- **120.0 MHz IF SAW Filter / 9.54 MHz Bandwidth**
- **Revision 0: 30. Oct. 2007**

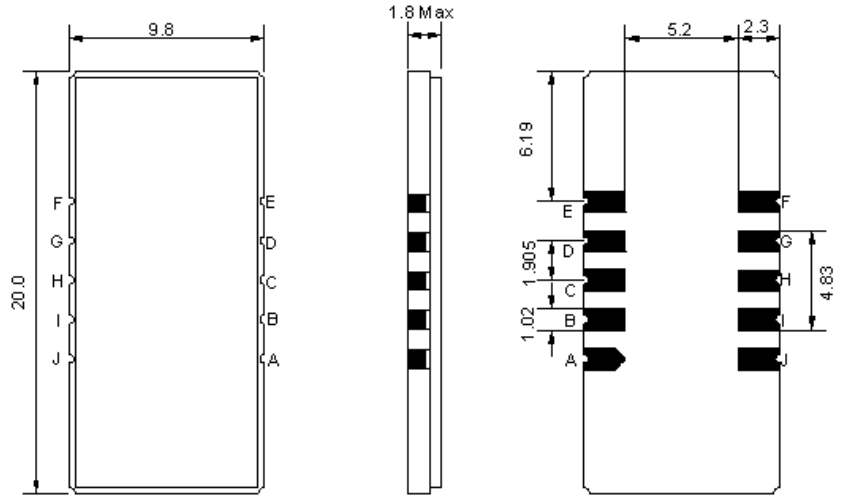
Electrical Characteristics

MAXIMUM RATING				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Operation Temperature Range	°C	-10	-	50
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	mm²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

ELECTRICAL SPECIFICATION				
PARAMETERS DESCRIPTION	**UNIT**	**MINIMUM**	**TYPICAL**	**MAXIMUM**
Center Frequency (Fo)	MHz	-	120.0	-
Insertion Loss at Fo	dB	-	24.4	26.0
Amplitude Ripple within fo ±4.4MHz	dB_{p-p}	-	0.6	1.0
Group Delay Variation within fo ±4.4 MHz	nsec	-	30	80
Absolute Delay at Fo	µsec	-	3.17	-
Temperature Coefficient	ppm/°C	-	-23	-
Bandwidth at –1.0 dB	MHz	9.0	9.24	-
Bandwidth at –3.0 dB	MHz	-	9.54	-
Bandwidth at –10.0 dB	MHz	-	10.01	10.1
Bandwidth at –25.0 dB	MHz	-	10.5	11.7
Bandwidth at –40.0 dB	MHz	-	10.75	-
Lower Sidelobe	dB	50	56	-
Upper Sidelobe	dB	50	56	-

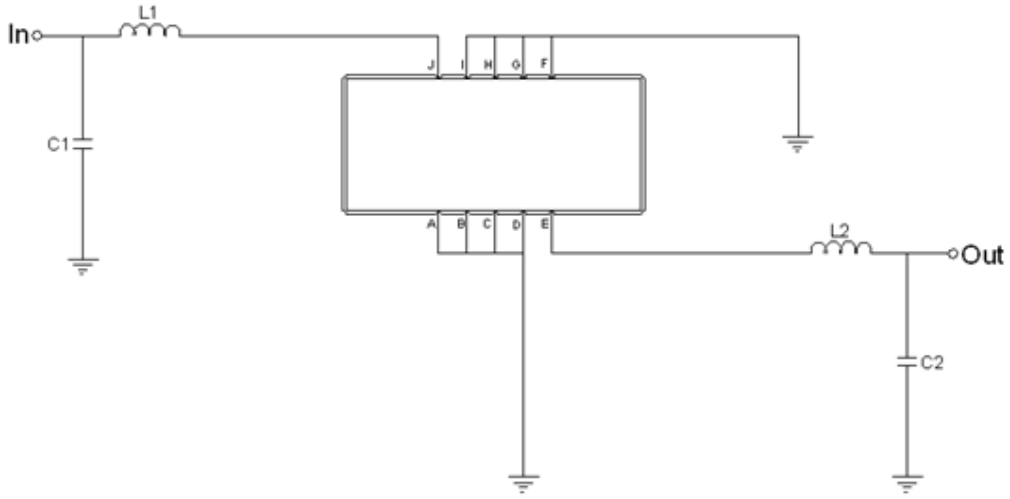
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment

