

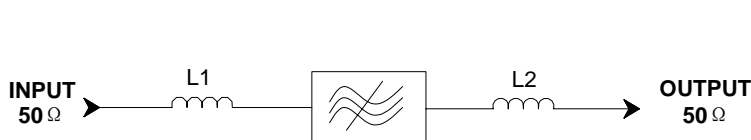
Specifications

| Parameter | Unit | Minimum | Typical | Maximum | |
|----------------------------------|----------------------------|---------|---------|---------|---|
| Center Frequency | MHz | 69.9 | 70 | 70.1 | |
| Insertion Loss | dB | - | 24.3 | 27 | |
| 1 dB Bandwidth | MHz | - | 14.42 | - | |
| 3 dB Bandwidth | MHz | 14.5 | 14.62 | - | |
| 40 dB Bandwidth | MHz | - | 15.37 | - | |
| 50 dB Bandwidth | MHz | - | 15.44 | - | |
| Passband Variation | dB | - | 0.9 | 1.5 | |
| Absolute Delay | usec | - | 3.74 | 4 | |
| Ultimate Rejection | $f_0 \pm 7.7\text{MHz}$ | dB | 35 | 60 | - |
| | $f_0 \pm 7.9\text{MHz}$ | dB | 45 | 61 | - |
| | $f_0 \pm 8.3\text{MHz}$ | dB | 50 | 59 | - |
| | $f_0 \pm 12.3\text{MHz}$ | dB | 55 | 57 | - |
| | $f_0 \pm 15\text{MHz}$ | dB | 55 | 62 | - |
| Material Temperature coefficient | KHz/°C | -6.58 | | | |
| Ambient Temperature | °C | 25 | | | |
| Package Size | DIP3512 (35.2x12.7x5.2mm3) | | | | |

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

Matching Configuration

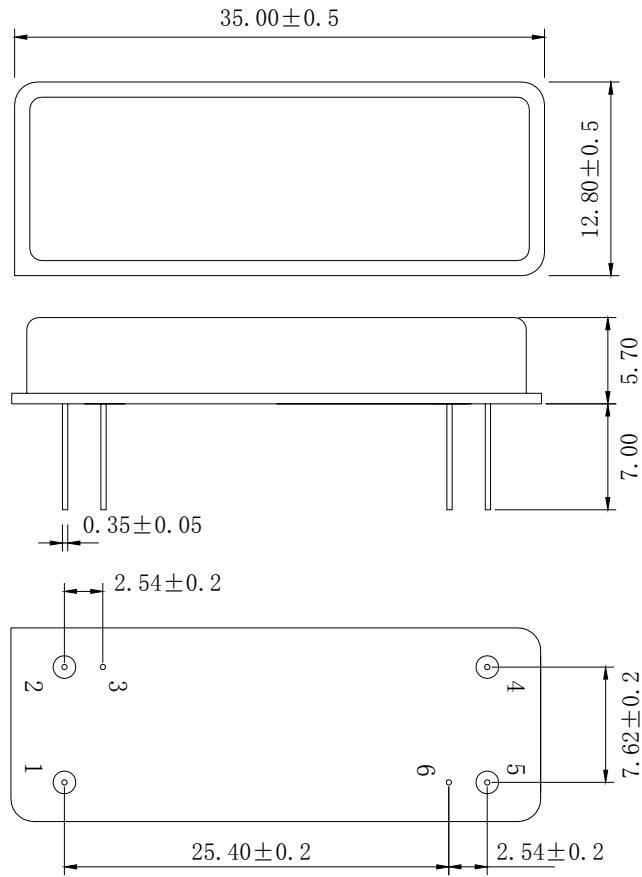


L1=150nH L2=120nH
Source/Load Impedance=50 ohm

Notes - Component values may change depending
on board layout.

| | | | | |
|--|---|-------------|-----------|------|
|  | SIPAT Co., Ltd. (CETC No. 26 Research Institute) Nanping Huayuan Road No. 14 Chongqing, China, 400060 | Part Number | LBN70A31 | |
| | | Rev. Date | 2006-8-30 | |
| | | Rev. | 1.0 | Page |

