



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description                     |
|-----------------------------|---|
| 813-SL63.8M-03B             | 63.8MHz IF SAW Filter 3.75MHz Bandwidth |

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Smith Chart
- o VSWR

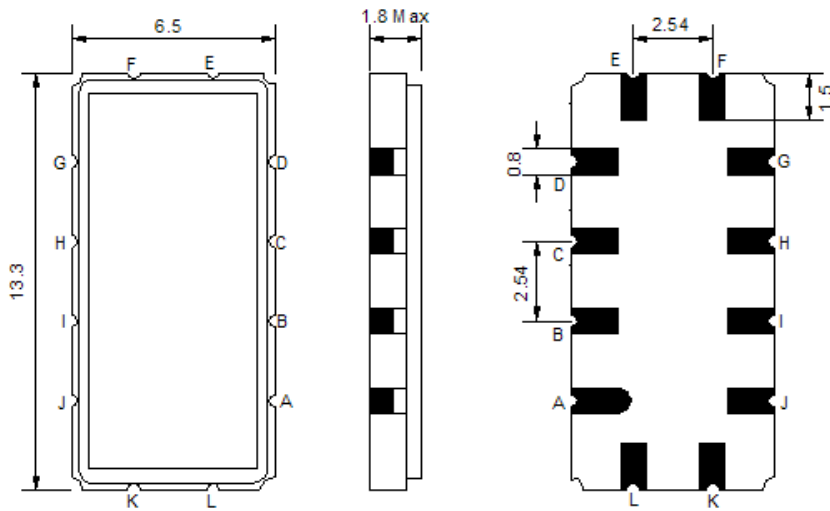
## Notes

- 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)



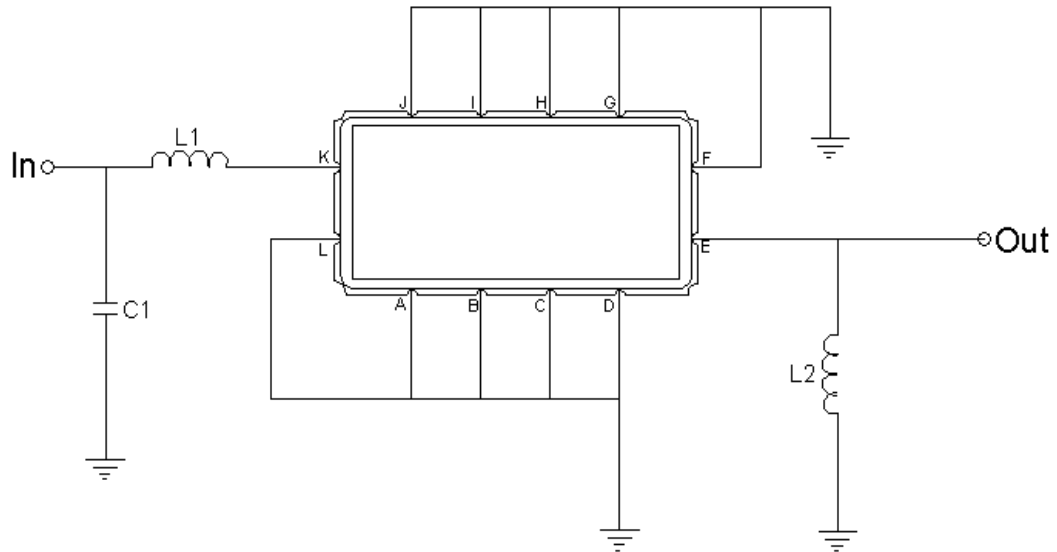


## Mechanical Dimensions (mm)



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

## Test Circuit



| Test Fixture & Values |                       |
|-----------------------|-----------------------|
| Input                 | L1 = 68 nH, L2 = 12nH |
| Output                | L3 = 56 nH            |
| Source/Load Impedance | 50 Ω                  |



## Maximum Ratings

| Parameters Description                         | Unit | Minimum | Typical | Maximum |
|--|------|---------|---------|---------|
| Operating Temperature Range                    | °C   | -5      | -       | 65      |
| 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.

