

□ Electrical Characteristics

Maximum Ratings

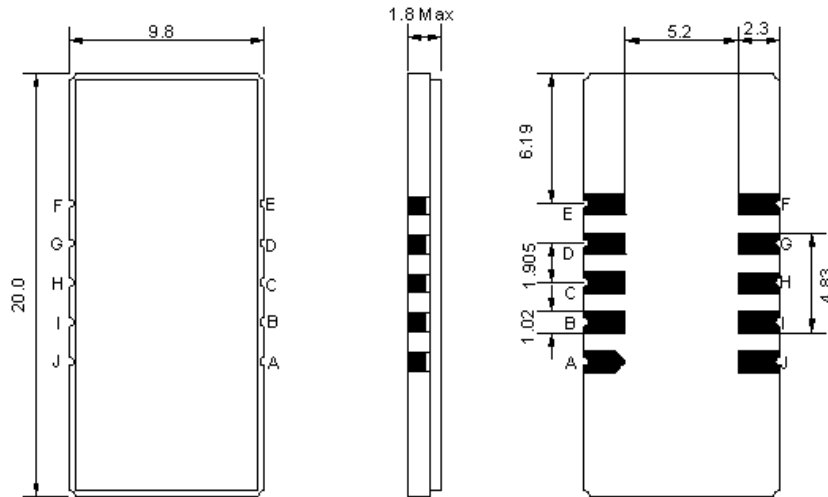
| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|-----------------|---------|------------|---------|
| Operation Temperature Range | °C | 0 | - | 60 |
| Storage Temperature Range | °C | -20 | - | 70 |
| Maximum DC Voltage | V | - | - | 10 |
| Maximum Input Power | dBm | - | - | 10 |
| 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 9.8 | - |
| Height | mm | - | - | 1.8 |

Electrical Specification

| Parameters Description | Unit | Minimum | Typical | Maximum |
|--|--------|---------|---------|---------|
| Center Frequency (Fo) | MHz | - | 75.00 | - |
| Insertion Loss at Fo | dB | - | 20.5 | 23.5 |
| Group Delay Variation (Fo±5.5MHz) | ns | - | 42 | 100 |
| Absolute Delay | us | - | 2.40 | - |
| Temperature Coefficient | ppm/°C | - | -72 | - |
| Passband Ripple (Fo±5.5MHz) | dB | - | 0.56 | 1.00 |
| Bandwidth at -1dB | MHz | 11.00 | 11.65 | - |
| Bandwidth at -30dB | MHz | - | 13.13 | - |
| Bandwidth at -45dB | MHz | - | 13.40 | 15.00 |
| Ultimate Rejection | dB | - | 55 | - |
| Relative Attenuation Fo±6.5MHz / Fo±7.5MHz | dB | | 24 / 55 | |

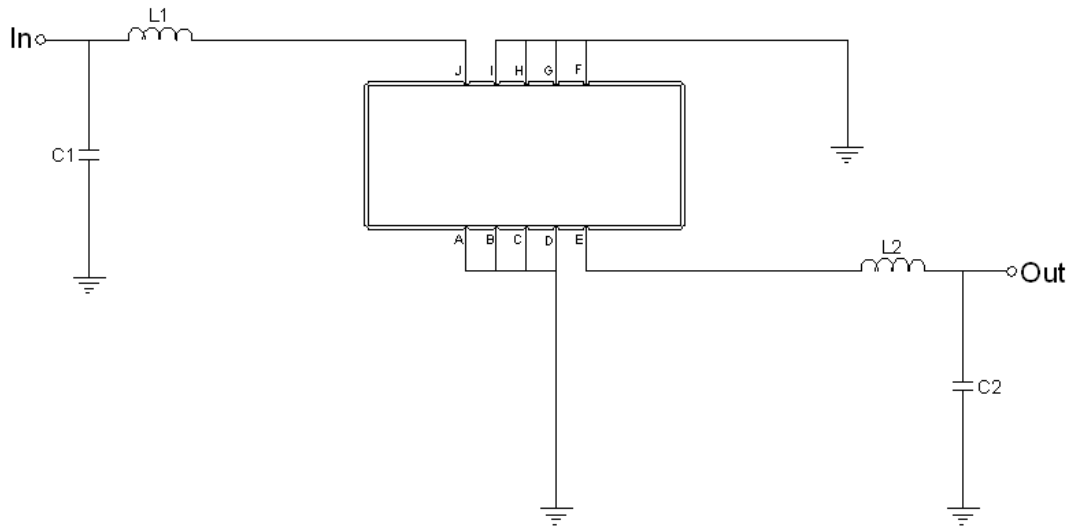
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

