

- 125.0MHz IF SAW Filter / 29.98MHz Bandwidth
- Revision 0: 17. Jul. 2008

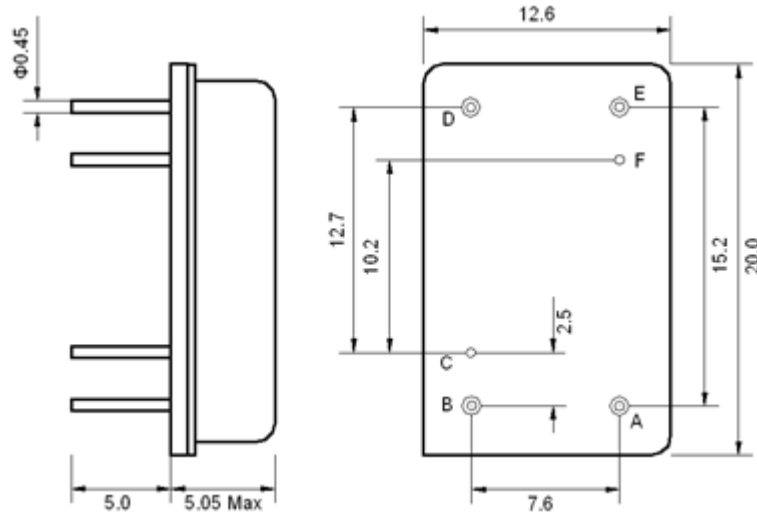
Electrical Characteristics

| MAXIMUM RATING | | | | |
|--|-----------------|---------|-------------|---------|
| PARAMETERS DESCRIPTION | UNIT | MINIMUM | TYPICAL | MAXIMUM |
| Operation 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 | - |
| 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 | - | 125.0 | - |
| Insertion Loss at Fo | dB | - | 24.3 | 26.0 |
| Amplitude Ripple Variation within Fo ±14.80 MHz | dB _{p-p} | - | 0.65 | 1.0 |
| Group Delay Variation within Fo ±14.80 MHz | nsec | - | 30 | 60 |
| Absolute Delay at Fo | μsec | - | 1.89 | - |
| Temperature Coefficient | ppm/°C | - | -72 | - |
| Bandwidth at -1.0 dB | MHz | 29.90 | 29.98 | - |
| Bandwidth at -3.0 dB | MHz | - | 30.30 | - |
| Center Frequency (Fo) | MHz | - | 125.0 | - |
| Attenuation Rejection | | | | |
| Lower Sidelobe | dB | 50 | 52 | |
| Upper Sidelobe | dB | 50 | 52 | |

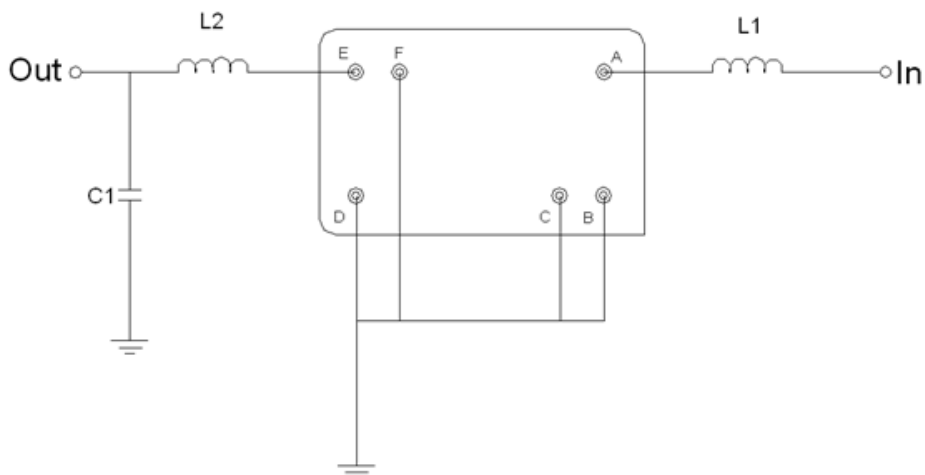
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment



