



Features

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

Specifications

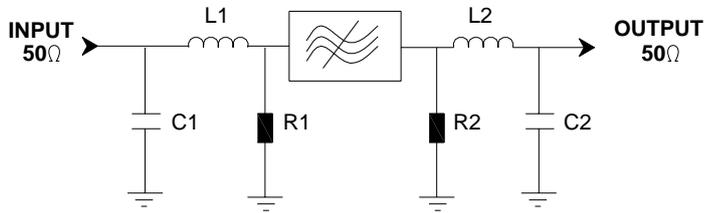
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	-	140	-
Insertion Loss	dB	-	17.8	22
Passband Variation(126~154MHz)	dB	-	0.6	2
Phase Linearity	129~151MHz	deg	3	5
	126~154MHz	deg	3	7
Input/Output return loss(126~154MHz)	dB	10	11.1/11.6	-
Absolute Delay	usec	-	0.66	-
Ultimate Rejection	10~112MHz	dB	35	44
	168~198MHz	dB	35	37
	198~225MHz	dB	30	55
	225~250MHz	dB	35	51
Material Temperature coefficient	KHz/°C	-13.16		
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	-	1A		
Package Size	SMD9.1*4.8			

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	LB140DS37	
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Matching Configuration



L1=L2=100nH

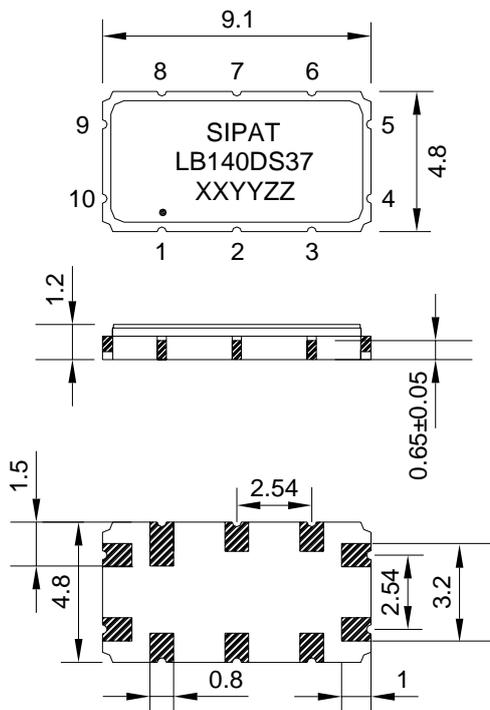
C1=6.8pF C2=3.9pF

R1=360Ω R2=510Ω

Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



Pad Configuration:

Input: 9

Output: 4

Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LB140DS37: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD9148

Unit: mm

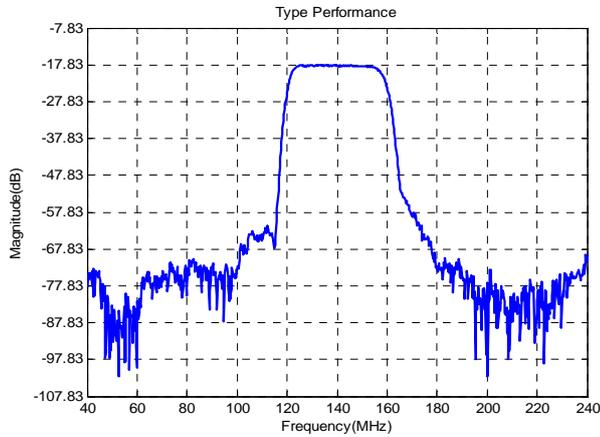


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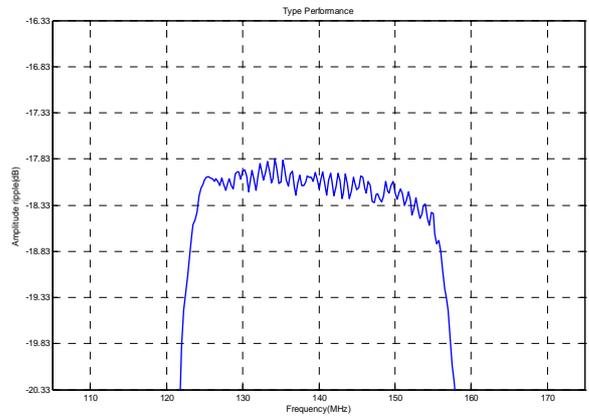
Typical Performance

Frequency Respond



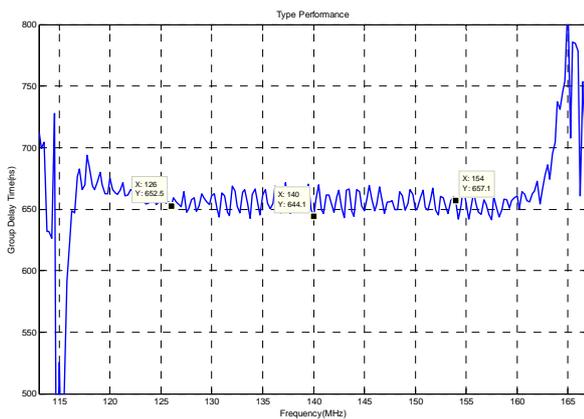
Horizontal: 20MHz/Div Vertical: 10dB/Div

Passband Respond



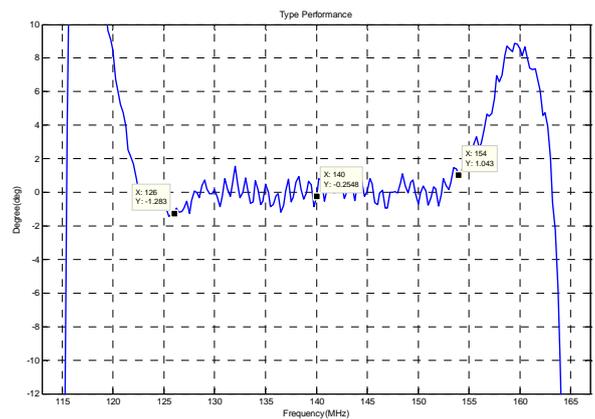
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 14\text{MHz}$)



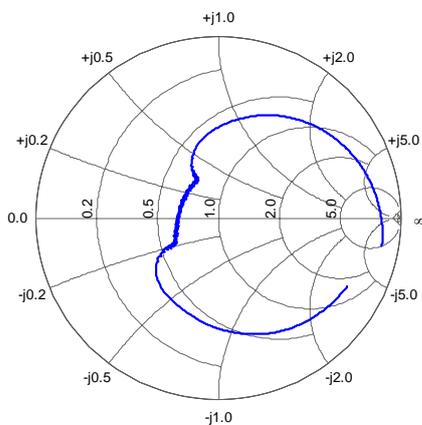
Horizontal: 5MHz/Div Vertical: 50ns/Div

Phase Linearity($f_0 \pm 14\text{MHz}$)

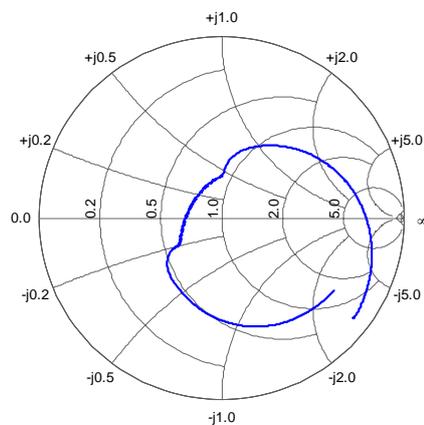


Horizontal: 5MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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