



Features


- ◇ For IF SAW filter
- ◇ Single-ended operation
- ◇ Ceramic Surface Mount Package
- ◇ Small size
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

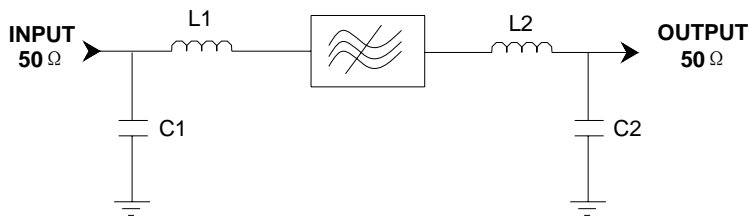
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.8	140	140.2
Insertion Loss	dB	-	12.4	16
1 dB Bandwidth	MHz	1.9	2	2.2
3 dB Bandwidth	MHz	2.8	2.92	3.2
30 dB Bandwidth	MHz	-	5.81	6
Passband Variation	dB	-	0.2	0.8
Absolute Delay	usec	-	1.17	-
Group Delay Variation(f0±1MHz)	nsec	-	50	100
Ultimate Rejection	dB	30	33	-
Material Temperature coefficient	KHz/°C	-2.52		
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	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	LB140DS34	
		Rev. Date	2008-07-28	
		Ver.	1.0	Page 1/3

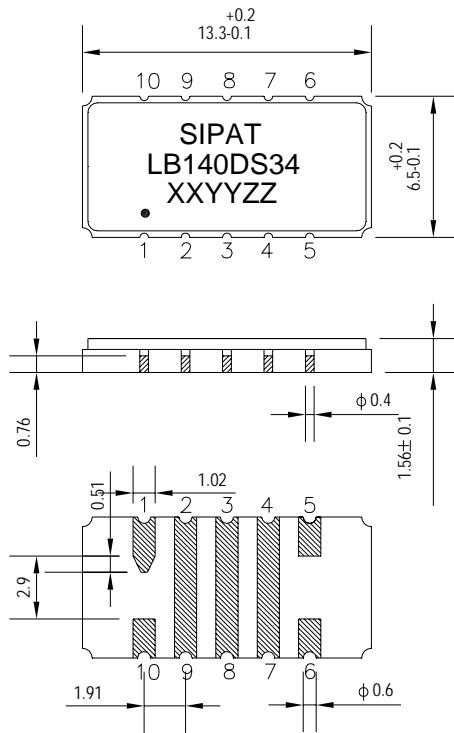
Matching Configuration



L1=L2=39nH
C1=C2=47pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input: 10
Output: 5
Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LB140DS34: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3*6.5A

Unit: mm



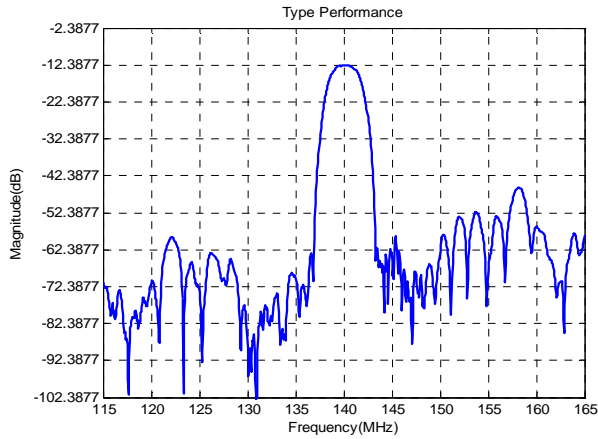
SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number	LB140DS34	
Rev. Date	2008-07-28	
Ver.	1.0	Page 2/3



