



Features


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

Specifications

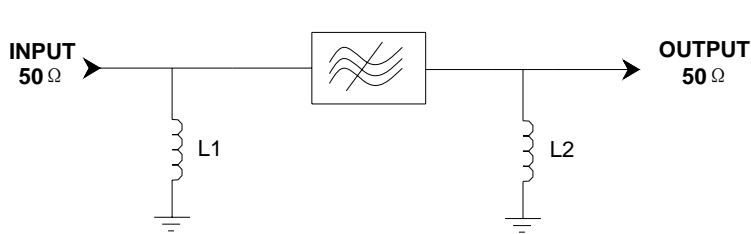
Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	139.75	140	140.25	
Insertion Loss	dB	-	6	8.5	
Return Loss	dB	-	-10	-	
1 dB Bandwidth	MHz	7.5	8.03	-	
3 dB Bandwidth	MHz	8.5	9.04	-	
40 dB Bandwidth	MHz	-	12.43	13	
Passband Variation($f_0 \pm 2.6\text{MHz}$)	dB	-	0.5	1	
Group Delay Variation($f_0 \pm 2.6\text{MHz}$)	nsec	-	65	150	
Absolute Delay	usec	-	0.85	-	
Ultimate Rejection	120~132MHz	dB	45	55	-
	148~160MHz	dB	40	42	-
	450~900MHz	dB	35	40	-
	900~1100MHz	dB	25	30	-
	1100~1500MHz	dB	-	20	-
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	SMD13.3*6.5				

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	LB140DS47	
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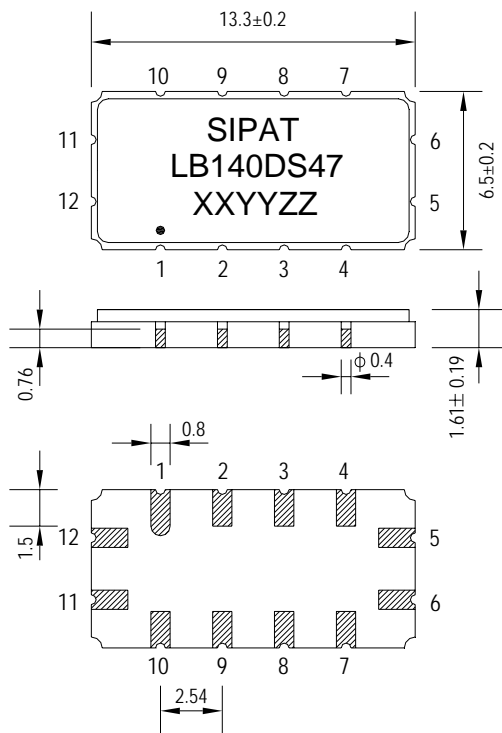
Matching Configuration



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

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input: 11
Output: 5
Ground: All Others

Marking Configuration:

- 1) •: Pad Number 1 Index
- 2) SIPAT: Manufacturer Name
- 3) LB140DS47: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3*6.5

Unit: mm



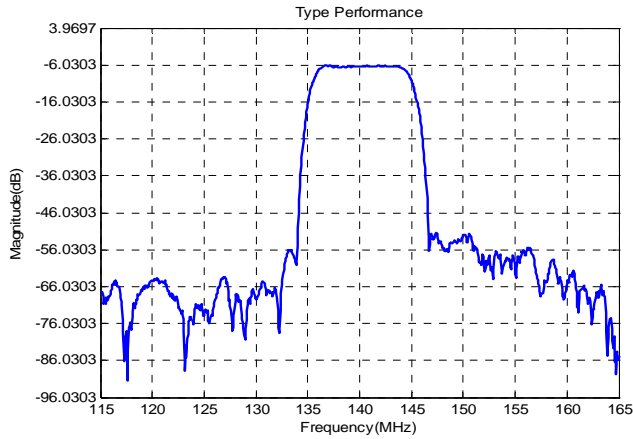
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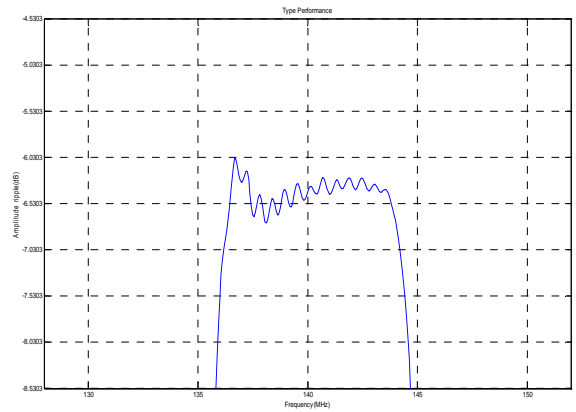
Typical Performance

