



Total Solution Provider in Saw Device

SA11505BD

115MHz IF SAW Filter

5.44MHz Bandwidth

Revision 0: 10. Oct. 2008



- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
-

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□ Electrical Characteristics

Maximum Ratings

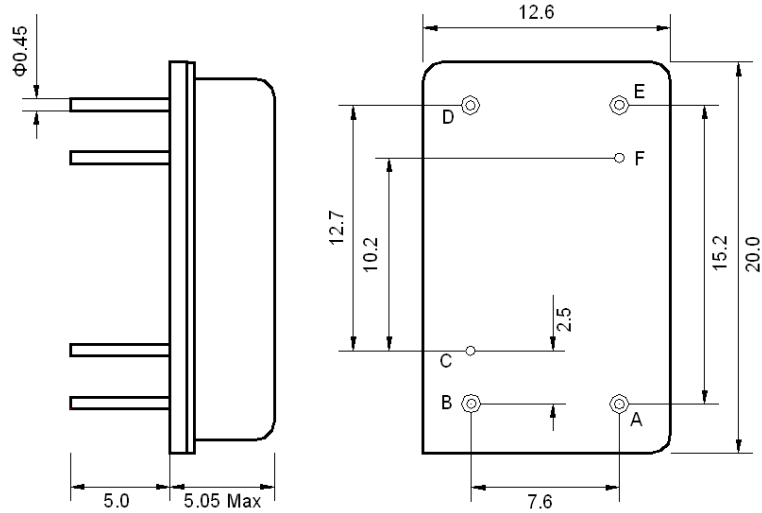
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
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	114.85	115.0	115.15
Insertion Loss at Fo	dB	-	21.6	23.5
Amplitude Ripple Variation	dB _{p-p}	-	0.45	0.95
Group Delay Variation	nsec	-	67	100
Absolute Delay at Fo	μsec	-	2.72	-
Temperature Coefficient	ppm/°C	-	-20	-
Bandwidth at -1.0 dB	MHz	5.20	5.44	-
Bandwidth at -3.0 dB	MHz	-	5.79	-
Bandwidth at -40.0 dB	MHz	-	7.34	7.50
Ultimate Rejection	dB	50	55	-

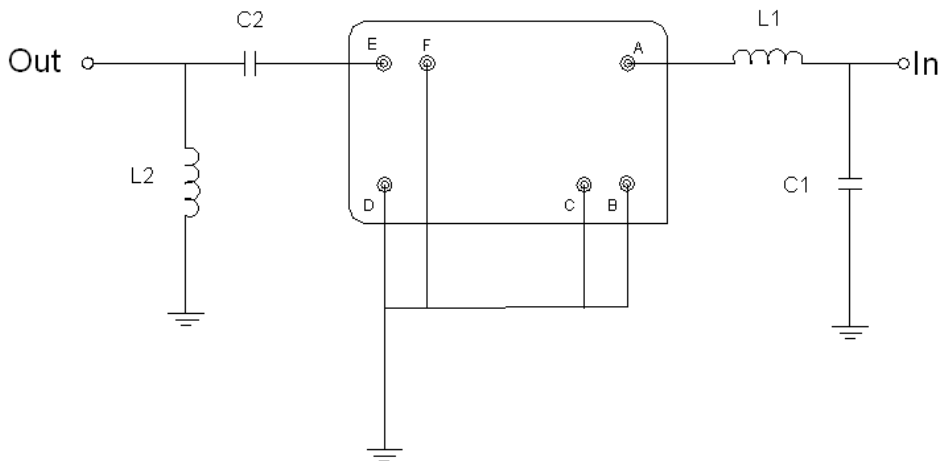
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Package Dimensions



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

Testing Environment



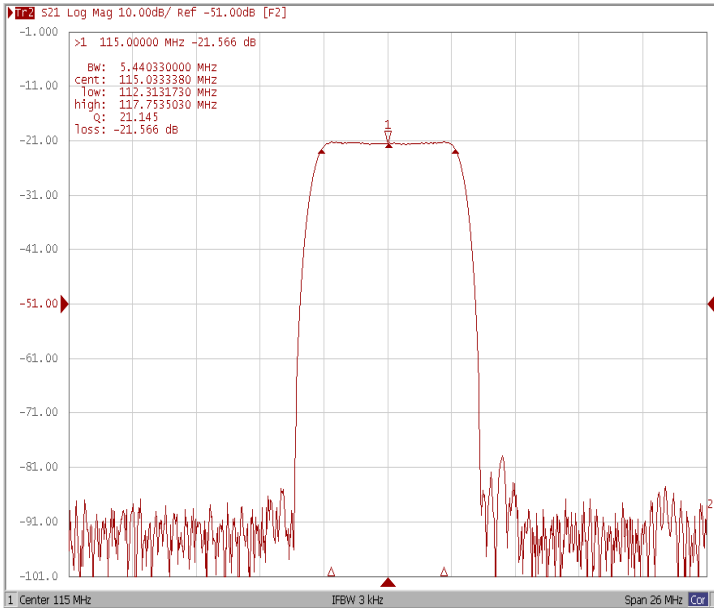
Test Fixture & Values	
Input	L1= 68 Nh, C1= 36 pF
Output	L2= 47 nH, C2= 180 pF
Source/Load Impedance	50 Ω