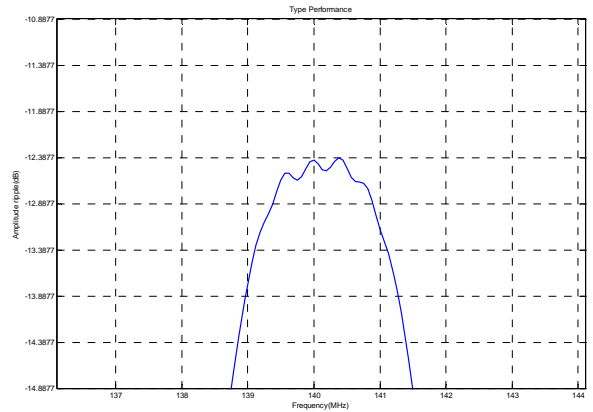
Typical Performance

Frequency Respond



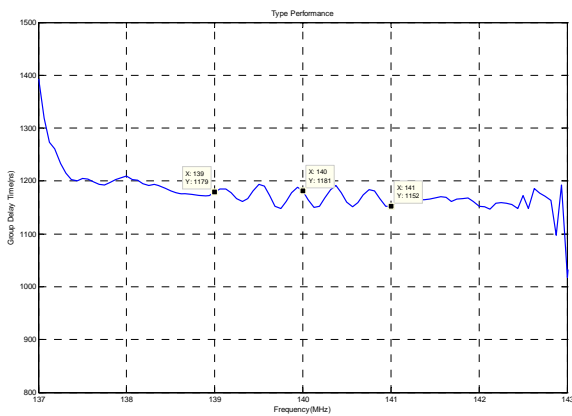
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



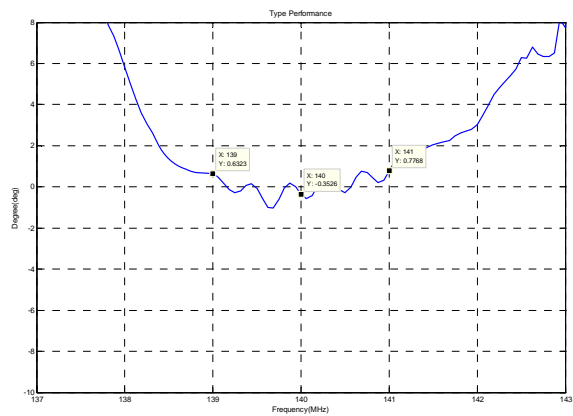
Horizontal: 1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 1\text{MHz}$)



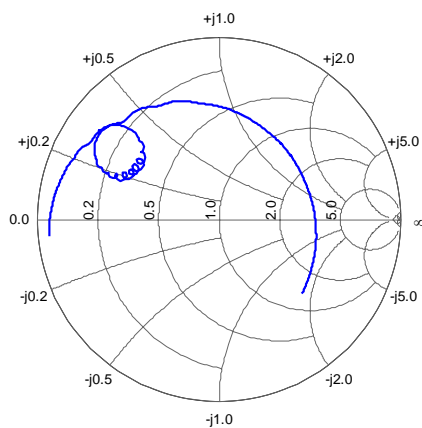
Horizontal: 1MHz/Div Vertical: 100ns/Div

Phase Linearity($f_0 \pm 1\text{MHz}$)

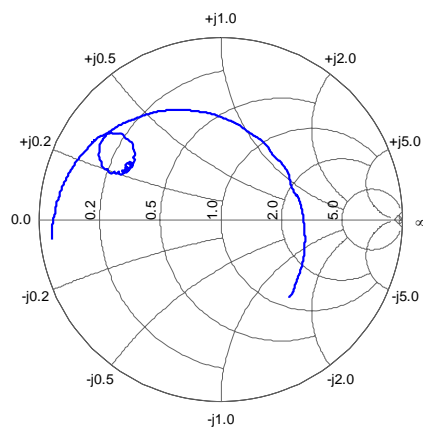


Horizontal: 1MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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

Part Number	LB140DS34	
Rev. Date	2008-07-28	
Ver.	1.0	Page 3/3