

- 117.51 MHz IF SAW Filter / 5.23 MHz Bandwidth
- Revision 0: November 2013

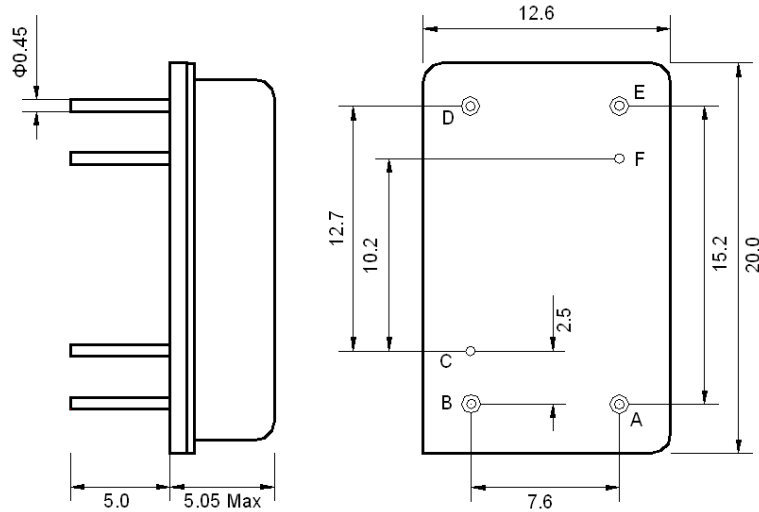
Electrical Characteristics

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	D40			
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	-	117.51	-
Insertion Loss at Fo	dB	-	23.8	25.5
Group Delay Variation (Fo±2.46MHz)	nsec	-	105	200
Absolute Delay at Fo	usec	-	2.28	-
Passband Ripple Variation(Fo±2.46MHz)	dB	-	0.5	1.2
Bandwidth at -1dB	MHz	5.10	5.23	-
Bandwidth at -3dB	MHz	-	5.42	-
Bandwidth at -20dB	MHz	-	6.03	-
Bandwidth at -40dB	MHz	-	6.32	6.55
Ultimate Rejection	dB	40	45	-
Relative Attenuation				
@edge - 0.555MHz	dB	-	23	-
@edge + 0.555MHz	dB	-	17	-
Temperature Coefficient	ppm/°C	-	-18	-

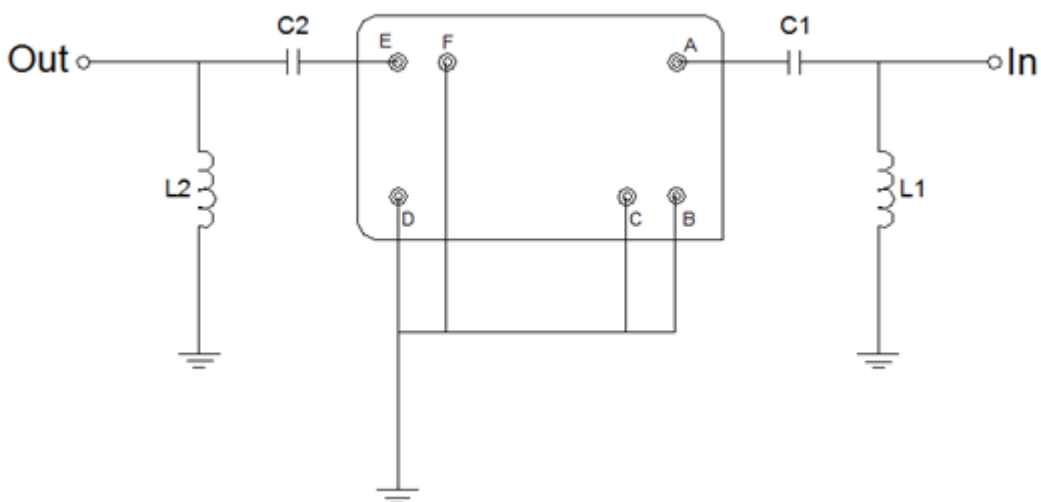
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment