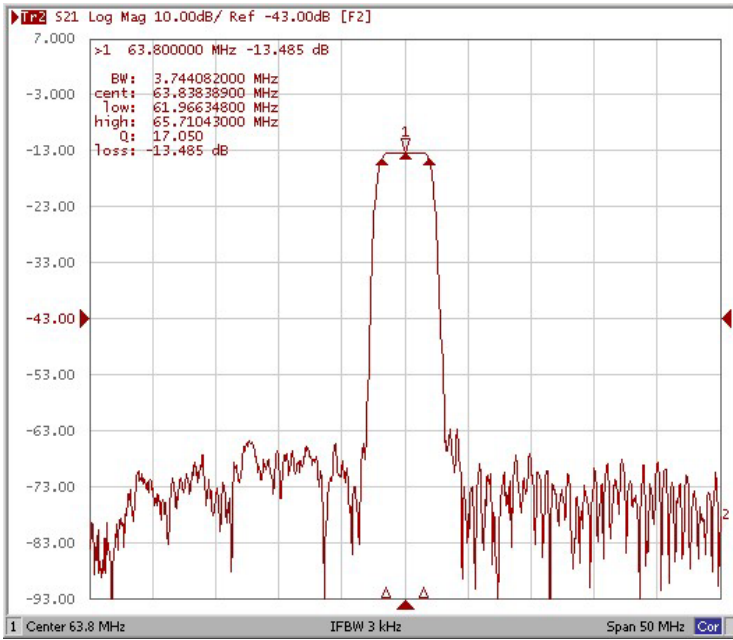
## Electrical Specification

| Parameters Description             | Unit   | Minimum | Typical | Maximum |
|------------------------------------|--------|---------|---------|---------|
| Center Frequency (Fo)              | MHz    | 63.70   | 63.80   | 63.90   |
| Insertion Loss at Fo               | dB     | -       | 13.50   | 15.00   |
| Group Delay Variation (Fo±1.50MHz) | ns     | -       | 37      | 80      |
| Absolute Delay Time at Fo          | us     | -       | 1.67    | -       |
| Temperature Coefficient            | ppm/°C | -       | -18     | -       |
| Amplitude Ripple (Fo±1.50MHz)      | dB     | -       | 0.30    | 0.80    |
| Bandwidth at -1dB                  | MHz    | 3.50    | 3.74    | -       |
| Bandwidth at -3dB                  | MHz    | 3.90    | 4.17    | -       |
| Bandwidth at -25dB                 | MHz    | -       | 5.42    | 6.70    |
| Bandwidth at -40dB                 | MHz    | -       | 5.95    | 6.20    |
| Ultimate Rejection                 | dB     | 45      | 50      | -       |

