



Features


- ◇ For TD-SCDMA IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size

Specifications

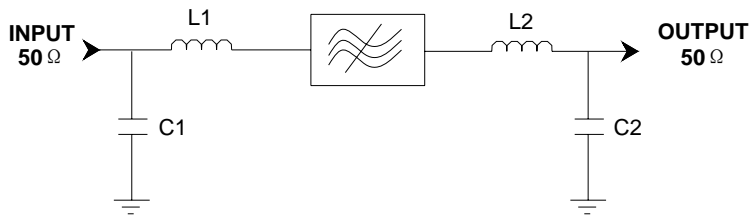
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	96	-
Insertion Loss	dB	-	11	15
1 dB Bandwidth	MHz	5	5.48	-
3 dB Bandwidth	MHz	-	6.32	-
15 dB Bandwidth	MHz	-	7.72	8
Passband Variation($f_0 \pm 2.5\text{MHz}$)	dB	-	0.8	1
Phase Linearity($f_0 \pm 1.92\text{MHz}$)	deg	-	4	5
Group Delay($f_0 \pm 2.5\text{MHz}$)	nsec	-	100	-
Absolute Delay	usec	-	1.24	3
Input Return Loss($f_0 \pm 1.92\text{MHz}$)	dB	10	13	-
Output Return Loss($f_0 \pm 1.92\text{MHz}$)	dB	10	10.3	-
Ultimate Rejection	40~87MHz	dB	43	47
	111~150MHz	dB	43	54
Material Temperature coefficient	KHz/°C	-1.72		
Substrate Material	-	112LT		
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	SMD13.3*6.5A			

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	LBT09609	
		Rev. Date	2007-09-05	
		Ver.	1.0	Page 1/3

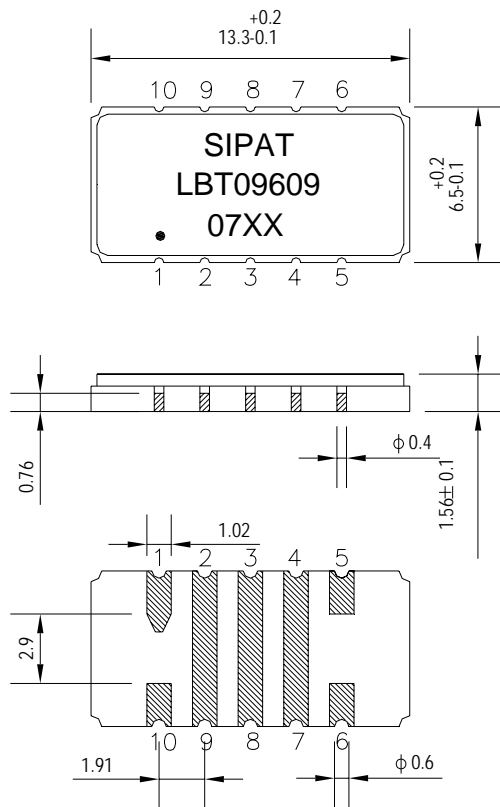
Matching Configuration



$L1 = (120 + 18)nH$ $L2 = (180 + 22)nH$
 $C1 = 82pF$ $C2 = (56 + 12)pF$
 Source/Load Impedance = 50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input 1
 Output 6
 Ground All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LBT09609: Part Number
- 4) 07XX: Date Code

Package: SMD13.3*6.5A

Unit: mm



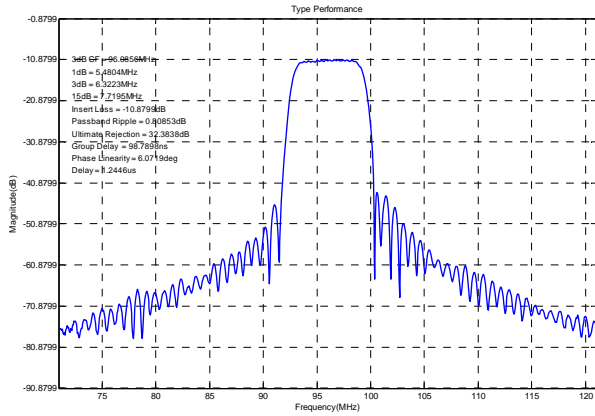
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Typical Performance