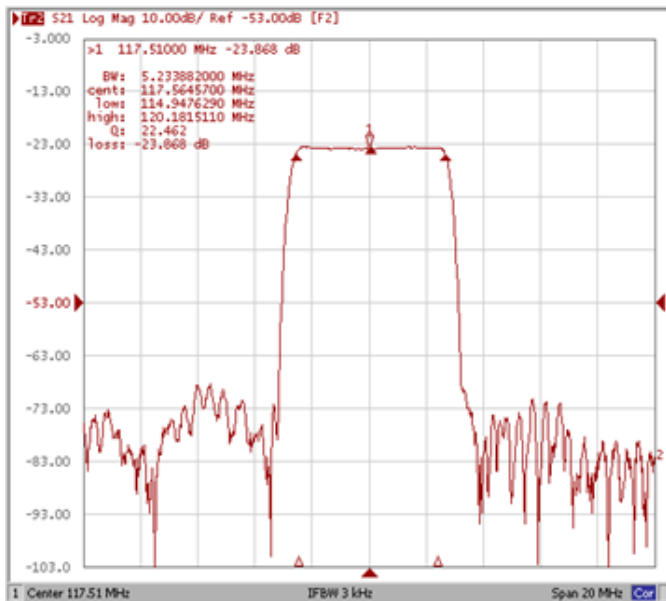
Test Fixture & Values	
Input	L1 = 68 nH, C1 = 51 pF
Output	L2 = 47 nH, C2 = 43 pF
Source/Load Impedance	50 Ω

Frequency Characteristics

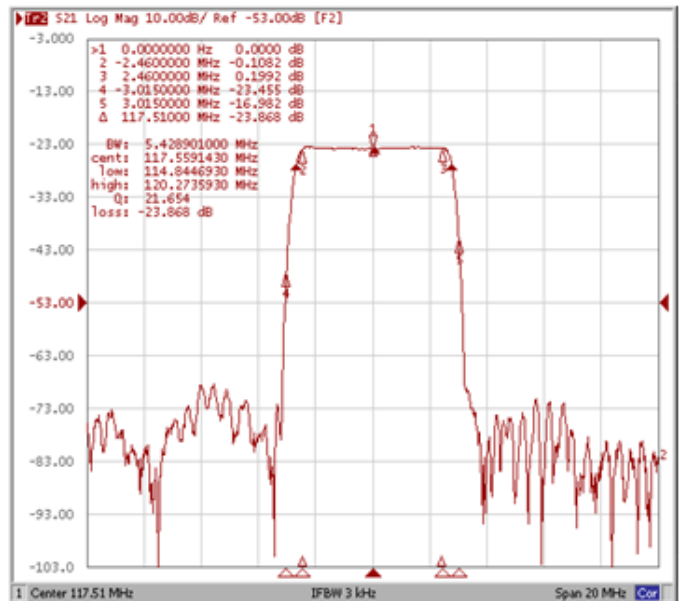
Frequency Response

Operating Temperature: +25°C

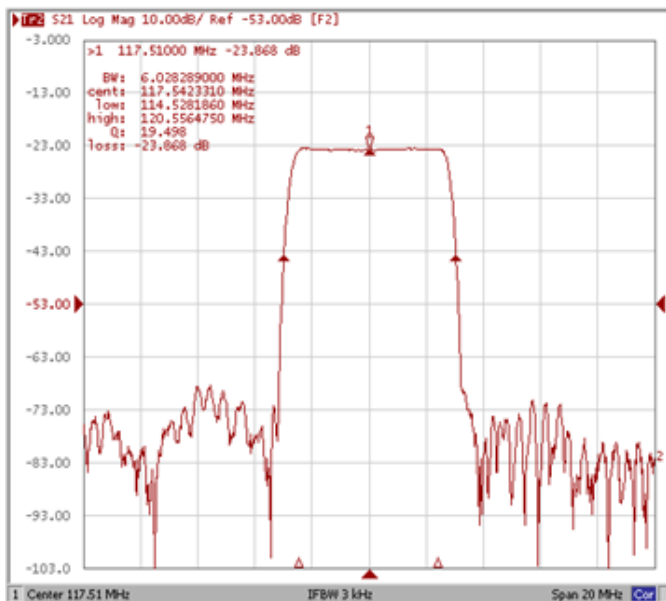
Bandwidth at -1.0 dB



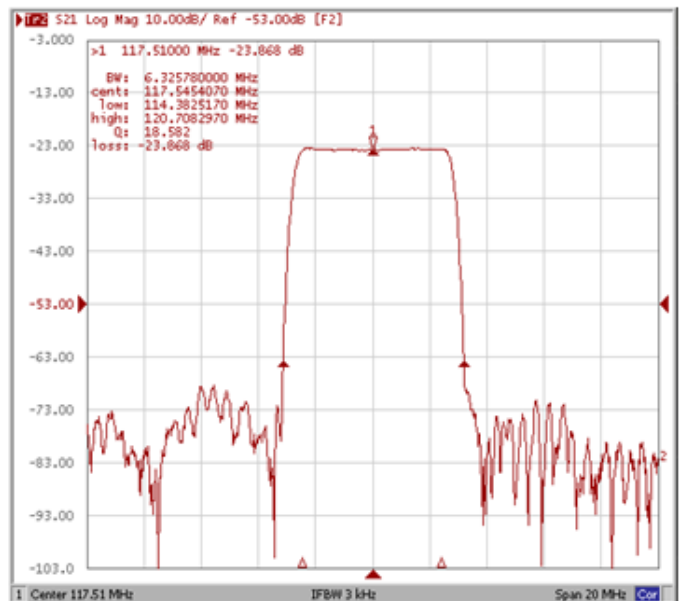
Bandwidth at -3.0 dB & Relative Attenuation



