



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description |
|-----------------------------|---|
| 813-SL75.0M-06A | 75.0MHz IF SAW Filter 6.31MHz Bandwidth |

Specification Contents

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- o Test Circuit
- o Maximum Ratings
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- o VSWR

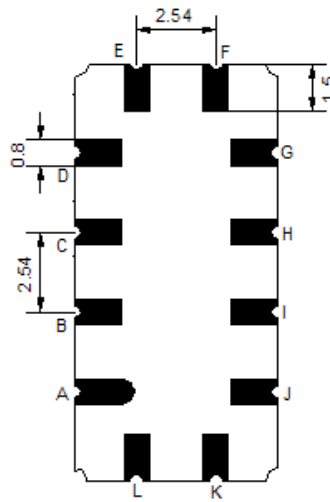
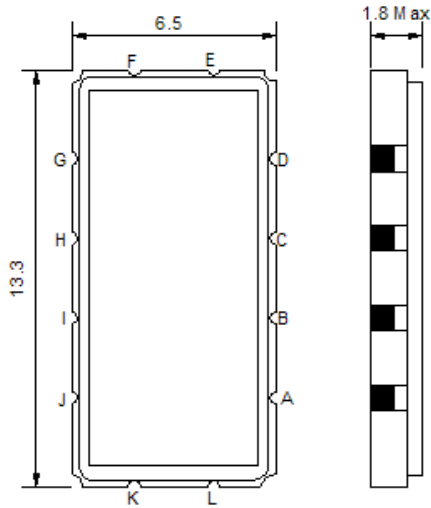
Notes

- 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)



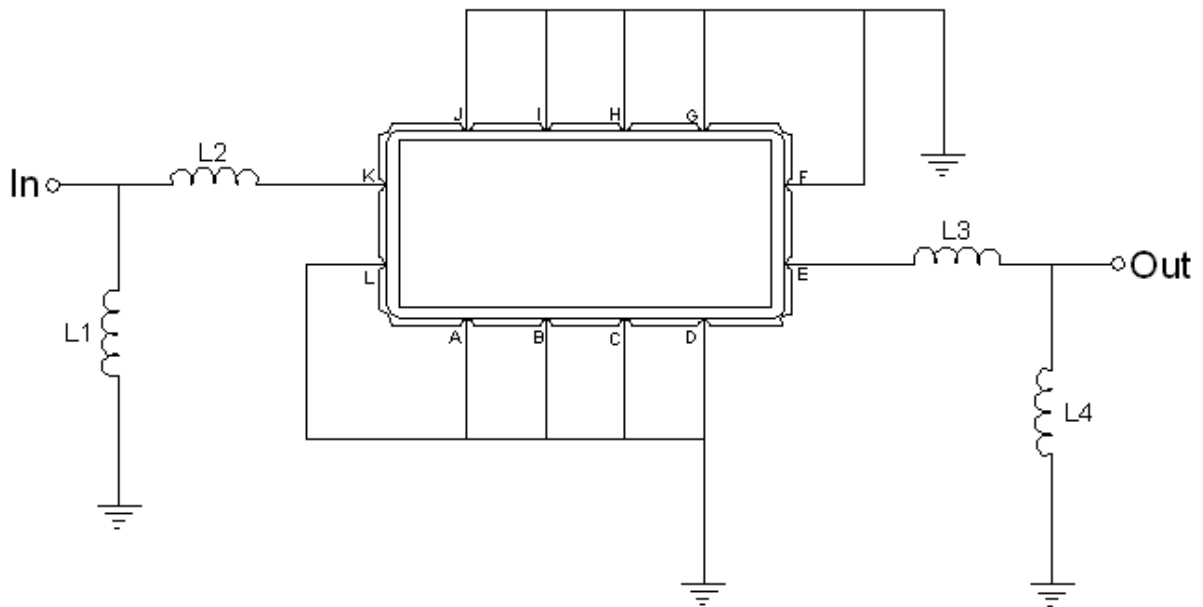


Mechanical Dimensions (mm)



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

Test Circuit



| Test Fixture & Values | |
|-----------------------|-------------------|
| Input | L1=33nH, L2=12nH |
| Output | L3=8.2nH, L4=47nH |
| Source/Load Impedance | 50 Ω |

**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 | - |

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.

