

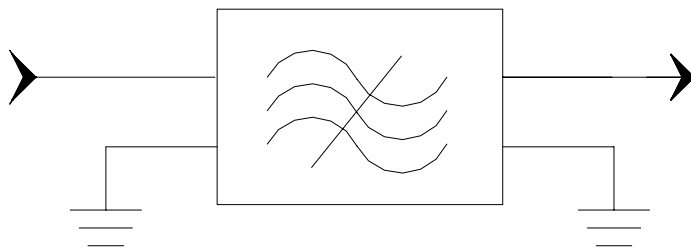
## Specifications

| Parameter                                       | Unit                                    | Minimum | Typical | Maximum |
|-------------------------------------------------|-----------------------------------------|---------|---------|---------|
| Center Frequency                                | MHz                                     | 89.875  | 90      | 90.125  |
| Insertion Loss                                  | dB                                      |         | 34      | 35      |
| 2 dB Bandwidth                                  | MHz                                     | 24      | 24.11   |         |
| 35 dB Bandwidth                                 | MHz                                     |         | 24.75   | 24.8    |
| Group Delay Variation( $f_0 \pm 11\text{MHz}$ ) | nsec                                    |         | 120     |         |
| Phase Linearity( $f_0 \pm 11\text{MHz}$ )       | degree                                  |         | 10      |         |
| Passband Variation                              | dB                                      |         | 1       | 1.5     |
| Ultimate Rejection                              | dB                                      | 48      | 52      |         |
| Absolute delay                                  | usec                                    |         | 3.83    |         |
| Material Temperature coefficient                | KHz/°C                                  |         | -8.46   |         |
| Ambient Temperature                             | °C                                      |         | 25      |         |
| Package Size                                    | DIP3512 (35.0x12.8x4.7mm <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 shown

## Matching Configuration



**Source / Load Impedance = 50 ohm**

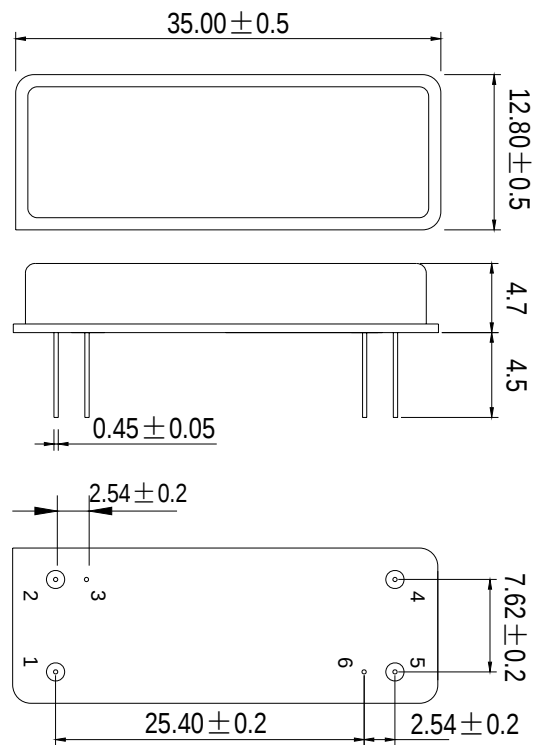
Notes - Component values may change depending  
on board layout.



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

|             |             |          |  |
|-------------|-------------|----------|--|
| Part Number | SP LBN09009 |          |  |
| Rev. Date   | 2005-8-1    |          |  |
| Rev.        | 1.0         | Page 1/3 |  |

## Package Dimension



**Input:1**  
**Output:5**

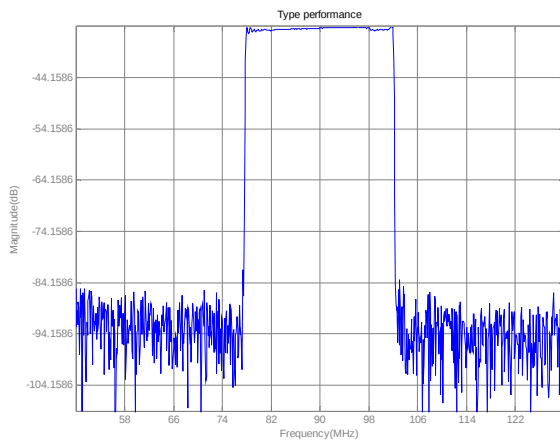


**SIPAT Co., Ltd.**  
( CETC No. 26 Research Institute )  
Nanping Huayuan Road No. 14  
Chongqing, China, 400060

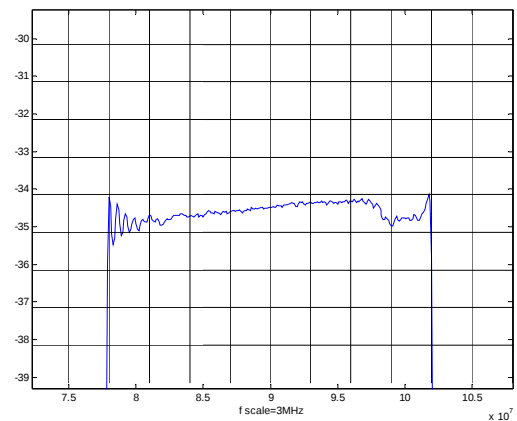
|             |             |          |
|-------------|-------------|----------|
| Part Number | SP LBN09009 |          |
| Rev. Date   | 2005-8-1    |          |
| Rev.        | 1.0         | Page 2/3 |

