



Total Solution Provider in Saw Device

SL07505AV

75.0MHz IF SAW Filter
5.30MHz Bandwidth
Revision 0 : 4. February. 2008



- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
-

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□ Electrical Characteristics

Maximum Ratings

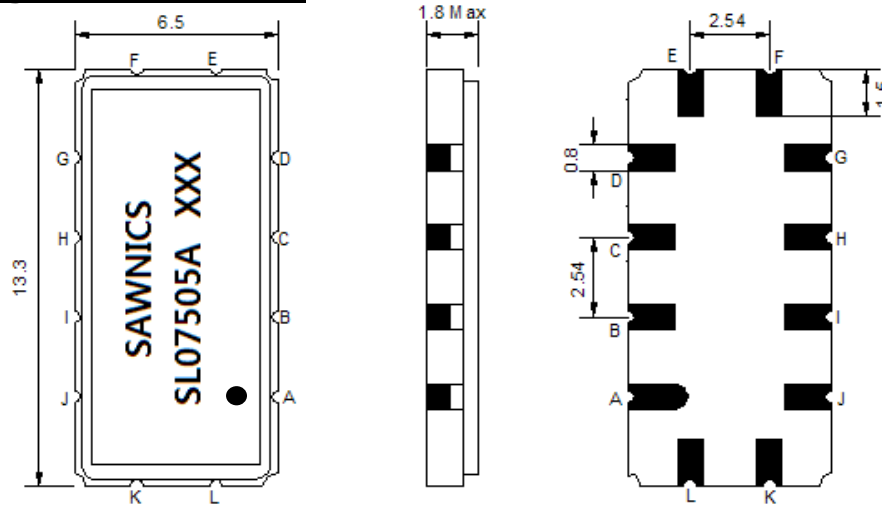
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|------------|---------|
| Operating Temperature Range | °C | -30 | - | 85 |
| Storage Temperature Range | °C | -40 | - | 85 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 30 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | V | | | |
| Length x Width | mm ² | - | 13.3 x 6.5 | - |
| Height | mm | - | - | 1.8 |

Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 75.0 | - |
| Insertion Loss at Fo | dB | - | 12.8 | 15.0 |
| Temperature Coefficient | ppm/°C | - | -18 | - |
| Amplitude Ripple within fo ±2.2 MHz | dB _{p-p} | - | 0.3 | 0.5 |
| Group Delay Variation within fo ±2.2 MHz | nsec | - | 50 | 80 |
| Absolute Delay at Fo | µsec | - | 1.21 | - |
| Bandwidth at -1.0 dB | MHz | - | 5.30 | - |
| Bandwidth at -3.0 dB | MHz | - | 5.95 | - |
| Bandwidth at -40.0 dB | MHz | - | 8.40 | 8.60 |
| Input VSWR at Fo | dB | - | 1.2 | - |
| Output VSWR at Fo | dB | - | 1.5 | - |
| Relative Attenuation: | | | | |
| Lower Sidelobe | dB | 40 | 45 | - |
| Upper Sidelobe | dB | 40 | 45 | - |

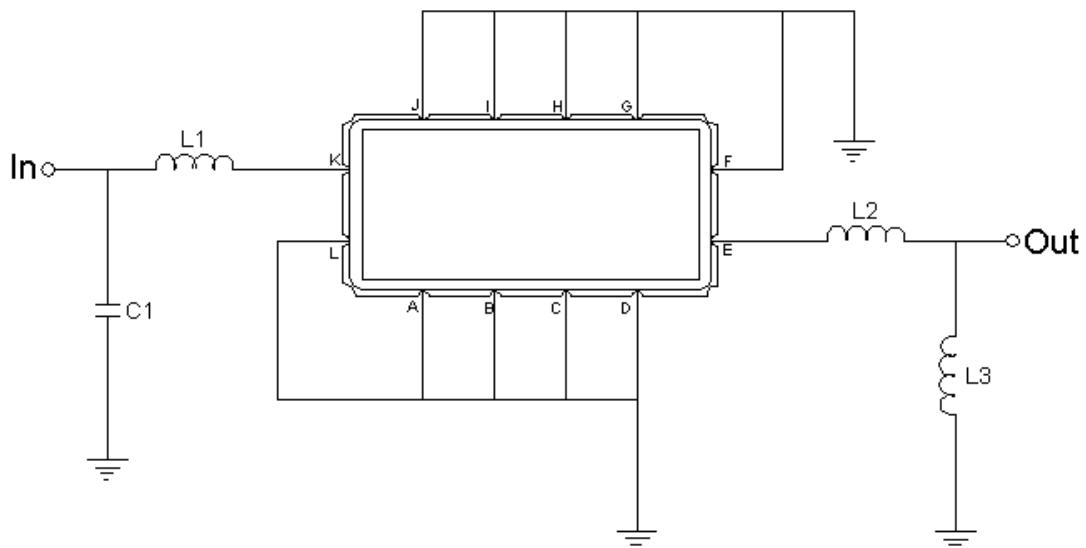
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



