

- 70.0 MHz IF SAW Filter / 18.97 MHz Bandwidth
- Revision 0: 22 Nov. 2012

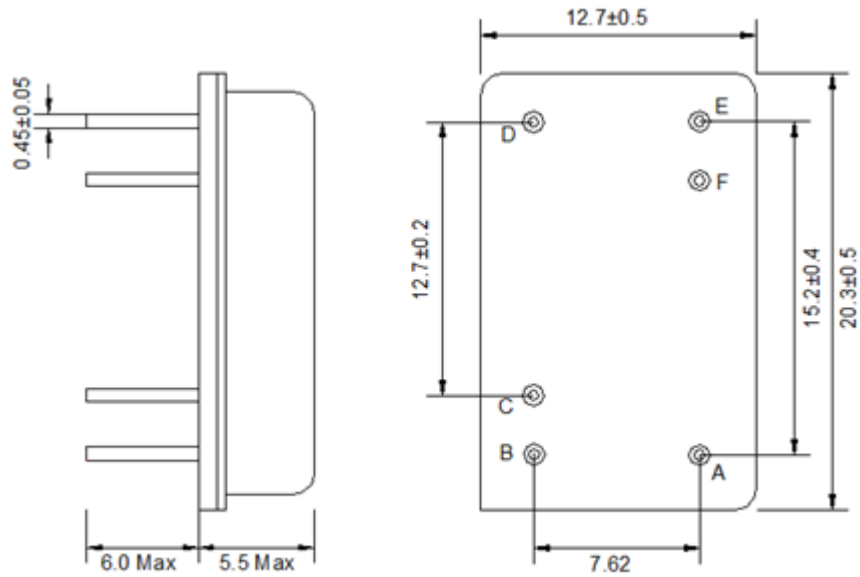
### Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Operation Temperature Range	°C	-	+25	-
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	-
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	D40			
Length x Width	mm <sup>2</sup>	-	20.3 x 12.7	-
Height	mm	-	-	5.5

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	UNIT	MINIMUM	TYPICAL	MAXIMUM
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	23.5	25.0
Amplitude Ripple Variation (Fo±9.22MHz)	dB <sub>p-p</sub>	-	0.45	1.20
Group Delay Variation (Fo±9.22MHz)	nsec	-	30	80
Absolute Delay at Fo	µsec	-	2.26	2.3
Bandwidth at -1.0 dB	MHz	18.80	18.97	-
Bandwidth at -3.0 dB	MHz	-	19.26	-
Bandwidth at -20.0 dB	MHz	-	20.12	-
Bandwidth at -45.0 dB	MHz	-	20.54	20.60
Ultimate Rejection	dB	48	53	-
Temperature Coefficient	ppm/°C	-	-72	-

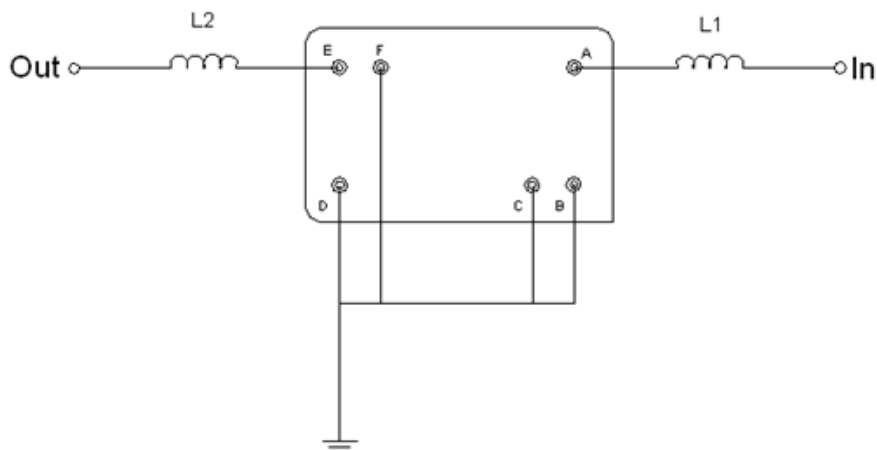
**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).  
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Package Dimensions