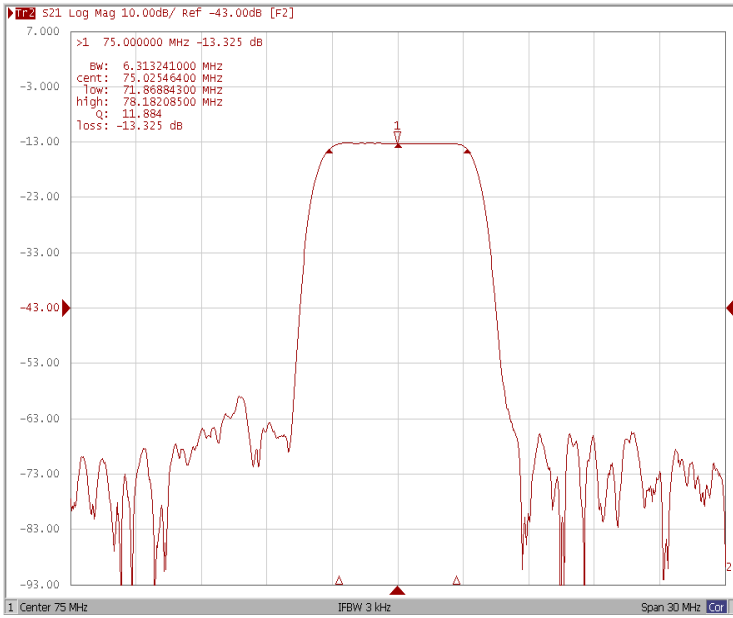
Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-------------------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 75.0 | - |
| Insertion Loss at Fo | dB | - | 13.3 | 15.0 |
| Temperature Coefficient | ppm/°C | - | -18 | - |
| Amplitude Ripple within fo ±2.7 MHz | dB _{p-p} | - | 0.3 | 0.5 |
| Group Delay Variation within fo ±2.7 MHz | nsec | - | 39 | 80 |
| Absolute Delay at Fo | µsec | - | 1.21 | - |
| Bandwidth at -1.0 dB | MHz | - | 6.31 | - |
| Bandwidth at -3.0 dB | MHz | - | 6.92 | - |
| Bandwidth at -40.0 dB | MHz | - | 9.40 | 9.0 |
| Input VSWR at Fo | dB | - | 2.0 | - |
| Output VSWR at Fo | dB | - | 2.4 | - |
| Relative Attenuation: | | | | |
| Lower Sidelobe | dB | 40 | 45 | - |
| Upper Sidelobe | dB | 40 | 45 | - |

