

Maximum Ratings

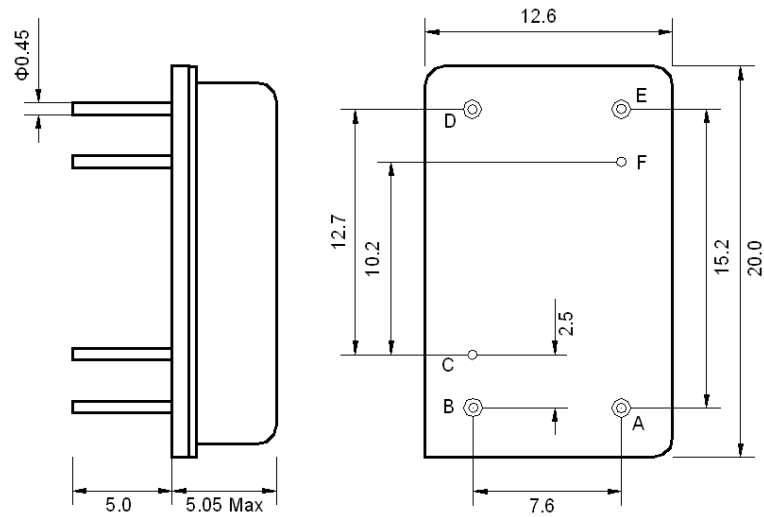
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|-------------|---------|
| Operation Temperature Range | °C | -20 | - | 70 |
| Storage Temperature Range | °C | -40 | - | 85 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 10 |
| Source Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Load Impedance (single ended) ⁽¹⁾ | Ω | - | 50 | - |
| Package type & size | D1 | | | |
| 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 | 69.92 | 70.0 | 70.08 |
| Insertion Loss at Fo | dB | - | 21.6 | 24.0 |
| Amplitude Ripple Variation | dB _{p-p} | - | 0.5 | 0.95 |
| Group Delay Variation | nsec | - | 47 | 100 |
| Absolute Delay at Fo | µsec | - | 2.92 | - |
| Temperature Coefficient | ppm/°C | - | -20 | - |
| Bandwidth at -1.0 dB | MHz | 5.0 | 5.28 | - |
| Bandwidth at -3.0 dB | MHz | - | 5.68 | - |
| Bandwidth at -40.0 dB | MHz | - | 7.39 | 7.50 |
| Ultimate Rejection | dB | 50 | 55 | - |

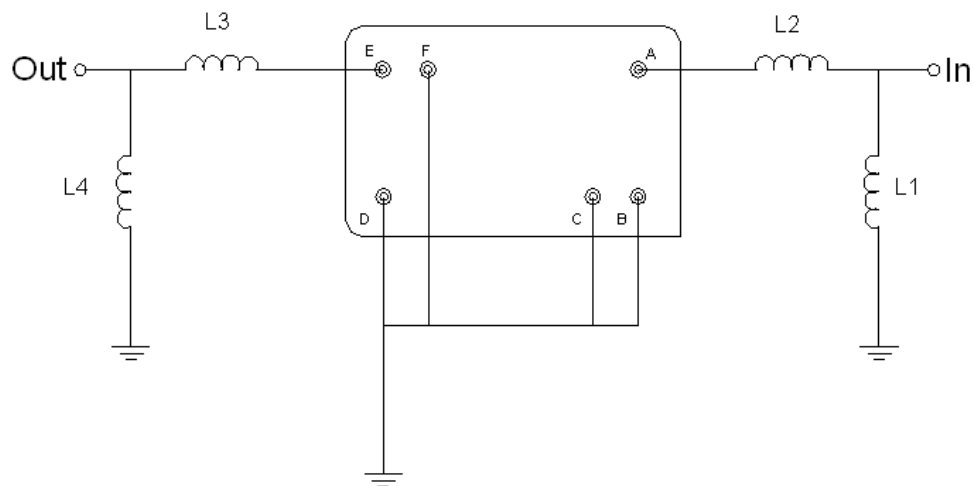
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

