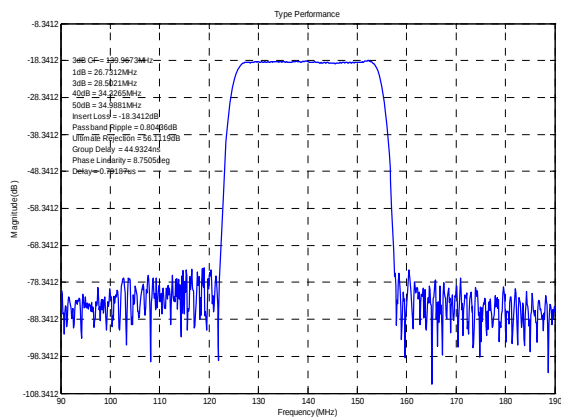
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Typical Performance

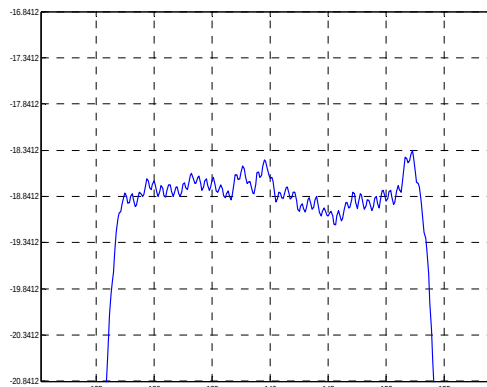
Frequency Respond



Horizontal: 10MHz/Div

Vertical: 10dB/Div

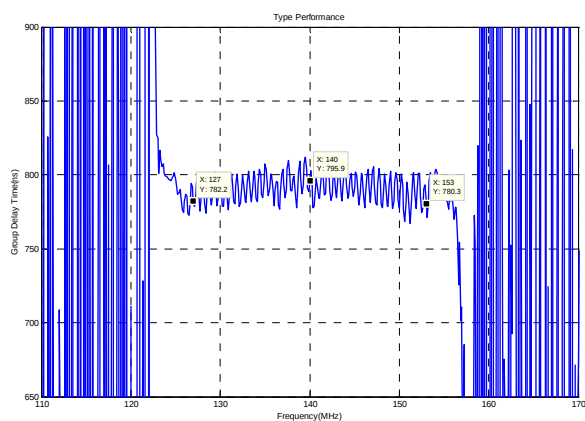
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

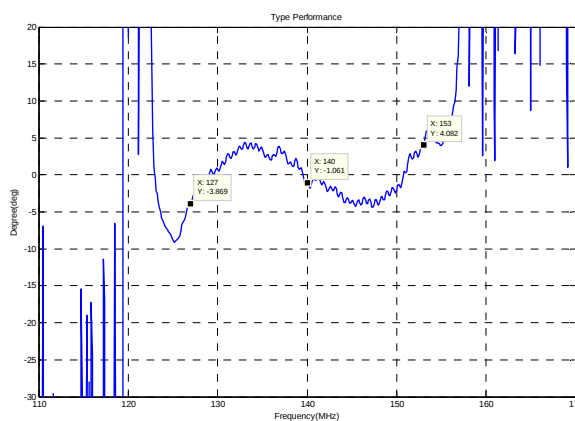
Group Delay Variation(f0±13MHz)



Horizontal: 10MHz/Div

Vertical: 50ns/Div

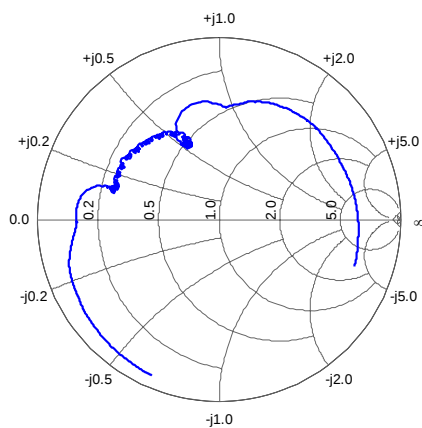
Phase Linearity(f0±13MHz)



Horizontal: 10MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22

