

- 120.0 MHz IF SAW Filter / 4.2 MHz Bandwidth
- Revision 0: 27. Jun. 2009

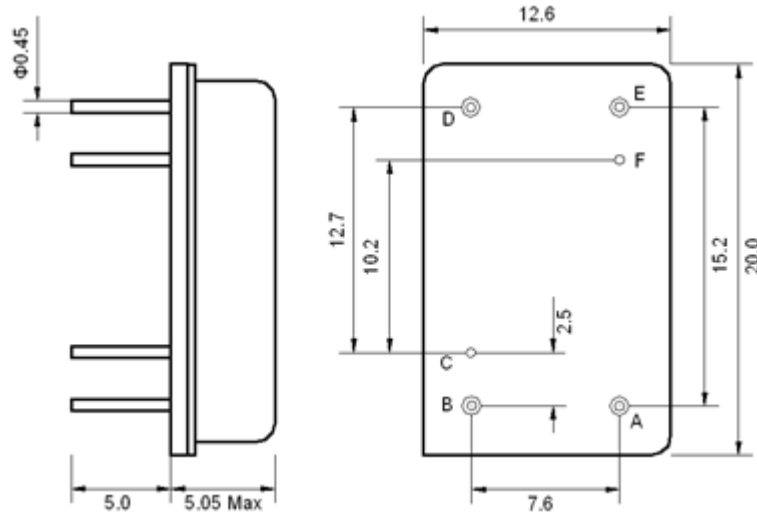
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|-------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation Temperature Range | °C | -30 | - | 80 |
| 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 | - |
| Package type & size | D | | | |
| Length x Width | mm ² | - | 20.0 x 12.6 | - |
| Height | mm | - | - | 5.05 |

| ELECTRICAL SPECIFICATION | | | | |
|--|-------------------|---------|---------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Center Frequency (Fo) | MHz | - | 120.0 | - |
| Insertion Loss at Fo | dB | - | 21.20 | 23.00 |
| Amplitude Ripple Variation within Fo ±1.92 MHz | dB _{p-p} | - | 0.35 | 1.00 |
| Group Delay Variation within Fo ±1.92 MHz | nsec | - | 70 | 150 |
| Absolute Delay at Fo | μsec | - | 2.47 | - |
| Temperature Coefficient | ppm/°C | - | -0.03 | - |
| Bandwidth at -1.0 dB | MHz | 4.00 | 4.20 | - |
| Bandwidth at -3.0 dB | MHz | - | 4.50 | - |
| Bandwidth at -25.0 dB | MHz | - | 5.33 | 5.50 |
| Bandwidth at -40.0 dB | MHz | - | 5.58 | 5.70 |
| Attenuation Rejection | | | | |
| Lower Sidelobe | dB | 47 | 52 | |
| Upper Sidelobe | dB | 47 | 52 | |

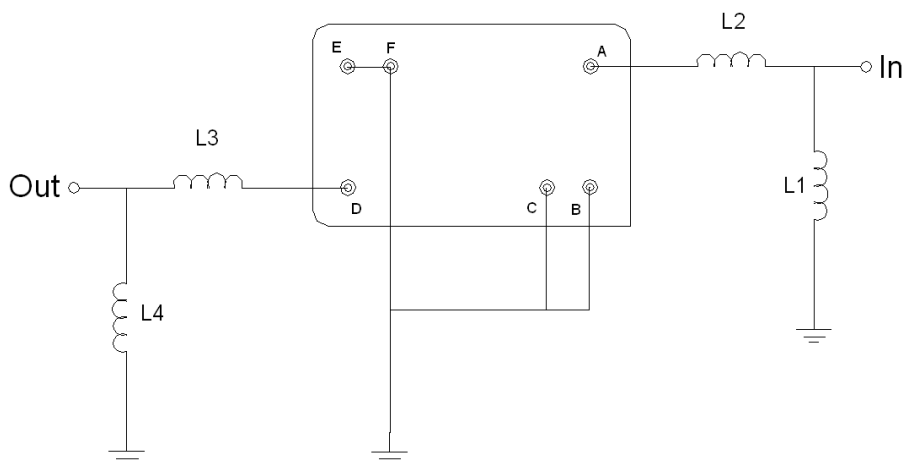
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



| Pin Description | |
|-----------------|--------|
| B, C, E, F | Ground |
| A | Input |
| D | Output |