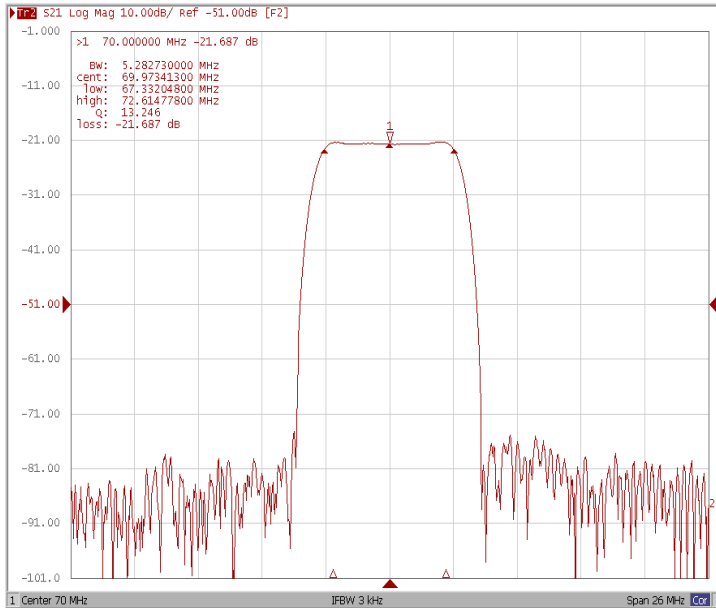
Testing Environment



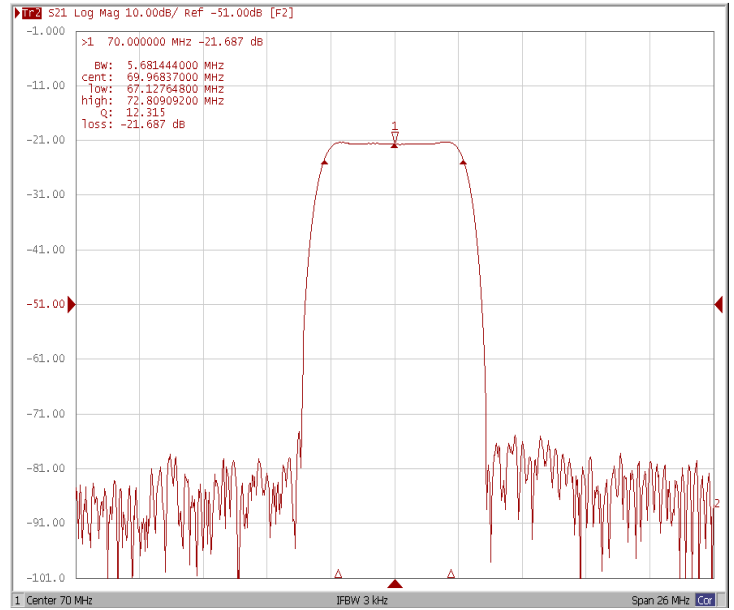
| Test Fixture & Values | |
|-----------------------|-----------------------|
| Input | L1= 120 nH, L2= 82 nH |
| Output | L3= 68 nH, L4= 120 nH |
| Source/Load Impedance | 50 Ω |

Frequency Response

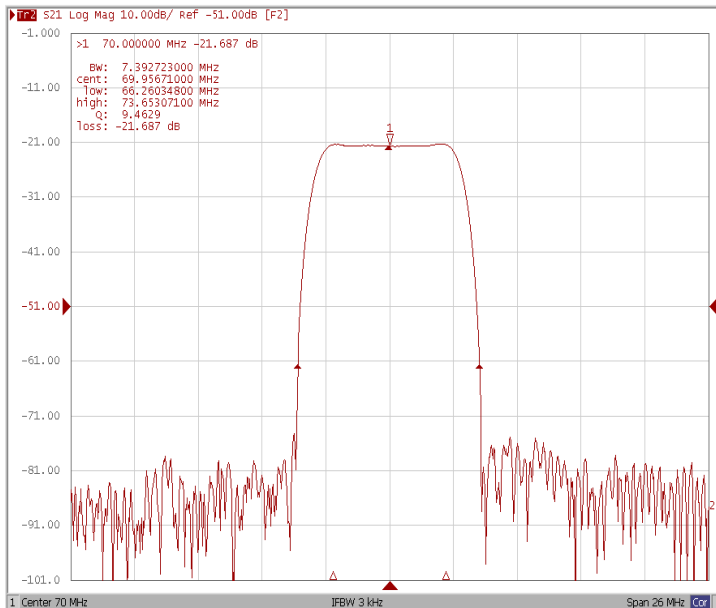
Bandwidth at -1.0 dB



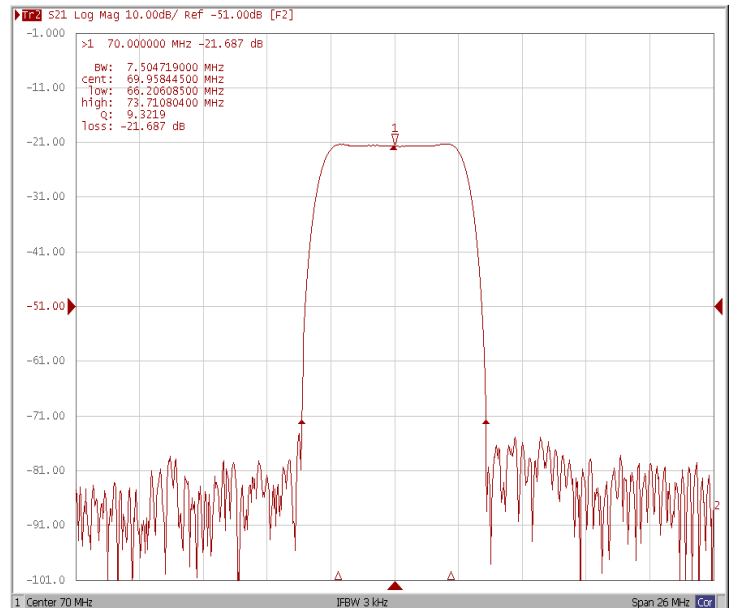
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

