



Features

- ✧ For IF GSMSAW filter
- ✧ High attenuation
- ✧ Single-ended operation
- ✧ Dual In-line Package
- ✧ No matching required for operation at 50Ω
- ✧ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	89.875	90	90.125
Insertion Loss		dB	-	32.7	38
2dB Bandwidth		MHz	24	24.06	-
3 dB Bandwidth		MHz	-	24.13	-
40 dB Bandwidth		MHz	-	24.84	-
Passband Variation		dB	-	0.9	-
Absolute Delay		usec	-	3.82	4
Ultimate Rejection	$f_0 \pm 12.4\text{MHz}$	dB	25	28	-
	$f_0 \pm 12.6\text{MHz}$	dB	40	53	
	$f_0 \pm 13\text{MHz}$	dB	50	53	
	$f_0 \pm 17\text{MHz}$	dB	50	52	
Material Temperature coefficient		KHz/°C	-8.46		
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		-	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	LBN09023	
Rev. Date	2007-10-31	
Ver.	1.0	Page 1/3



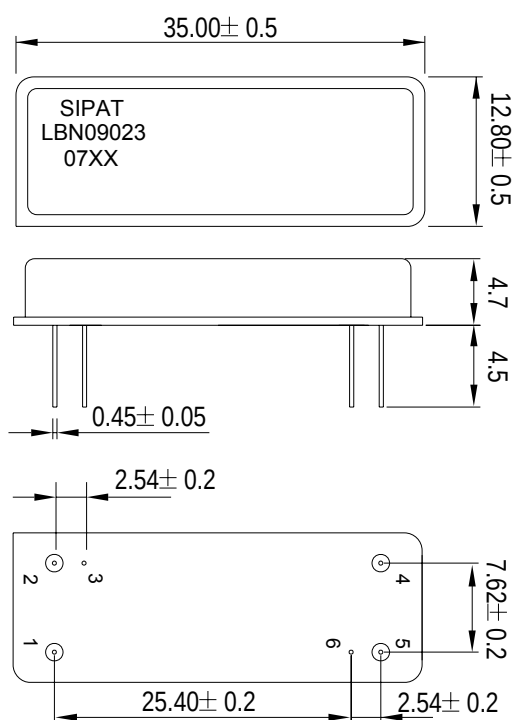
Matching Configuration



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) LBN09023: Part Number
- 3) 07XX: Date Code

Package: DIP3512

Unit: mm



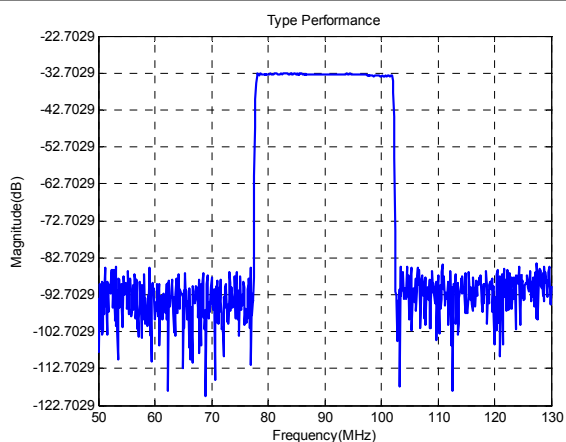
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Typical Performance

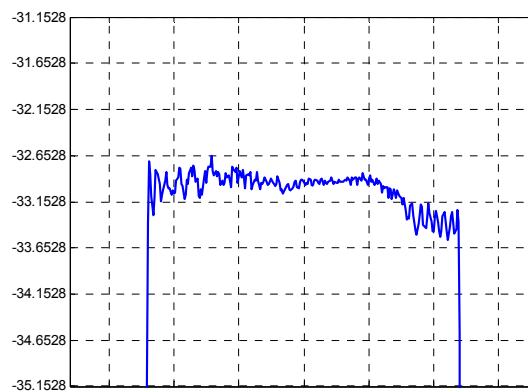
Frequency Respond



Horizontal: 10MHz/Div

Vertical: 10dB/Div

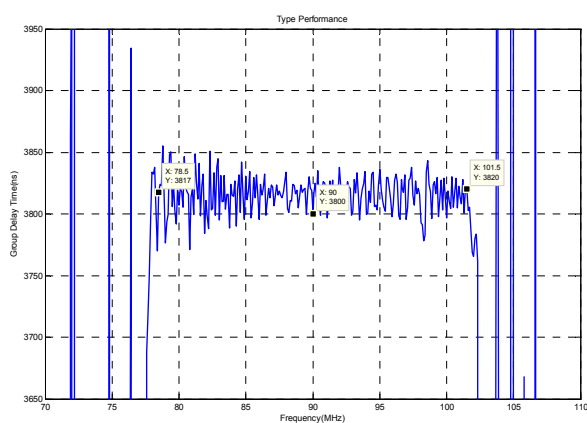
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

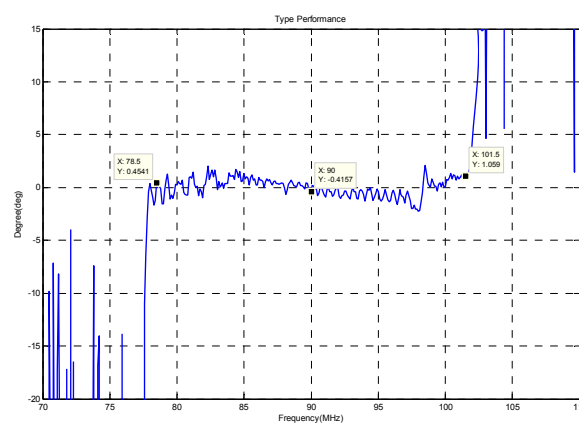
Group Delay Variation($f_0 \pm 11.5\text{MHz}$)



Horizontal: 5MHz/Div

Vertical: 50ns/Div

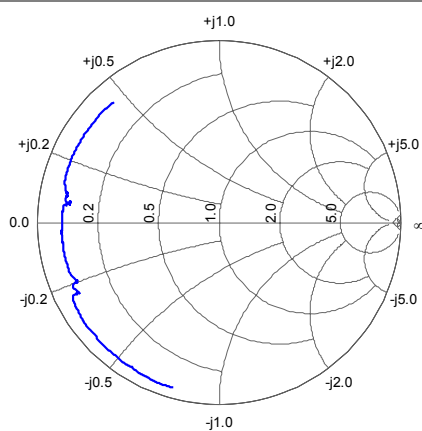
Phase Linearity($f_0 \pm 11.5\text{MHz}$)



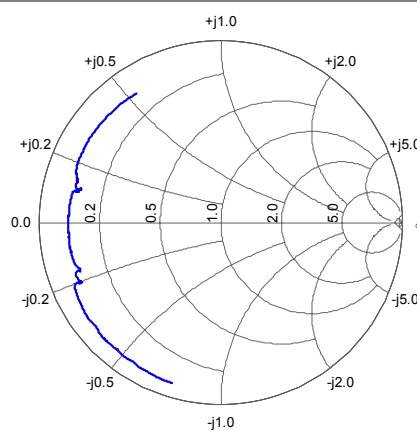
Horizontal: 5MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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