Features

- ✧ For IF SAW filter
- ✧ Single-ended operation
- ✧ Ceramic Surface Mount Package
- ✧ Small size
- ✧ RoHS compliant (2002/95/EC), Pb-free

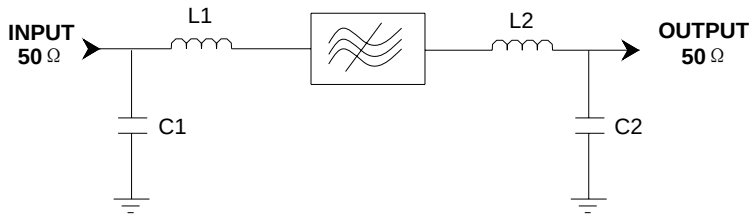
Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	-	140	-
Insertion Loss		dB	-	12.6	18.5
Passband Variation	*137.25~142.75MHz*	dB	-	0.3	1.8
	136.5~143.5MHz	dB	-	0.3	2
Phase Linearity	*137.25~142.75MHz*	deg	-	2	6
	136.5~143.5MHz	deg	-	3	8
Absolute Delay(137.25~142.75MHz)		usec	-	1.05	-
Input/Output return loss(136.5~143.5MHz)		dB	8.5	12/10.7	-
Ultimate Rejection	*10~132MHz*	dB	40	46	-
	132~133MHz	dB	35	49	-
	147~150MHz	dB	35	38	-
	150~200MHz	dB	40	52	-
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		SMD9.1*4.8			

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



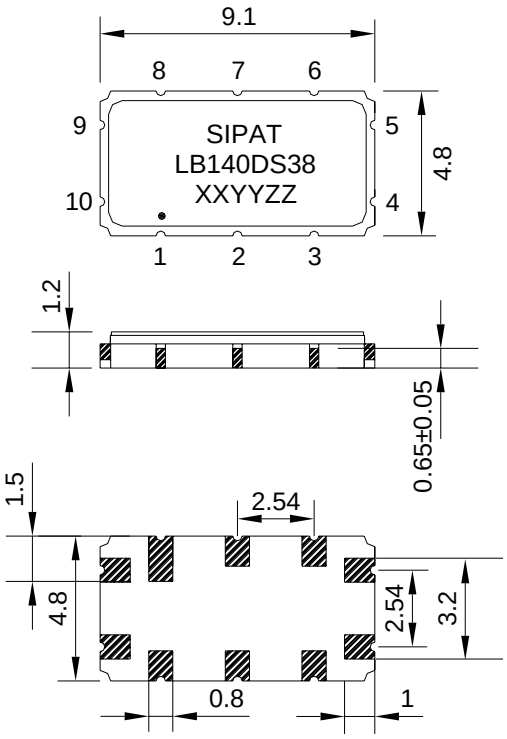
L1=(27+15)nH L2=47nH

C1=C2=56pF

Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input: 9

Output: 4

Ground: All Others

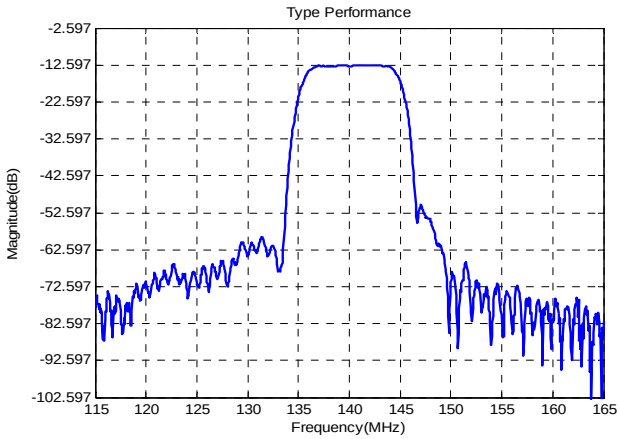
Marking Configuration:

1) •: Pad Number 1 Index
2) SIPAT: Manufacturer Name
3) LB140DS38: Part Number
4) XXYY: Date(Year/month)
5) ZZ: Identified Code

Package: SMD9148 **Unit: mm**

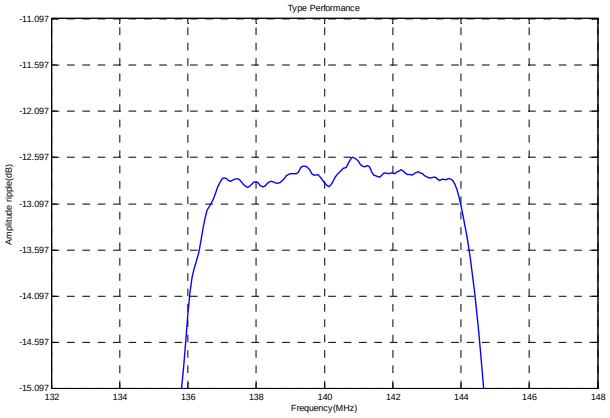
Typical Performance

Frequency Respond



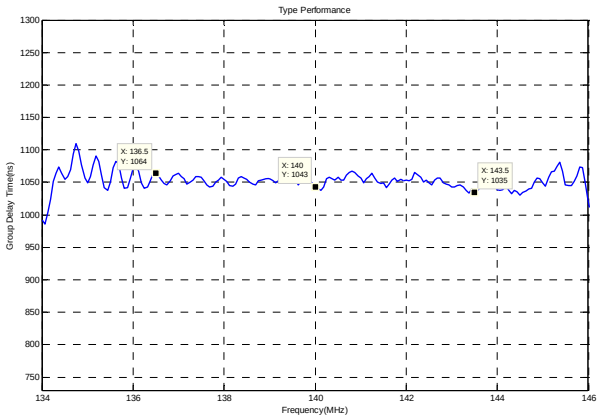
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



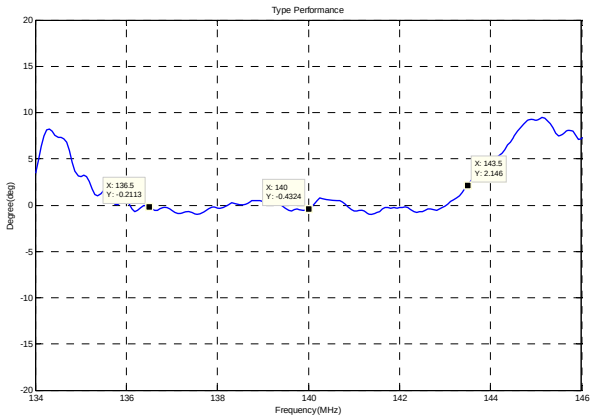
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±3.5MHz)



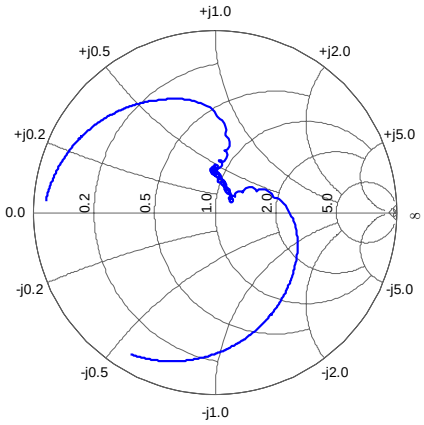
Horizontal: 2MHz/Div Vertical: 50ns/Div

Phase Linearity(f0±3.5MHz)



Horizontal: 2MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22

