



### Features

- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package

### Specifications

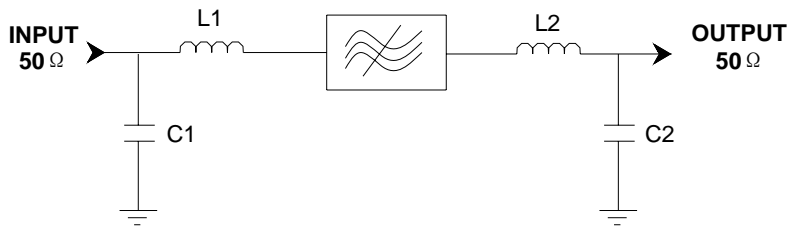
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	211.088	211.288	211.488
Insertion Loss	dB	-	26.4	29
1.5 dB Bandwidth	MHz	7.1	7.13	-
3 dB Bandwidth	MHz	-	7.32	-
40 dB Bandwidth	MHz	-	8.32	8.4
45 dB Bandwidth	MHz	-	8.38	8.5
Passband Variation	dB	-	0.7	1
Absolute Delay	usec	-	2.7	3
Ultimate Rejection	dB	45	47	-
Material Temperature coefficient	KHz/°C	0.211		
Substrate Material	-	Quartz		
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	DIP2212 (22.2x12.8x4.7mm3)			

#### 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.

	<b>SIPAT Co., Ltd.</b> ( CETC No.26 Research Institute ) #14 Nanping Huayuan Road, Chongqing, China, 400060	Part Number	LBS21105	
		Rev. Date	2007-09-26	
		Ver.	2.0	Page 1/3

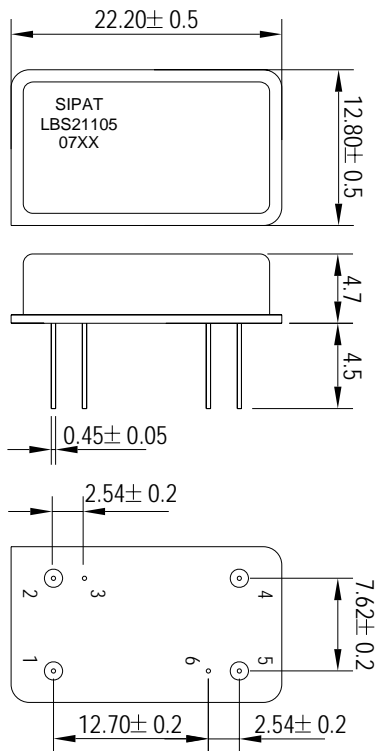
### Matching Configuration



**L1=47nH L2=39nH**  
**C1=47pF C2=33pF**  
**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) LBS21105: Part Number  
3) 07XX: Date Code

Package: DIP2212

Unit: mm



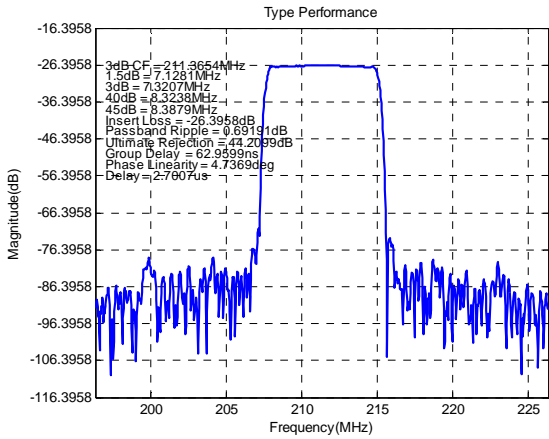
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Rev. Date	2007-09-26	
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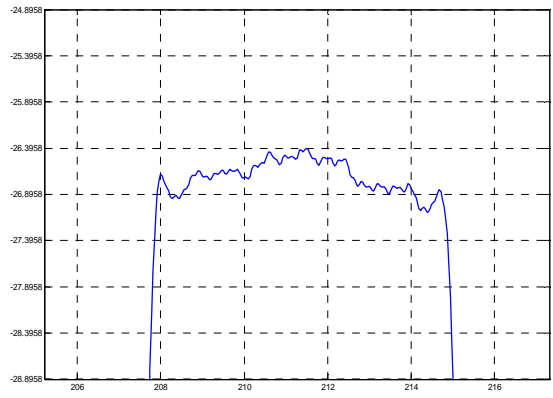
Typical Performance

Frequency Respond



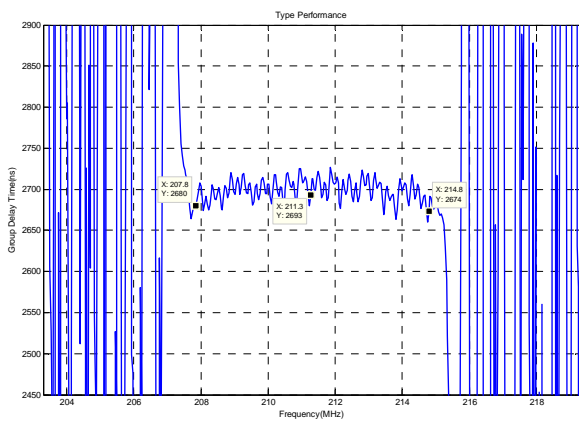
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



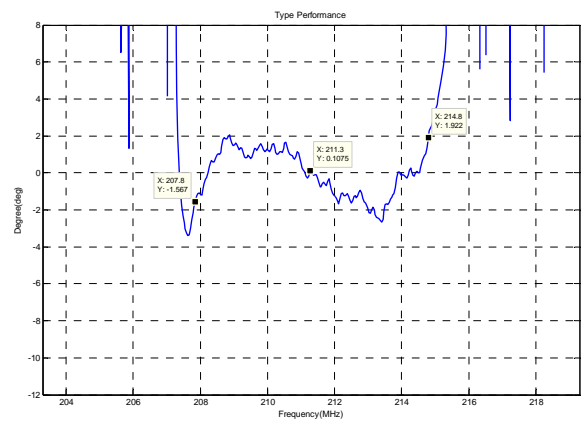
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±3.5MHz)



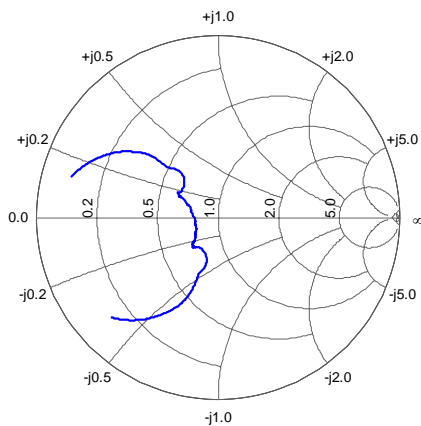
Horizontal: 2MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±3.5MHz)

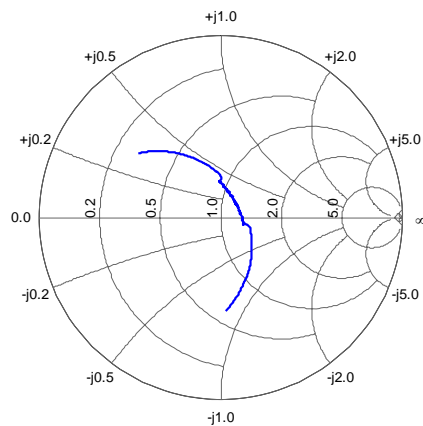


Horizontal: 2MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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Part Number	LBS21105	
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