| Pin Description | |
|------------------------------|--------|
| A, B, C, D, F, G, H, I, J, L | Ground |
| K | Input |
| E | Output |

Testing Environment



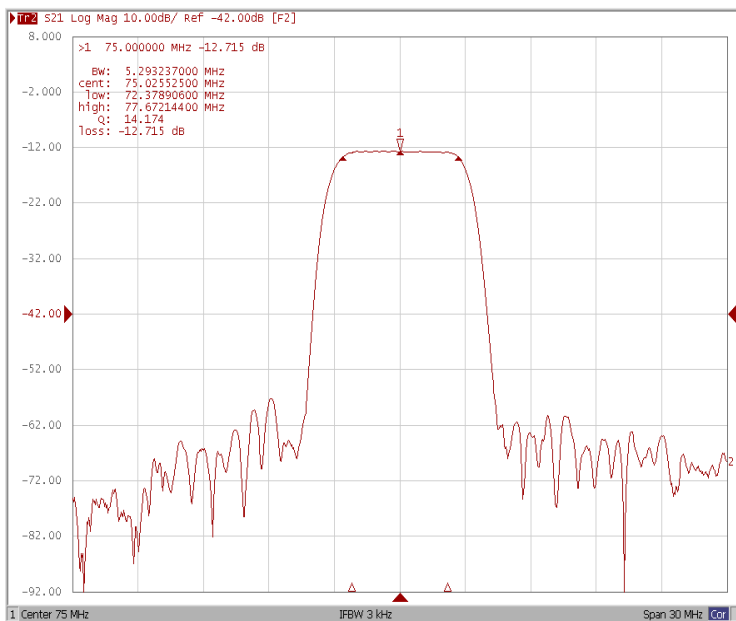
| Test Fixture & Values | |
|-----------------------|--------------------|
| Input | L1=68nH , C1=130pF |
| Output | L2=8.2nH , L3=39nH |
| Source/Load Impedance | 50 Ω |