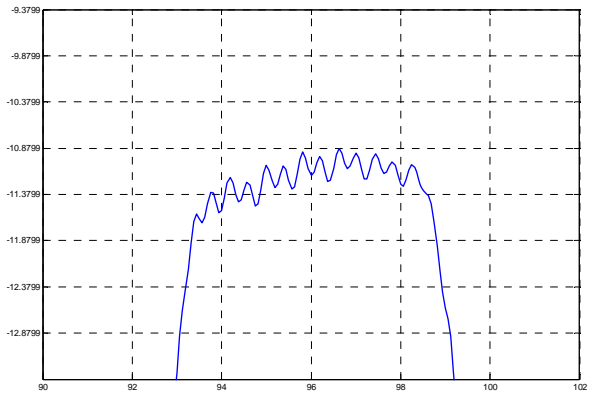
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

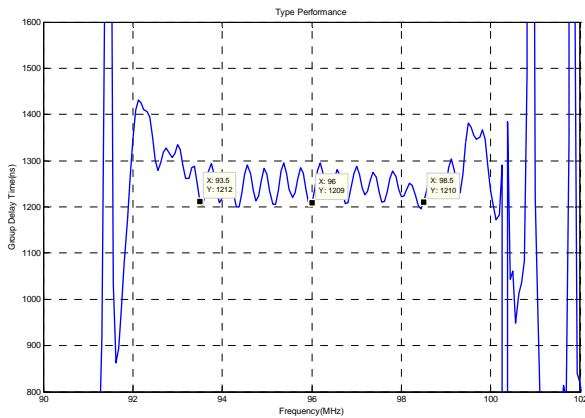
Passband Respond



Horizontal: 2MHz/Div

Vertical: 0.5dB/Div

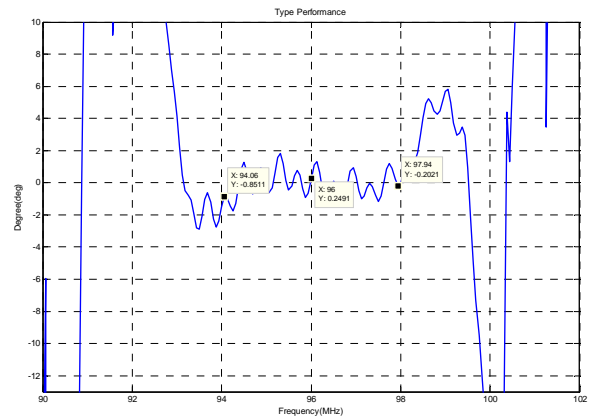
Group Delay Variation(f0±2.5MHz)



Horizontal: 2MHz/Div

Vertical: 100ns/Div

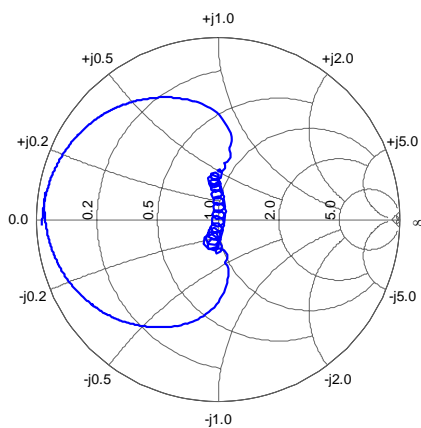
Phase Linearity(f0±1.92MHz)



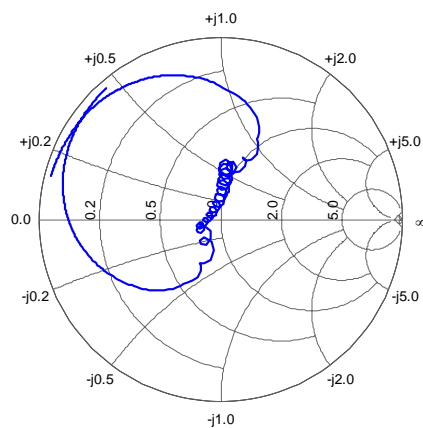
Horizontal: 2MHz/Div

Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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