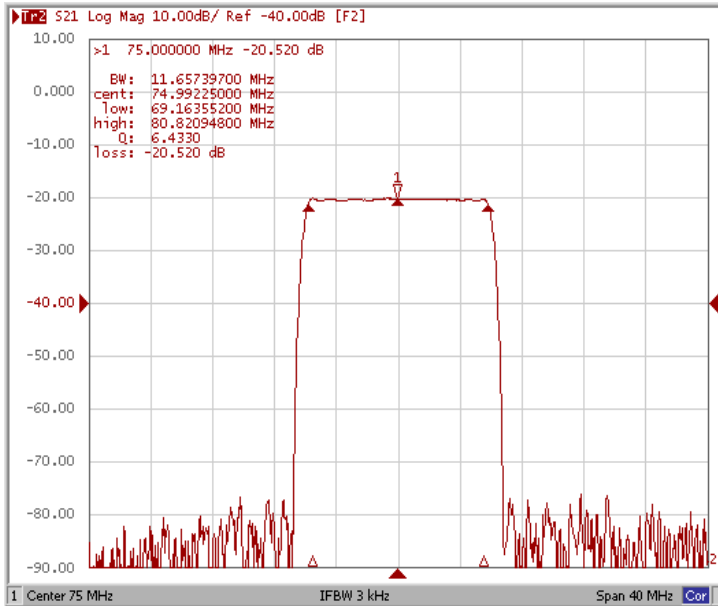
Testing Environment



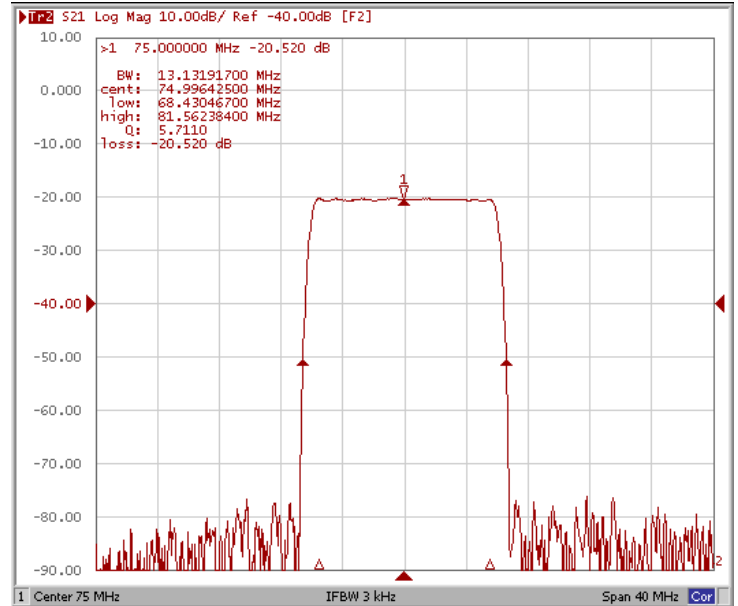
| Test Fixture & Values | |
|-----------------------|------------------|
| Input | L1=68nH, C1=20pF |
| Output | L2=68nH, C2=20pF |
| Source/Load Impedance | 50 Ω |

