



Features


- ◇ For IF SAW filter
- ◇ High attenuation
- ◇ Single-ended operation
- ◇ Dual In-line Package
- ◇ No matching required for operation at 50Ω
- ◇ RoHS compliant (2002/95/EC), Pb-free

Specifications

| Parameter | Unit | Minimum | Typical | Maximum | |
|----------------------------------|----------------------------|---------|---------|---------|---|
| Center Frequency | MHz | 69.9 | 70 | 70.1 | |
| Insertion Loss | dB | - | 21 | 27 | |
| 3 dB Bandwidth | MHz | 6.9 | 7 | - | |
| Passband Variation | dB | - | 0.7 | 1.2 | |
| Absolute Delay | usec | - | 3.67 | 4 | |
| Ultimate Rejection | $f_0 \pm 3.9\text{MHz}$ | dB | 35 | 46 | - |
| | $f_0 \pm 4.1\text{MHz}$ | dB | 45 | 52 | - |
| | $f_0 \pm 4.5\text{MHz}$ | dB | 50 | 57 | - |
| | $f_0 \pm 8.5\text{MHz}$ | dB | 55 | 60 | - |
| | $f_0 \pm 15\text{MHz}$ | dB | 55 | 61 | - |
| Material Temperature coefficient | KHz/°C | -6.58 | | | |
| Substrate Material | - | YZ LN | | | |
| 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 (35.0x12.8x4.7mm3) | | | | |

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 | LBN70A60 | |
| | | Rev. Date | 2008-05-29 | |
| | | Ver. | 1.0 | Page |

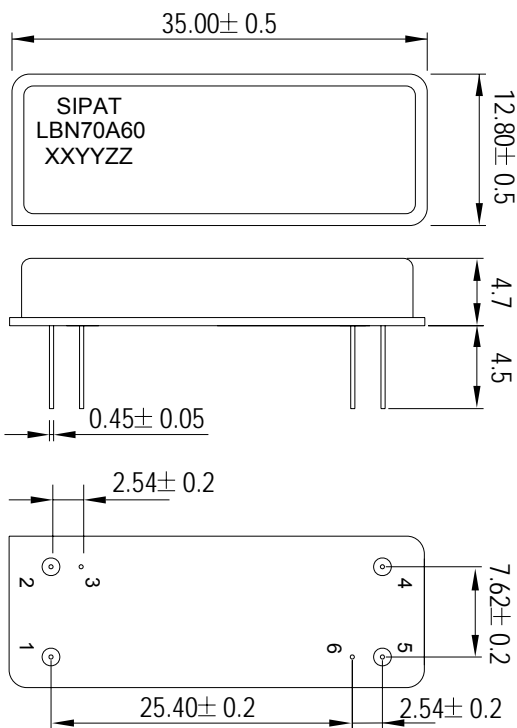
Matching Configuration



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) LBN70A60: Part Number
- 3) XXYY: Date(Year/month)
- 4) ZZ: Identified Code

Package: DIP3512

Unit: mm



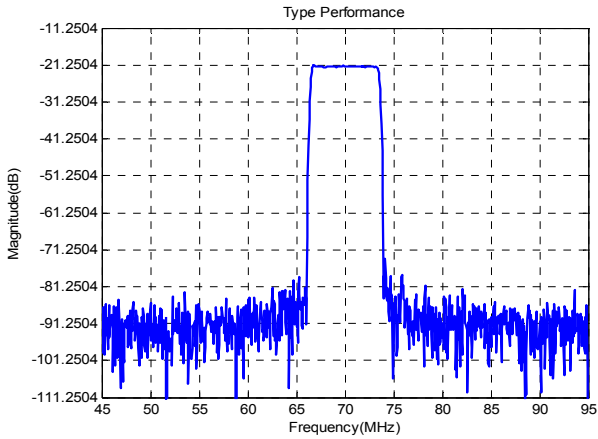
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| Ver. | 1.0 | Page 2/3 |