Testing Environment



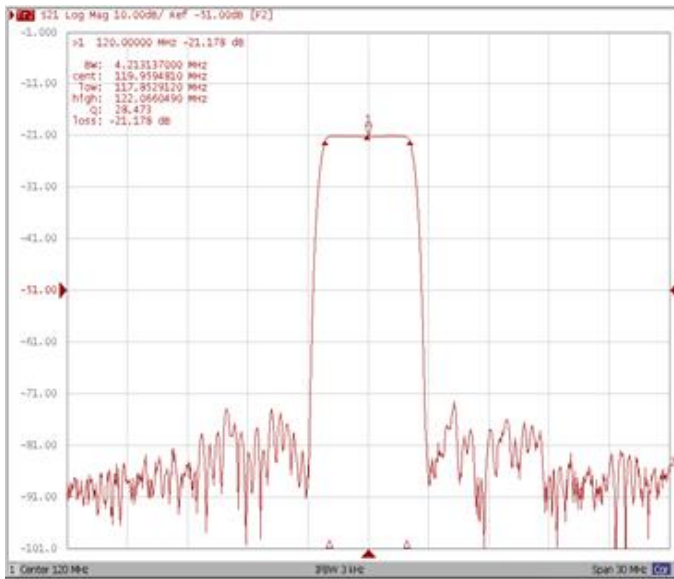
| Test Fixture & Values | |
|-----------------------|------------------------|
| Input | L1 = 27 nH, L2 = 68 nH |
| Output | L3 = 47 nH, L4 = 27 nH |
| Source/Load Impedance | 50 Ω |

Frequency Characteristics

Frequency Response

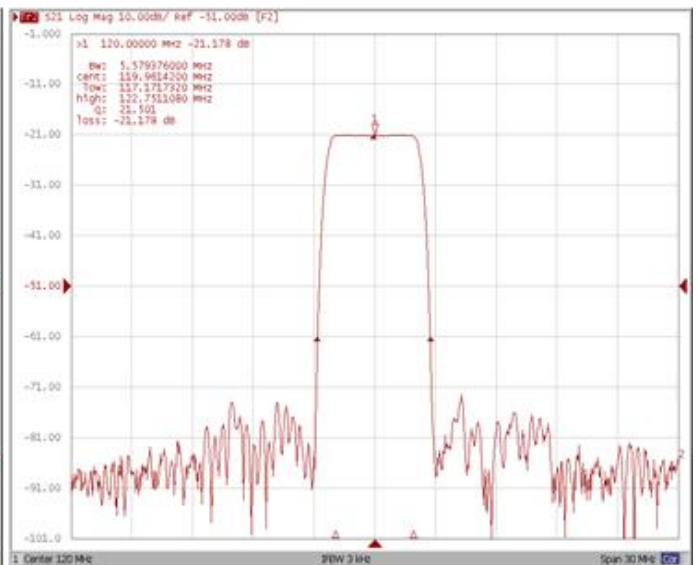
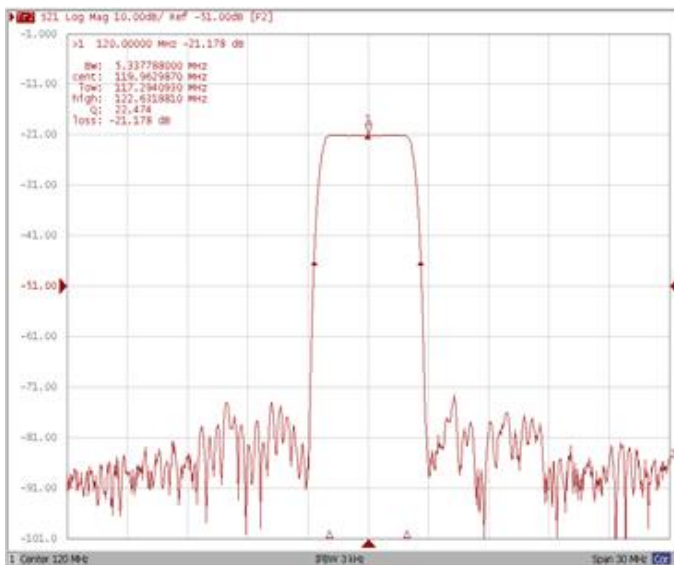
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



