



Features

- ✧ For IF SAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Dual In-line Package
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	99.85	100	100.15
Insertion Loss	dB	-	23.2	30
1.5 dB Bandwidth	MHz	-	5.05	-
3 dB Bandwidth	MHz	5.15	5.2	-
35 dB Bandwidth	MHz	-	5.98	6.05
45 dB Bandwidth	MHz	-	6.06	6.4
50 dB Bandwidth	MHz	-	6.09	7.2
Passband Variation	dB	-	0.8	1.5
Absolute Delay	usec	-	4	-
Ultimate Rejection($f_0\pm 7\text{MHz}$)	dB	50	54	-
Material Temperature coefficient	KHz/°C	-1.8		
Substrate Material	-	112LT		
Ambient Temperature	°C	25		
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	DIP3512 (35.0x12.8x4.7mm3)			

Notes:

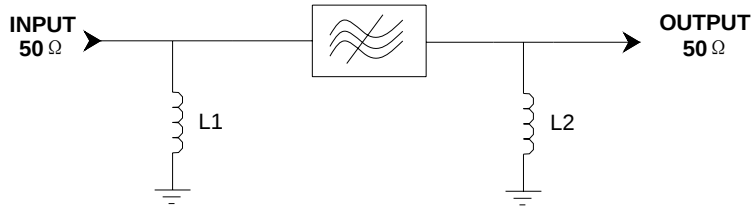
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



SIPAT Co., Ltd.
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Part Number	LBT10014		
Rev. Date	2010-09-26		
Ver.	1.0	Page	1/3

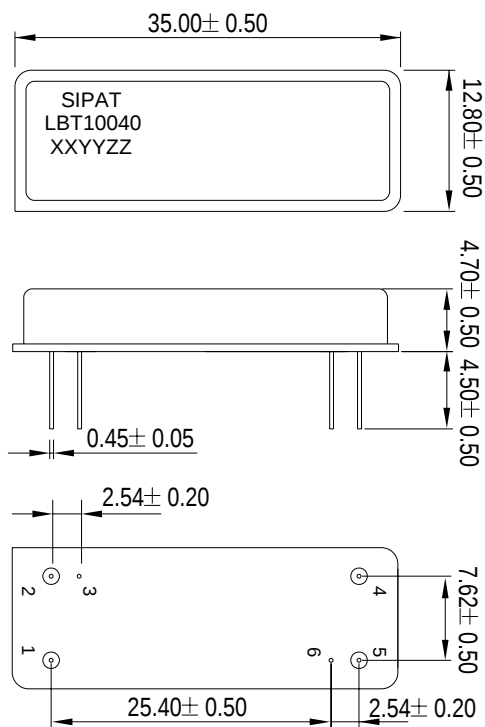
Matching Configuration



L1=39nH L2=56nH
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) SIPAT: Manufacturer Name
- 2) LBT10014: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



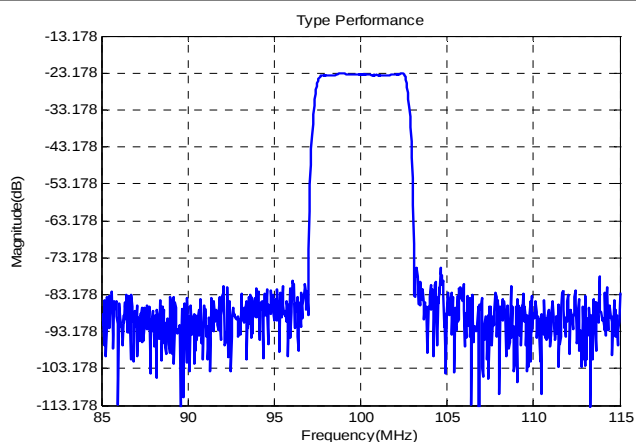
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Typical Performance

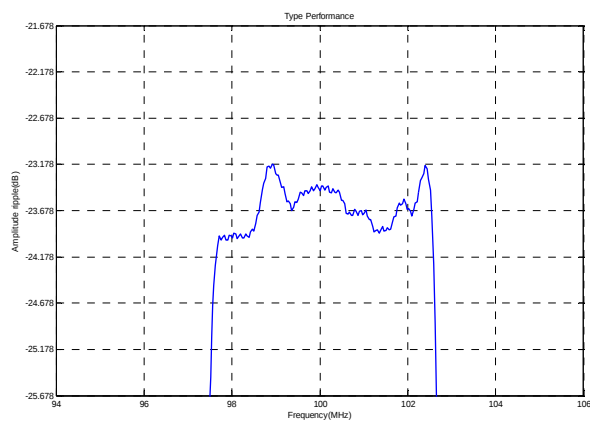
Frequency Response



Horizontal: 5MHz/Div

Vertical: 10dB/Div

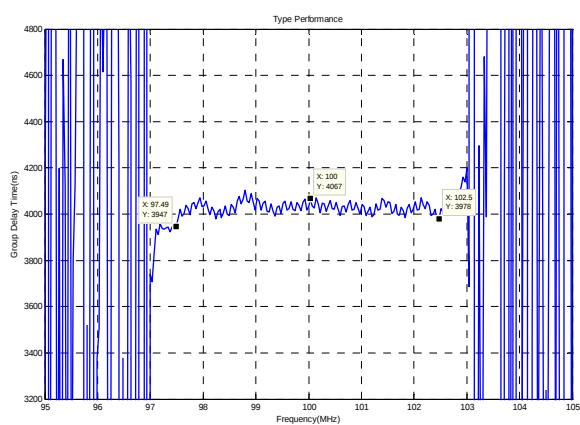
Passband Response



Horizontal: 2MHz/Div

Vertical: 0.5dB/Div

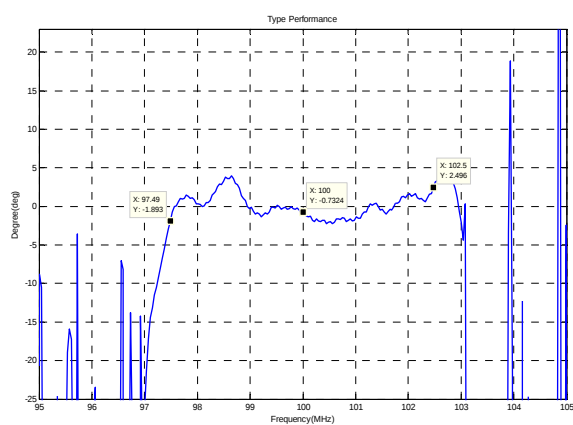
Group Delay Variation($f_0 \pm 2.5\text{MHz}$)



Horizontal: 1MHz/Div

Vertical: 200ns/Div

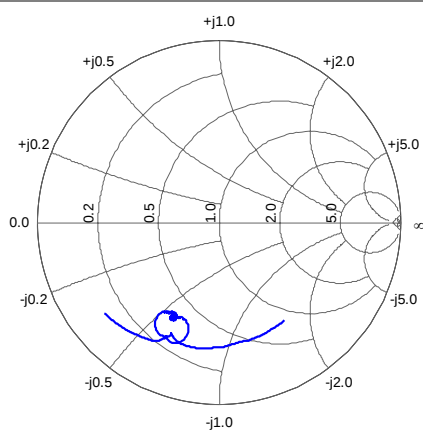
Phase Linearity($f_0 \pm 2.5\text{MHz}$)



Horizontal: 1MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22

