



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

| Ordering Code / Part Number | Product Description |
|-----------------------------|---|
| 835-IF70.0M-14C | 70.0MHz IF SAW Filter 14.27 MHz Bandwidth |

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
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- o Frequency Response
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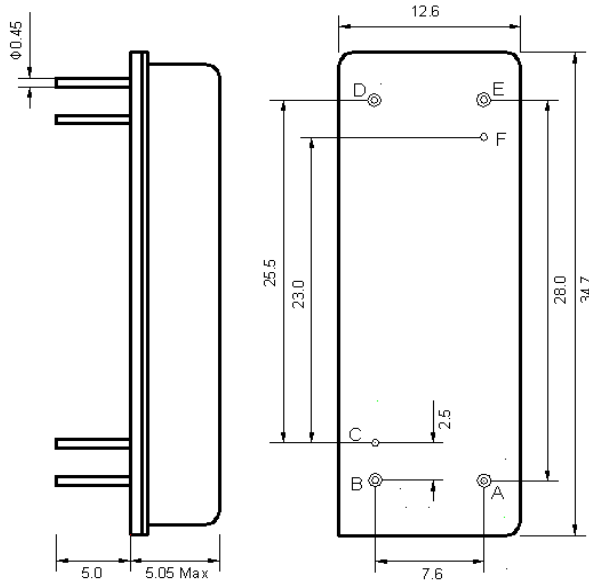
Notes

- 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)



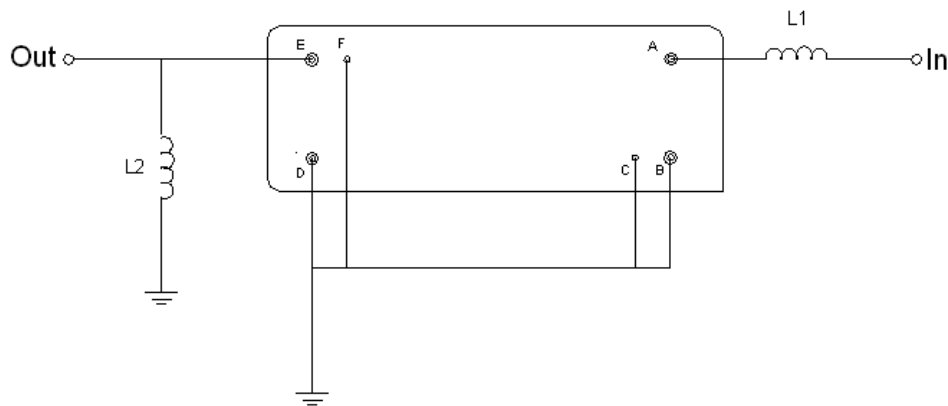


Mechanical Dimensions (mm)



| Pin Description | |
|-----------------|--------|
| B, C, D, F | Ground |
| A | In |
| E | Out |

Test Circuit



| Test Fixture & Values | |
|-----------------------|-------------|
| Input | L1=100 nH |
| Output | L2=220 nH |
| 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) ⁽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.

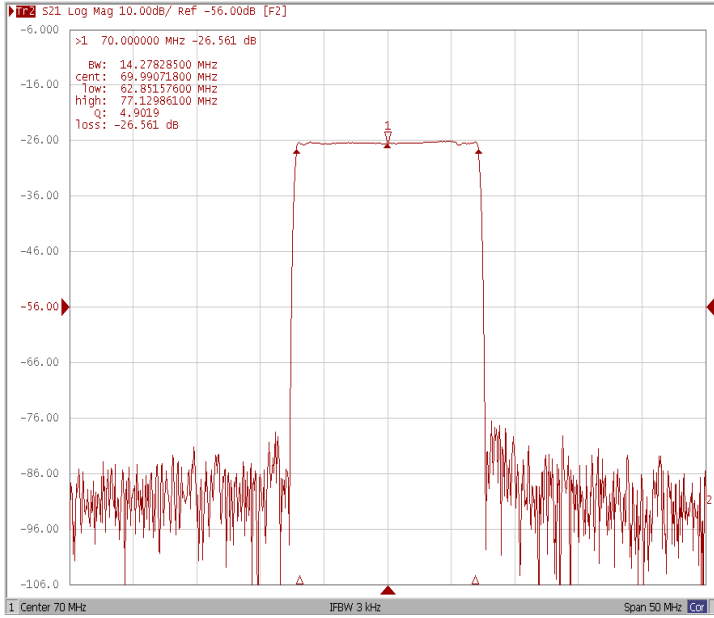
Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|----------------------------|--------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 70.0 | - |
| Insertion Loss at Fo | dB | - | 26.5 | 28.0 |
| Temperature Coefficient | ppm/°C | - | -72 | - |
| Amplitude Ripple Variation | dB | - | 0.65 | 1.00 |
| Group Delay Variation | nsec | - | 62 | 100 |
| Absolute Delay | us | - | 3.8 | 4.0 |
| Bandwidth at -1dB | MHz | 14.00 | 14.27 | - |
| Bandwidth at -3dB | MHz | - | 14.46 | - |
| Bandwidth at -40dB | MHz | - | 15.26 | 15.40 |
| Bandwidth at -50dB | MHz | - | 15.35 | - |
| Ultimate Rejection Level | dB | 45 | 50 | - |

