



Features

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

Specifications

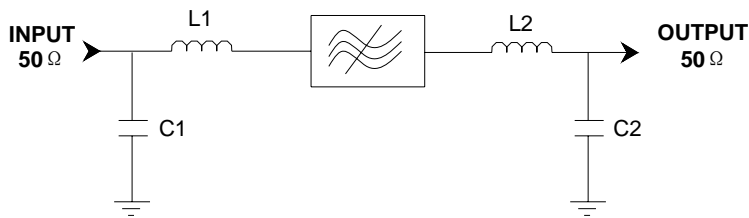
Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.85	140	140.15
Insertion Loss	dB	-	21.3	25
3 dB Bandwidth	MHz	1.5	1.61	-
40 dB Bandwidth	MHz	-	2.35	-
Passband Variation	dB	-	0.7	1
Absolute Delay	usec	-	3.6	4
Ultimate Rejection	$f_0 \pm 1.2\text{MHz}$	dB	35	47
	$f_0 \pm 1.4\text{MHz}$	dB	45	48
	$f_0 \pm 1.8\text{MHz}$	dB	50	54
	$f_0 \pm 5.8\text{MHz}$	dB	55	66
Material Temperature coefficient	KHz/°C	0.14		
Substrate Material	-	Qz		
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	LBS140A17	
		Rev. Date	2008-07-18	
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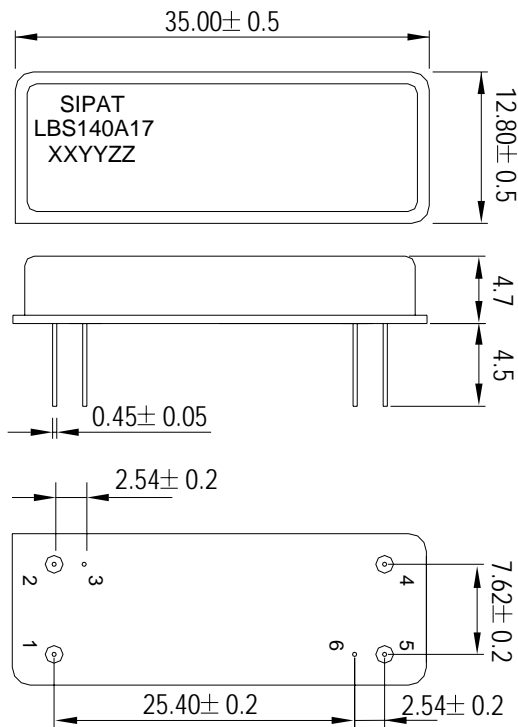
Matching Configuration



L1=L2=68nH
C1=C2=36pF
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) LBS140A17: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm

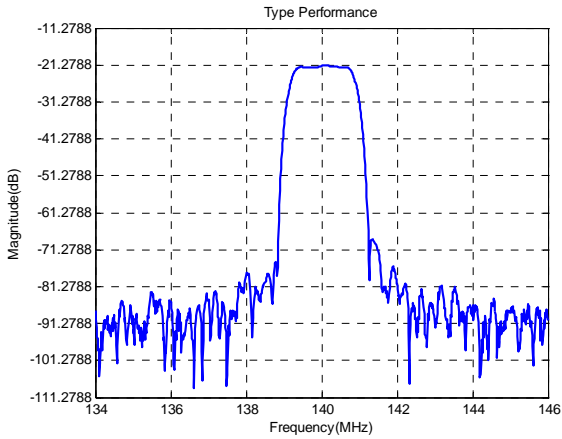


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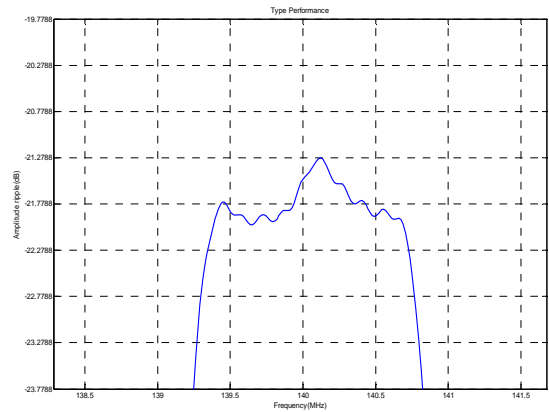
Typical Performance

Frequency Respond



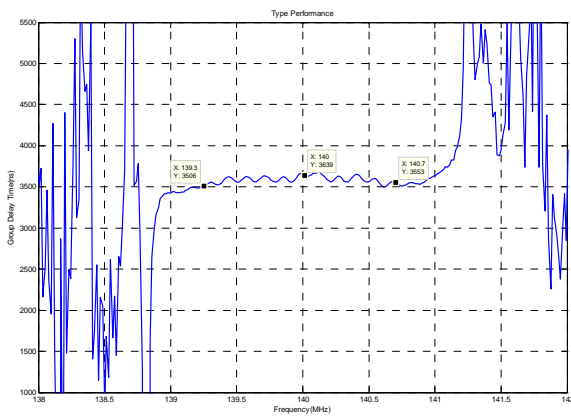
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Respond



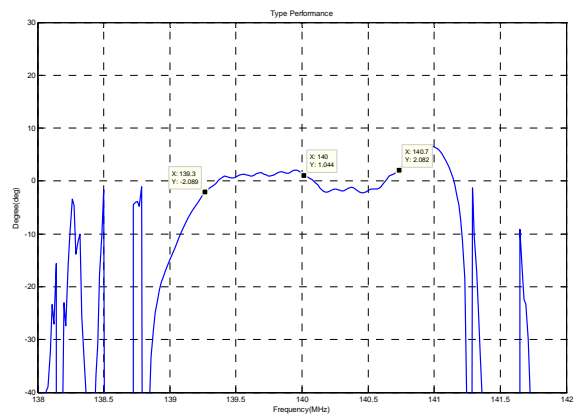
Horizontal: 0.5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 0.7\text{MHz}$)



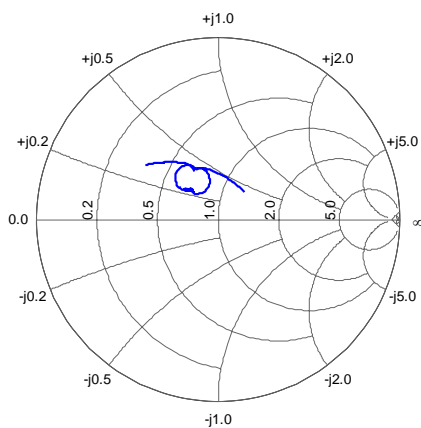
Horizontal: 0.5MHz/Div Vertical: 500ns/Div

Phase Linearity($f_0 \pm 0.7\text{MHz}$)

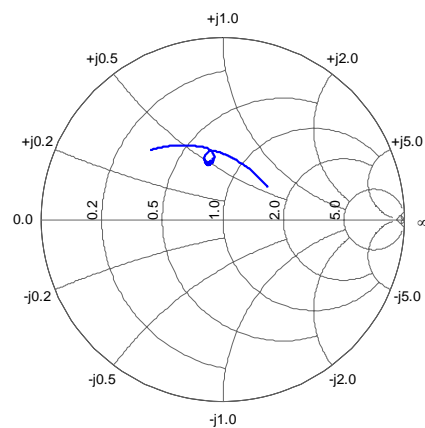


Horizontal: 0.5MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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