



REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description                     |
|-----------------------------|---|
| 813-SL75.0M-04A             | 75.0MHz IF SAW Filter 4.73MHz Bandwidth |

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
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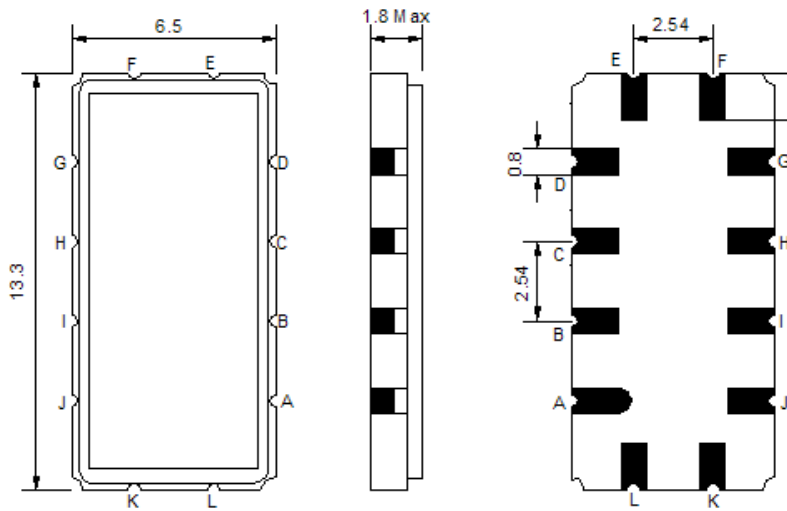
## Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



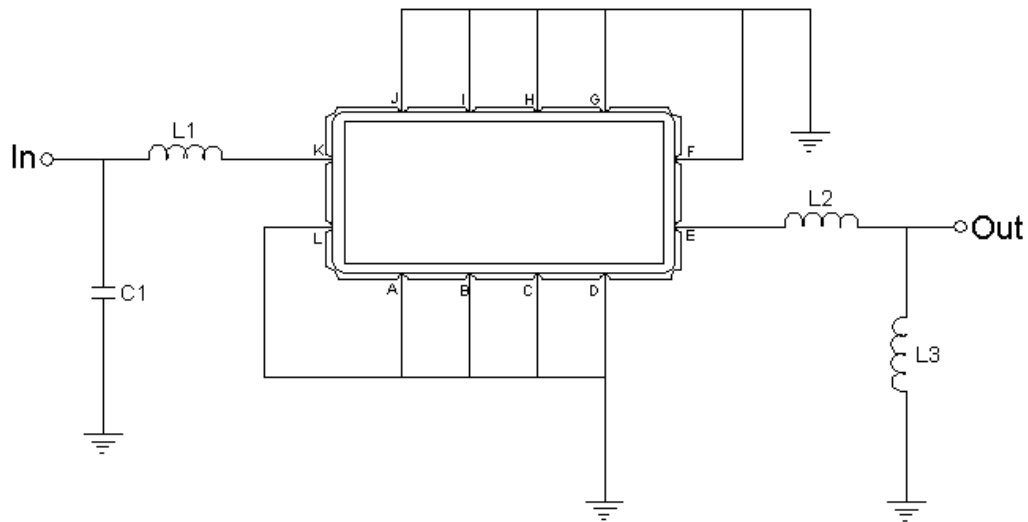


## Mechanical Dimensions (mm)



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

## Test Circuit



| Test Fixture & Values |                   |
|-----------------------|-------------------|
| Input                 | L1=56nH, C1=150pF |
| Output                | L2=3.9nH, L3=33nH |
| Source/Load Impedance | 50 Ω              |



## Maximum Ratings

| Parameters Description                         | Unit | Minimum | Typical | Maximum |
|--|------|---------|---------|---------|
| Operating Temperature Range                    | °C   | -       | 25      | -       |
| Storage Temperature Range                      | °C   | -40     | -       | 85      |
| Maximum DC Voltage                             | V    | -       | -       | 10      |
| Maximum Input Power                            | dBm  | -       | -       | 10      |
| Source Impedance (single ended) <sup>(1)</sup> | Ω    | -       | 50      | -       |
| Load Impedance (single ended) <sup>(1)</sup>   | Ω    | -       | 50      | -       |

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

Those impedances could be modified with different impedance values and/or structures, if necessary.

