



Features

- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.85	140	140.15
Insertion Loss	dB	-	22.7	27
3 dB Bandwidth	MHz	11.55	11.6	-
Passband Variation	dB	-	1.1	1.5
Absolute Delay	usec	-	3.63	4
Ultimate Rejection	$f_0 \pm 6.2\text{MHz}$	dB	35	-
	$f_0 \pm 6.4\text{MHz}$	dB	45	-
	$f_0 \pm 6.8\text{MHz}$	dB	50	-
	$f_0 \pm 10.8\text{MHz}$	dB	55	-
	$f_0 \pm 15\text{MHz}$	dB	55	-
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	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	LBN140A10		
Rev. Date	2008-05-06		
Ver.	1.0	Page 1/3	

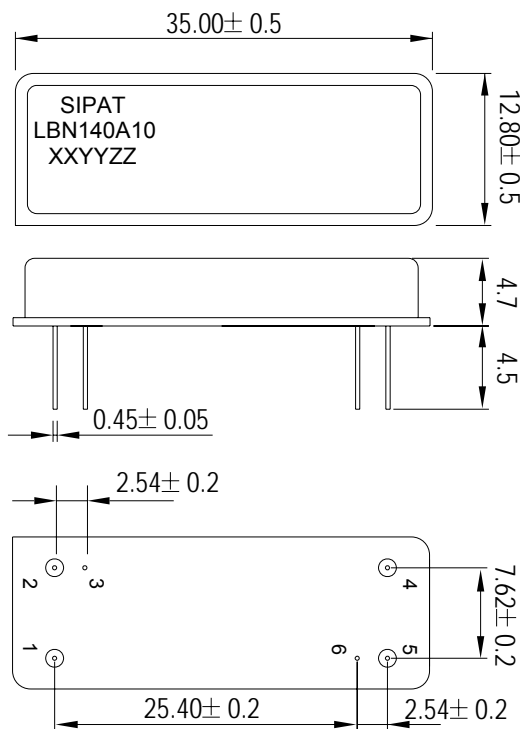
Matching Configuration



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) LBN140A10: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



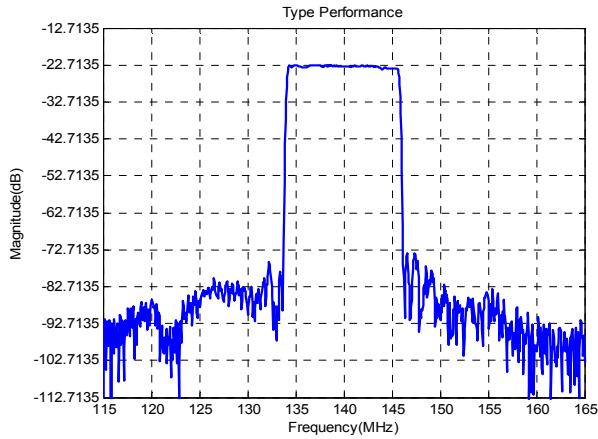
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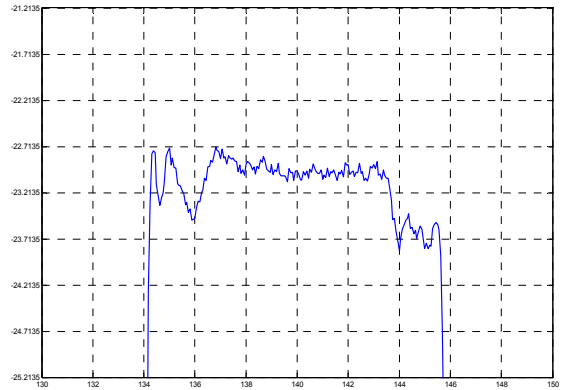
Typical Performance

Frequency Respond



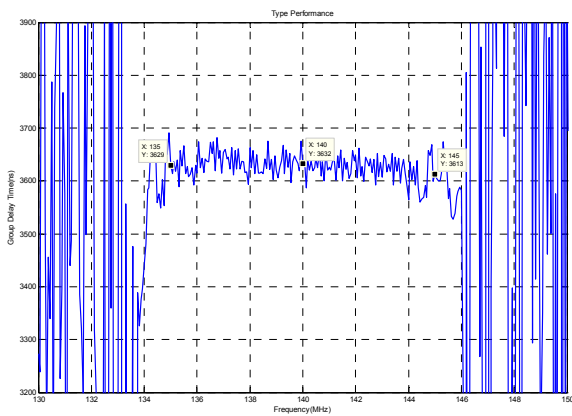
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



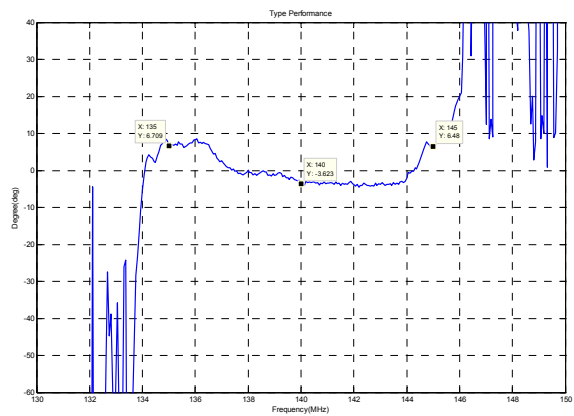
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±5MHz)



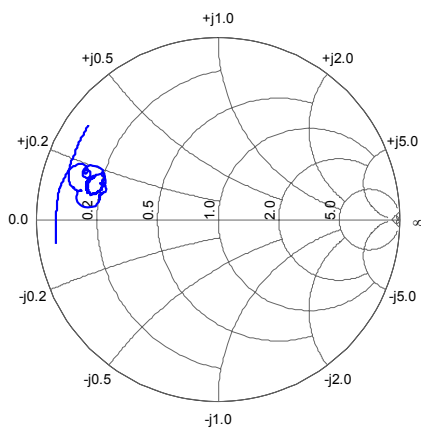
Horizontal: 2MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±5MHz)

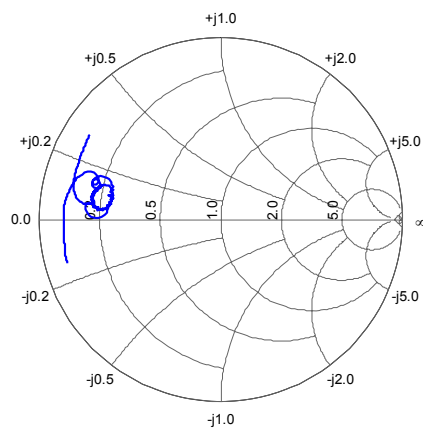


Horizontal: 2MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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