



Features


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

Specifications

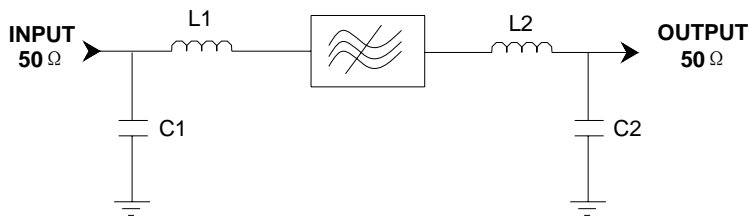
| Parameter | Unit | Minimum | Typical | Maximum |
|--|-------------|---------|---------|---------|
| Center Frequency | MHz | 139.6 | 140 | 140.4 |
| Insertion Loss | dB | - | 11.5 | 13 |
| 1dB Bandwidth | MHz | 22 | 24.89 | - |
| 3 dB Bandwidth | MHz | 23.9 | 26 | - |
| 35 dB Bandwidth | MHz | - | 29.58 | 33.5 |
| Passband Variation($f_0 \pm 9.6\text{MHz}$) | dB | - | 0.7 | 1 |
| Phase Linearity($f_0 \pm 9.6\text{MHz}$) | deg | - | 4 | 14 |
| Group Delay Variation($f_0 \pm 9.6\text{MHz}$) | nsec | - | 85 | 100 |
| Absolute Delay | usec | - | 0.98 | - |
| Ultimate Rejection | dB | - | 38 | - |
| Material Temperature coefficient | KHz/°C | -13.16 | | |
| Substrate Material | - | YZ LN | | |
| 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 | 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.

| | | | | |
|--|--|-------------|------------|------|
|  | SIPAT Co., Ltd. (CETC No.26 Research Institute) #14 Nanping Huayuan Road, Chongqing, China, 400060 | Part Number | LB140DS17 | |
| | | Rev. Date | 2009-03-27 | |
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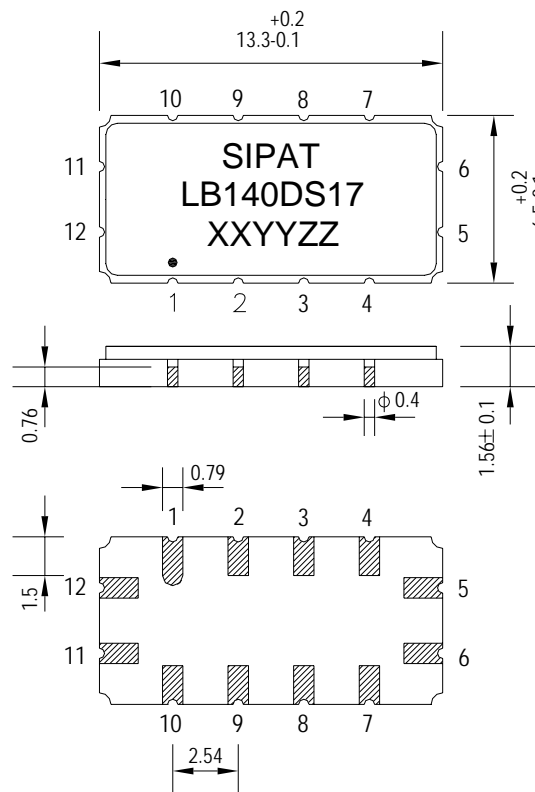
Matching Configuration



L1=120nH L2=(100+18)nH
C1=22pF C2=15pF
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) LB140DS17: Part Number
- 4) XXYY: Date(Year/month)
- 5) ZZ: Identified Code