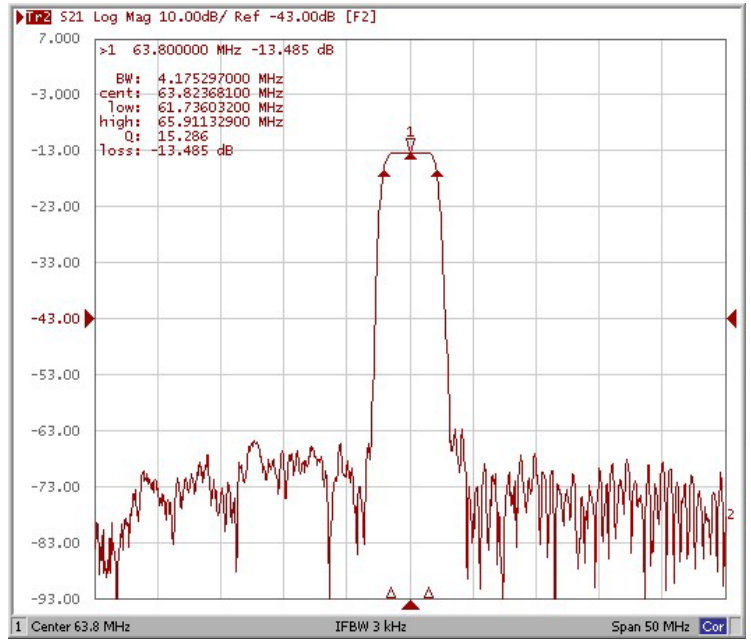


### Frequency Response

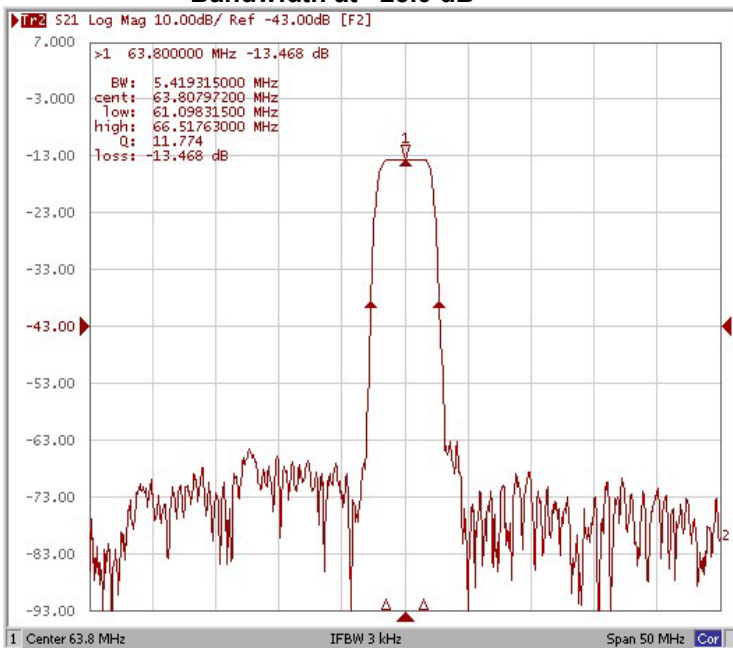
#### Bandwidth at -1.0 dB



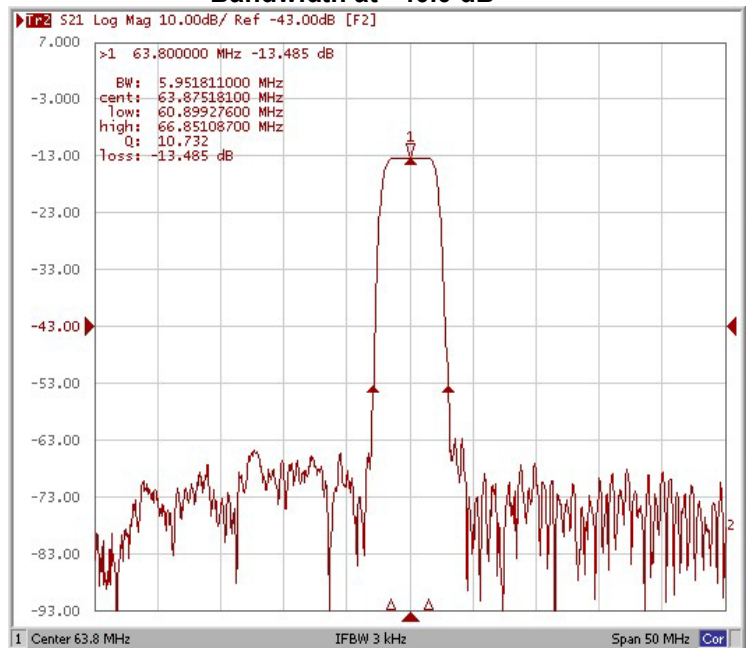
#### Bandwidth at -3.0 dB



#### Bandwidth at -25.0 dB

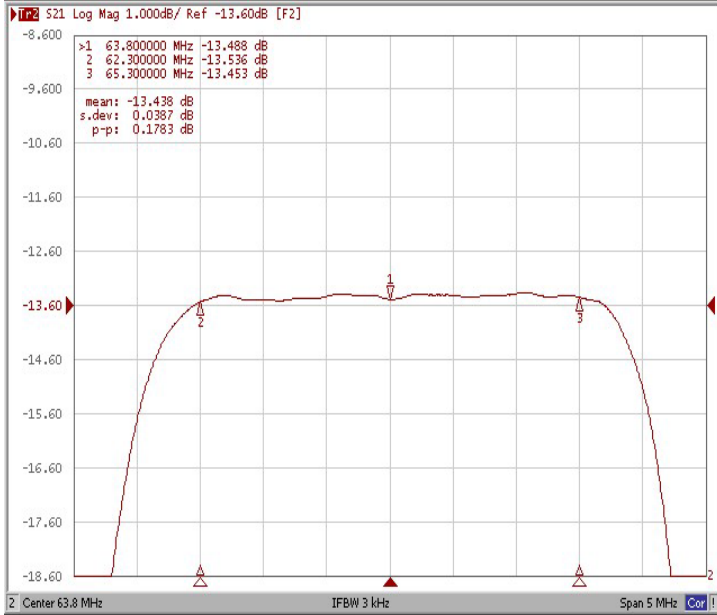