Frequency Respond



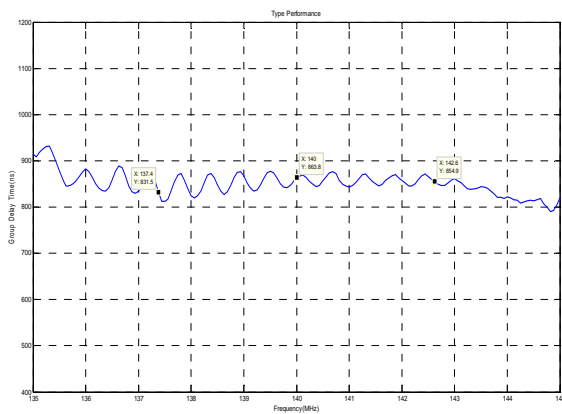
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



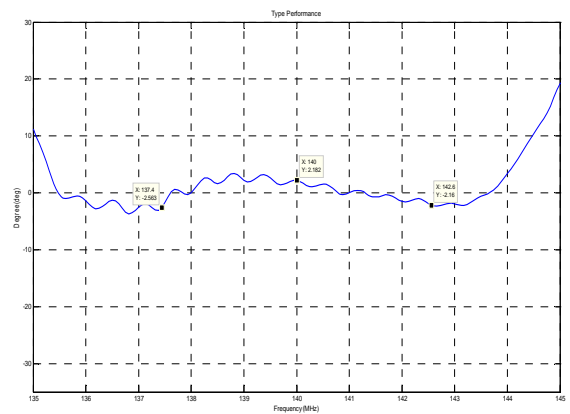
Horizontal: 5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±2.6MHz)



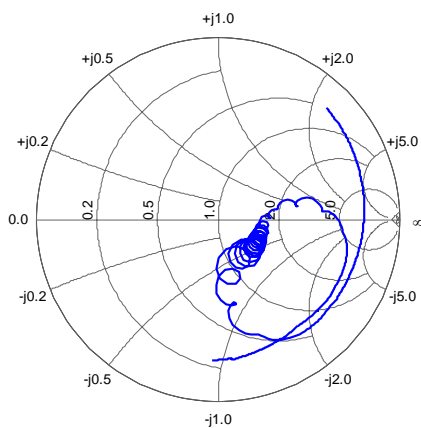
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Phase Linearity(f0±2.6MHz)

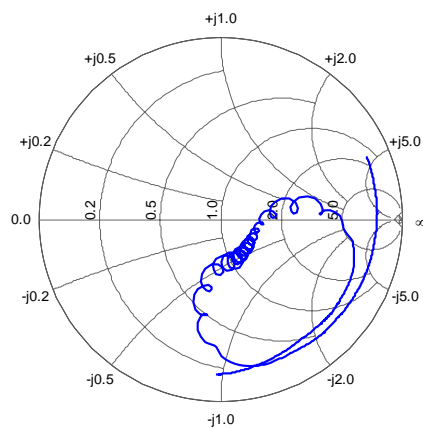


Horizontal: 1MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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