



Features

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

Specifications

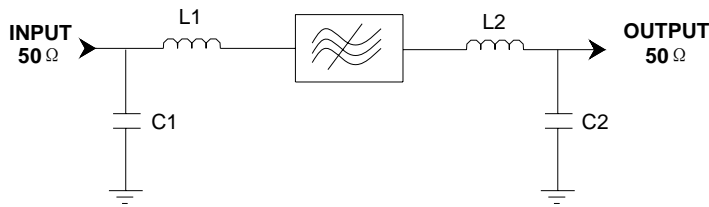
Parameter	Unit	Minimum	Typical	Maximum	
Center Frequency	MHz	139.85	140	140.15	
Insertion Loss	dB	-	31	33	
1.2 dB Bandwidth	MHz	15.05	15.054	-	
Passband Variation	dB	-	1	1.2	
Absolute Delay	usec	-	4.49	4.5	
Ultimate Rejection	$f_0 \pm 7.9\text{MHz}$	dB	16	20	-
	$f_0 \pm 8.1\text{MHz}$	dB	38	55	-
	$f_0 \pm 8.5\text{MHz}$	dB	50	56	-
	$f_0 \pm 9.5\text{MHz}$	dB	52	54	-
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	DIP3512 (35.0x12.8x4.7mm3)				

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	LBT140A07	
		Rev. Date	2008-04-11	
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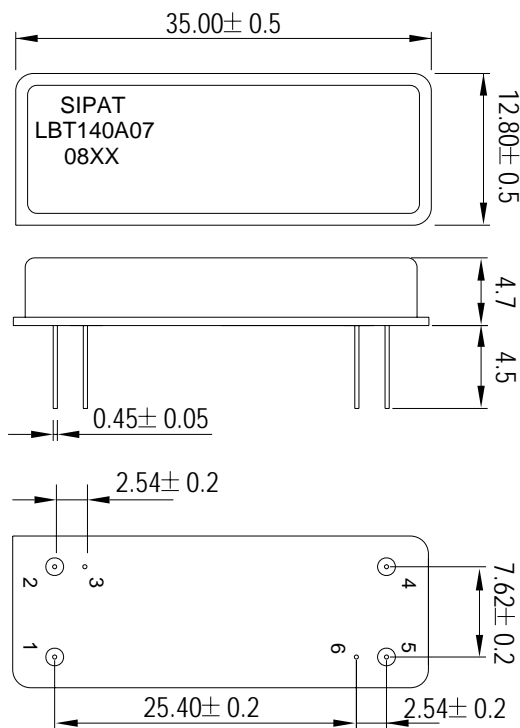
Matching Configuration



L1=L2=47nH
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) LBT140A07: Part Number
3) 08XX: Date Code