Frequency Response

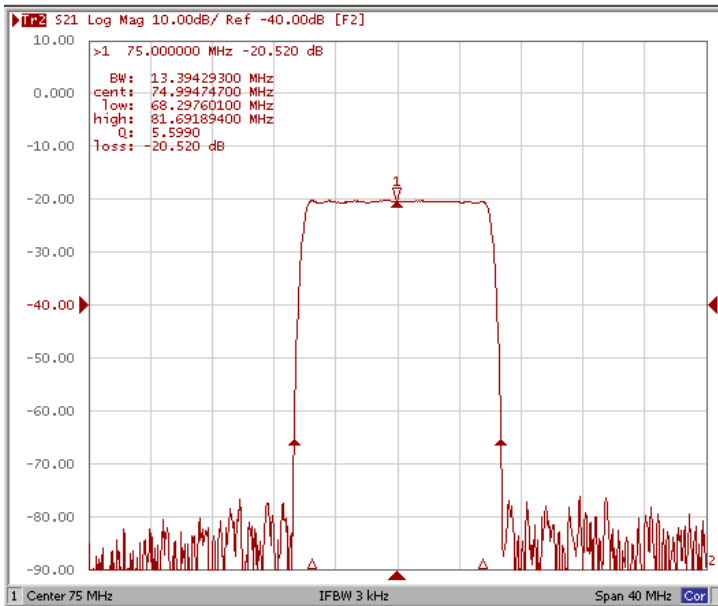
Bandwidth at -1.0 dB



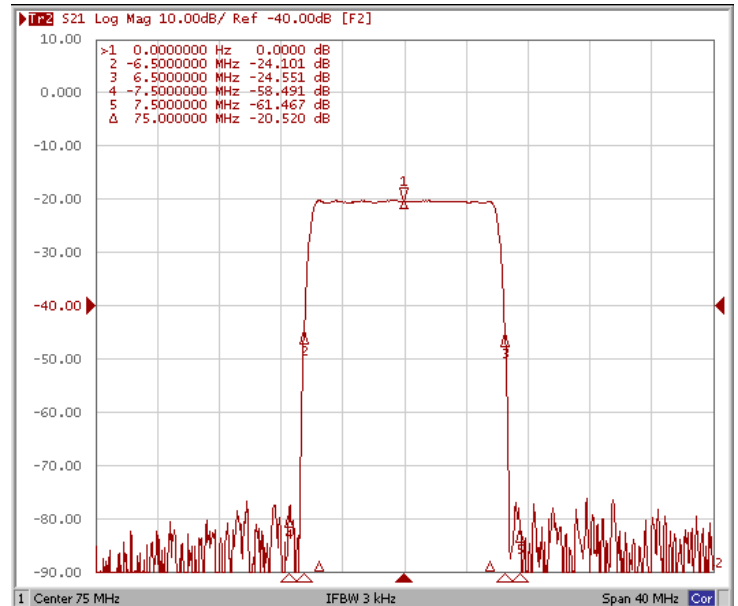
Bandwidth at -30.0 dB



Bandwidth at -45.0 dB

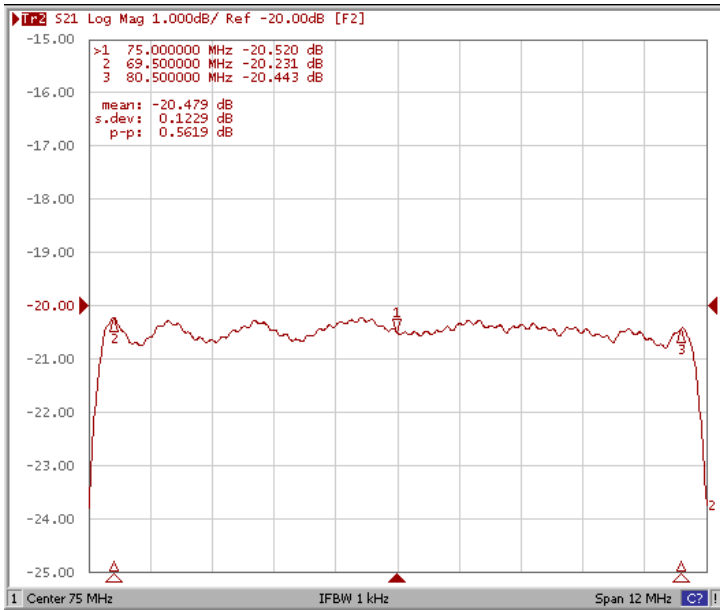