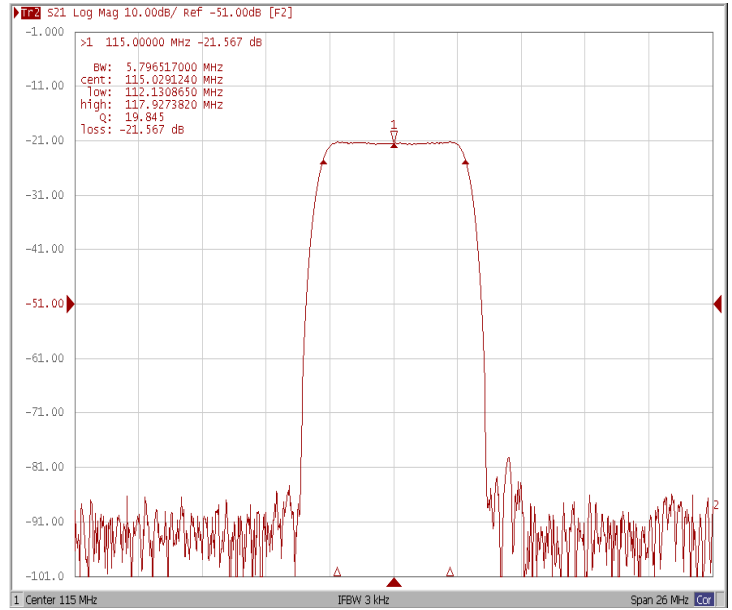
□ Frequency Characteristics

Frequency Response

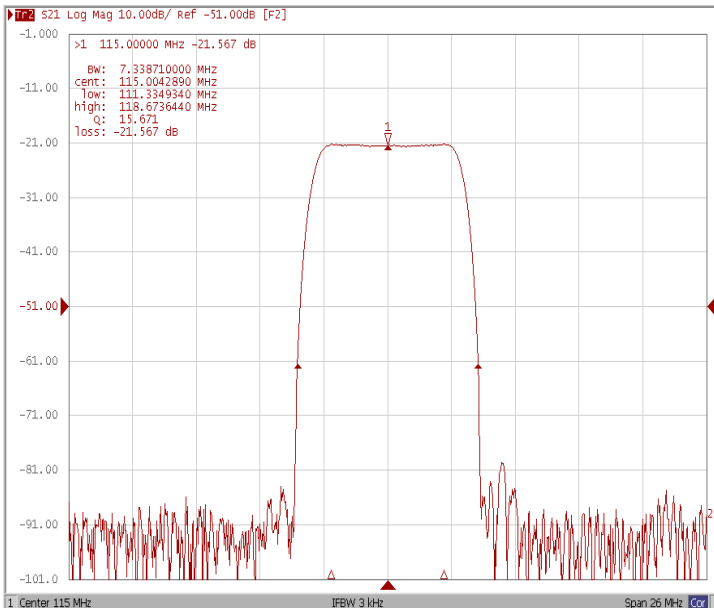
Bandwidth at -1.0 dB



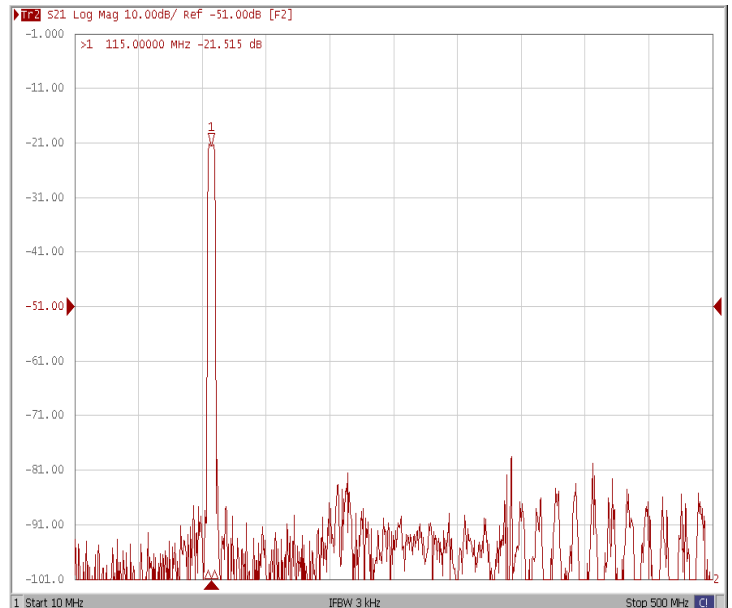
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



