



Features

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

Specifications

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	119.85	120	120.15
Insertion Loss	dB	-	25.7	27
1.5 dB Bandwidth	MHz	1.6	1.72	-
25 dB Bandwidth	MHz	-	2.4	2.41
30 dB Bandwidth	MHz	-	2.46	2.65
35 dB Bandwidth	MHz	-	2.5	3
40 dB Bandwidth	MHz	-	2.54	3.2
Passband Variation	dB	-	0.4	1.3
Absolute Delay	usec	-	2.77	3.1
Ultimate Rejection	dB	40	43	-
Material Temperature coefficient	KHz/°C	0.12		
Substrate Material	-	Qz		
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	-	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.



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Part Number	LBS12031		
Rev. Date	2008-06-16		
Ver.	1.0	Page 1/3	

Matching Configuration

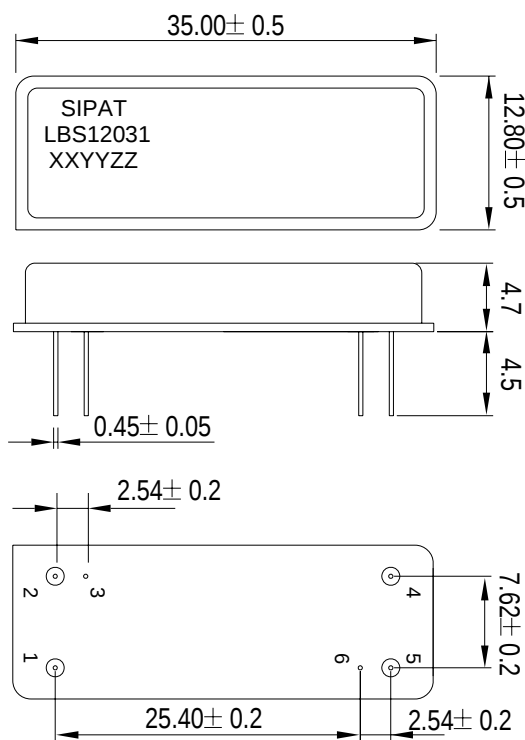


L1=82nH L2=39nH

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) LBS12031: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



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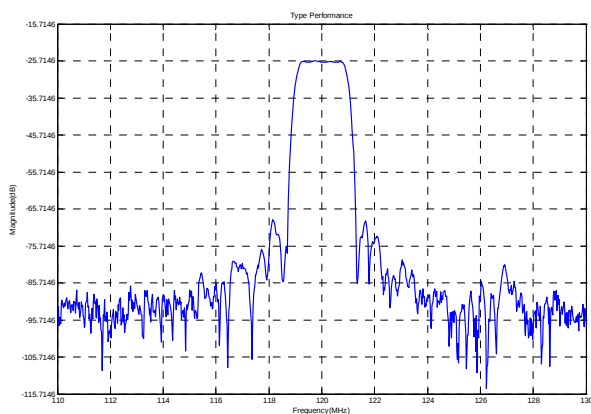
1.0

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Typical Performance

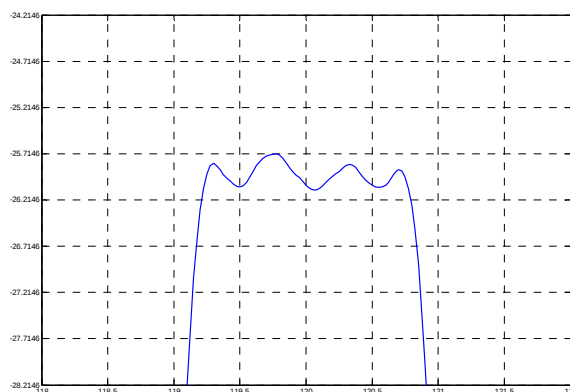
Frequency Respond



Horizontal: 2MHz/Div

Vertical: 10dB/Div

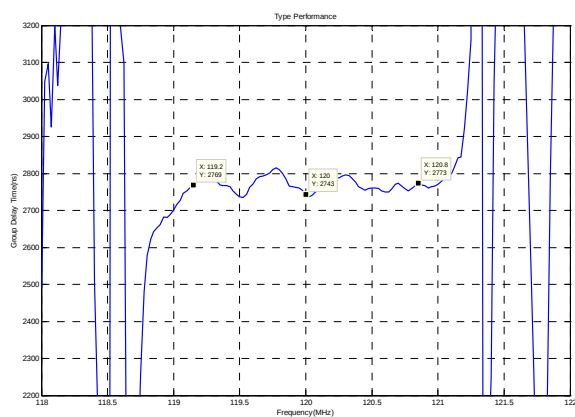
Passband Respond



Horizontal: 0.5MHz/Div

Vertical: 0.5dB/Div

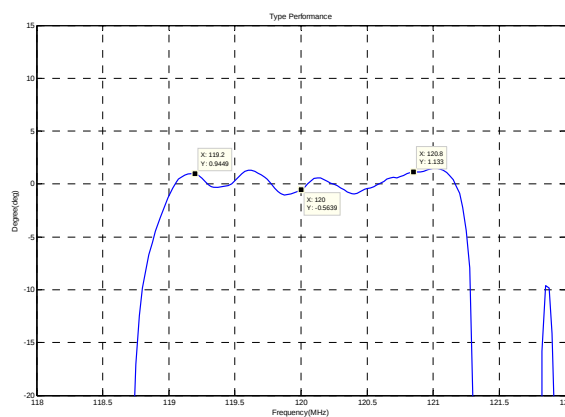
Group Delay Variation($f_0 \pm 0.8\text{MHz}$)



Horizontal: 0.5MHz/Div

Vertical: 100ns/Div

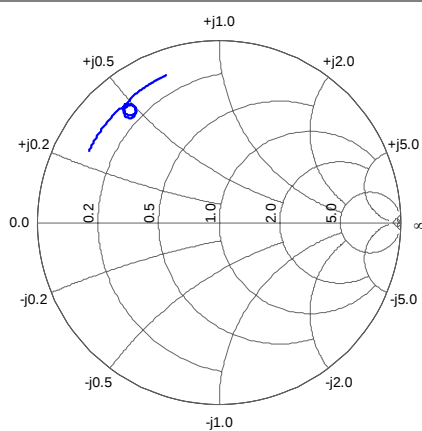
Phase Linearity($f_0 \pm 0.8\text{MHz}$)



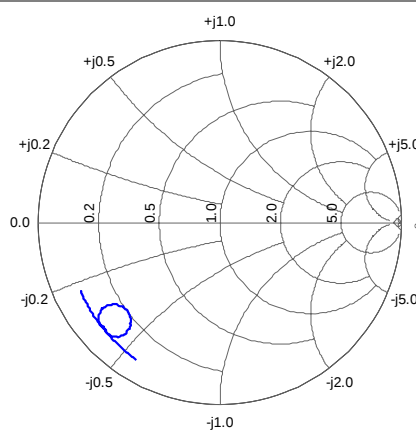
Horizontal: 0.5MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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