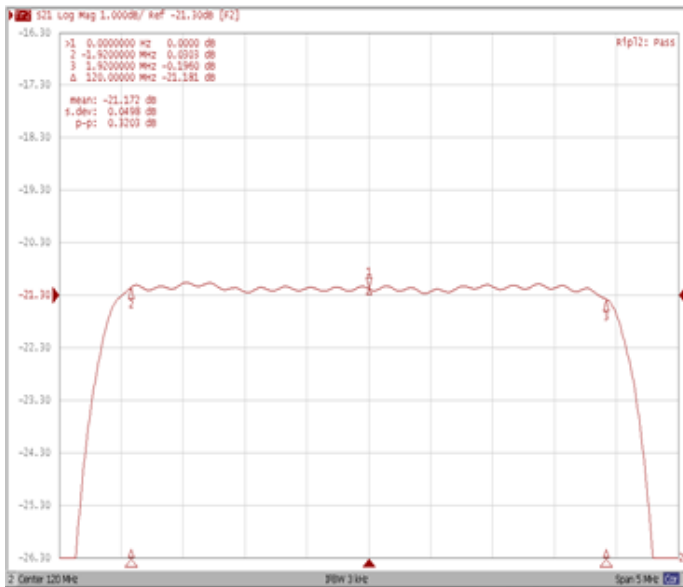
Bandwidth at -25.0 dB

Bandwidth at -40.0 dB

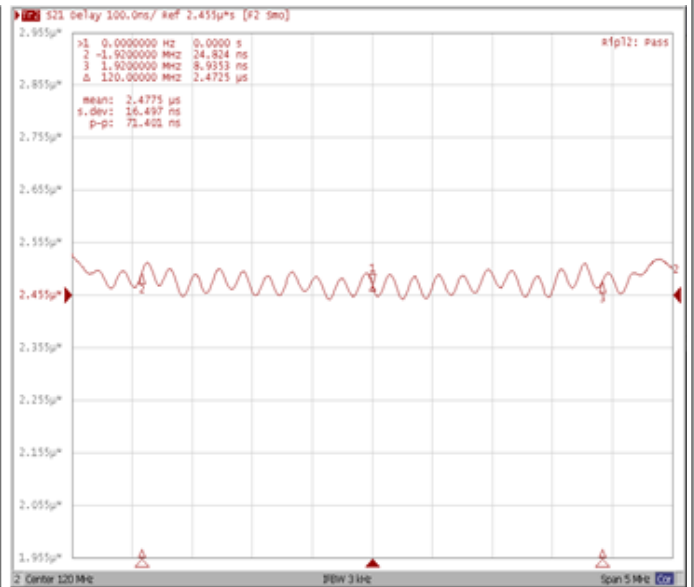


Frequency Response

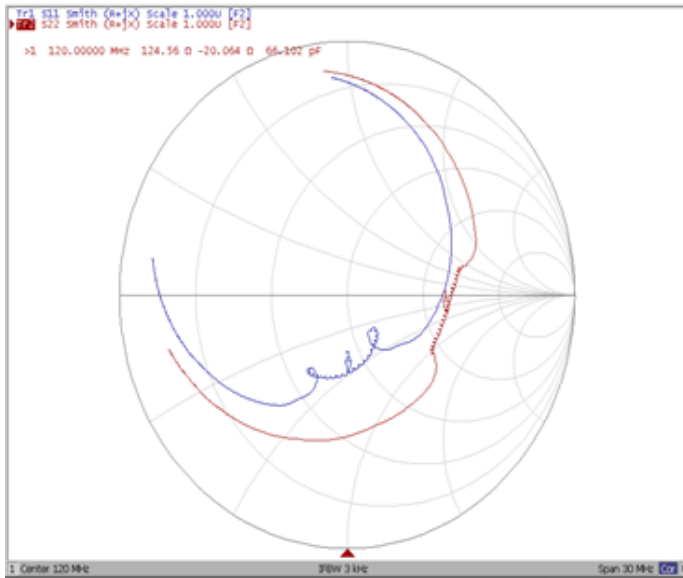
Ripple Variation Fo±1.92MHz



Group Delay Variation Fo±1.92MHz



Smith Chart



SWR