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

## Testing Environment



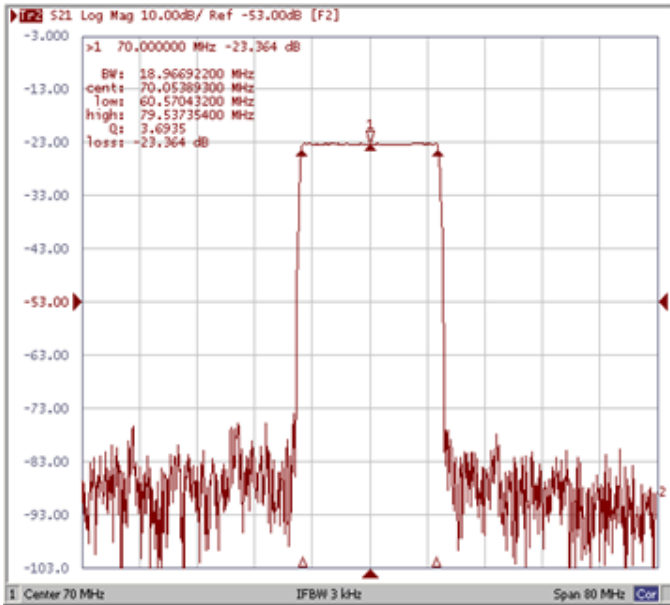
Test Fixture & Values	
Input	L1= 120 nH
Output	L2= 120 nH
Source/Load Impedance	50 $\Omega$

