



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	-	24.8	27
1.5 dB Bandwidth	MHz	10	10.02	-
3 dB Bandwidth	MHz	-	10.16	-
23 dB Bandwidth	MHz	-	10.75	10.8
32 dB Bandwidth	MHz	-	10.86	11.18
40 dB Bandwidth	MHz	-	10.94	11.95
Passband Variation	dB	-	1	1.5
Absolute Delay	usec	-	2.94	2.95
Ultimate Rejection	dB	40	47	-
Material Temperature coefficient	KHz/°C	-13.16		
Substrate Material	-	YZ LN		
Ambient Temperature	°C	25		
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	DIP3512 (35.0x12.8x4.7mm3)			

Notes:

- All specifications are based on the test circuit shown;
- In production, all specifications are measured by Agilent Network analyzer and full 2 port calibration at room temperature;
- Electrical margin has been built into the design to account for the variations due to temperature drift and manufacturing tolerances;
- 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	LBN140A53		
Rev. Date	2010-07-08		
Ver.	1.0	Page 1/3	

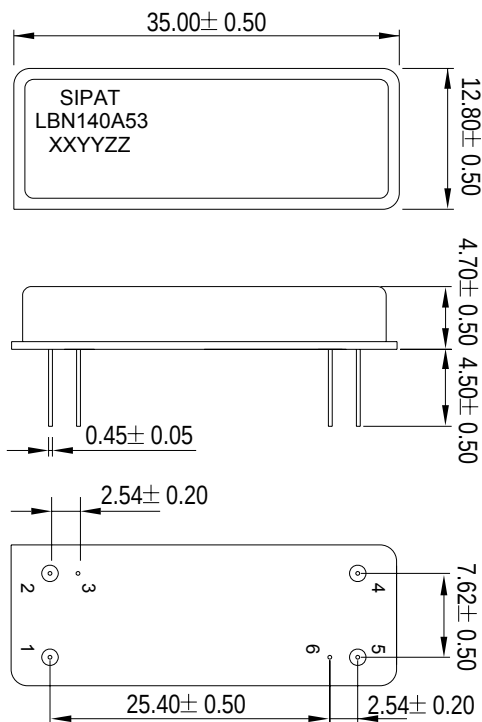
Matching Configuration



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) LBN140A53: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



SIPAT Co., Ltd.
(CETC No.26 Research Institute)
#14 Nanping Huayuan Road,
Chongqing, China, 400060

Part Number

LBN140A53

Rev. Date

2010-07-08

Ver.

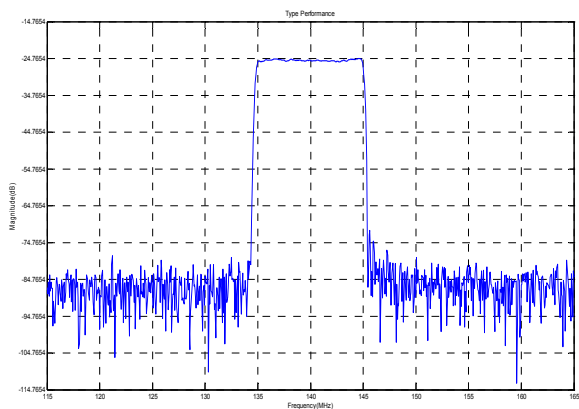
1.0

Page 2/3



Typical Performance

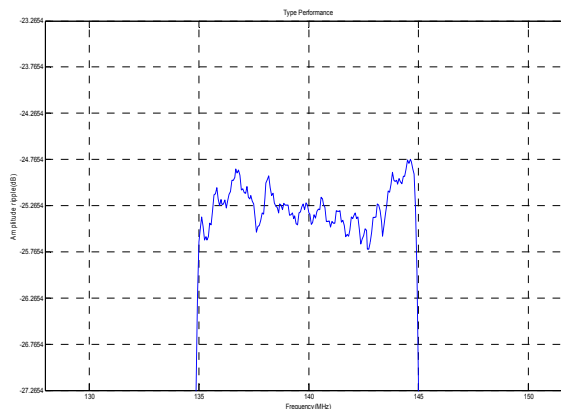
Frequency Response



Horizontal: 5MHz/Div

Vertical: 10dB/Div

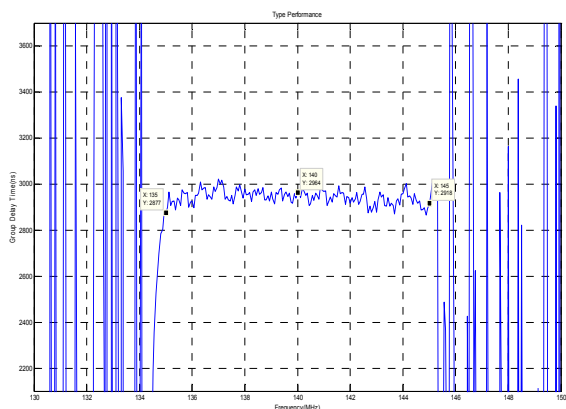
Passband Response



Horizontal: 5MHz/Div

Vertical: 0.5dB/Div

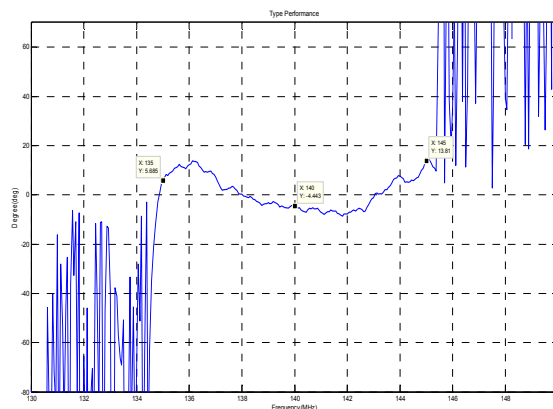
Group Delay Variation($f_0 \pm 5\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 200ns/Div

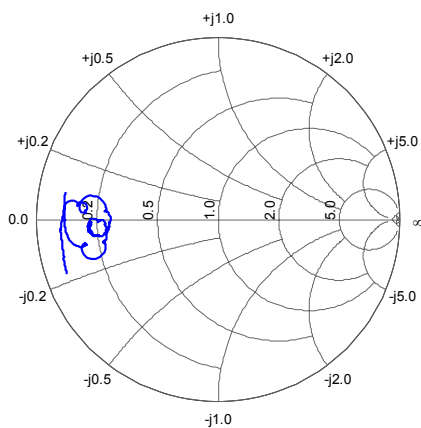
Phase Linearity($f_0 \pm 5\text{MHz}$)



Horizontal: 2MHz/Div

Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22