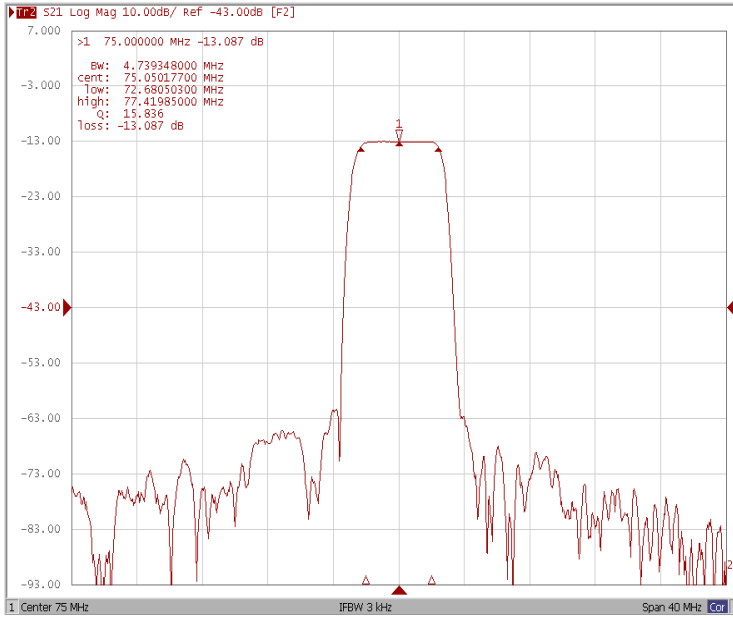
## Electrical Specification

| Parameters Description                   | Unit              | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo)                    | MHz               | -       | 75.0    | -       |
| Insertion Loss at Fo                     | dB                | -       | 13.0    | 15.0    |
| Temperature Coefficient                  | ppm/°C            | -       | -20     | -       |
| Amplitude Ripple within fo ±2.0 MHz      | dB <sub>p-p</sub> | -       | 0.3     | 0.8     |
| Group Delay Variation within fo ±2.0 MHz | nsec              | -       | 50      | 80      |
| Absolute Delay at Fo                     | µsec              | -       | 1.58    | -       |
| Bandwidth at -1.0 dB                     | MHz               | -       | 4.73    | -       |
| Bandwidth at -3.0 dB                     | MHz               | -       | 5.25    | -       |
| Bandwidth at -30.0 dB                    | MHz               | -       | 6.8     | -       |
| Bandwidth at -40.0 dB                    | MHz               | -       | 7.0     | -       |
| Ultimate Attenuation:                    | -                 | 40      | 45      | -       |