## Frequency Characteristics

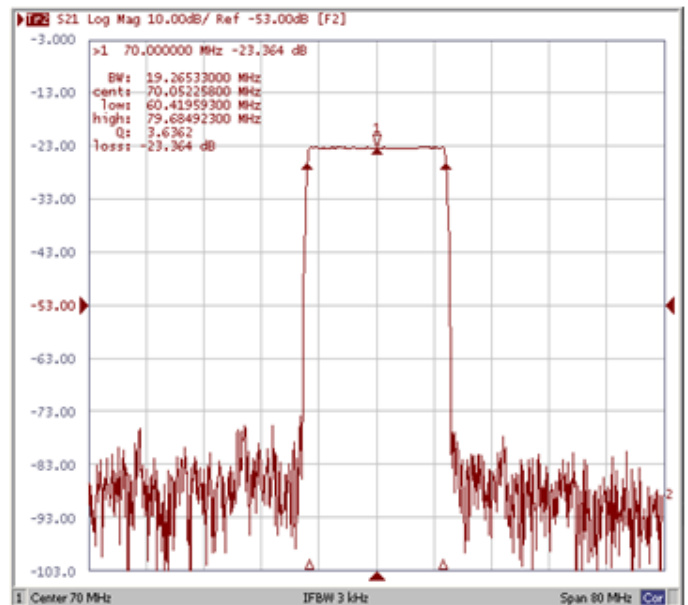
### Frequency Response

Operating Temperature: +25°C

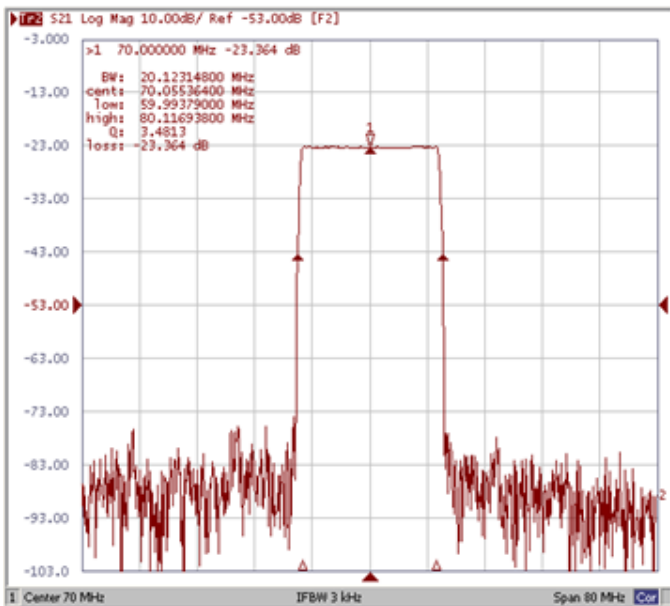
**Bandwidth at -1.0 dB**



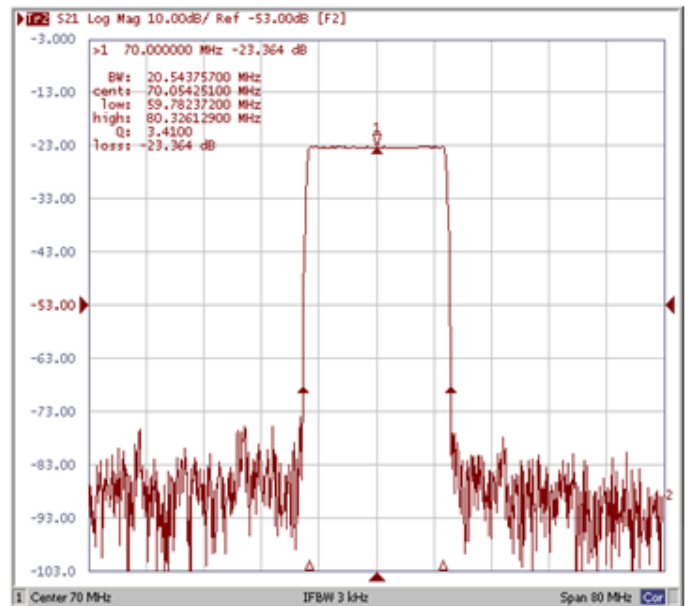
**Bandwidth at -3.0 dB**



**Bandwidth at -20.0 dB**

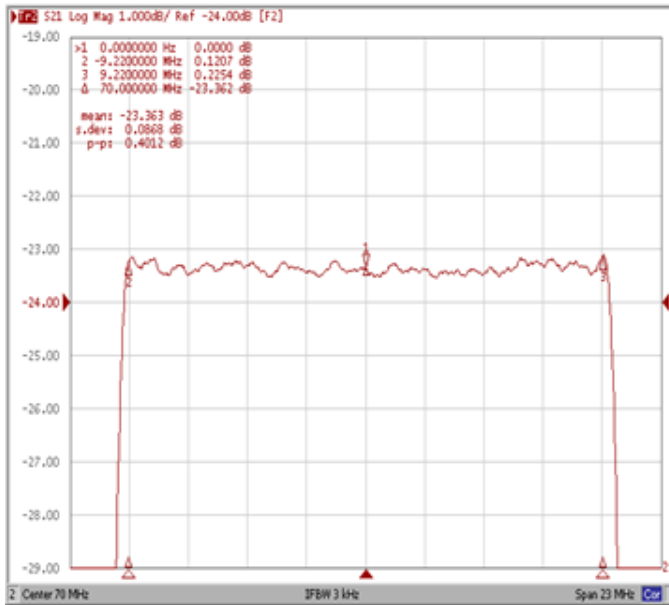


**Bandwidth at -45.0 dB**

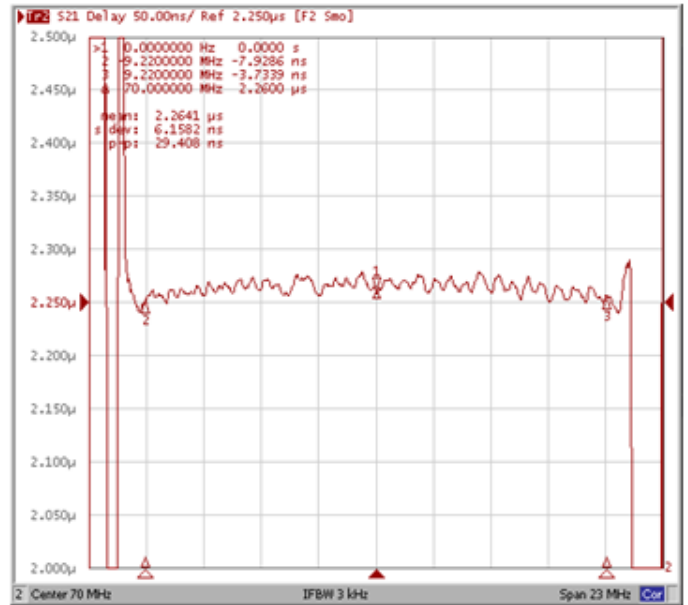


## Frequency Response

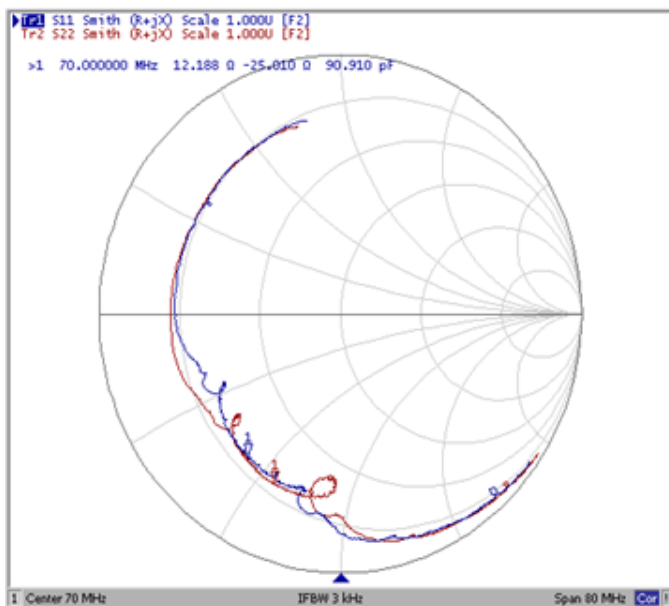
**Ripple Variation Fo±9.22 MHz**



**Group Delay Variation Fo±9.22 MHz**



**Smith Chart**



**VSWR**