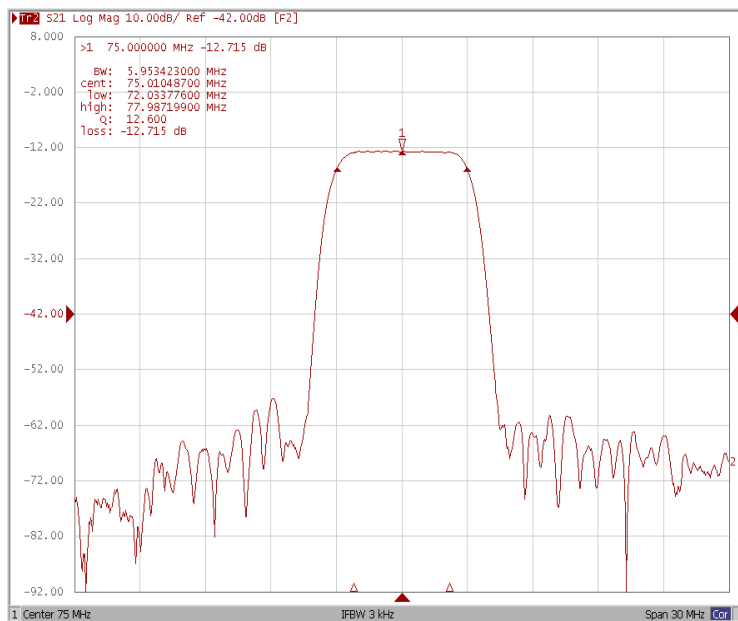
Frequency Characteristics

Frequency Response

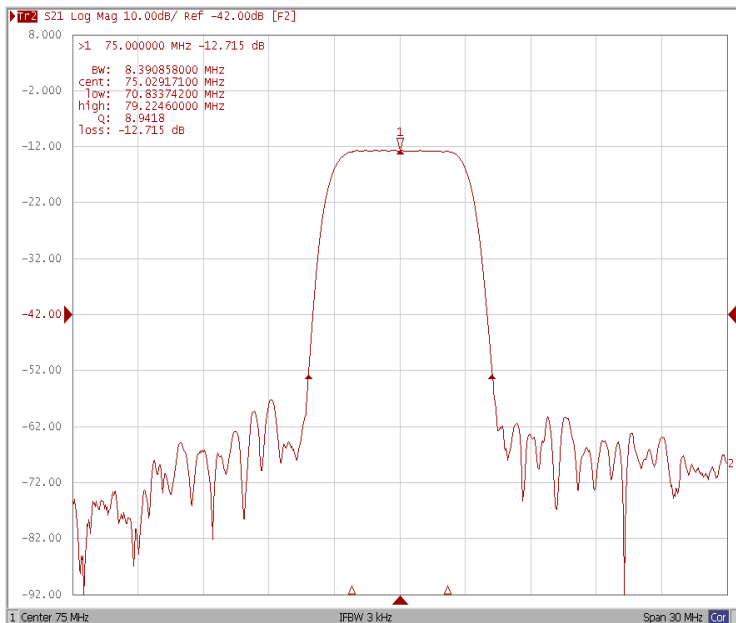
Bandwidth at -1.0 dB



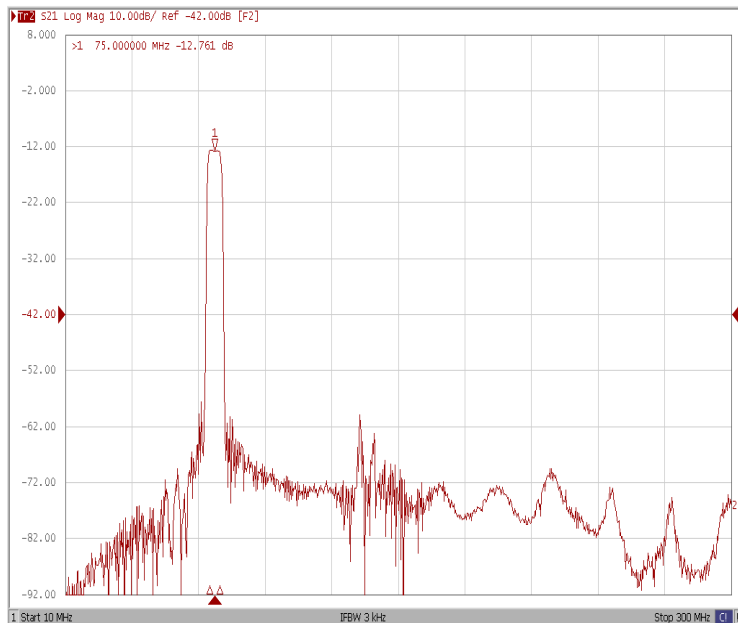
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Wide-Band