WIDE

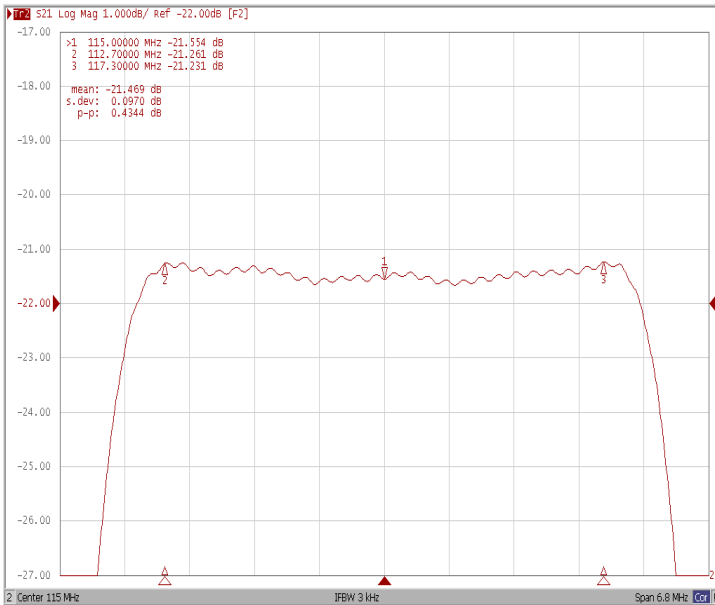




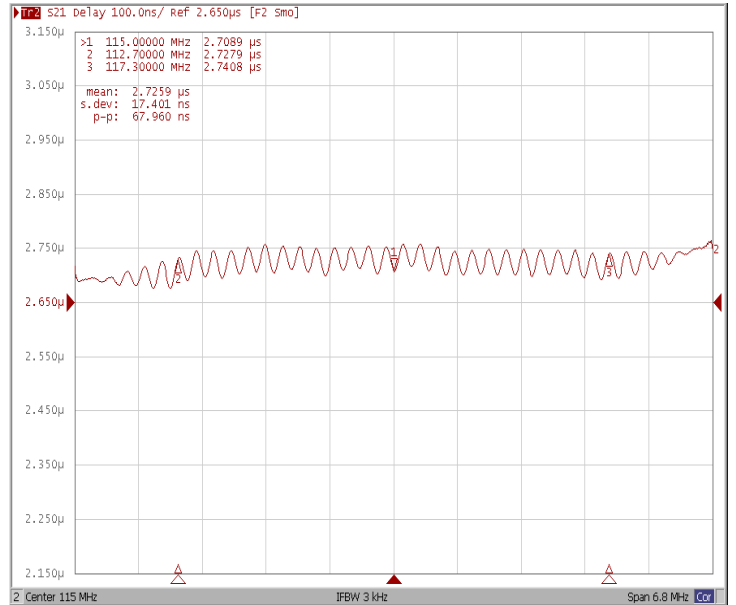
Frequency Characteristics

Frequency Response

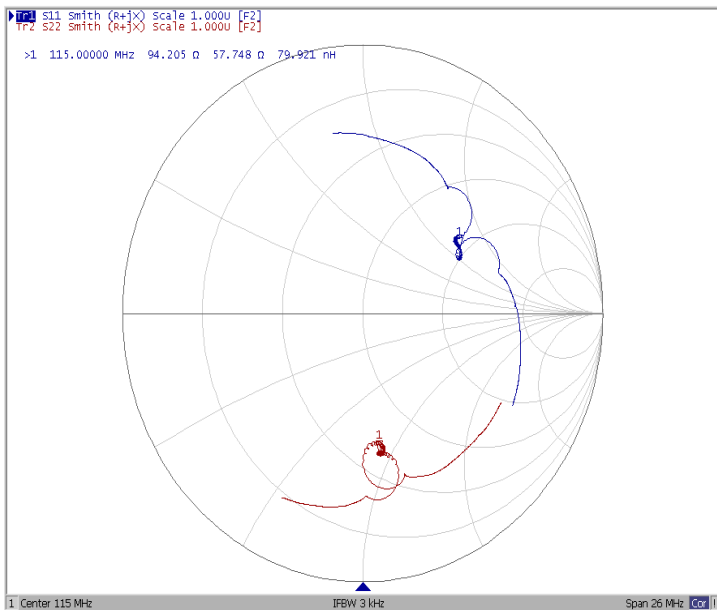
Ripple Variation $Fo \pm 2.3\text{MHz}$



Group Delay Variation $Fo \pm 2.3\text{MHz}$



Smith Chart



VSWR

