Features

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

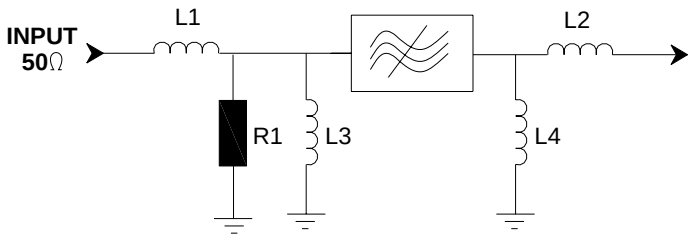
Specifications

Parameter	Unit	Minimum	Typical	Maximum
Center Frequency	MHz	139.75	140	140.25
Insertion Loss	dB	-	13	15
1 dB Bandwidth	MHz	31	32.06	-
3 dB Bandwidth	MHz	32	33.54	-
40 dB Bandwidth	MHz	-	37.54	40
Phase Linearity(f0±13MHz)	deg	-	5	6
Group delay variation(f0±13MHz)	nsec	-	85	100
Passband Variation(f0±15MHz)	dB	-	0.5	1
Absolute Delay	usec	-	0.96	-
Ultimate Rejection(f0±20MHz)	dB	38	39	-
Material Temperature coefficient	KHz/°C	-13.2		
Substrate Material	-	YZ LN		
Ambient Temperature	°C	25		
DC Voltage	V	0		
Input Power	dBm	-	-	10
ESD Class	-	1A		
Package Size	SMD13.3*6.5			

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.

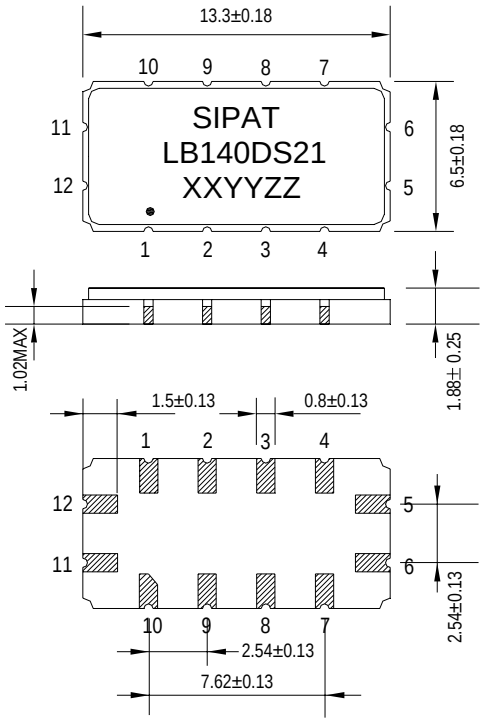
Matching Configuration



L1=L2=82nH L3=150nH L4=120nH
R1=510Ω
Source/Load Impedance=50 ohm

Notes - Component values may change depending on board layout.

Package Dimension



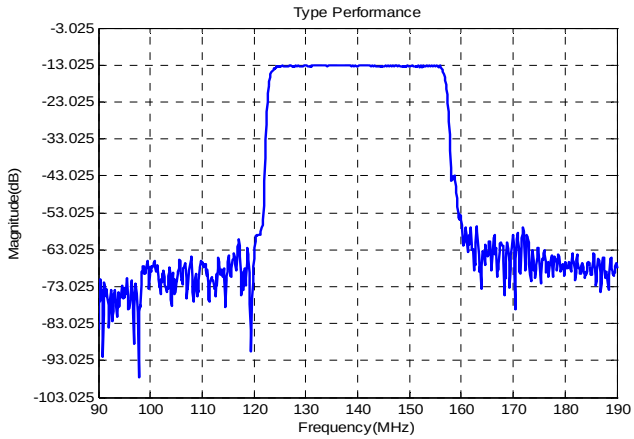
Pad Configuration:
Input: 11
Output: 5
Ground: All Others

Marking Configuration:
1) •: Pad Number 1 Index
2) SIPAT: Manufacturer Name
3) LB140DS21: Part Number
4) XXYY: Date(Year/month)
5) ZZ: Identified Code

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

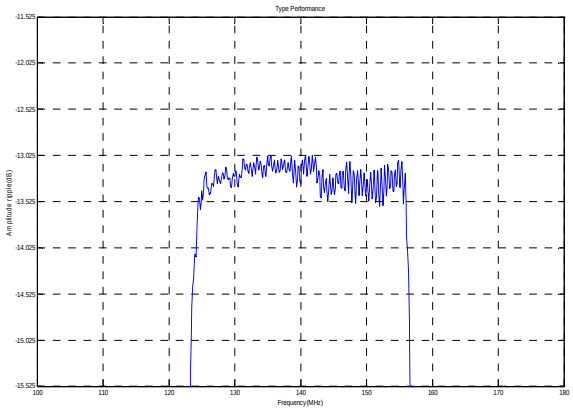
Typical Performance

Frequency Response



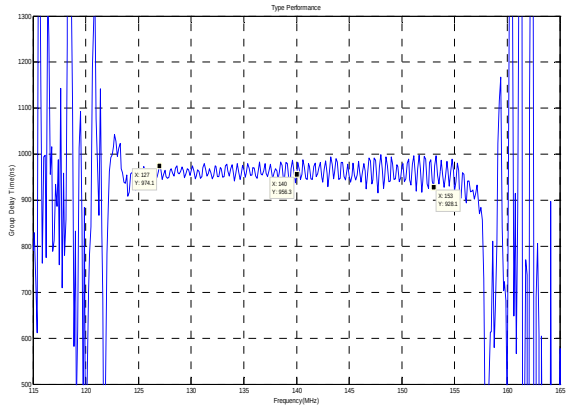
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Response



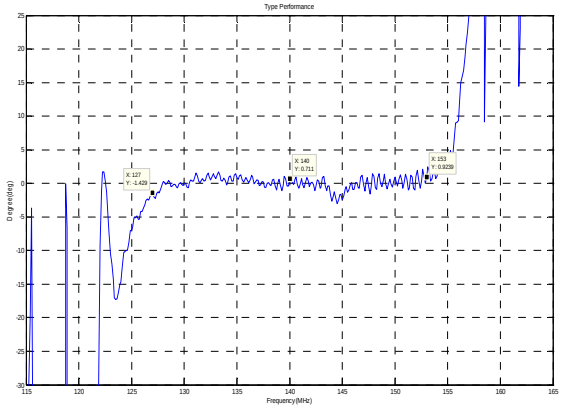
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±16MHz)



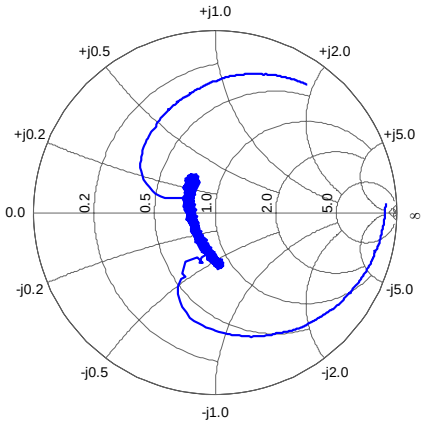
Horizontal: 5MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±16MHz)



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

Smith Chart S11



Smith Chart S22