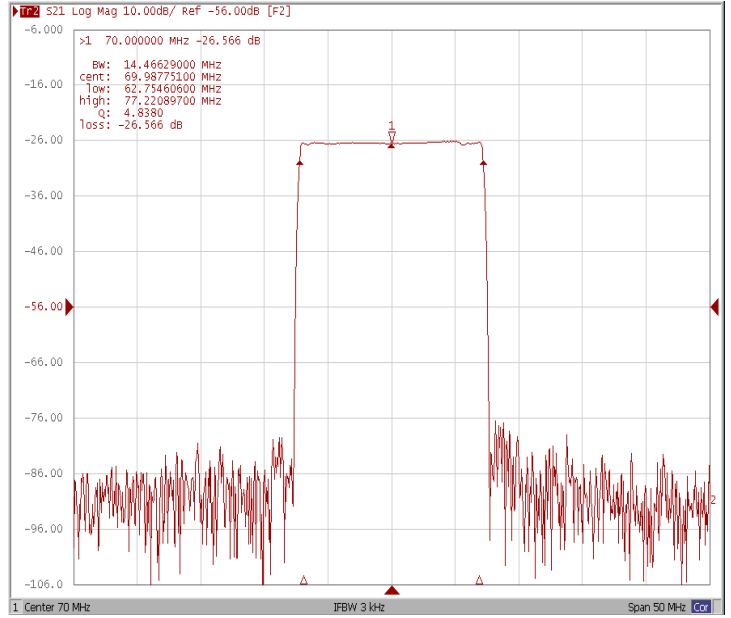


Frequency Response

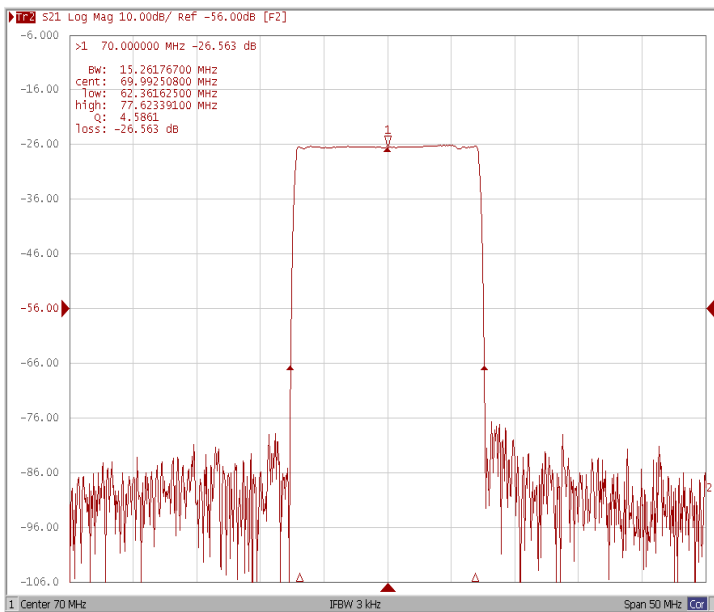
Bandwidth at -1.0 dB



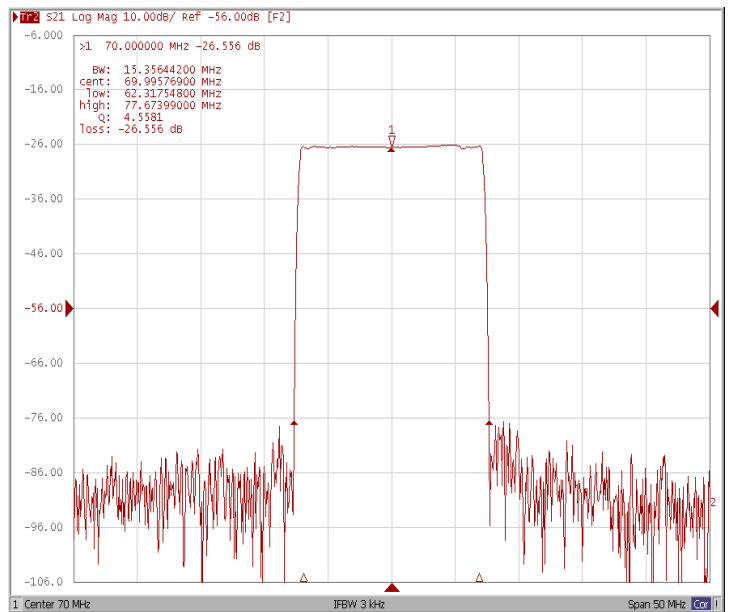
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

