



Features

- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

| Parameter | Unit | Minimum | Typical | Maximum | |
|----------------------------------|---|---------|---------|---------|---|
| Center Frequency | MHz | 140.975 | 140 | 140.025 | |
| Insertion Loss | dB | - | 20 | 25 | |
| 1.5 dB Bandwidth | MHz | 0.2 | 0.21 | - | |
| Passband Variation | dB | - | 0.1 | - | |
| Absolute Delay | usec | - | 4.75 | 4.8 | |
| Ultimate Rejection | $f_0 \pm 0.5\text{MHz}$ | dB | 38 | 52 | - |
| | $f_0 \pm 0.7\text{MHz}$ | dB | 46 | 57 | - |
| | $f_0 \pm 1.1\text{MHz}$ | dB | 55 | 61 | - |
| | $f_0 \pm 5.1\text{MHz}$ | dB | 55 | 68 | - |
| 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 | DIP3512 (35.0x12.8x4.7mm ³) | | | | |

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 | LBS14056 | |
| | | Rev. Date | 2007-12-17 | |
| | | Ver. | 2.0 | Page 1/3 |

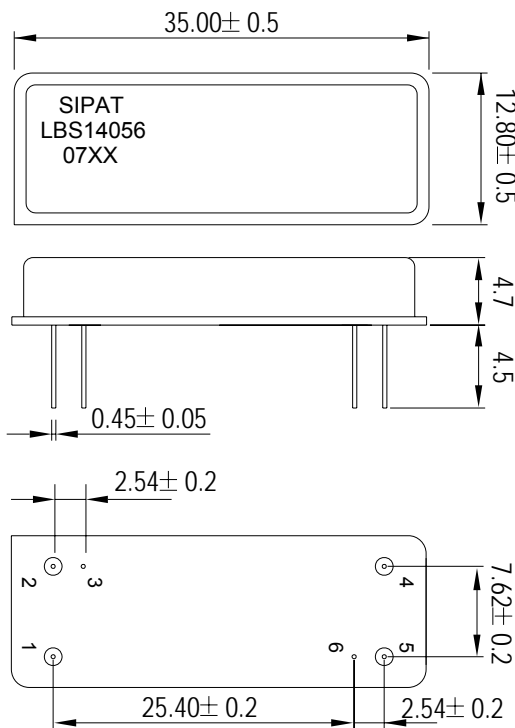
Matching Configuration



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) LBS14056: Part Number
- 3) 07XX: Date Code

Package: DIP3512

Unit: mm

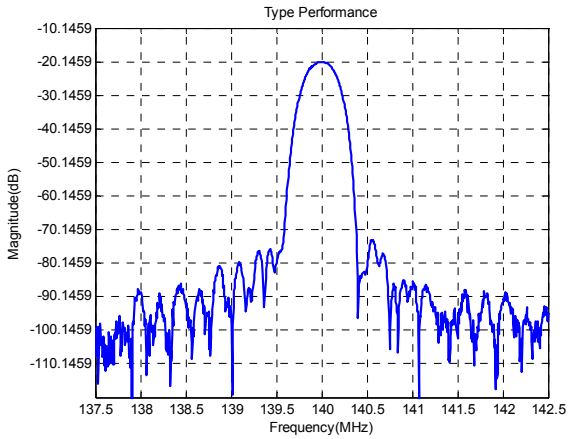


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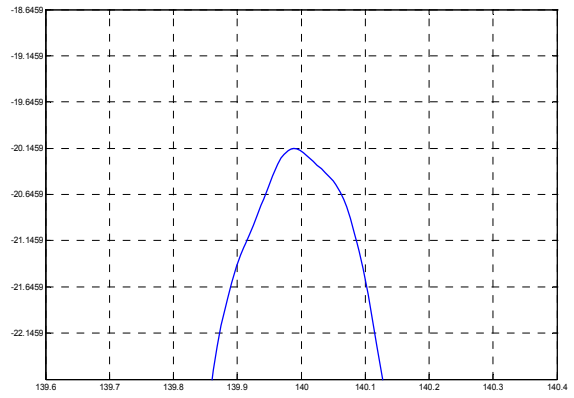
Typical Performance

Frequency Respond



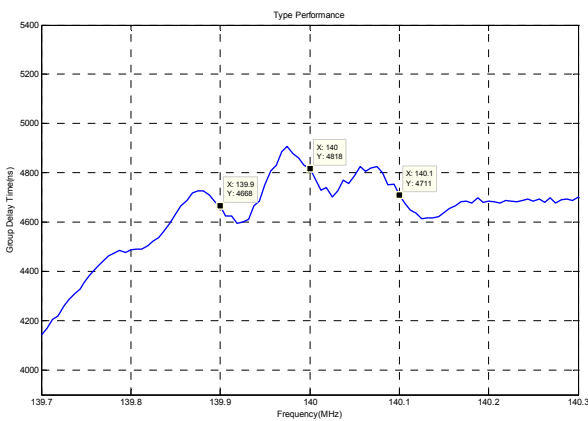
Horizontal: 0.5MHz/Div Vertical: 10dB/Div

Passband Respond



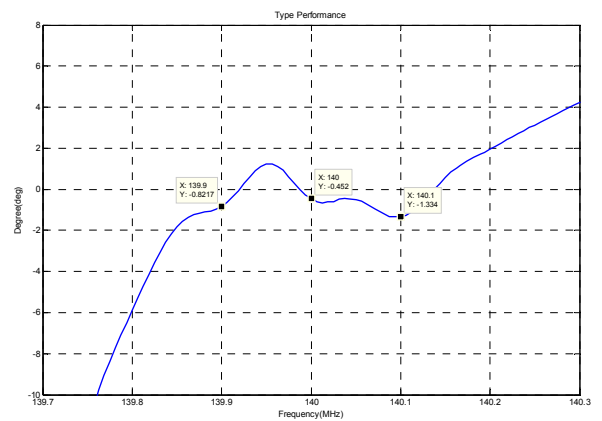
Horizontal: 0.1MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 0.1$ MHz)



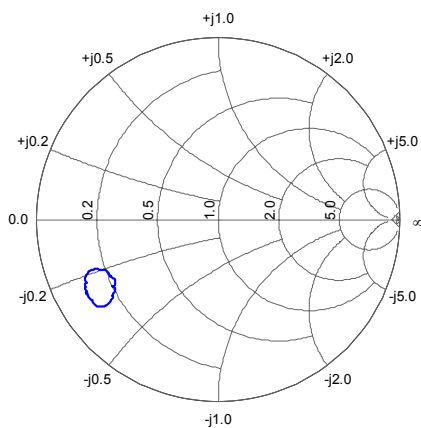
Horizontal: 0.1MHz/Div Vertical: 200ns/Div

Phase Linearity($f_0 \pm 0.1$ MHz)

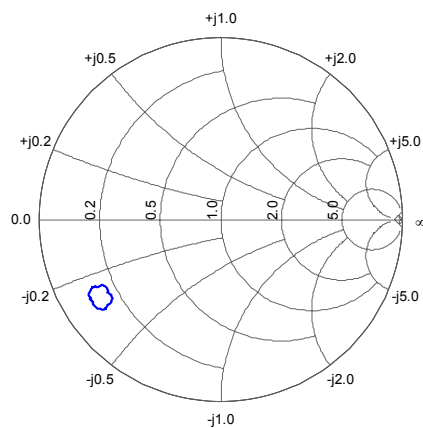


Horizontal: 0.1MHz/Div Vertical: 2deg/Div

Smith Chart S11



Smith Chart S22



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