



Features

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

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	101.15	101.3	101.45
Insertion Loss	dB	-	24	25
1.5 dB Bandwidth	MHz	5	5.06	-
3 dB Bandwidth	MHz	-	5.19	-
35 dB Bandwidth	MHz	-	5.78	5.8
40 dB Bandwidth	MHz	-	5.82	-
45 dB Bandwidth	MHz	-	5.85	6.2
50 dB Bandwidth	MHz	-	5.88	7
55 dB Bandwidth	MHz	-	5.91	15
Passband Variation	dB	-	1.2	1.5
Absolute Delay	usec	-	4.66	4.8
Ultimate Rejection($f_0\pm 15\text{MHz}$)	dB	55	68	-
Material Temperature coefficient	KHz/°C	-1.82		
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:

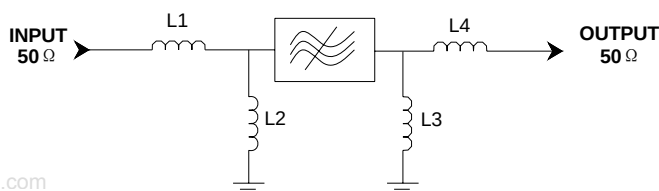
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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Part Number	LBT10103		
Rev. Date	2007-09-17		
Ver.	1.0	Page 1/3	

Matching Configuration



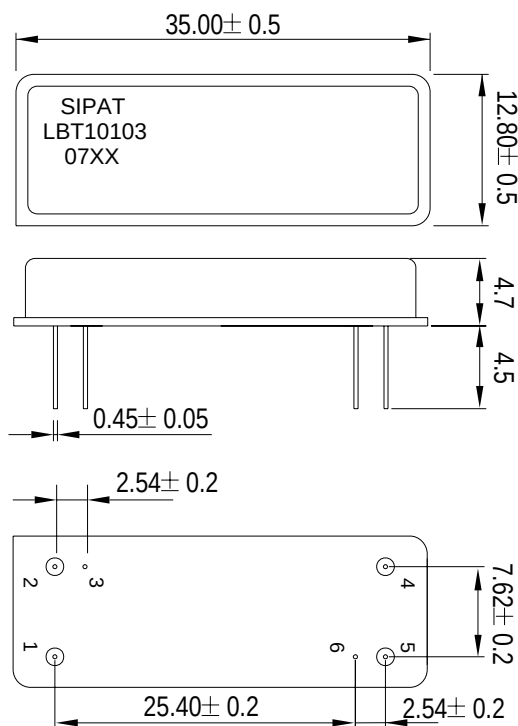
L1=L4=47nH

L2=L3=39nH

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) LBT10103: Part Number
3) 07XX: Date Code

Package: DIP3512

Unit: mm



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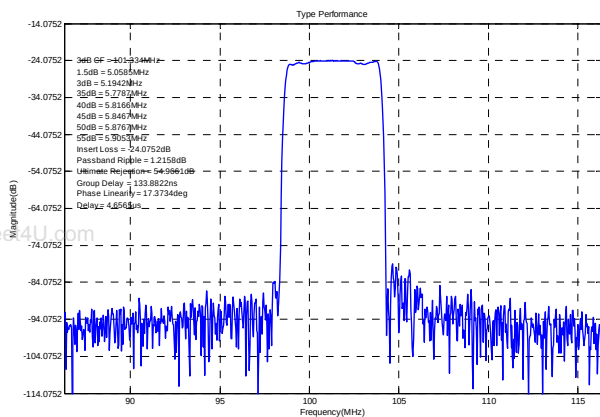
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Typical Performance

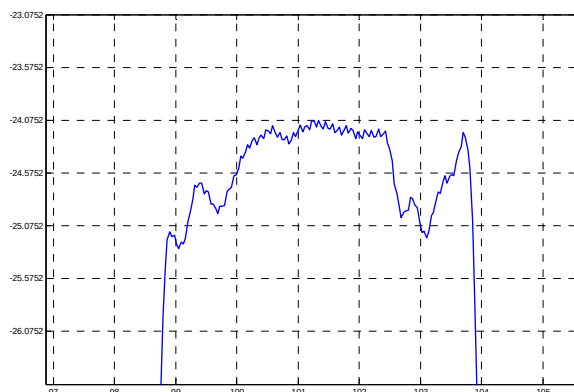
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

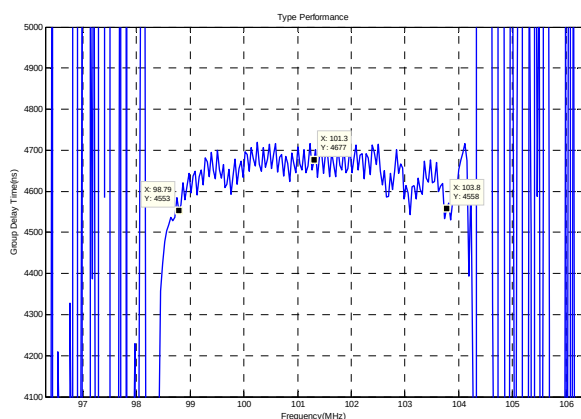
Passband Respond



Horizontal: 1MHz/Div

Vertical: 0.5dB/Div

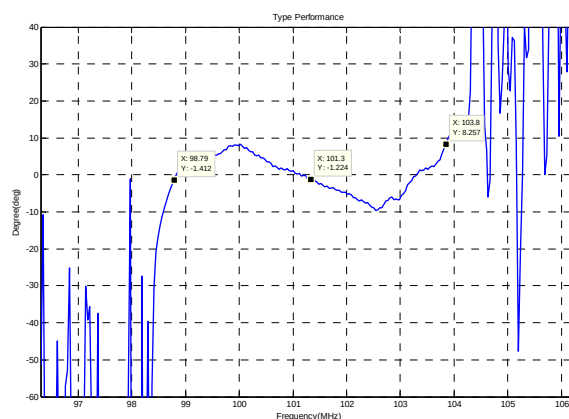
Group Delay Variation($f_0 \pm 2.5\text{MHz}$)



Horizontal: 1MHz/Div

Vertical: 100ns/Div

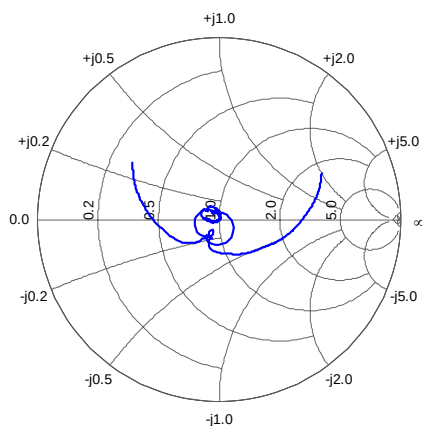
Phase Linearity($f_0 \pm 2.5\text{MHz}$)



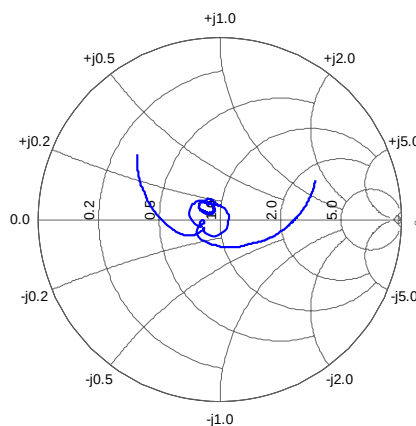
Horizontal: 1MHz/Div

Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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