



Features

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

Specifications

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Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	119.92	120	120.08
Insertion Loss	dB	-	24.3	26
1 dB Bandwidth	MHz	-	18.84	-
3 dB Bandwidth	MHz	19	19.22	-
40 dB Bandwidth	MHz	-	20.27	-
50 dB Bandwidth	MHz	-	20.41	20.5
Passband Variation	dB	-	0.9	1
Group Delay Variation($f_0\pm 9\text{MHz}$)	nsec	-	80	150
Absolute Delay	usec	-	2.67	-
Ultimate Rejection	dB	50	54	-
Material Temperature coefficient	KHz/°C	-9.84		
Substrate Material	-	128LN		
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:

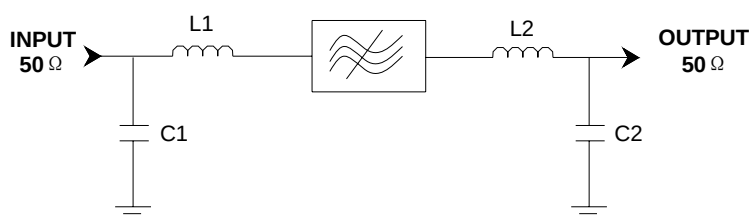
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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Part Number	LBN12030		
Rev. Date	2007-12-21		
Ver.	1.0	Page	1/3

Matching Configuration



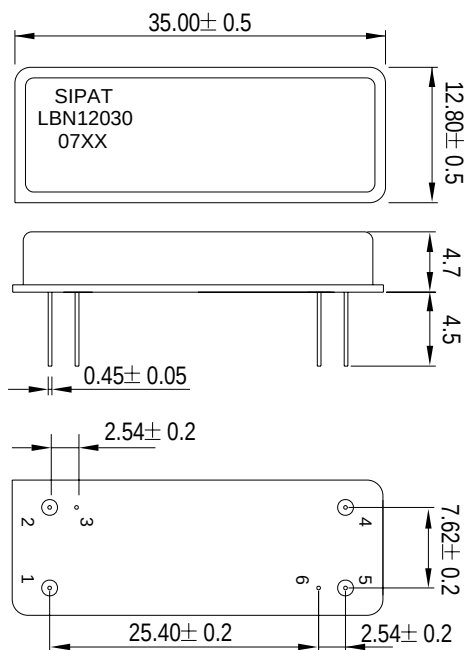
L1=39nH L2=27nH

C1=C2=15pF

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) LBN12030: Part Number
- 3) 07XX: Date Code

Package: DIP3512

Unit: mm



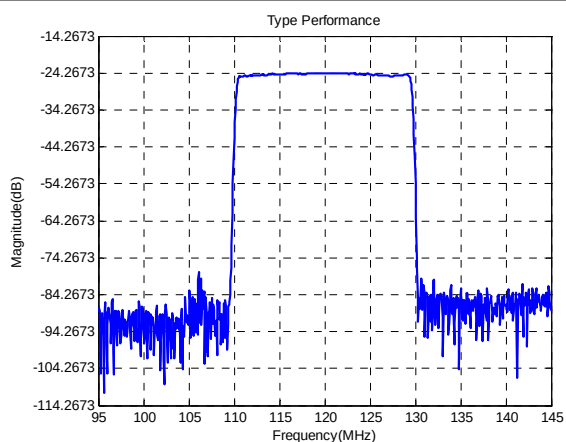
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Typical Performance

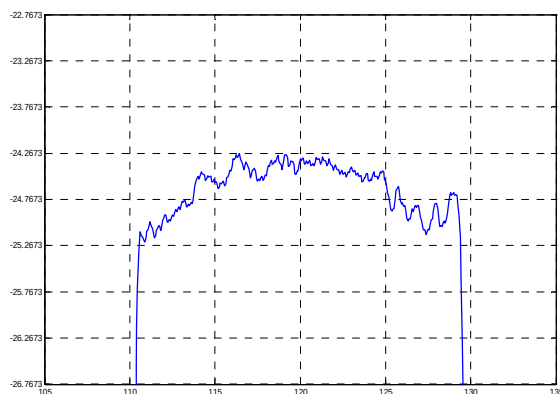
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

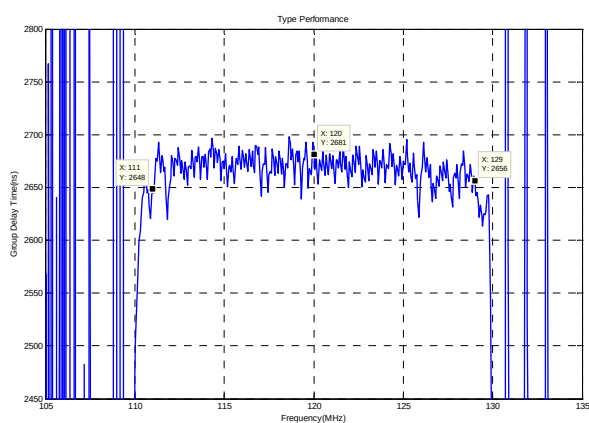
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

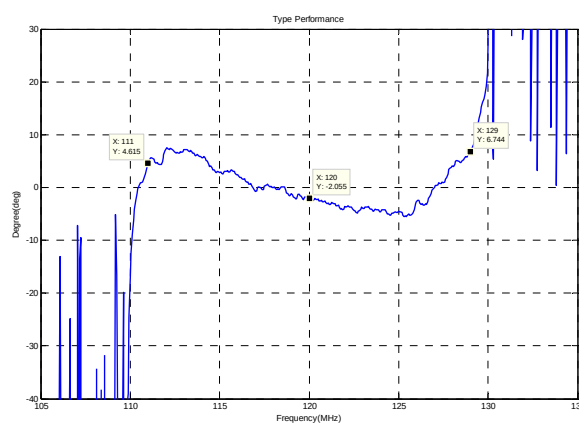
Group Delay Variation($f_0 \pm 9\text{MHz}$)



Horizontal: 5MHz/Div

Vertical: 50ns/Div

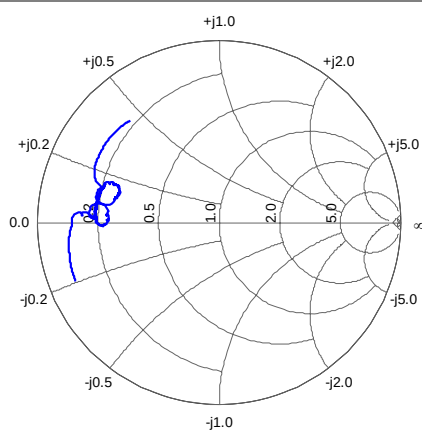
Phase Linearity($f_0 \pm 9\text{MHz}$)



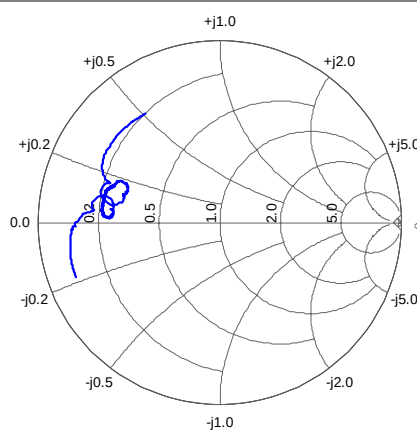
Horizontal: 5MHz/Div

Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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