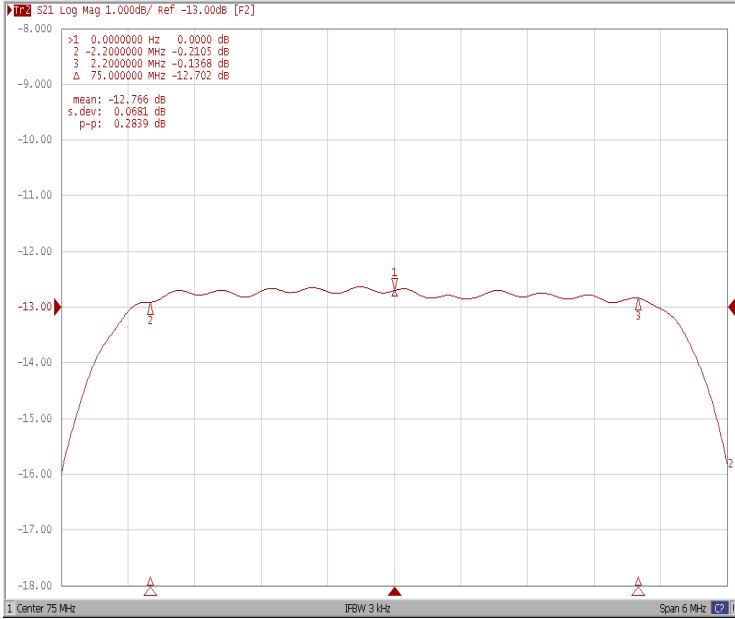




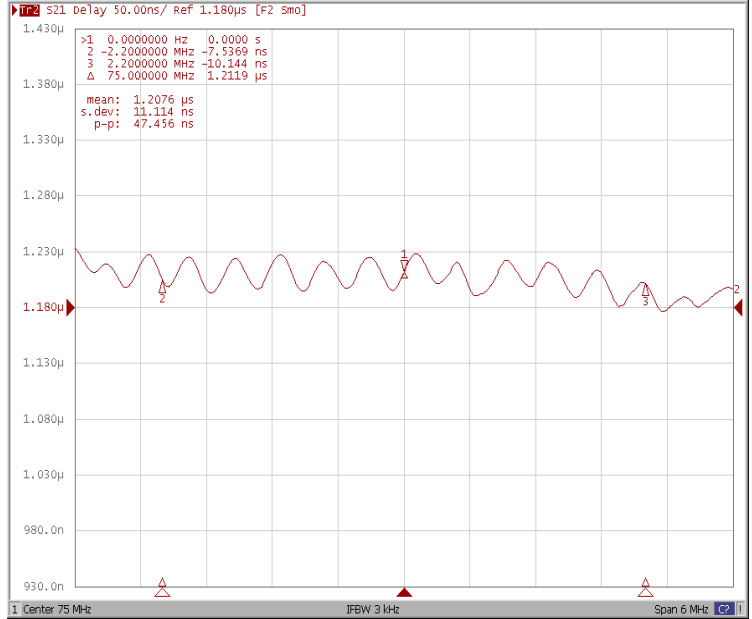
Frequency Characteristics

Frequency Response

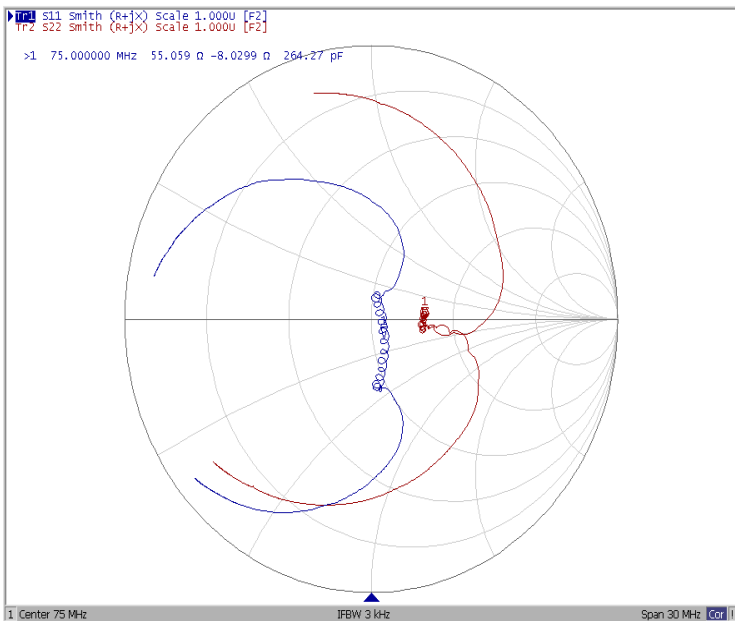
Ripple Variation Fo±2.2MHz



Group Delay Variation Fo±2.2MHz



Smith Chart



SWR