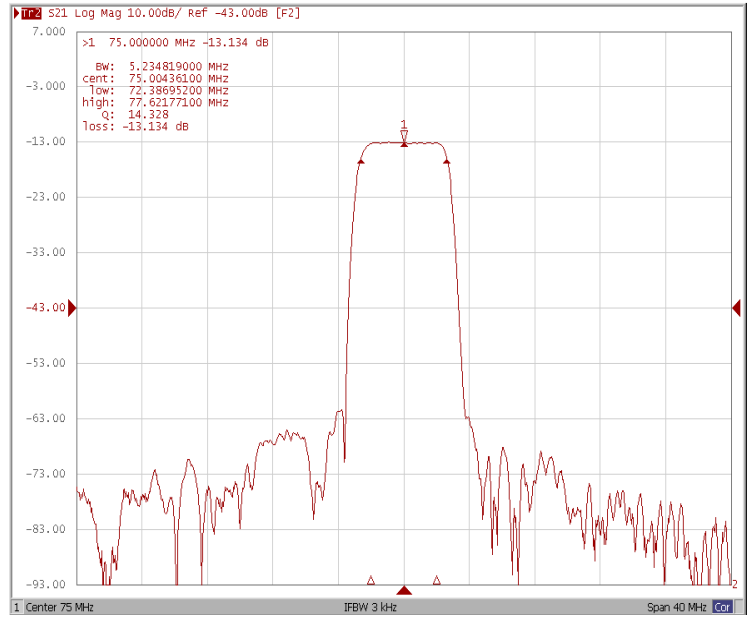


### Frequency Response

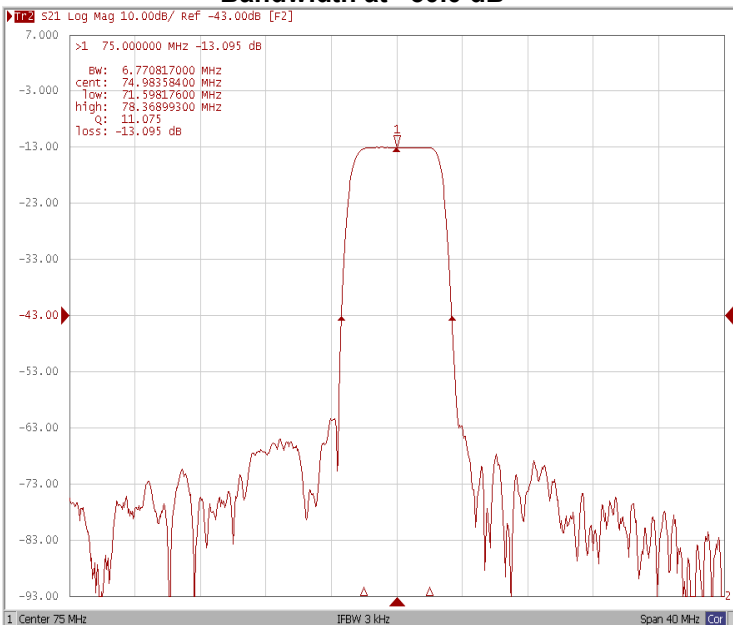
#### Bandwidth at -1.0 dB



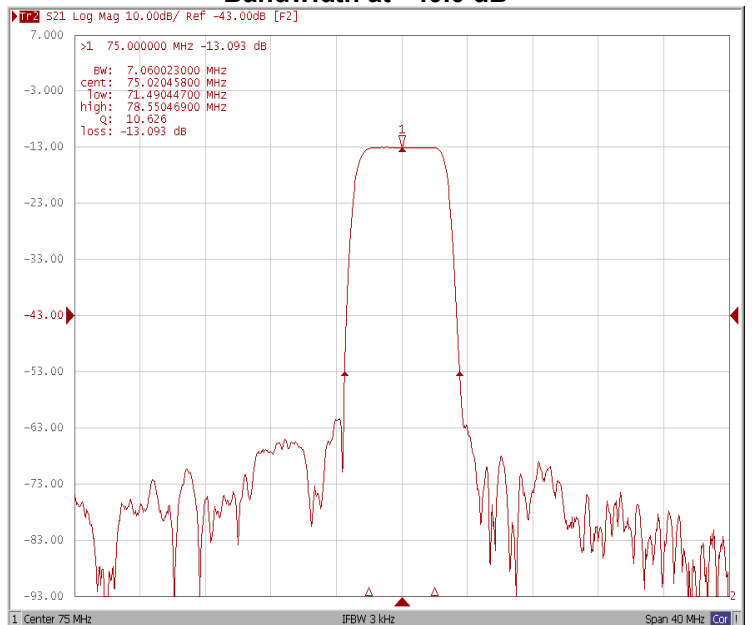
#### Bandwidth at -3.0 dB



#### Bandwidth at -30.0 dB

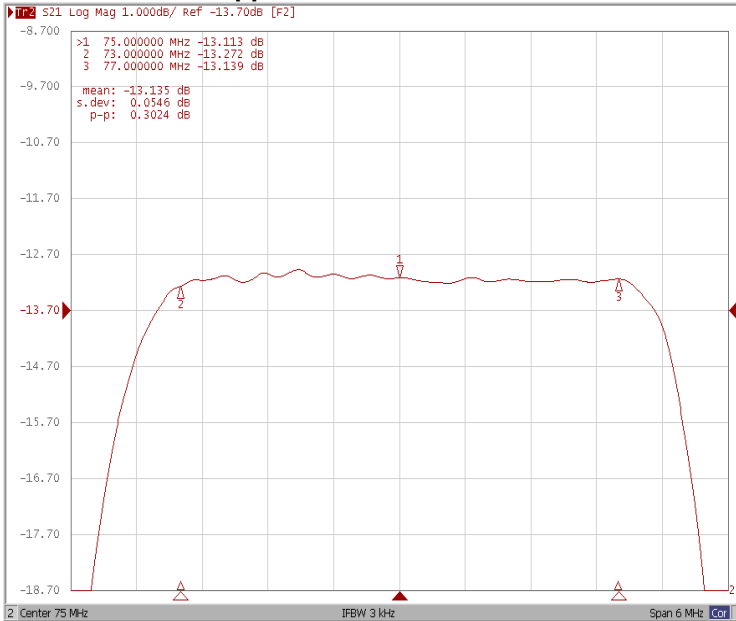