#### Bandwidth at -40.0 dB

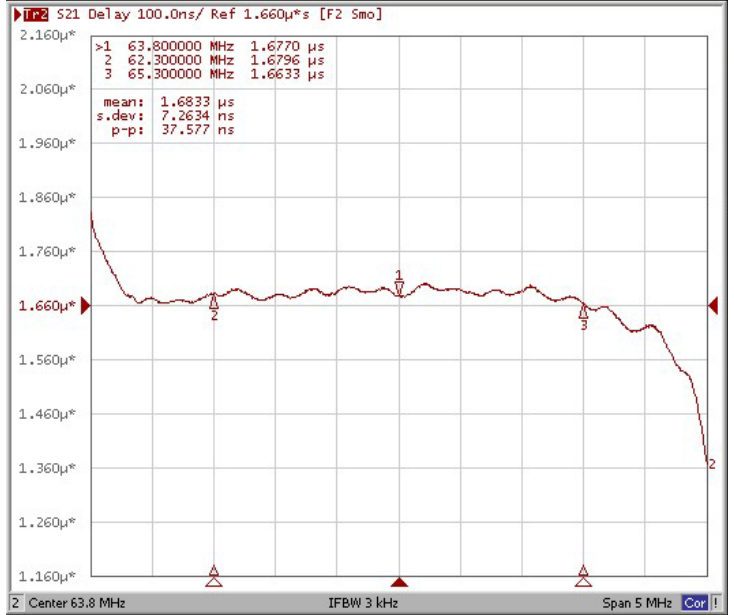




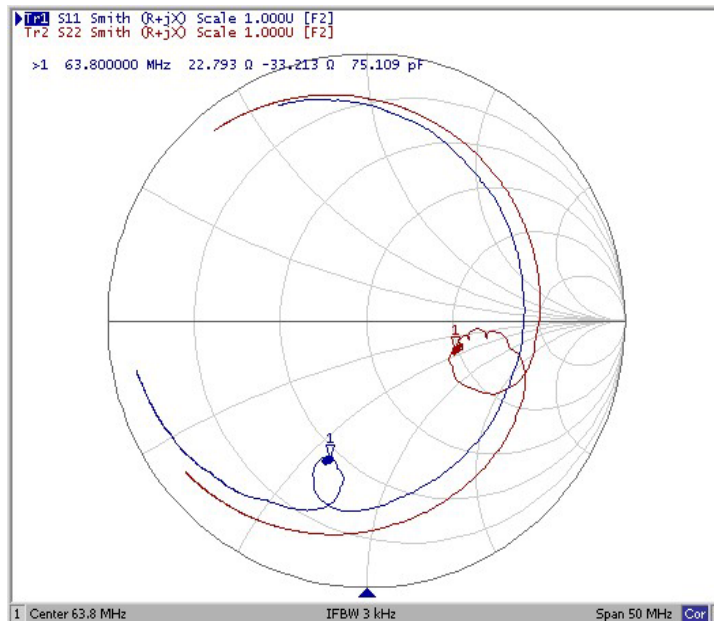
### Ripple Variation Fo±1.50MHz



### Group Delay Variation Fo±1.50MHz



### Smith Chart





### VSWR

