


Specifications

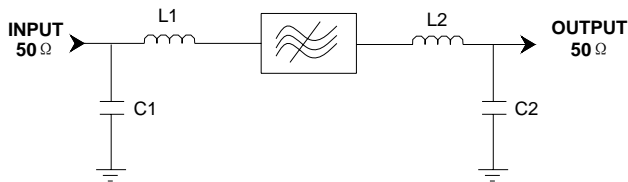
| Parameter | Unit | Minimum | Typical | Maximum | |
|--|--------------|---------|---------|---------|---|
| Center Frequency | MHz | - | 140 | - | |
| Insertion Loss | dB | - | 10.3 | 11 | |
| 1 dB Bandwidth | MHz | 18.4 | 21.21 | - | |
| 3 dB Bandwidth | MHz | 19.6 | 22.07 | - | |
| 35 dB Bandwidth | MHz | - | 25.66 | 26.4 | |
| 40 dB Bandwidth | MHz | - | 26.3 | - | |
| Passband Variation (Over the 1dB bandwidth) | dB | - | 0.6 | 0.8 | |
| Absolute Delay | usec | - | 1.2 | - | |
| Group Delay Variation (130.8~149.2MHz) | nsec | - | 80 | 160 | |
| Ultimate Rejection | 10~90MHz | dB | 35 | 64 | - |
| | 90~120MHz | dB | 40 | 54 | - |
| | 120~126.8MHz | dB | 35 | 52 | - |
| | 153.2~160MHz | dB | 35 | 45 | - |
| | 160~190MHz | dB | 40 | 46 | - |
| | 190~800MHz | dB | 35 | 73 | - |
| Input VSWR(130.8~149.2MHz) | - | - | 1.67 | 2.8 | |
| Output VSWR(130.8~149.2MHz) | - | - | 1.41 | 2.3 | |
| Material Temperature coefficient | KHz/°C | -13.16 | | | |
| Ambient Temperature | °C | 25 | | | |
| Package Size | SMD13.3*6.5 | | | | |

Notes:

1. All specifications are based on the test circuit shown
2. In production, devices will be tested at room temperature to a guardbanded specification to ensure electrical compliance over 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) Nanping Huayuan Road No. 14 Chongqing, China, 400060 | Part Number | LB140DS15 | |
| | | Rev. Date | 2006-12-11 | |
| | | Rev. | 1.0 | Page |

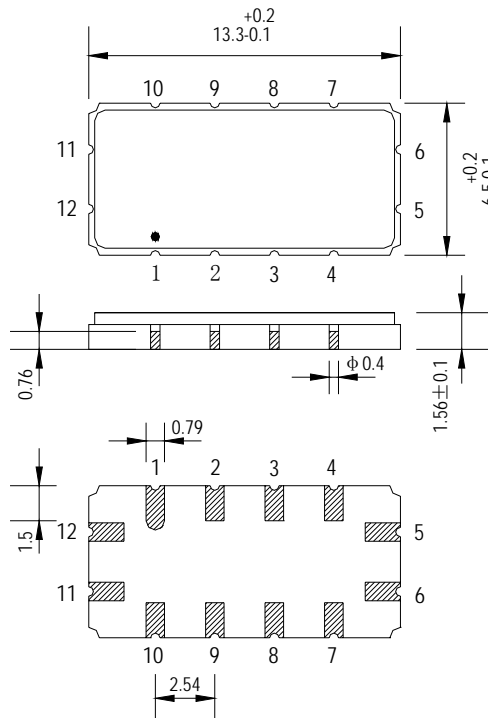
Matching Configuration



L1=127nH L2=100nH
C1=22pF C2=34pF
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

Package Dimension



| | |
|--------|-----------------------|
| Input | 11 |
| Output | 5 |
| Ground | 1,2,3,4,6,7,8,9,10,12 |

Package: SMD13.3*6.5

Unit: mm

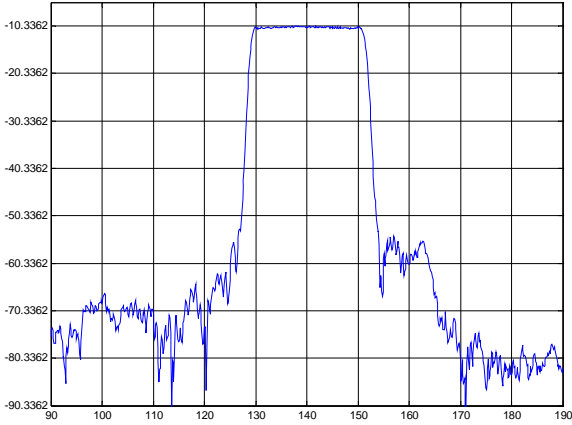


SIPAT Co., Ltd.
(CETC No. 26 Research Institute)
Nanping Huayuan Road No. 14
Chongqing, China, 400060

