



Features


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

Specifications

Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	89.9	90	90.1	
Insertion Loss	dB	-	25.7	27	
3 dB Bandwidth	MHz	16	16.12	-	
Passband Variation	dB	-	0.7	1.2	
Absolute Delay	usec	-	3.63	4	
Ultimate Rejection	$f_0 \pm 8.45\text{MHz}$	dB	35	44	-
	$f_0 \pm 8.65\text{MHz}$	dB	45	57	-
	$f_0 \pm 9.05\text{MHz}$	dB	50	55	-
	$f_0 \pm 13.05\text{MHz}$	dB	55	60	-
	$f_0 \pm 15\text{MHz}$	dB	55	60	-
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 (35.0x12.8x4.7mm ³)				

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.

	SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBN09024	
		Rev. Date	2008-01-08	
		Ver.	1.0	Page

Matching Configuration

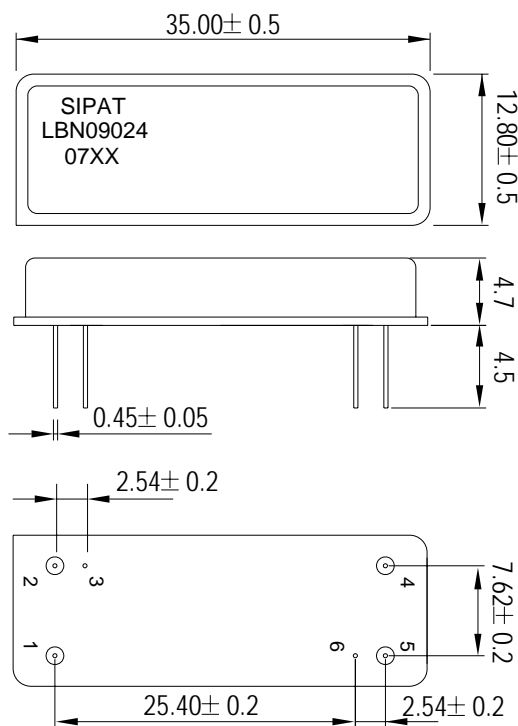


L1=L2=47nH

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) LBN09024: Part Number
3) 07XX: Date Code

Package: DIP3512

Unit: mm



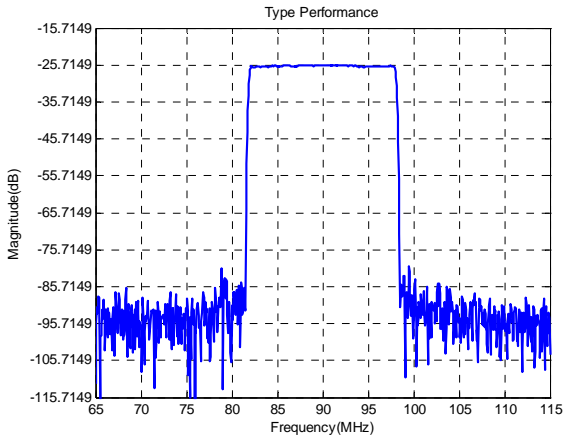
SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LBN09024	
Rev. Date	2008-01-08	
Ver.	1.0	Page 2/3



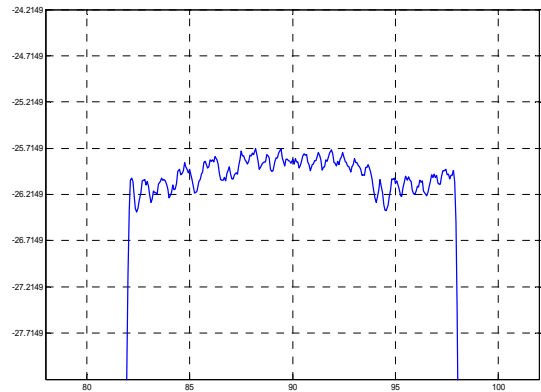
Typical Performance

Frequency Respond



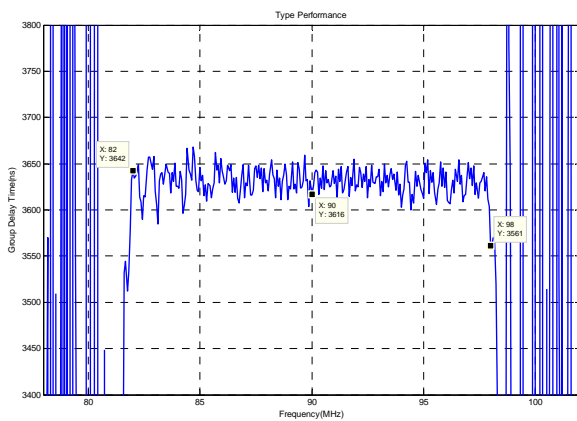
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



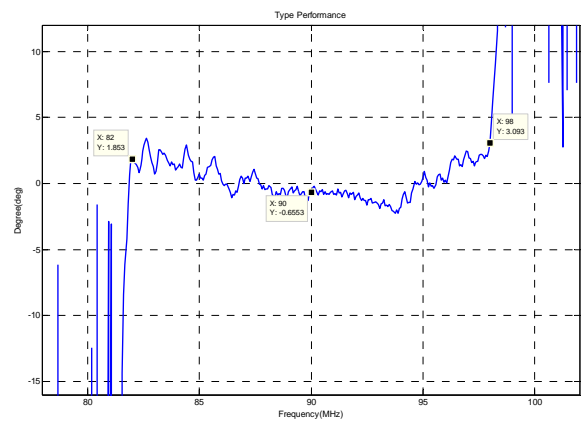
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 8\text{MHz}$)



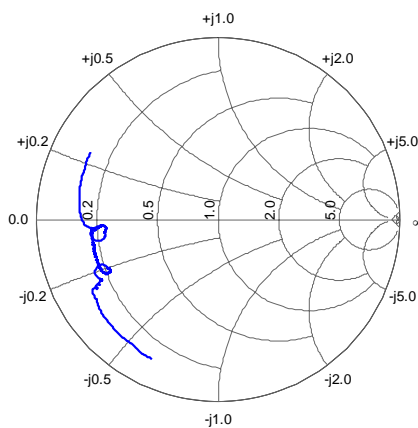
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity($f_0 \pm 8\text{MHz}$)

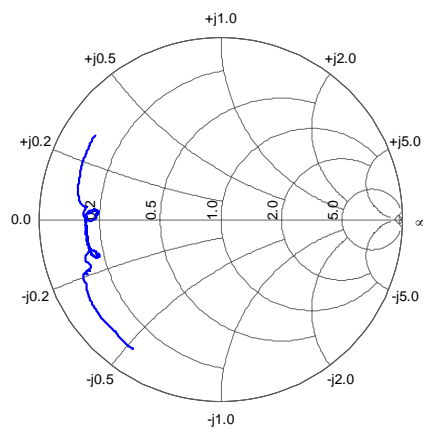


Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LBN09024	
Rev. Date	2008-01-08	
Ver.	1.0	Page 3/3