Bandwidth at -20.0 dB

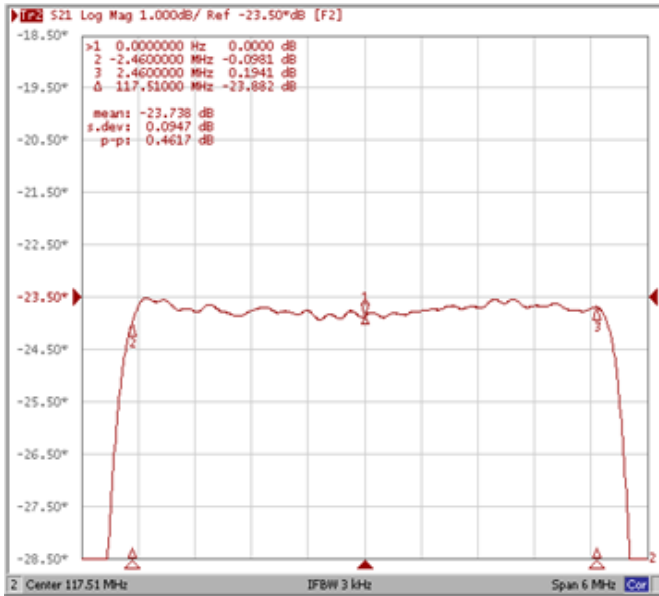


Bandwidth at -40.0 dB

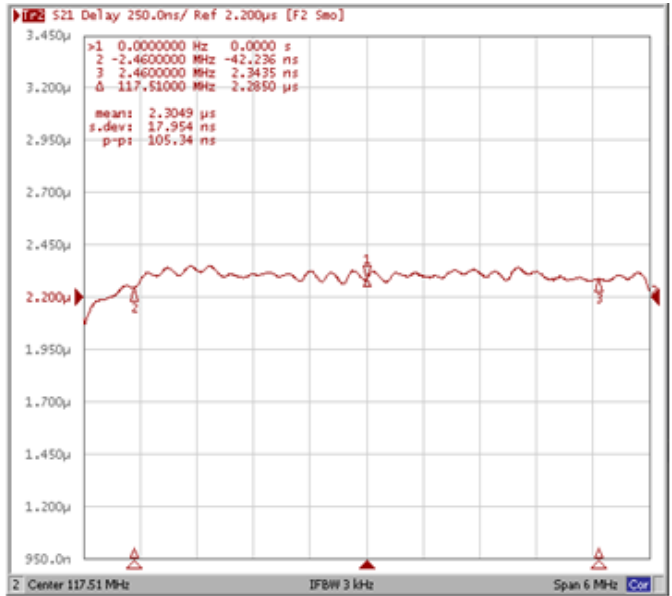


Frequency Response

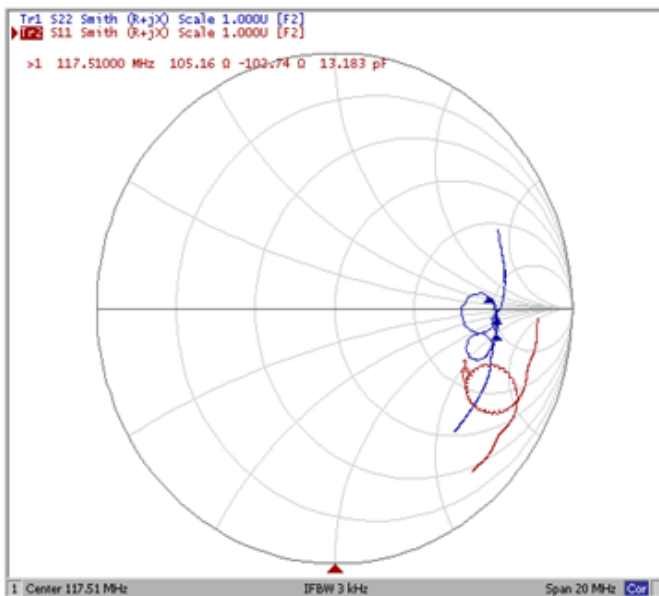
Ripple Variation Fo±2.46MHz



Group Delay Variation Fo±2.46MHz



Smith Chart



VSWR

