



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Dual In-line Package

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.85	140	140.15
Insertion Loss	dB	-	31	33
1.5 dB Bandwidth	MHz	6.8	6.85	-
3 dB Bandwidth	MHz	-	6.98	-
32 dB Bandwidth	MHz	-	7.58	7.6
40 dB Bandwidth	MHz	-	7.65	-
45 dB Bandwidth	MHz		7.68	8
Passband Variation	dB	-	0.9	1.2
Absolute Delay	usec	-	4.47	4.5
Ultimate Rejection	dB	50	55	-
Material Temperature coefficient	KHz/°C	-2.52		
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	-	1		
Package Size	DIP3512 (35.0x12.8x4.7mm3)			

Notes:

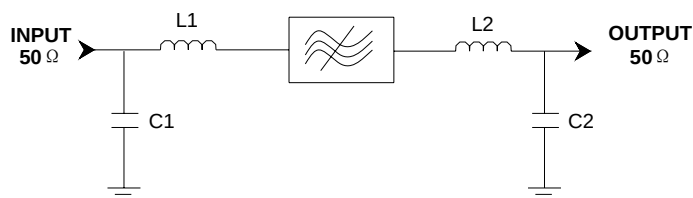
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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Part Number	LBT140A01		
Rev. Date	2007-08-31		
Ver.	1.0	Page 1/3	

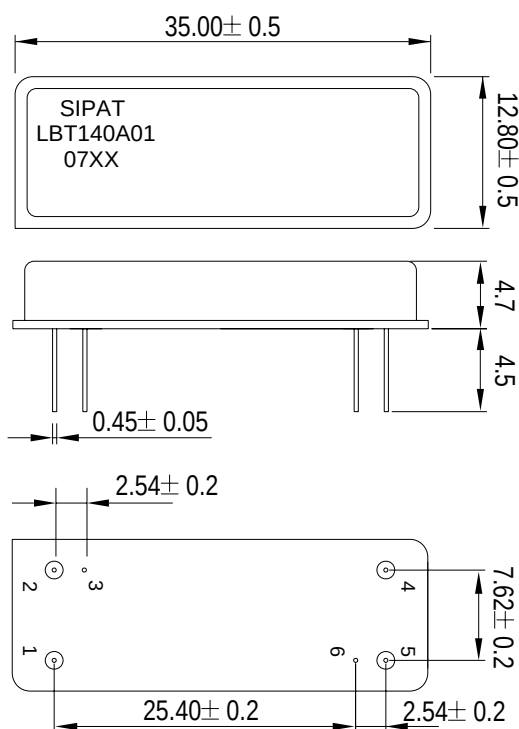
Matching Configuration



L1=L2=33nH
C1=47pF C2=33pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input 1
Output 5
Ground All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT140A01: Part Number
- 4) 07XX: Date Code

Package: DIP3512

Unit: mm



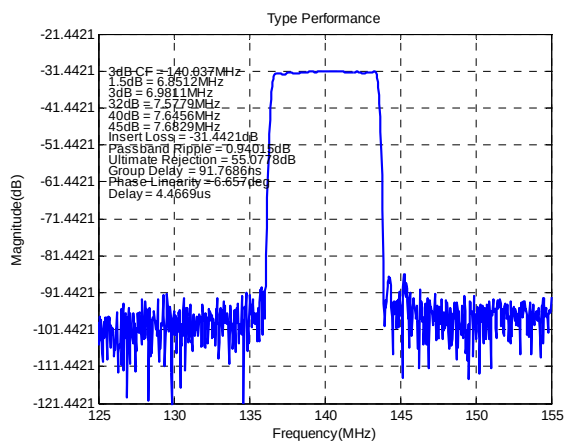
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Typical Performance

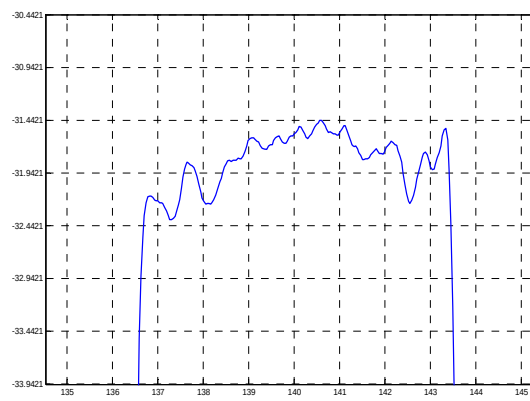
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

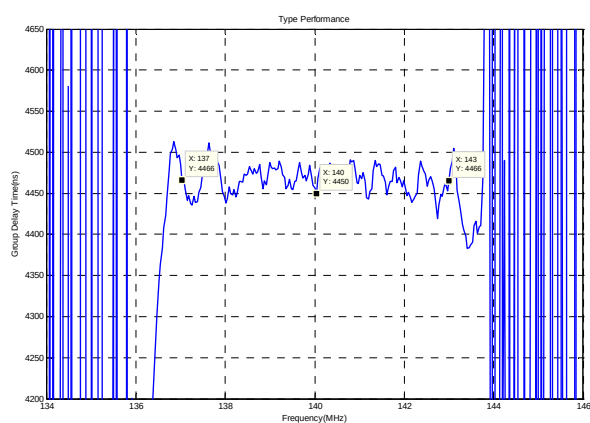
Passband Respond



Horizontal: 1MHz/Div

Vertical: 0.5dB/Div

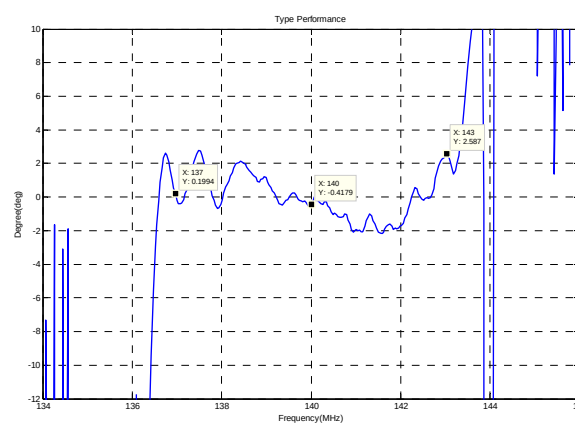
Group Delay Variation($f_0 \pm 3\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 50ns/Div

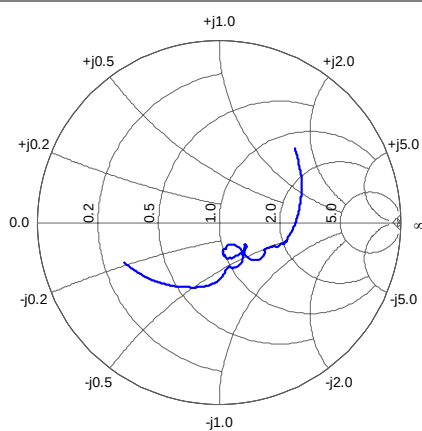
Phase Linearity($f_0 \pm 3\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22

