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	-	31.4	32
1.5 dB Bandwidth	MHz	-	40.82	-
3 dB Bandwidth	MHz	40.9	41.04	-
15 dB Bandwidth	MHz	-	41.76	41.8
40 dB Bandwidth	MHz	-	42.33	42.4
45 dB Bandwidth	MHz	-	42.43	43
Passband Variation	dB	-	1.2	1.5
Absolute Delay	usec	-	2.3	4.5
Ultimate Rejection(f0±25MHz)	dB	45	48	-
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:

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.

Matching Configuration

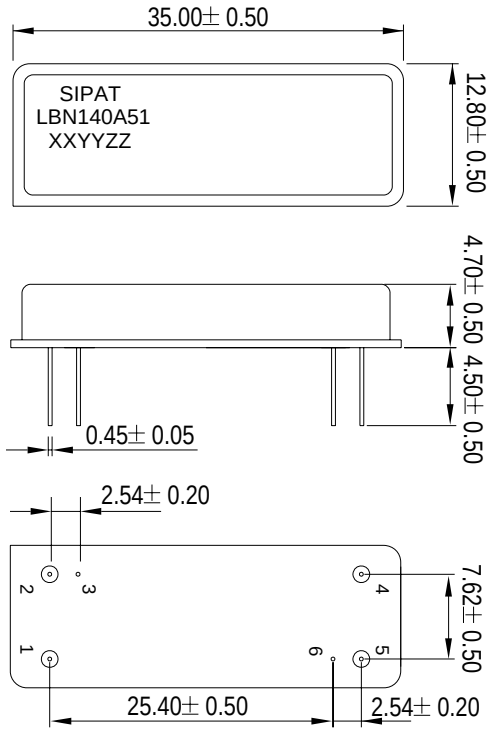


L1=L2=22nH

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

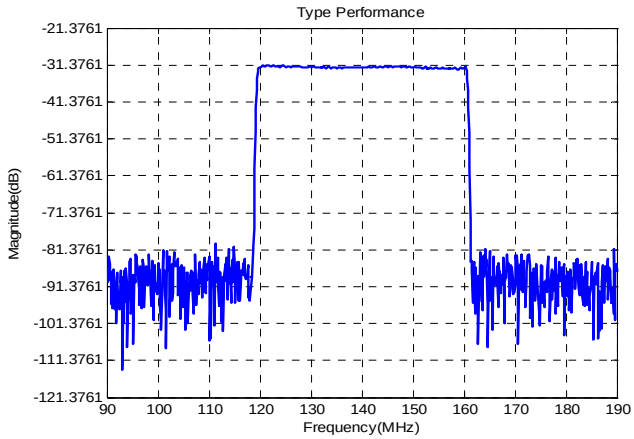
Marking Configuration:

1) SIPAT: Manufacturer Name
2) LBN140A51: Part Number
3) XXYY: Date(Year/month)
4) ZZ: Identified Code

Package: DIP3512 **Unit: mm**

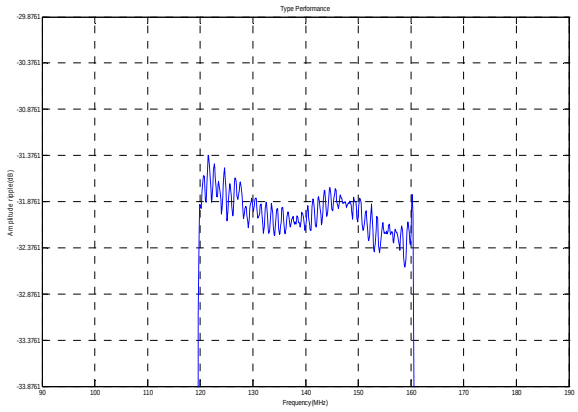
Typical Performance

Frequency Response



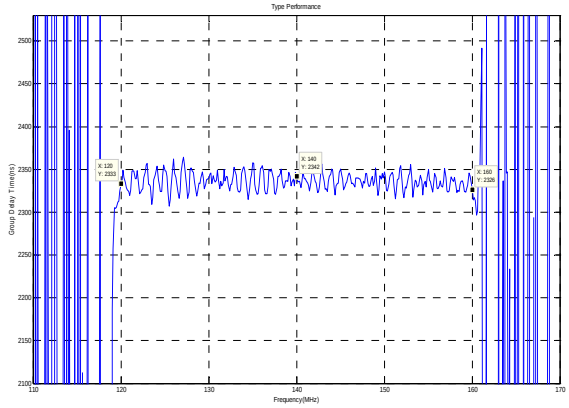
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Response



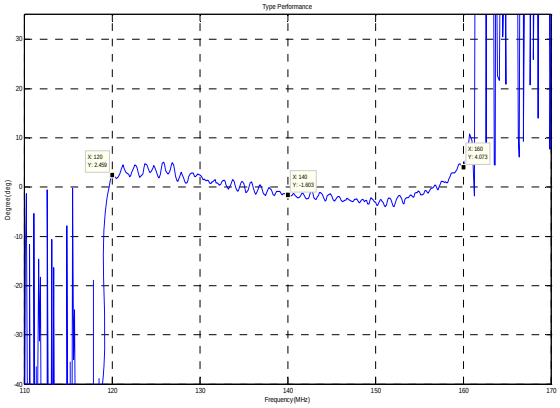
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±20MHz)



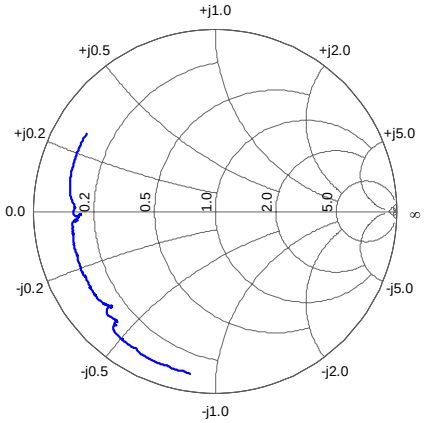
Horizontal: 10MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±20MHz)



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

Smith Chart S11



Smith Chart S22