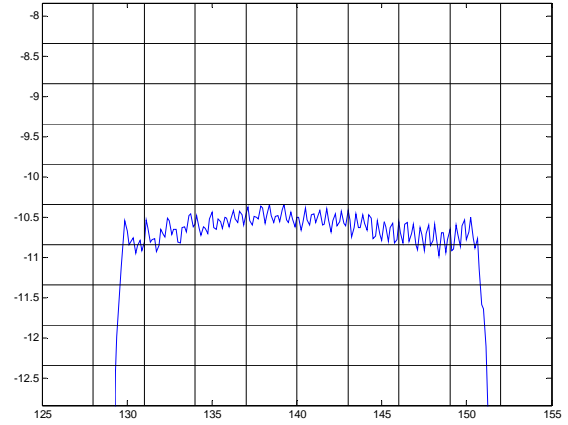
| | | |
|-------------|------------|----------|
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Typical Performance

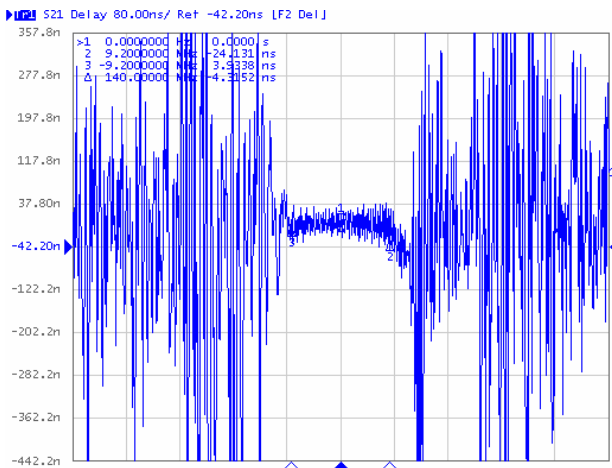
Frequency Respond



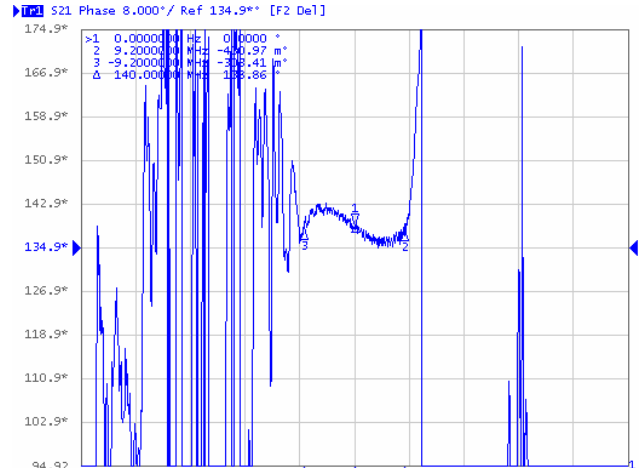
Passband Respond



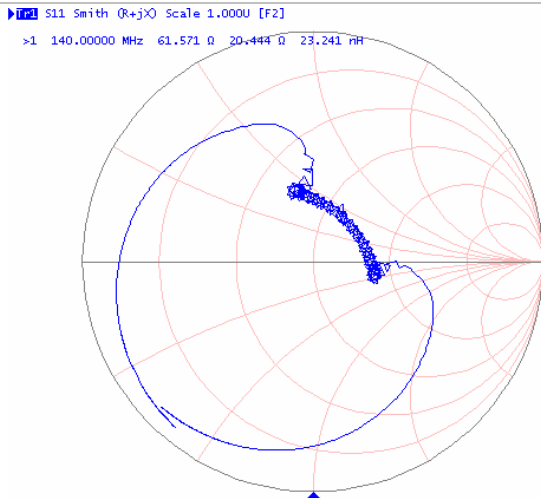
Group Delay Variation(f0±9.2MHz)



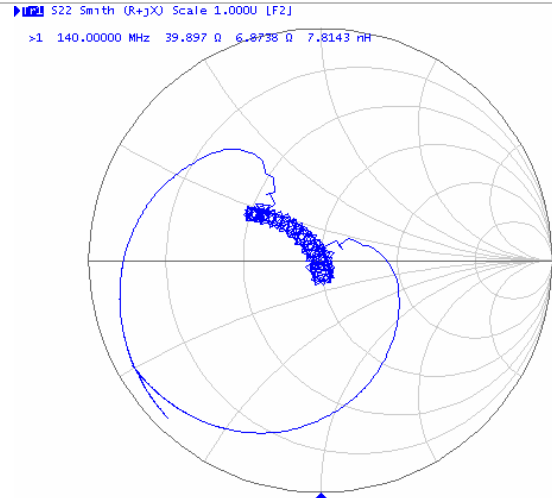
Phase Linearity(f0±9.2MHz)



Smith Chart S11



Smith Chart S22



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