Package: DIP3512

Unit: mm

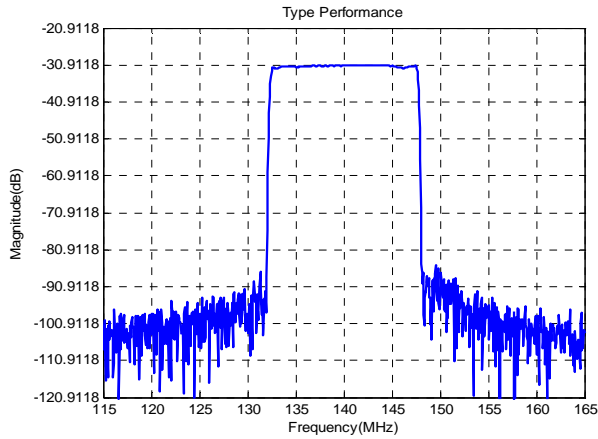


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Typical Performance

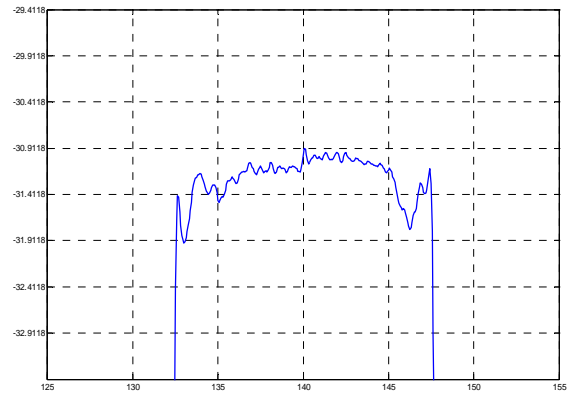
Frequency Respond



Horizontal: 5MHz/Div

Vertical: 10dB/Div

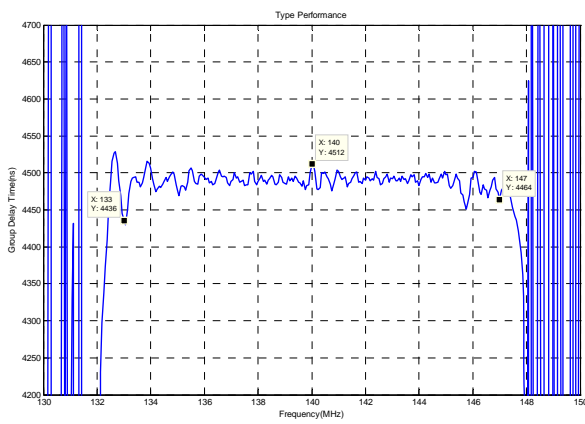
Passband Respond



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

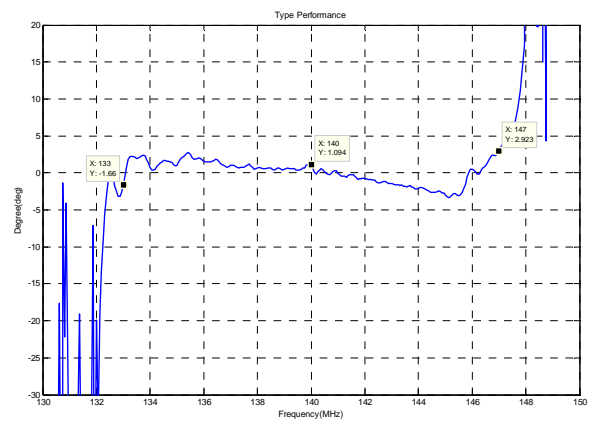
Group Delay Variation($f_0 \pm 7\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 50ns/Div

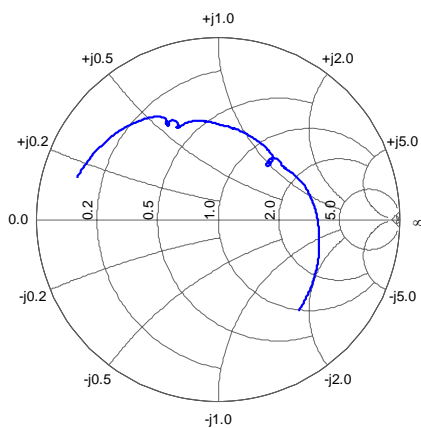
Phase Linearity($f_0 \pm 7\text{MHz}$)



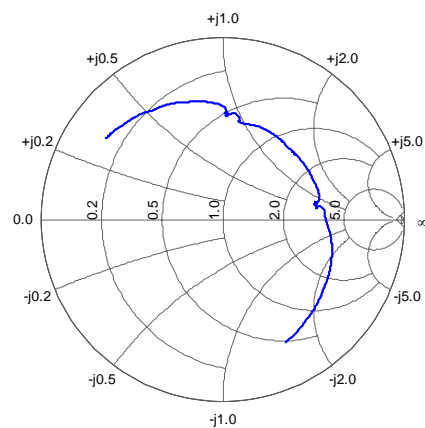
Horizontal: 2MHz/Div

Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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