



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	109.85	100	100.15
Insertion Loss	dB	-	23.8	25
1.2 dB Bandwidth	MHz	18.9	19.04	-
3 dB Bandwidth	MHz	19.2	19.29	-
40 dB Bandwidth	MHz	-	20.25	20.35
50 dB Bandwidth	MHz	-	20.38	20.45
Passband Variation	dB	-	0.9	1.2
Absolute Delay	usec	-	3	3.2
Ultimate Rejection	dB	50	60	-
Material Temperature coefficient	KHz/°C	-9.4		
Substrate Material	-	YZ LN		
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:

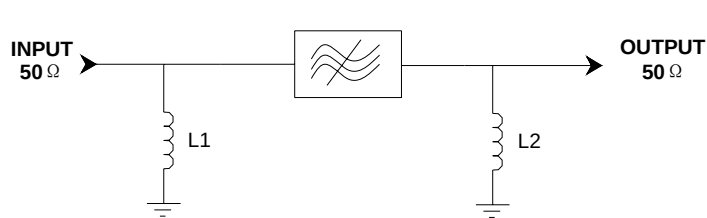
1. All specifications are based on the test circuit shown;
2. In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
3. Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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Part Number	LBN10007		
Rev. Date	2008-02-26		
Ver.	1.1	Page 1/3	

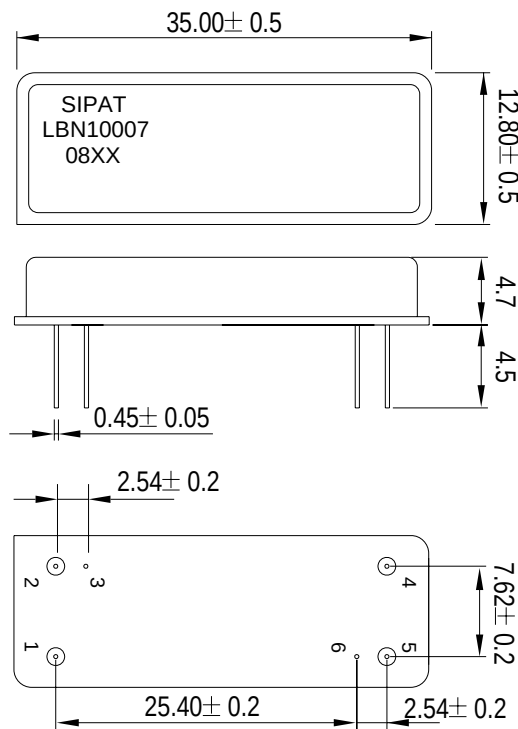
Matching Configuration



L1=120nH L2=100nH
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) LBN10007: Part Number
3) 08XX: Date Code

Package: DIP3512

Unit: mm



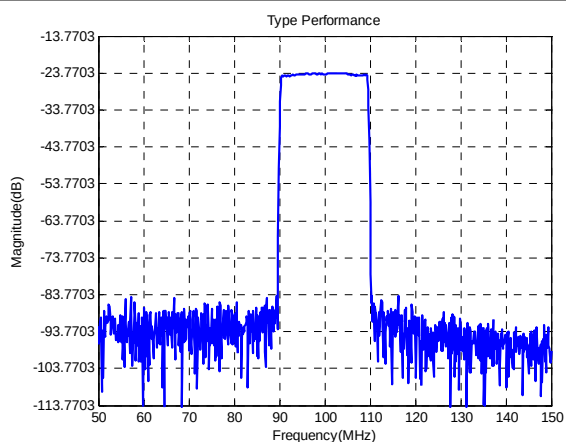
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Typical Performance

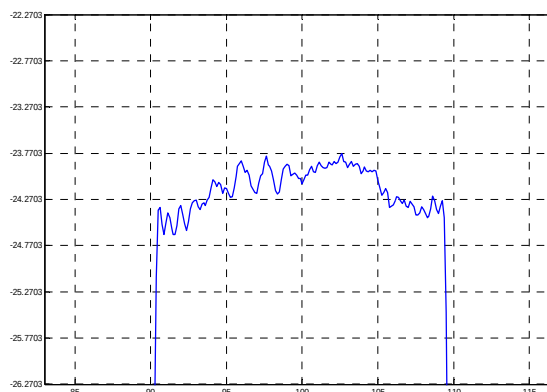
Frequency Respond



Horizontal: 10MHz/Div

Vertical: 10dB/Div

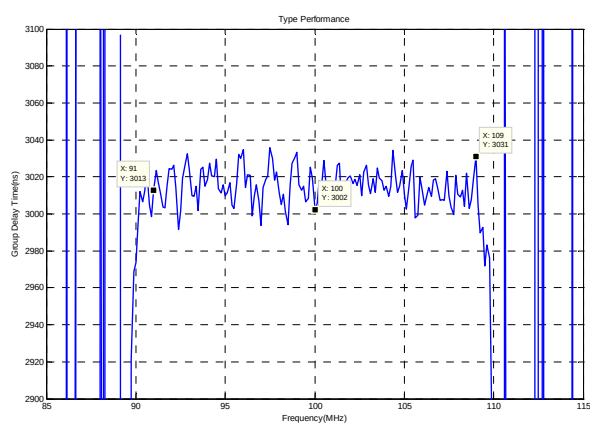
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

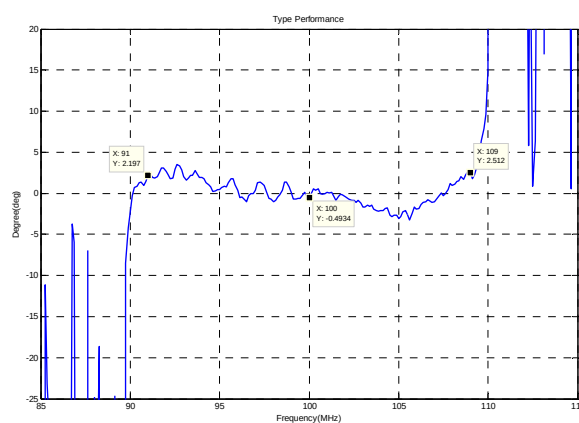
Group Delay Variation($f_0 \pm 9\text{MHz}$)



Horizontal: 5MHz/Div

Vertical: 20ns/Div

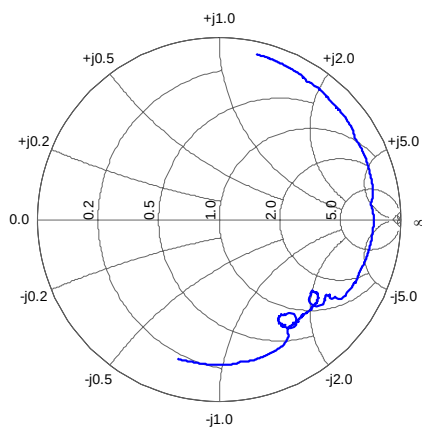
Phase Linearity($f_0 \pm 9\text{MHz}$)



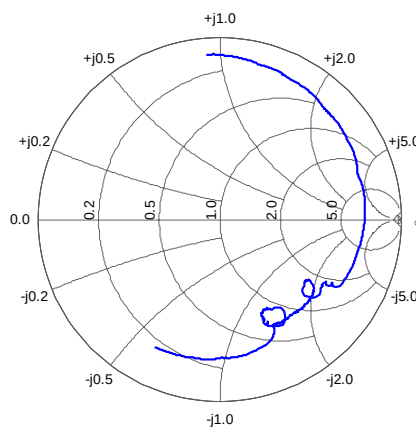
Horizontal: 5MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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