



Features

- ✧ For IF SAW filter
- ✧ Balance-ended operation
- ✧ Ceramic Surface Mount Package
- ✧ Small size
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	230.4	-
Insertion Loss		dB	-	11	15
1.5 dB Bandwidth		MHz	60	66.8	-
3 dB Bandwidth		MHz	-	69.3	-
Passband Variation($f_0\pm 30\text{MHz}$)		dB	-	0.7	1.5
Group Delay Variation at F_0		nsec	300	356.4	400
Input/Output VSWR($f_0\pm 30\text{MHz}$)		-	-	2/2.2	2.5
Ultimate Rejection	110~170MHz	dB	45	50	-
	290~350MHz	dB	45	45	-
Material Temperature coefficient		KHz/°C	-18.9		
Substrate Material		-	128LN		
Ambient Temperature		°C	25		
DC Voltage		V	0		
Input Power		dBm	-	-	10
ESD Class		-	1A		
Package Size		SMD7.0*5.0			

Notes:

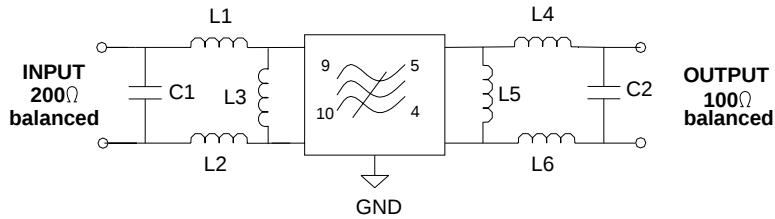
- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 4 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing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



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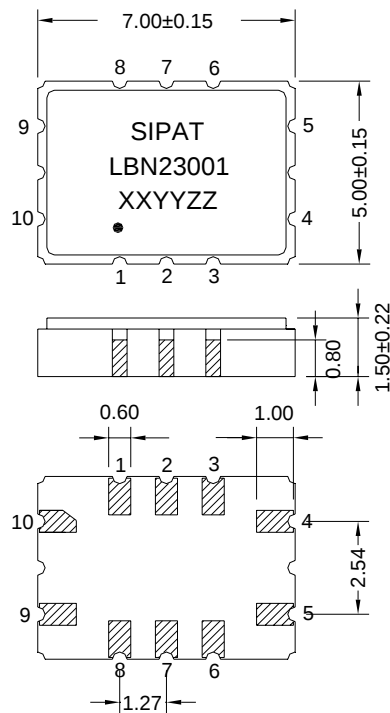
Part Number	LBN23001		
Rev. Date	2011-06-02		
Ver.	2.0	Page	1/3

Matching Configuration



L1=L2=22nH
L3=L5=12nH L4=L6=18nH
C1=C2=6.8pF
Source Impedance=200 ohm
Load Impedance=100 ohm
Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input: 9,10
Output: 4,5
Ground: 1,2,3,6,7,8

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBN23001: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD7.0*5.0

Unit: mm



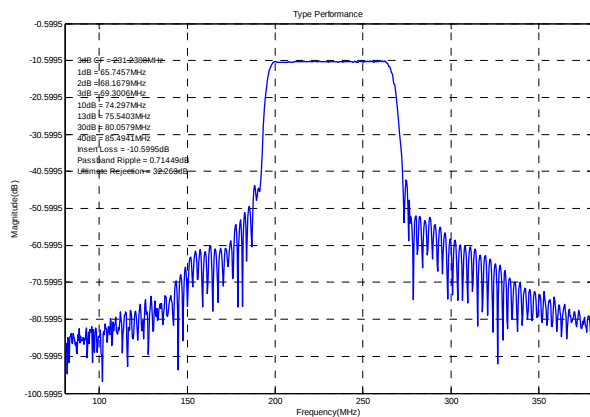
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Typical Performance

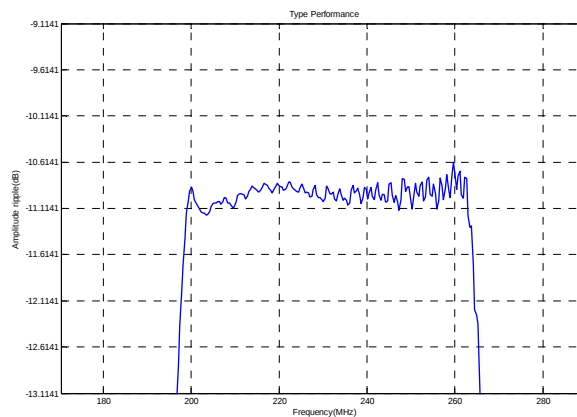
Frequency Response



Horizontal: 50MHz/Div

Vertical: 10dB/Div

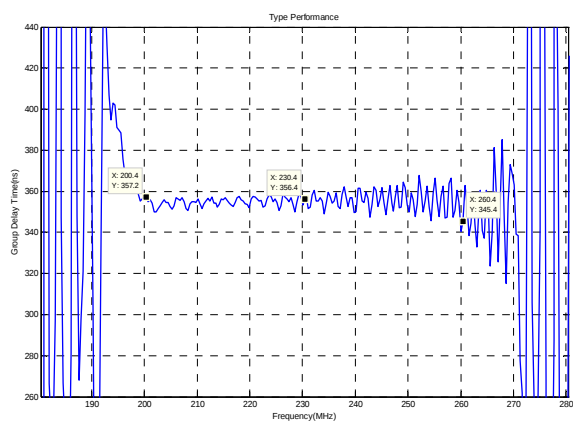
Passband Response



Horizontal: 20MHz/Div

Vertical: 0.5dB/Div

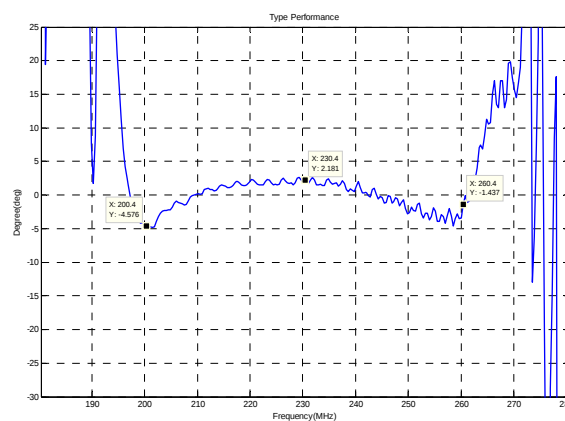
Group Delay Variation($f_0 \pm 30\text{MHz}$)



Horizontal: 10MHz/Div

Vertical: 20ns/Div

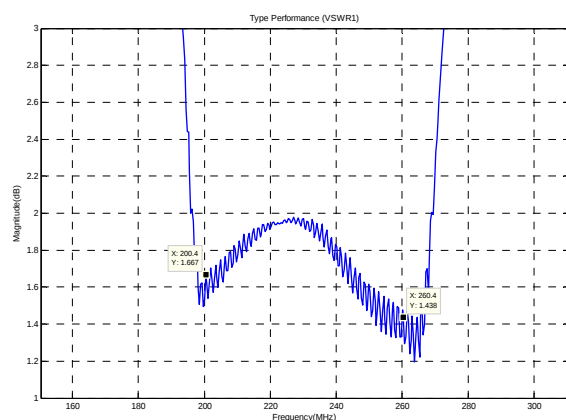
Phase Linearity($f_0 \pm 30\text{MHz}$)



Horizontal: 10MHz/Div

Vertical: 5deg/Div

Input VSWR($f_0 \pm 30\text{MHz}$)



Output VSWR($f_0 \pm 30\text{MHz}$)

