

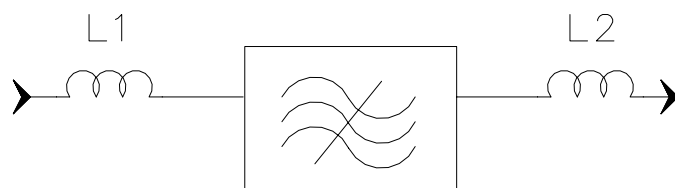
### Specifications

| Parameter                                    | Unit | Minimum                                 | Typical | Maximum |
|----------------------------------------------|------|-----------------------------------------|---------|---------|
| Center Frequency                             | MHz  | 69.95                                   | 70      | 70.05   |
| Insertion Loss                               | dB   |                                         | 26.5    | 28      |
| 3dB Bandwidth                                | MHz  | 18.55                                   | 18.6    | 18.65   |
| 35dB Bandwidth                               | MHz  |                                         | 19.37   | 19.45   |
| 45dB Bandwidth                               | MHz  |                                         | 19.46   | 19.85   |
| 50dB Bandwidth                               | MHz  |                                         | 19.52   | 20.65   |
| Passband Variation                           | dB   |                                         | 1       | 1.3     |
| Absolute Delay                               | usec |                                         | 3.68    | 4       |
| Ultimate Rejection( $f_0 \pm 15\text{MHz}$ ) | dB   | 55                                      | 60      |         |
| Substrate Material                           |      |                                         | YZ      |         |
| Ambient Temperature                          | °C   |                                         | 25      |         |
| Package Size                                 |      | DIP3512 (35.2x12.7x5.2mm <sup>3</sup> ) |         |         |

#### 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



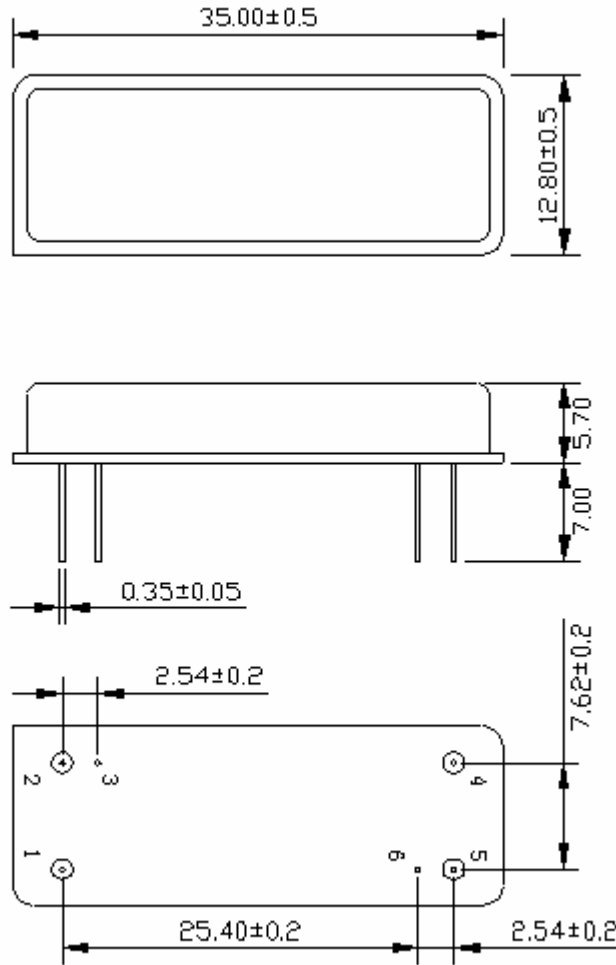
**L1 = 100nH L2 = 120nH**

**Source/Load Impedance = 50 ohm**


Notes - Component values may change depending on board layout.

|                                                                                    |                                                                                                                         |             |          |          |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|----------|----------|
|  | <b>SIPAT Co., Ltd.</b><br>( CETC No. 26 Research Institute )<br>Nanping Huayuan Road No. 14<br>Chongqing, China, 400060 | Part Number | LBN07095 |          |
|                                                                                    |                                                                                                                         | Rev. Date   | 2005-4-8 |          |
|                                                                                    |                                                                                                                         | Rev.        | 1.0      | Page 1/3 |

