



Features


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

Specifications

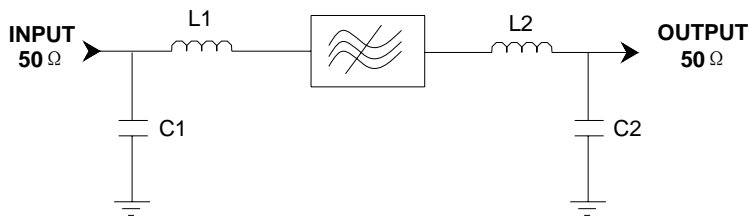
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	159.4	159.5	159.6
Insertion Loss	dB	22	23.3	26
1 dB Bandwidth	MHz	-	10.94	-
3 dB Bandwidth	MHz	11.3	11.33	-
30 dB Bandwidth	MHz	-	12.5	-
45 dB Bandwidth	MHz	-	12.74	12.95
50 dB Bandwidth	MHz	-	12.81	13.5
Passband Variation	dB	-	0.8	1
Absolute Delay	usec	-	3.16	3.5
Ultimate Rejection	dB	50	58	-
Material Temperature coefficient	KHz/°C	-2.88		
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	-	1A		
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	LBT16049	
		Rev. Date	2008-04-01	
		Ver.	1.0	Page 1/3

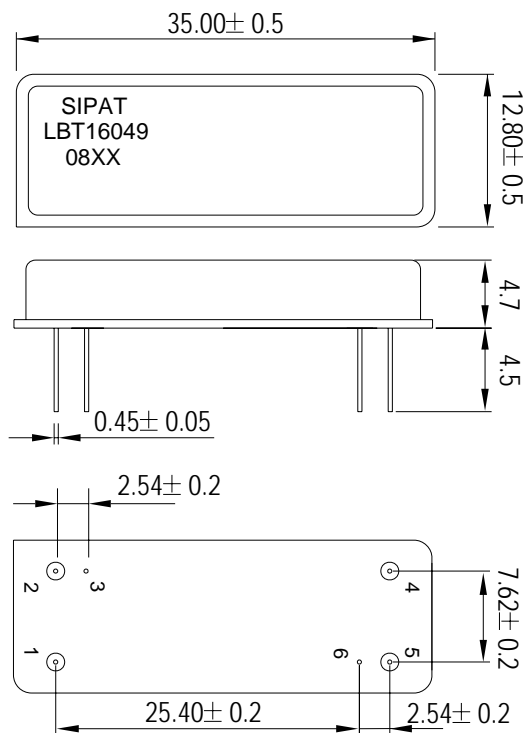
Matching Configuration



L1=L2=33nH
C1=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) LBT16049: Part Number
- 3) 08XX: Date Code

Package: DIP3512

Unit: mm



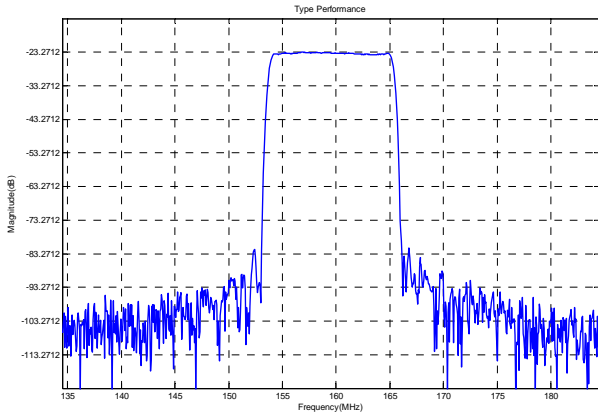
SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LBT16049	
Rev. Date	2008-04-01	
Ver.	1.0	Page 2/3



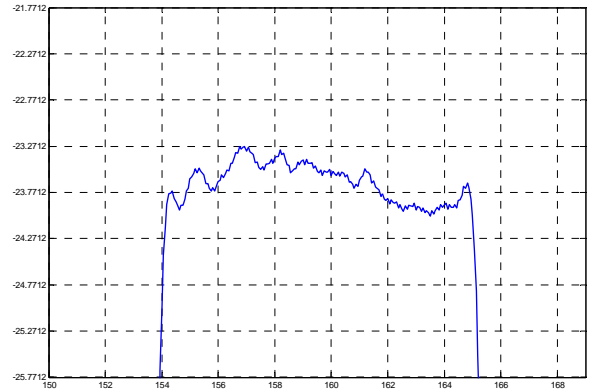
Typical Performance

Frequency Respond



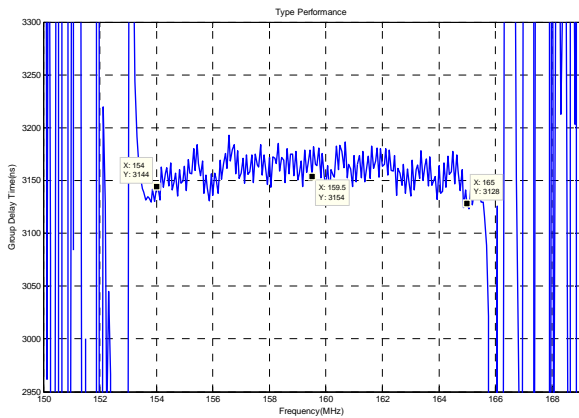
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



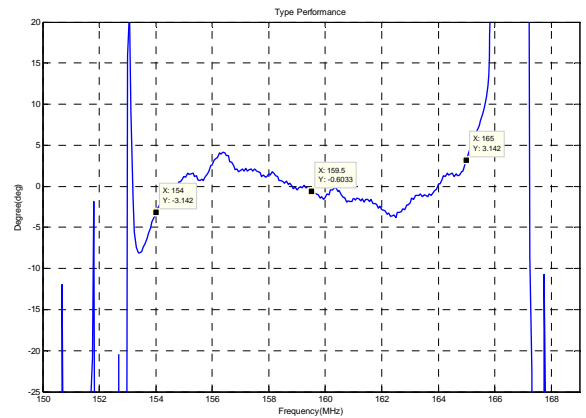
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 5.5$ MHz)



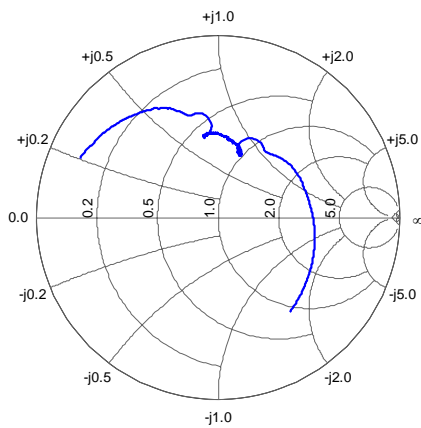
Horizontal: 2MHz/Div Vertical: 50ns/Div

Phase Linearity($f_0 \pm 5.5$ MHz)

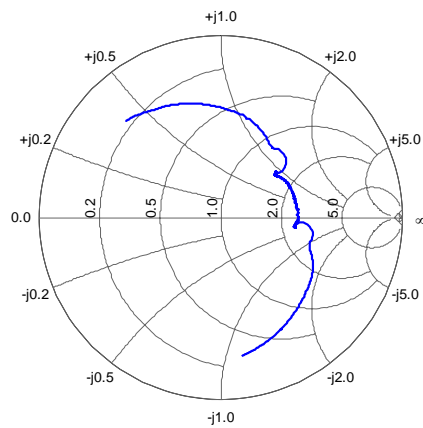


Horizontal: 2MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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

Part Number	LBT16049	
Rev. Date	2008-04-01	
Ver.	1.0	Page 3/3