



Features

- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

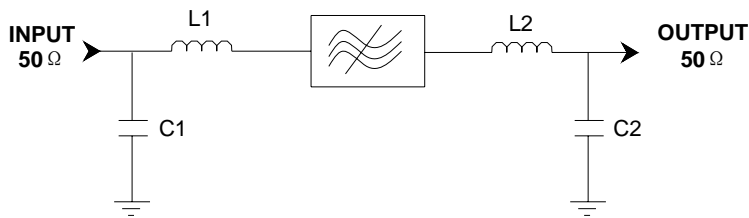
| Parameter | Unit | Minimum | Typical | Maximum |
|----------------------------------|---|---------|---------|---------|
| Center Frequency | MHz | 159.4 | 159.5 | 159.6 |
| Insertion Loss | dB | 22 | 23.3 | 26 |
| 1 dB Bandwidth | MHz | - | 10.94 | - |
| 3 dB Bandwidth | MHz | 11.3 | 11.33 | - |
| 30 dB Bandwidth | MHz | - | 12.5 | - |
| 45 dB Bandwidth | MHz | - | 12.74 | 12.95 |
| 50 dB Bandwidth | MHz | - | 12.81 | 13.5 |
| Passband Variation | dB | - | 0.8 | 1 |
| Absolute Delay | usec | - | 3.16 | 3.5 |
| Ultimate Rejection | dB | 50 | 58 | - |
| Material Temperature coefficient | KHz/°C | -2.88 | | |
| 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 | 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 | LBT16049 | |
| | | Rev. Date | 2008-04-01 | |
| | | Ver. | 1.0 | Page 1/3 |

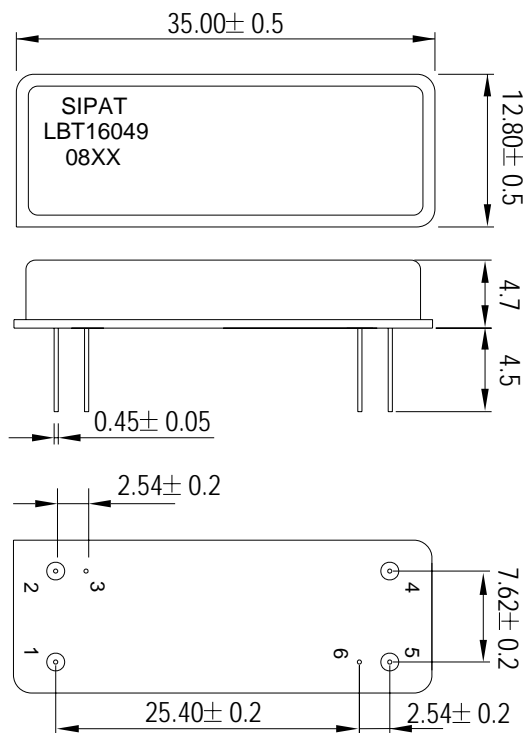
Matching Configuration



L1=L2=33nH
C1=C2=33pF
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) LBT16049: Part Number
3) 08XX: Date Code

Package: DIP3512

Unit: mm



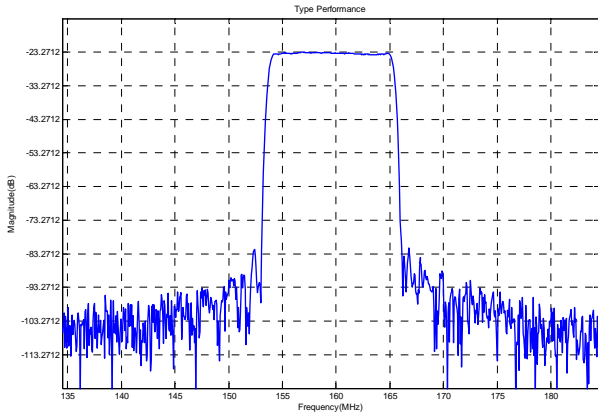
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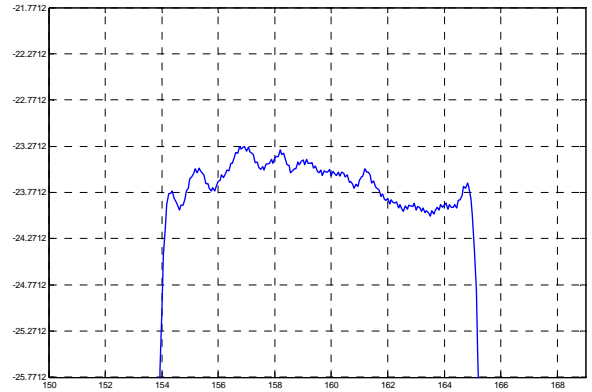
Typical Performance