Relative Attenuation $F_{o\pm 6.5\text{MHz}} / F_{o\pm 7.5\text{MHz}}$

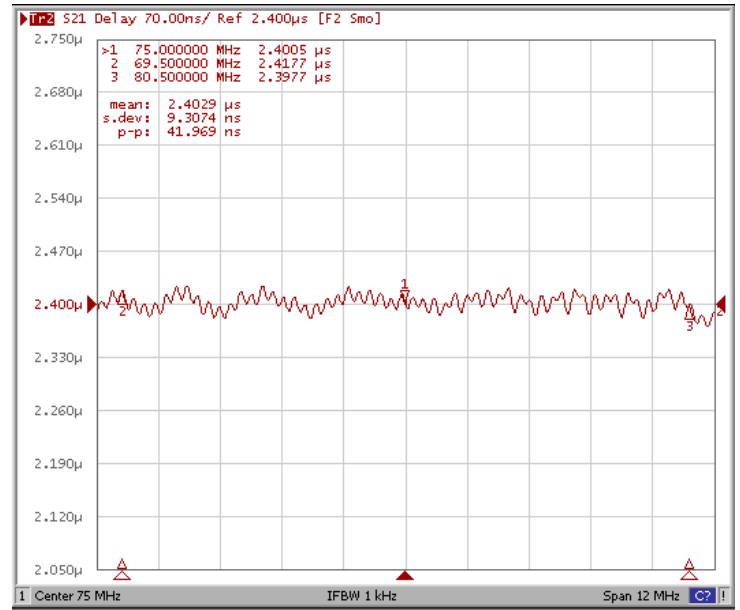


Frequency Response

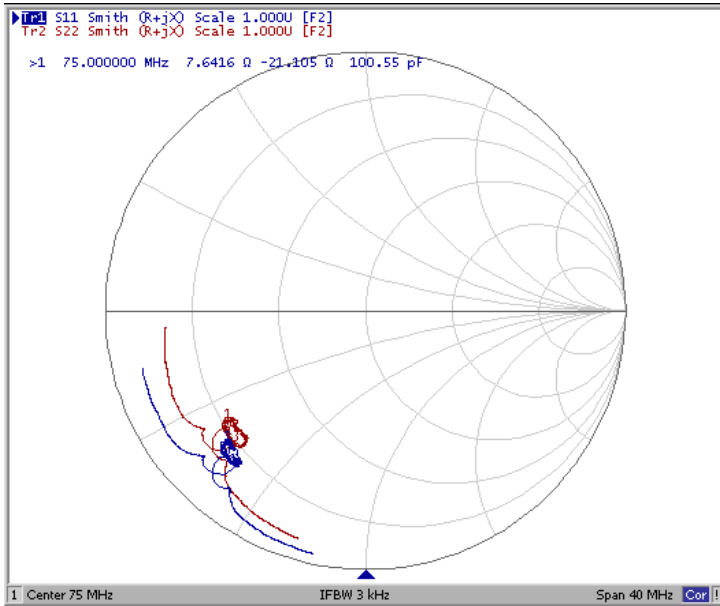
Ripple Variation Fo±5.5MHz



Group Delay Variation Fo±5.5MHz



Smith Chart



VSWR