Package: SMD13.3*6.5

Unit: mm

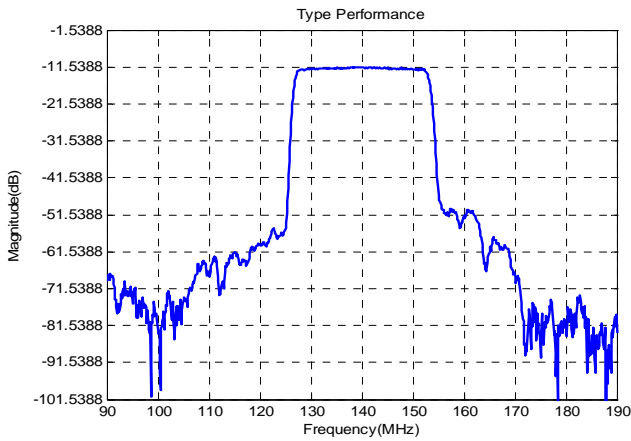


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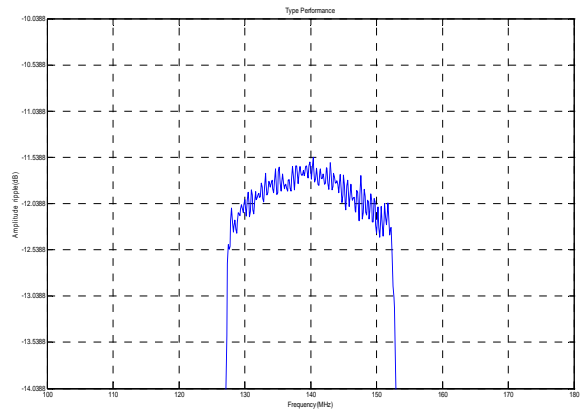
Typical Performance

Frequency Respond



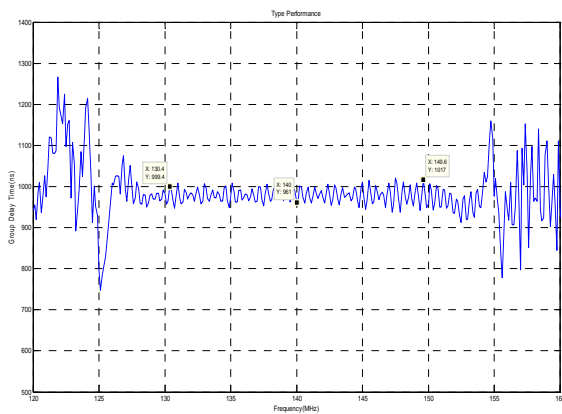
Horizontal: 10MHz/Div Vertical: 10dB/Div

Passband Respond



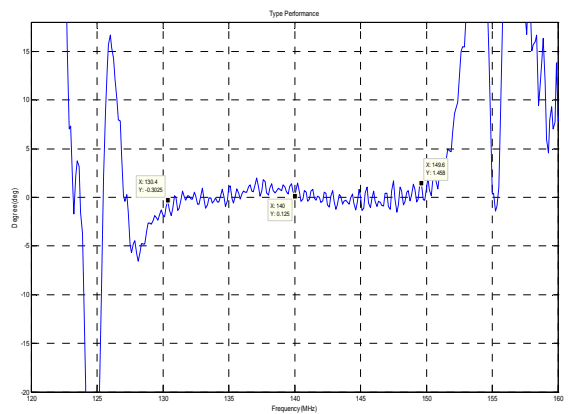
Horizontal: 10MHz/Div Vertical: 0.5dB/Div

Group Delay Variation(f0±9.6MHz)



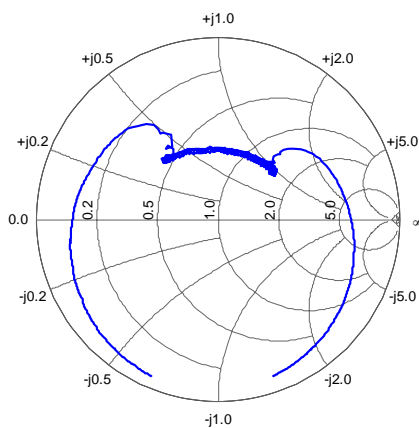
Horizontal: 5MHz/Div Vertical: 100ns/Div

Phase Linearity(f0±9.6MHz)

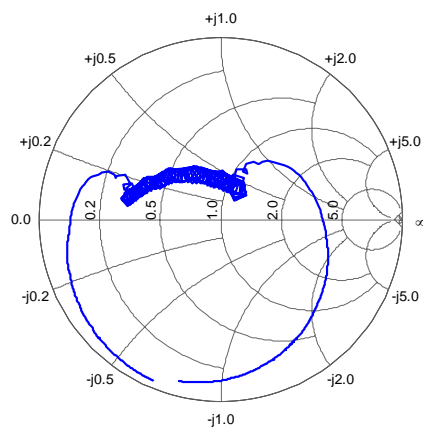


Horizontal: 5MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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