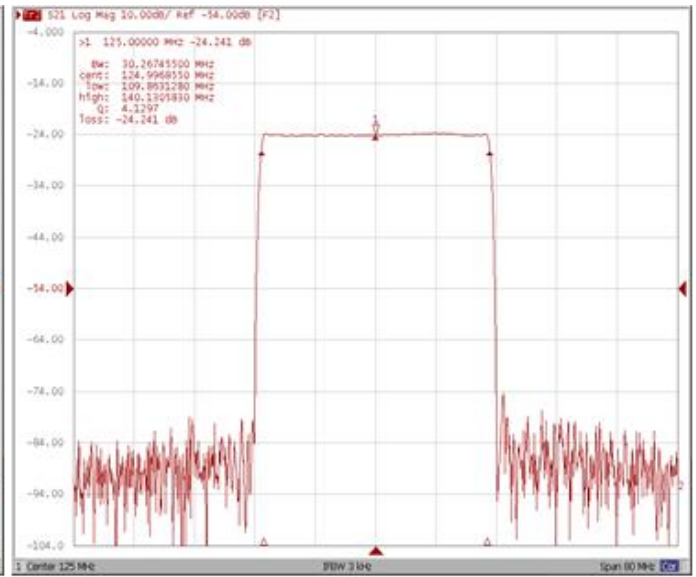
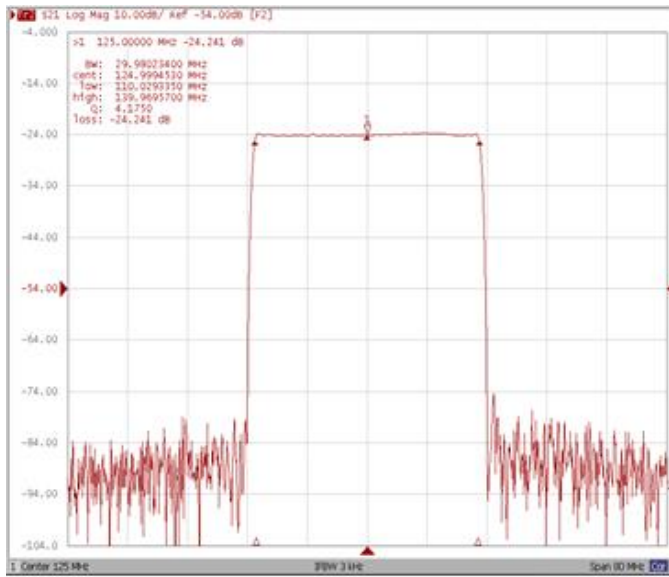
| Test Fixture & Values | |
|-----------------------|------------------------|
| Input | L1 = 47 nH |
| Output | L2 = 68 nH, C1 = 24 pF |
| Source/Load Impedance | 50 Ω |

Frequency Characteristics

Frequency Response

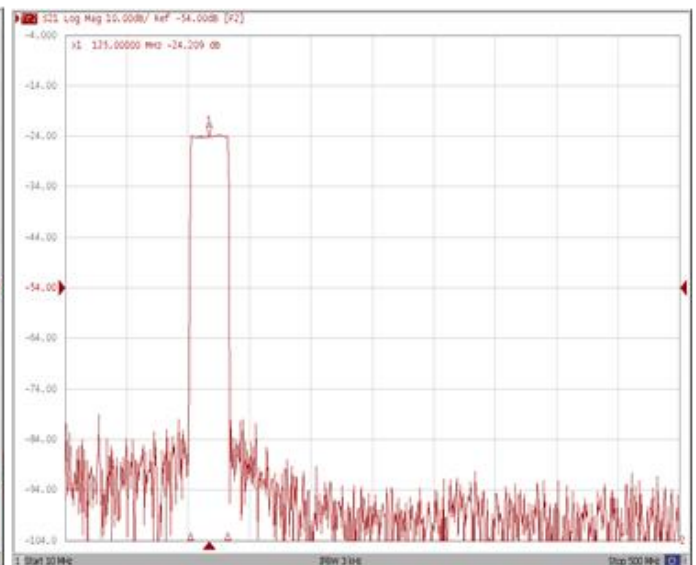
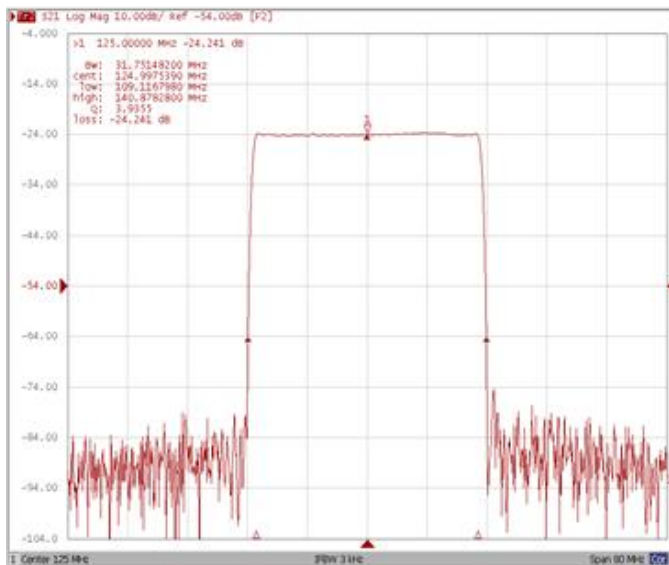
Bandwidth at -1.0 dB