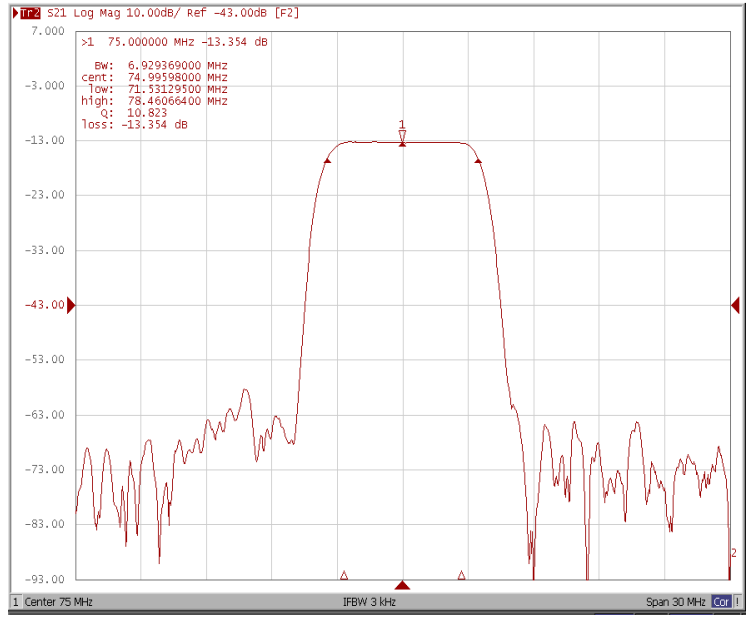


Frequency Response

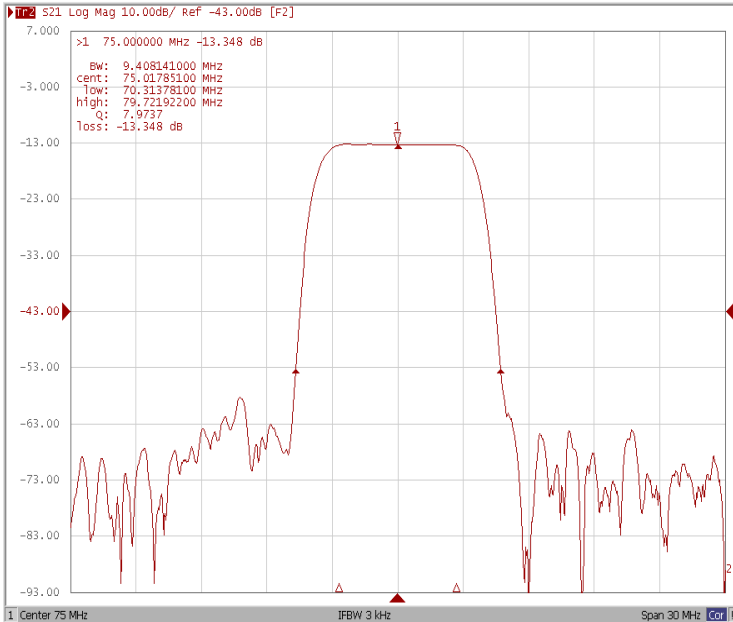
Bandwidth at -1.0 dB



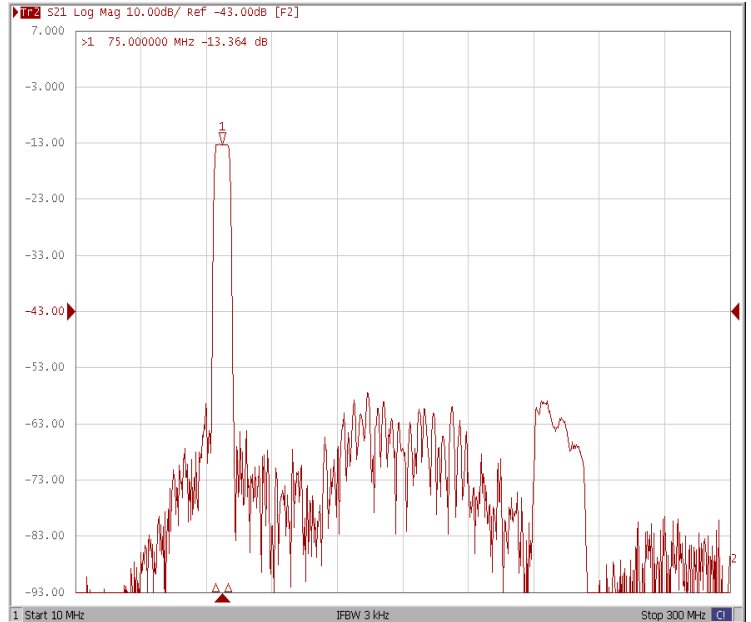
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

