Features

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

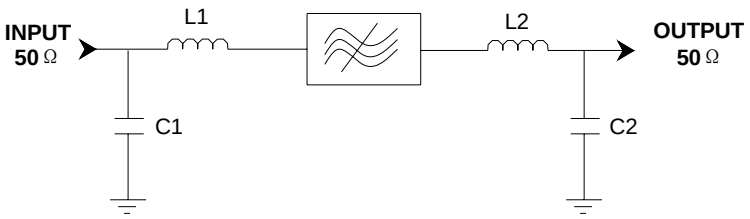
Specifications

Parameter		Unit	Minimum	Typical	Maximum
Center Frequency		MHz	139.9	140	140.1
Insertion Loss		dB	-	10.5	12
1dB Bandwidth		MHz	0.48	0.61	-
3 dB Bandwidth		MHz	-	0.9	-
35 dB Bandwidth		MHz	-	1.94	2.1
Passband Variation		dB	-	0.1	0.6
Absolute Delay		usec	-	2.34	-
Phase Linearity(f0±0.2MHz)		deg	-	0.5	-
Group Delay variation(f0±0.25MHz)		nsec	-	80	200
Ultimate Rejection	*f0±2.5MHz*	dB	37	55	-
	f0±20MHz	dB	40	60	-
Material Temperature coefficient		KHz/°C	0.14		
Substrate Material		-	QZ		
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		SMD13.3*6.5C			

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



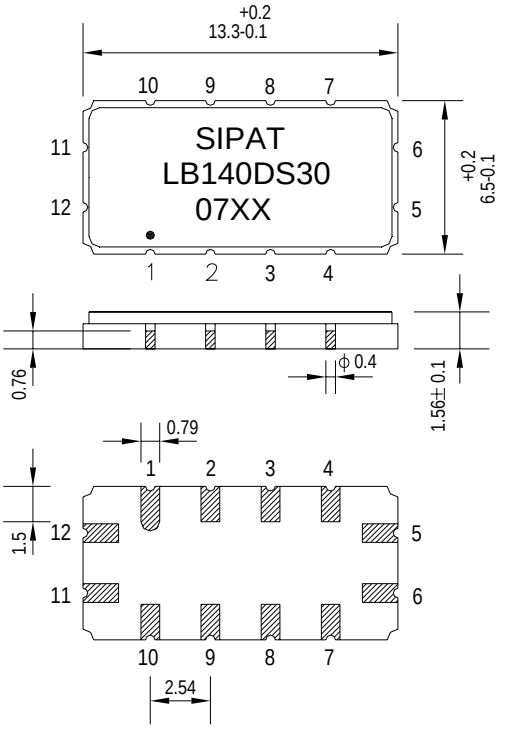
L1=82nH L2=68nH

C1=C2=56pF

Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



Pad Configuration:

Input 11

Output 5

Ground All Others

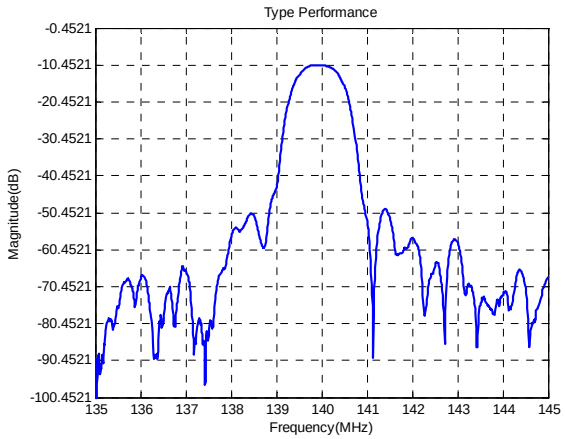
Marking Configuration:

1) •: Pad Number 1 Index
2) SIPAT: Manufacturer Name
3) LB140DS30: Part Number
4) 07XX: Date Code

Package: SMD13.3*6.5C **Unit: mm**

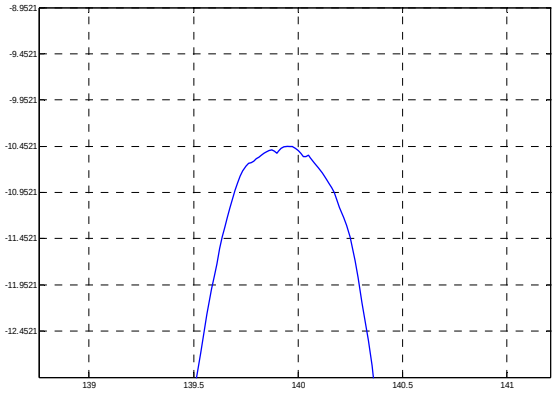
Typical Performance

Frequency Respond



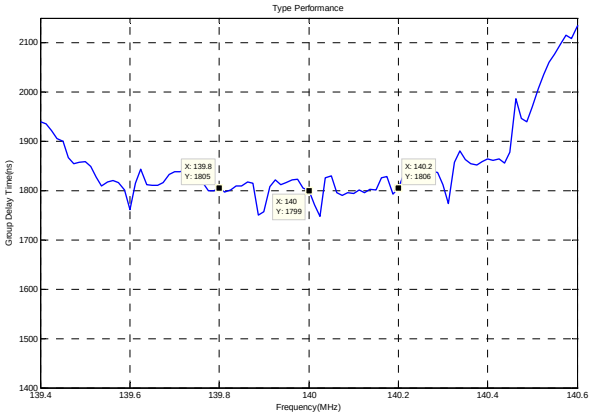
Horizontal: 1MHz/Div Vertical: 10dB/Div

Passband Respond



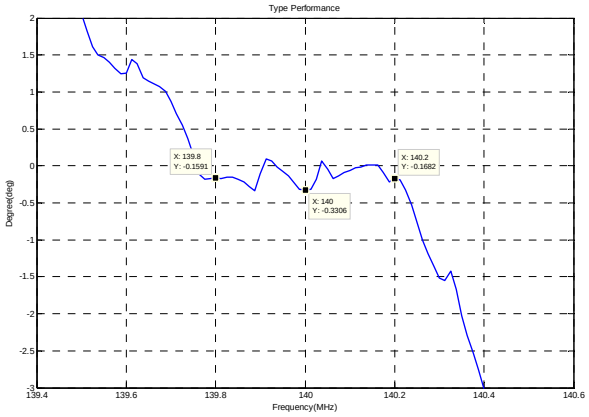
Horizontal: 0.5MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±0.2MHz)



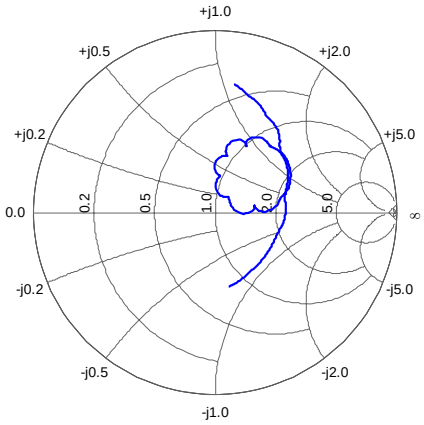
Horizontal: 0.2MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±0.2MHz)



Horizontal: 0.2MHz/Div Vertical: 0.5deg/Div

Smith Chart S11



Smith Chart S22