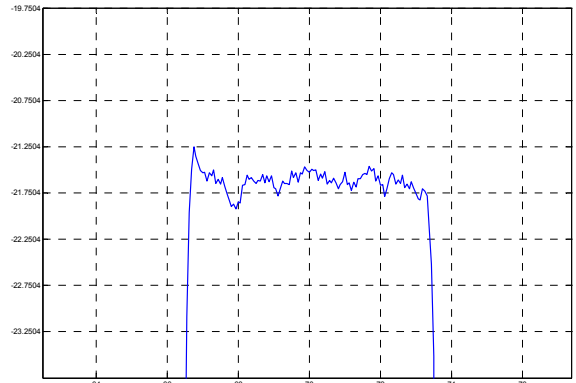
Typical Performance

Frequency Respond



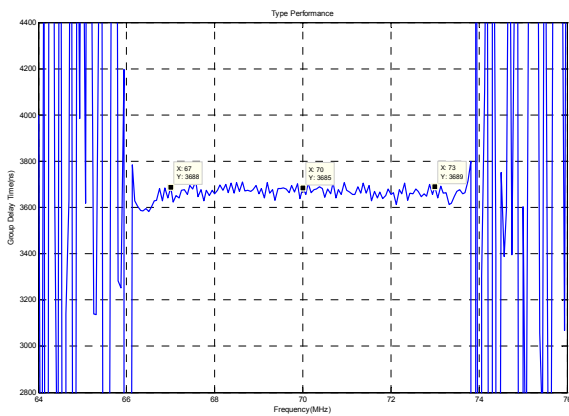
Horizontal: 5MHz/Div Vertical: 10dB/Div

Passband Respond



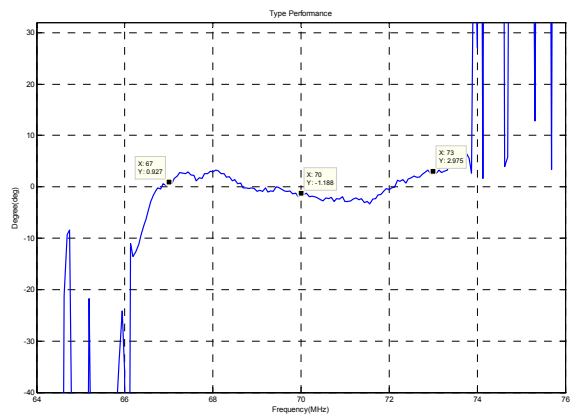
Horizontal: 2MHz/Div Vertical: 0.5dB/Div

Group Delay Variation($f_0 \pm 3\text{MHz}$)



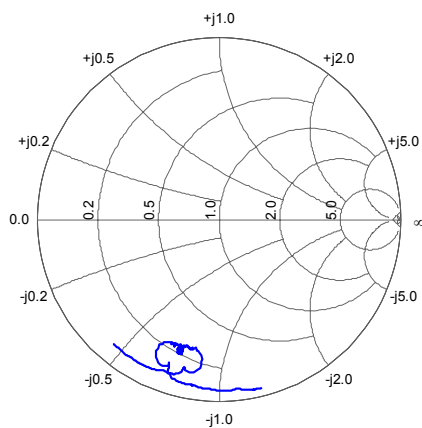
Horizontal: 2MHz/Div Vertical: 200ns/Div

Phase Linearity($f_0 \pm 3\text{MHz}$)

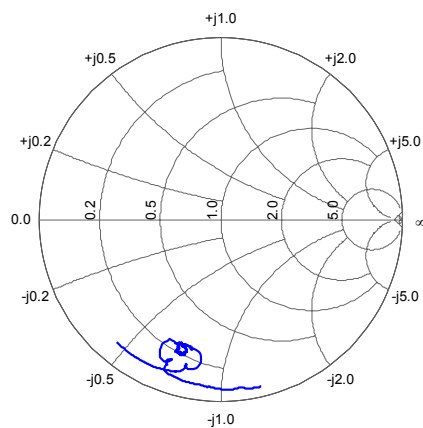


Horizontal: 2MHz/Div Vertical: 10deg/Div

Smith Chart S11



Smith Chart S22



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