Package Dimension




Package: DIP3512

Unit: mm

| | |
|--------|---------|
| Input | 1 |
| Output | 5 |
| Ground | 2,3,4,6 |

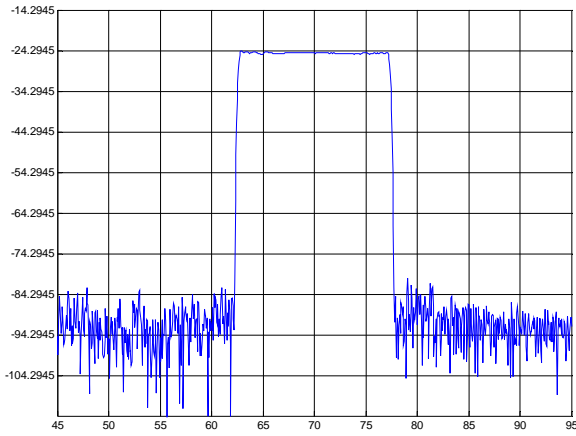
Package: DIP3512

Unit: mm

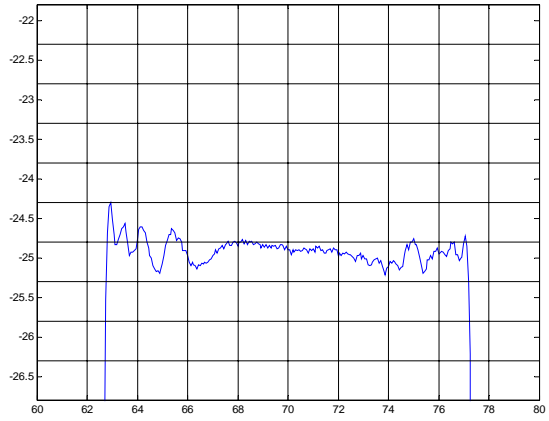
| | | | | |
|--|---|-------------|-----------|------|
|  | SIPAT Co., Ltd. (CETC No. 26 Research Institute) Nanping Huayuan Road No. 14 Chongqing, China, 400060 | Part Number | LBN70A31 | |
| | | Rev. Date | 2006-8-30 | |
| | | Rev. | 1.0 | Page |

Typical Performance

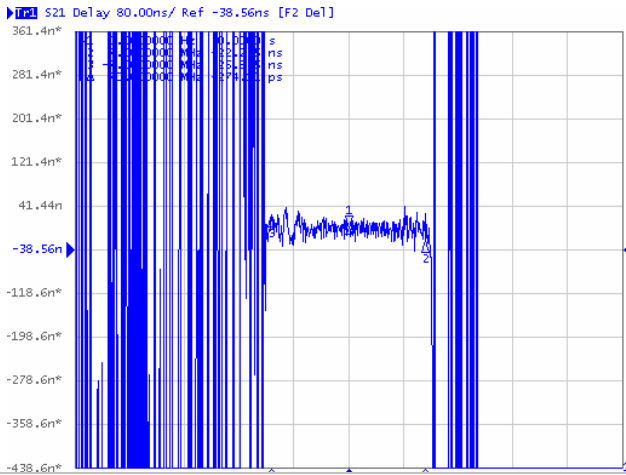
Frequency Respond



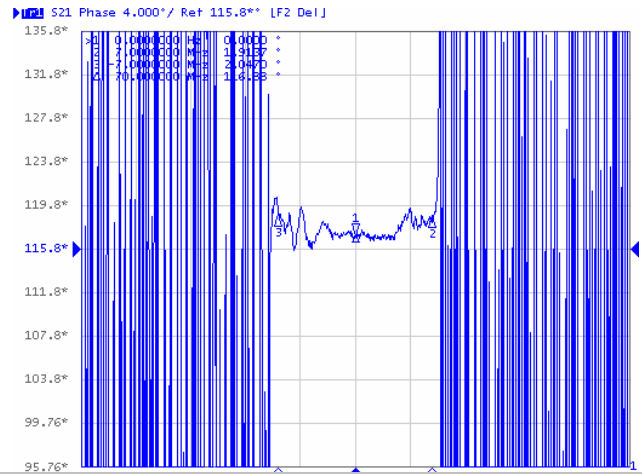
Passband Respond



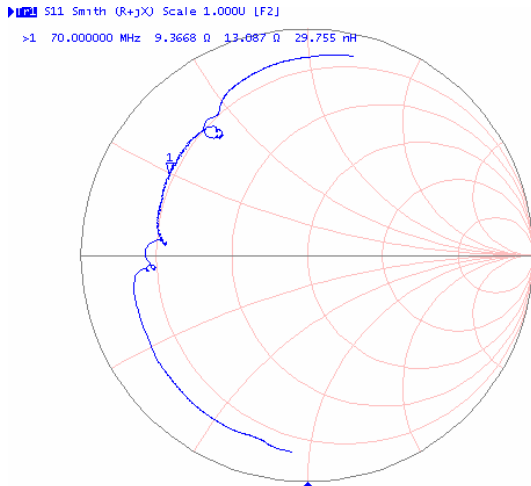
Group Delay Variation($f_0 \pm 7\text{MHz}$)



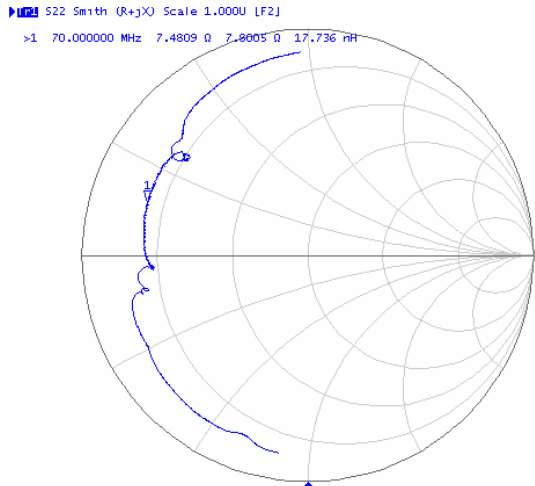
Phase Linearity($f_0 \pm 7\text{MHz}$)



Smith Chart S11



Smith Chart S22



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

| | | |
|-------------|-----------|----------|
| Part Number | LBN70A31 | |
| Rev. Date | 2006-8-30 | |
| Rev. | 1.0 | Page 3/3 |