*Package Dimension*

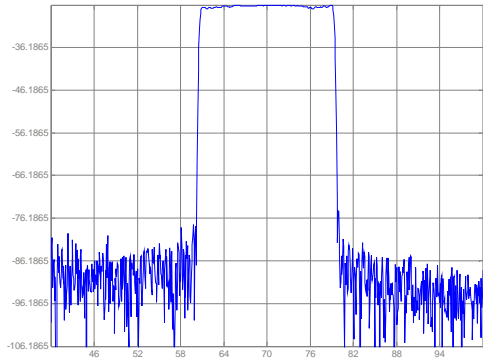


Pin 1: input  
Pin 5: output  
Others: Grounded

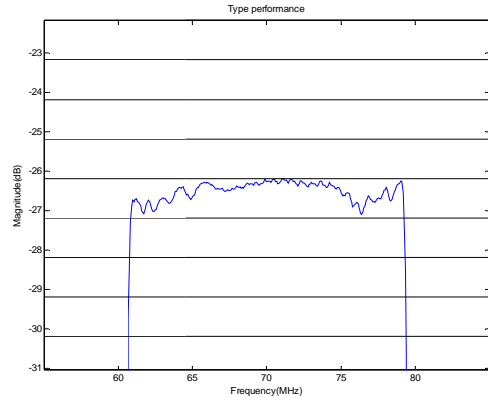
|                                                                                    |                                                                                                                         |             |          |      |
|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------|----------|------|
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|                                                                                    |                                                                                                                         | Rev.        | 1.0      | Page |

*Typical Performance*

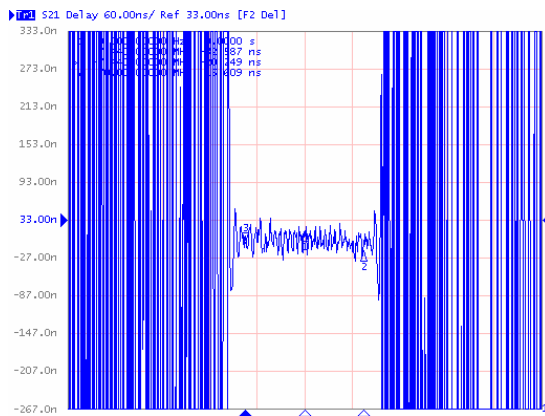
Frequency Respond



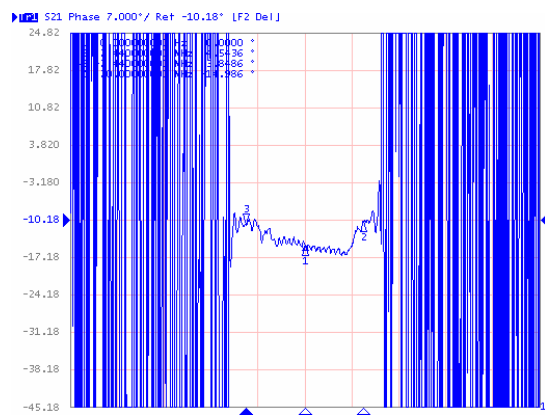
Passband Respond



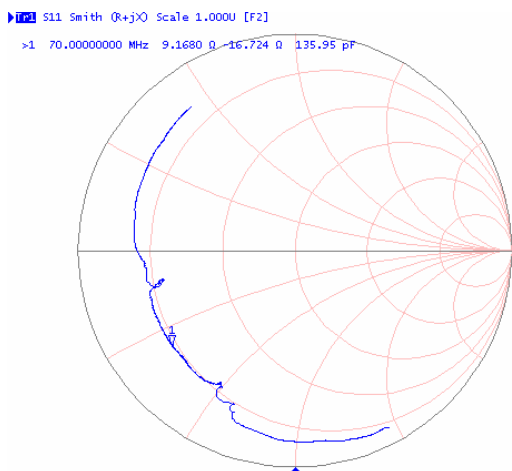
Group Delay Variation( $f_0 \pm 7.44\text{MHz}$ )



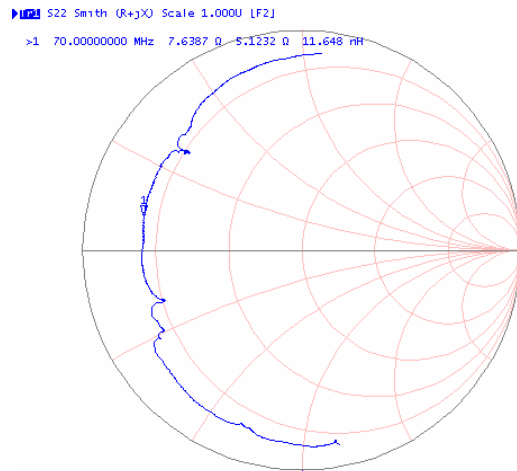
Phase Linearity( $f_0 \pm 7.44\text{MHz}$ )



Simth Chart S11



Simth Chart S22



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|             |          |          |
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| Rev.        | 1.0      | Page 3/3 |