Features

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

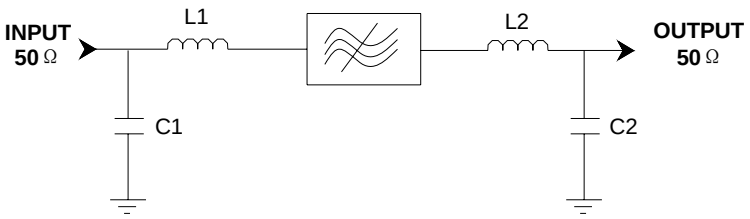
Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	139.9	140	140.1
Insertion Loss		dB	-	22.4	25
1.5dB Bandwidth		MHz	4.4	4.46	-
Passband Variation		dB	-	1.3	1.5
Absolute Delay		usec	-	4.38	4.5
Ultimate Rejection	*f0±2.6MHz*	dB	35	38	-
	f0±2.8MHz	dB	45	51	-
	f0±3.2MHz	dB	50	51	-
	f0±7.2MHz	dB	52	61	-
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		-	1		
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



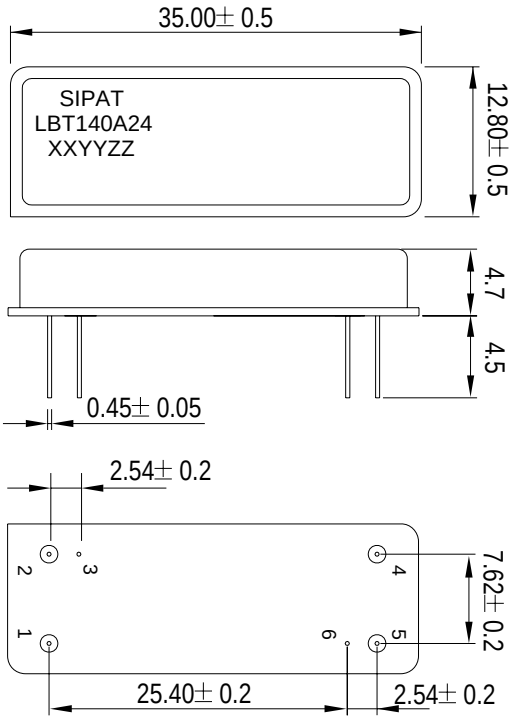
L1=L2=22nH

C1=C2=47pF

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

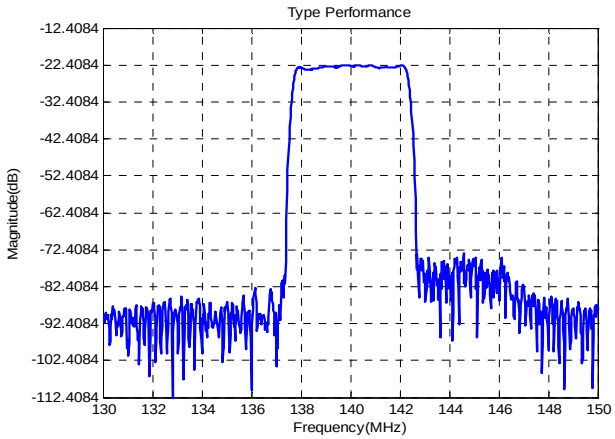
Marking Configuration:

1) SIPAT: Manufacturer Name
2) LBT140A24: Part Number
3) XXYY: Date(Year/month)
4) ZZ: Identified Code

Package: DIP3512 **Unit: mm**

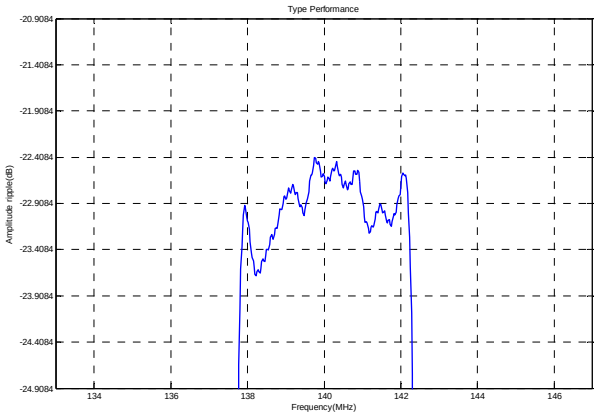
Typical Performance

Frequency Respond



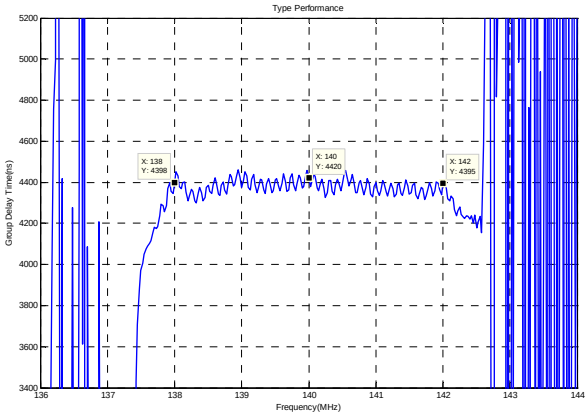
Horizontal: 2MHz/Div Vertical: 10dB/Div

Passband Respond



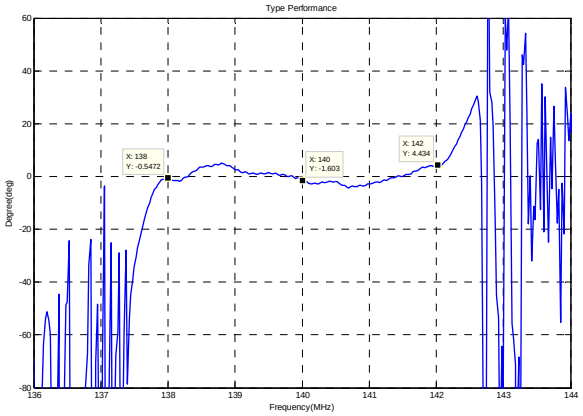
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±2MHz)



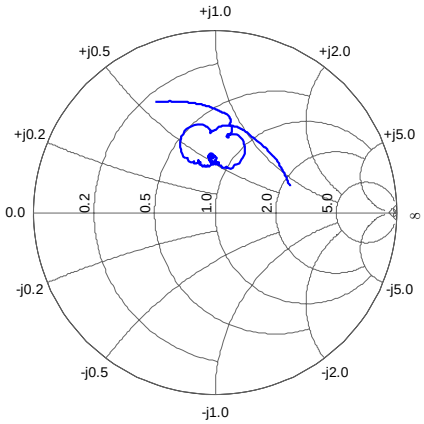
Horizontal: 1MHz/Div Vertical: 200ns/Div

Phase Linearity(f0±2MHz)



Horizontal: 1MHz/Div Vertical: 20deg/Div

Smith Chart S11



Smith Chart S22