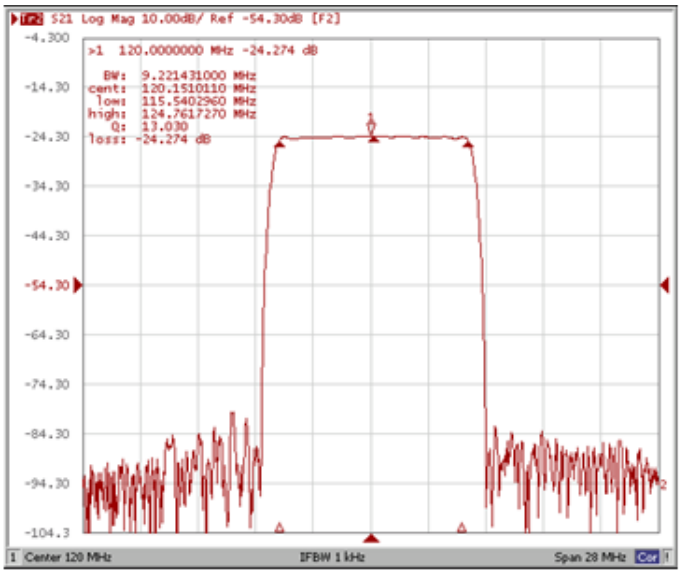


Test Fixture & Values	
Input	L1= 56 nH, C1= 43 pF
Output	L2= 56 nH, C2= 43 pF
Source/Load Impedance	50 Ω