Frequency Respond



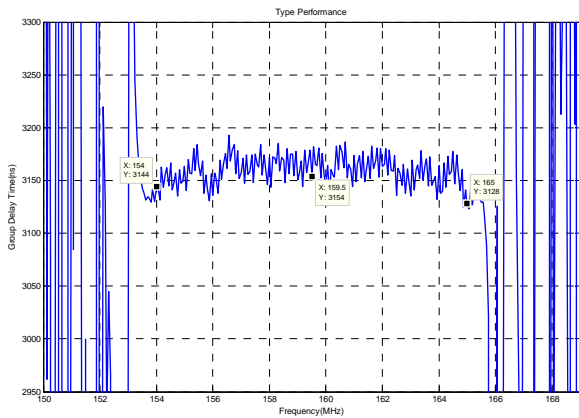
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



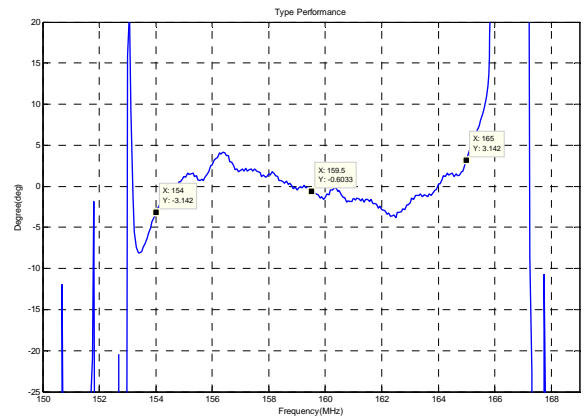
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 5.5$ MHz)



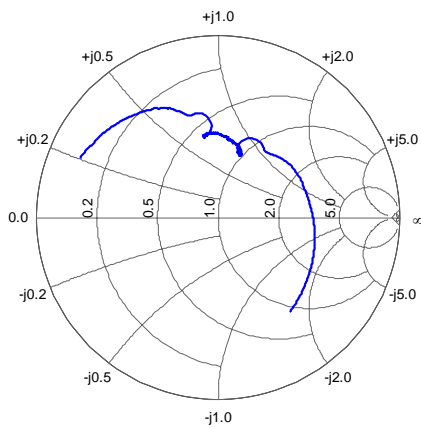
Horizontal: 2MHz/Div Vertical: 50ns/Div

Phase Linearity($f_0 \pm 5.5$ MHz)

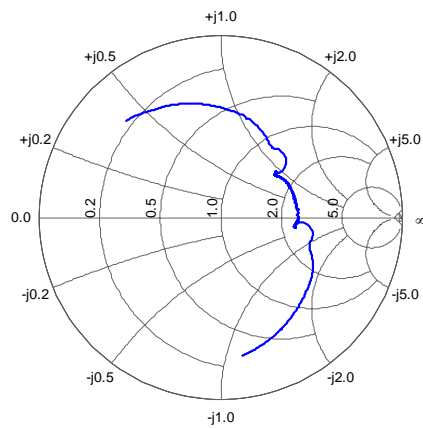


Horizontal: 2MHz/Div Vertical: 5deg/Div

Smith Chart S11



Smith Chart S22



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