#### Bandwidth at -40.0 dB

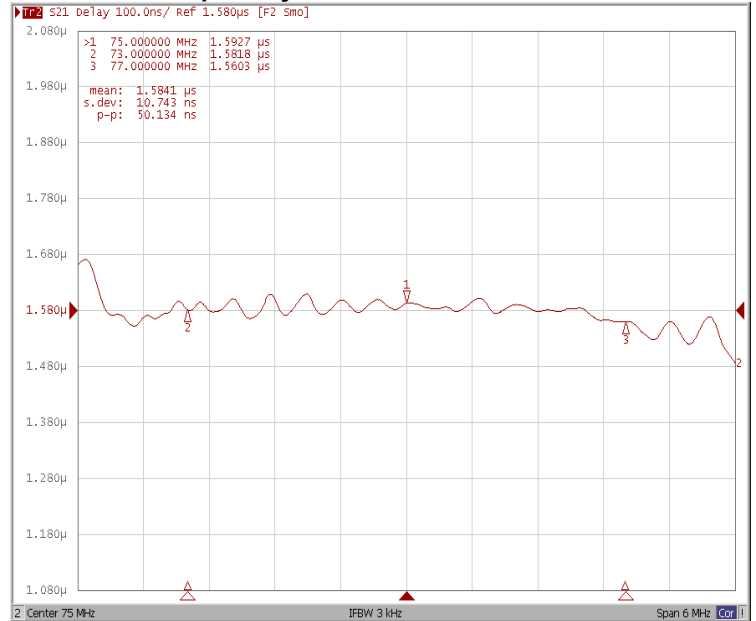




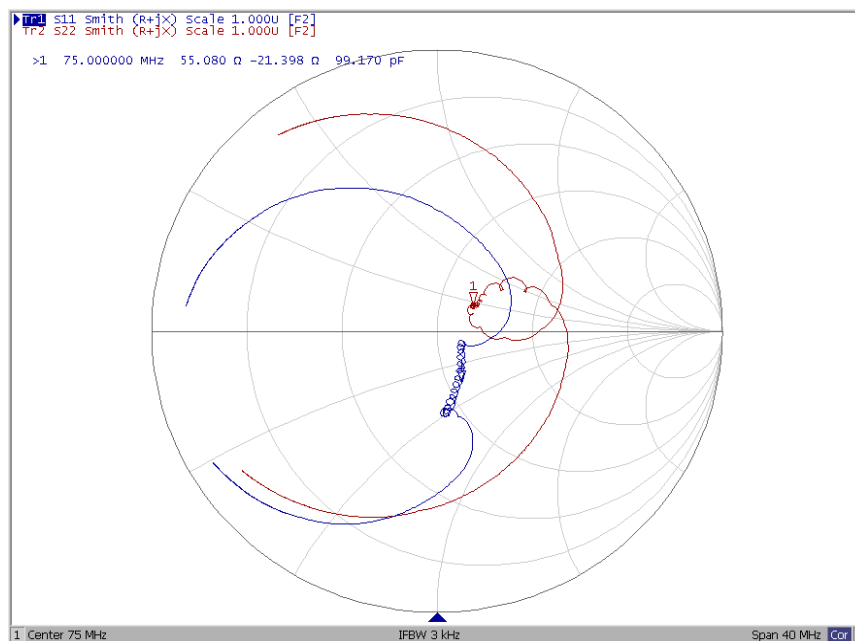
### Ripple Variation Fo±2.0MHz



### Group Delay Variation Fo±2.0MHz



### Smith Chart





### VSWR