Bandwidth at -3.0 dB



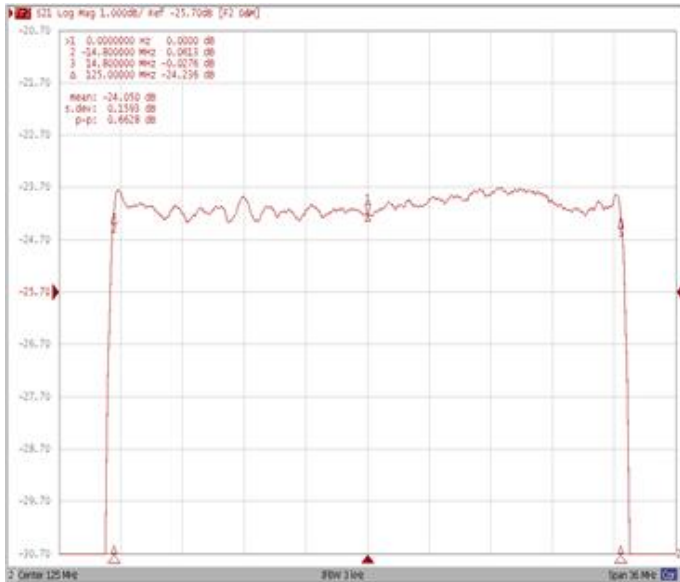
Bandwidth at -40.0 dB

Wide-Band

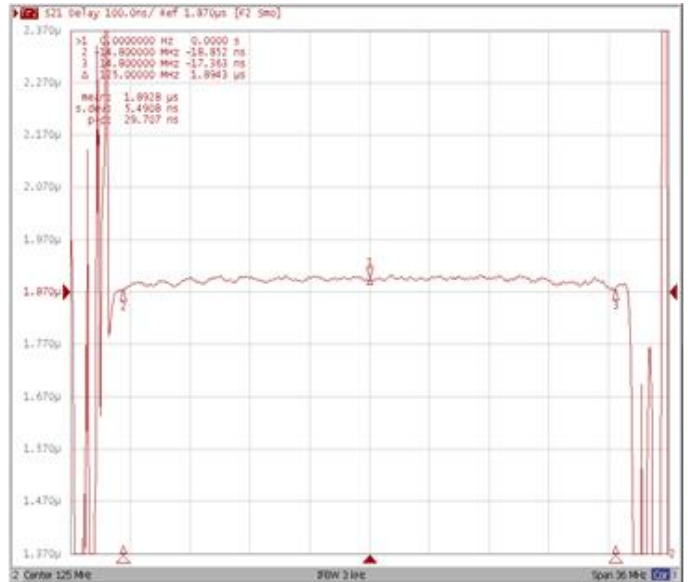


Frequency Response

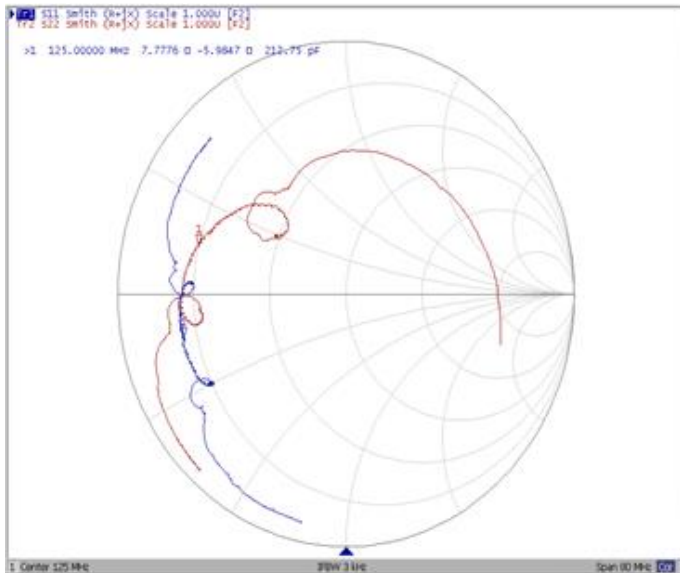
Ripple Variation $F_0 \pm 14.80\text{MHz}$



Group Delay Variation $F_0 \pm 14.80\text{MHz}$



Smith Chart



SWR