## Typical Performance

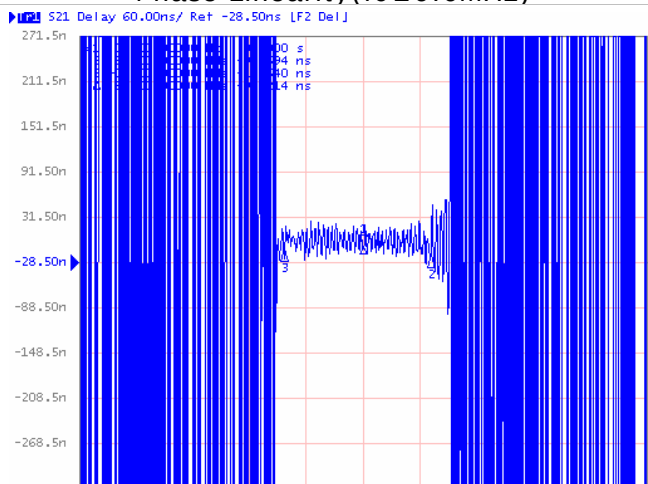
Frequency Response



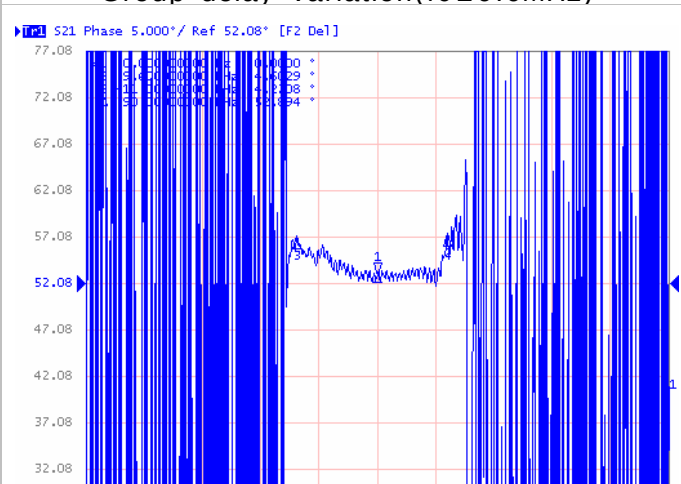
Passband Response



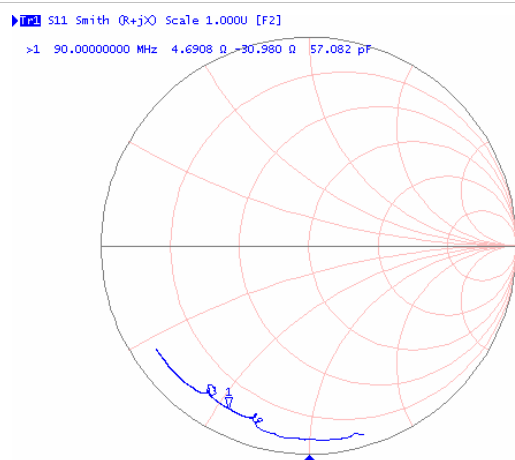
Phase Linearity( $f_0 \pm 9.6\text{MHz}$ )



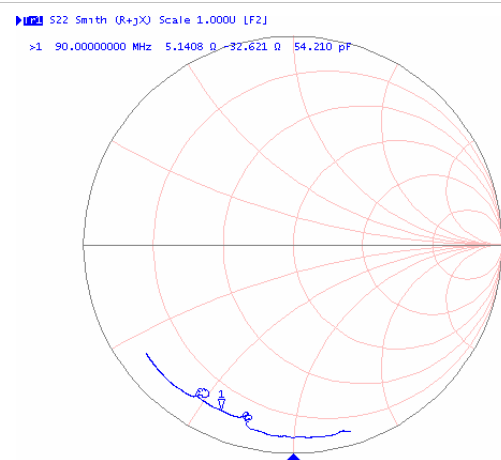
Group delay Variation( $f_0 \pm 9.6\text{MHz}$ )



Simth Chart S11



Simth Chart S22



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

Part Number

SP LBN09009

Rev. Date

2005-8-1

Rev.

1.0

Page 3/3