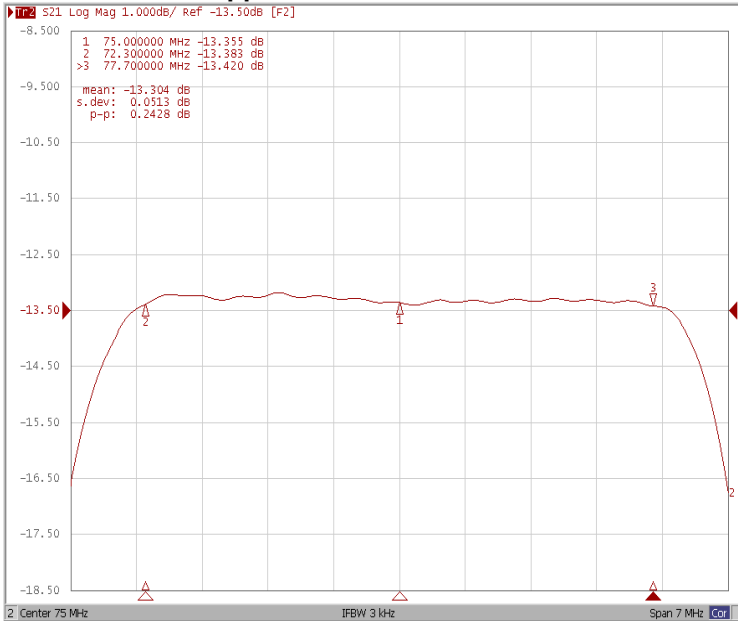


Wide-Band

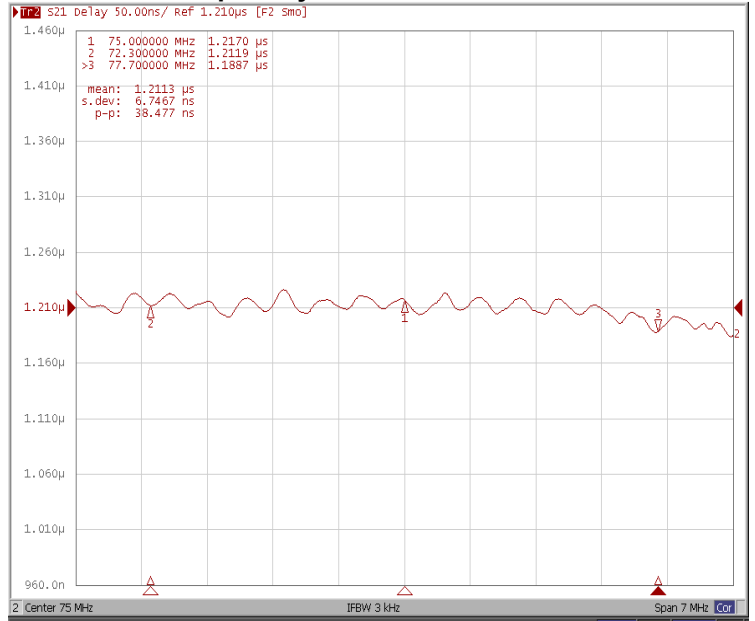




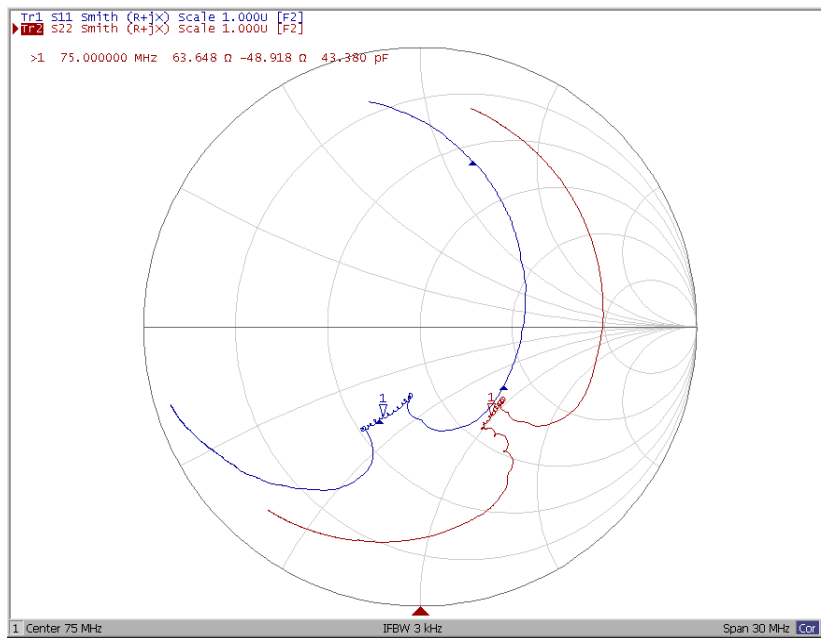
Ripple Variation Fo±2.7MHz



Group Delay Variation Fo±2.7MHz



Smith Chart





VSWR