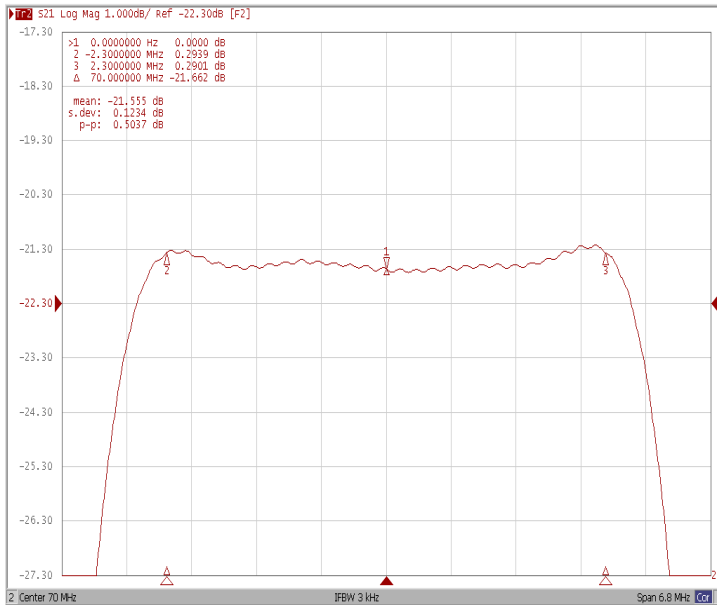


Bandwidth at -50.0 dB

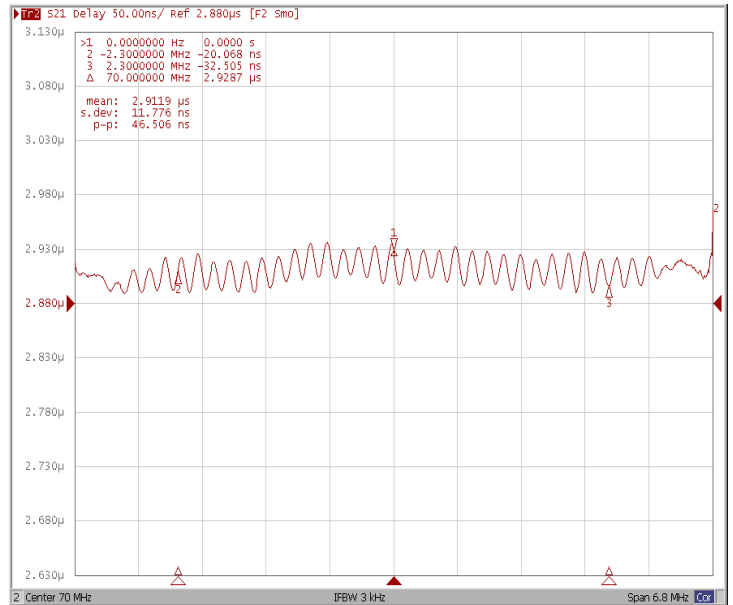


Frequency Response

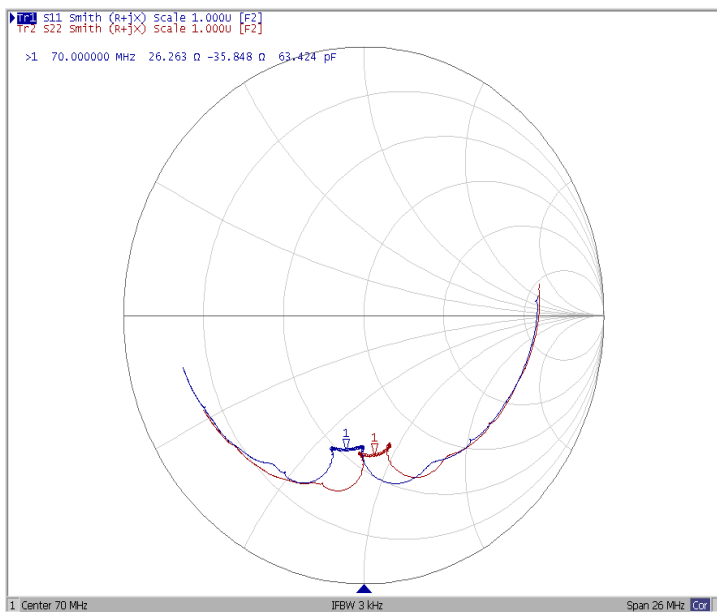
Ripple Variation $F_{0\pm 2.3\text{MHz}}$



Group Delay Variation $F_{0\pm 2.3\text{MHz}}$



Smith Chart



VSWR