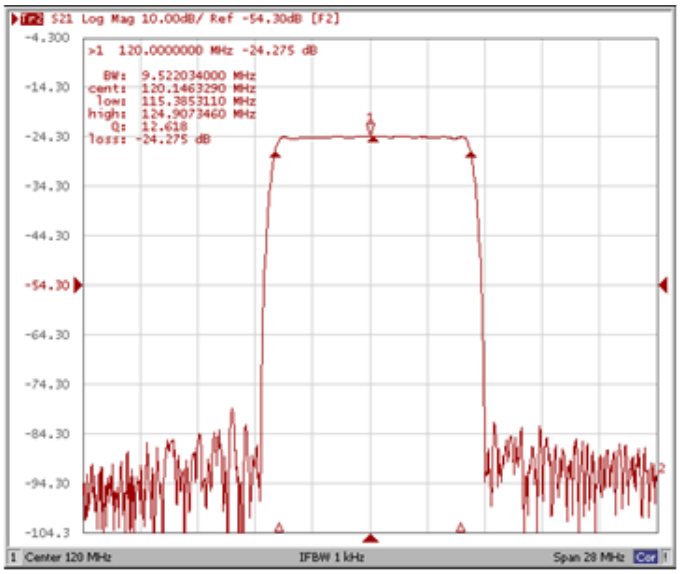
Frequency Characteristics

Frequency Response

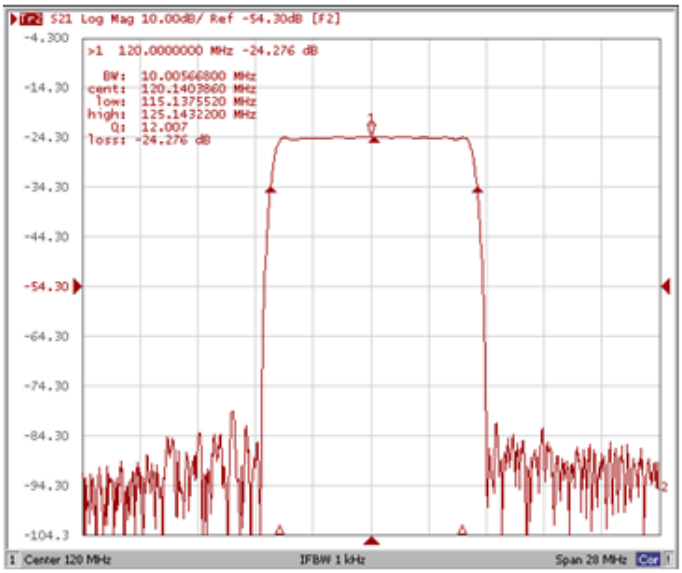
Bandwidth at –1.0 dB



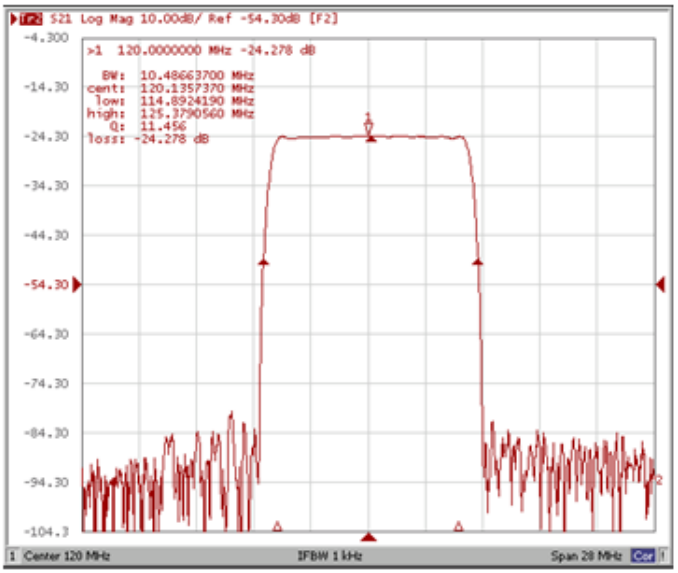
Bandwidth at –3.0 dB



Bandwidth at –10.0 dB

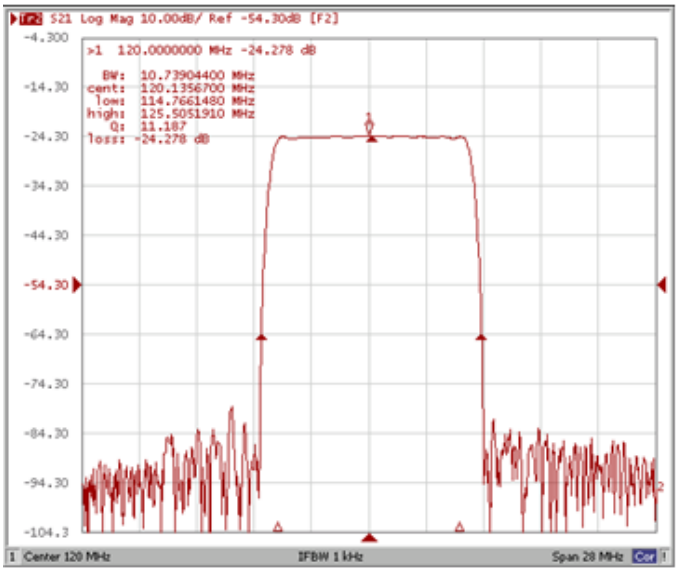


Bandwidth at –25.0 dB

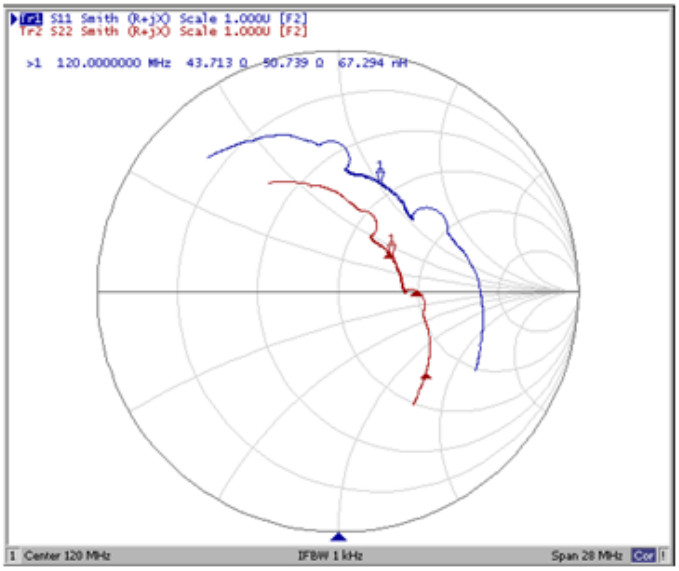


Frequency Response

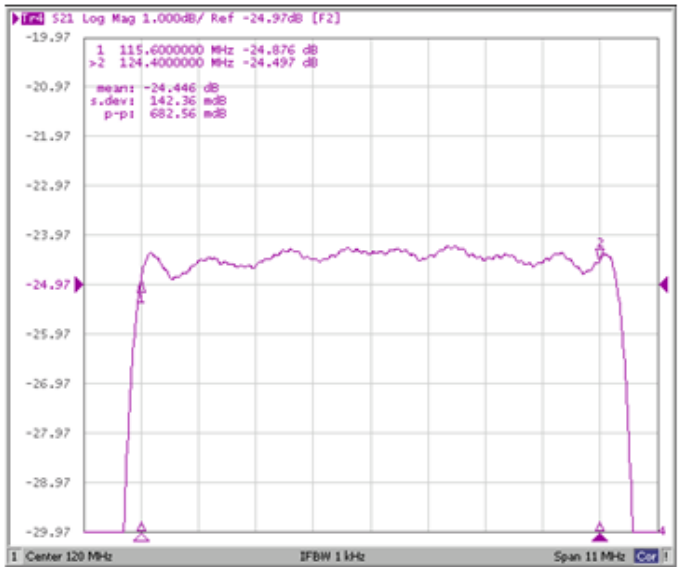
Bandwidth at –40.0 dB



Smith Chart



Ripple



Group Delay Variation