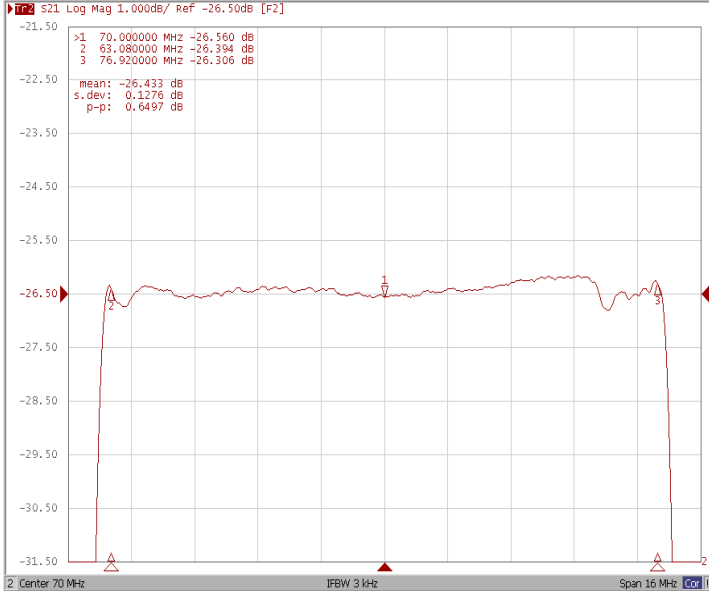


Bandwidth at -50.0 dB





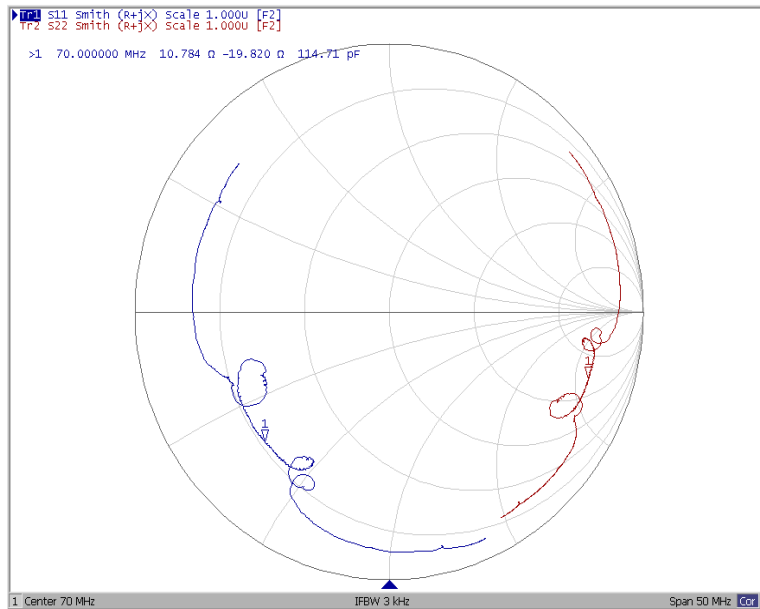
Ripple Variation



Group Delay Variation



Smith Chart





VSWR

