



Total Solution Provider in Saw Device

SL07019AV

70.0 MHz IF SAW Filter
18.44 MHz Bandwidth
Revision 0: 24. December. 2007



- 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	-	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	V			
Length x Width	mm ²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

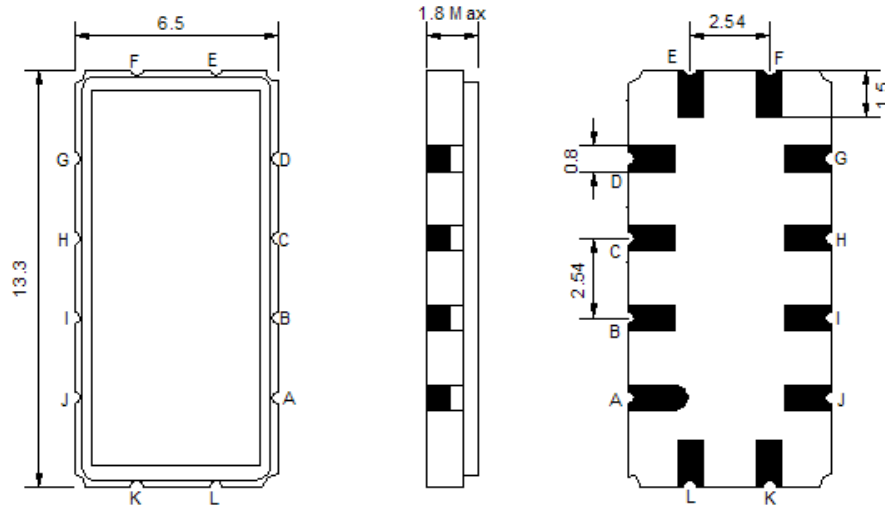
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	12.8	15.0
Group Delay Variation (Fo±9.22MHz)	nsec	-	50	100
Absolute Delay at Fo	usec	-	1.16	-
Temperature Coefficient	ppm/°C	-	-86	-
Passband Ripple (Fo±9.22MHz)	dB	-	0.50	1.00
Bandwidth at -1dB	MHz	19.00	19.30	-
Bandwidth at -3dB	MHz	-	19.95	-
Bandwidth at -40dB	MHz	-	22.95	23.20
Relative Attenuation				
Fo +10.8MHz	dB	15	18	-
Fo -10.8MHz	dB	15	16	-
Ultimate Rejection	dB	40	45	-

Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

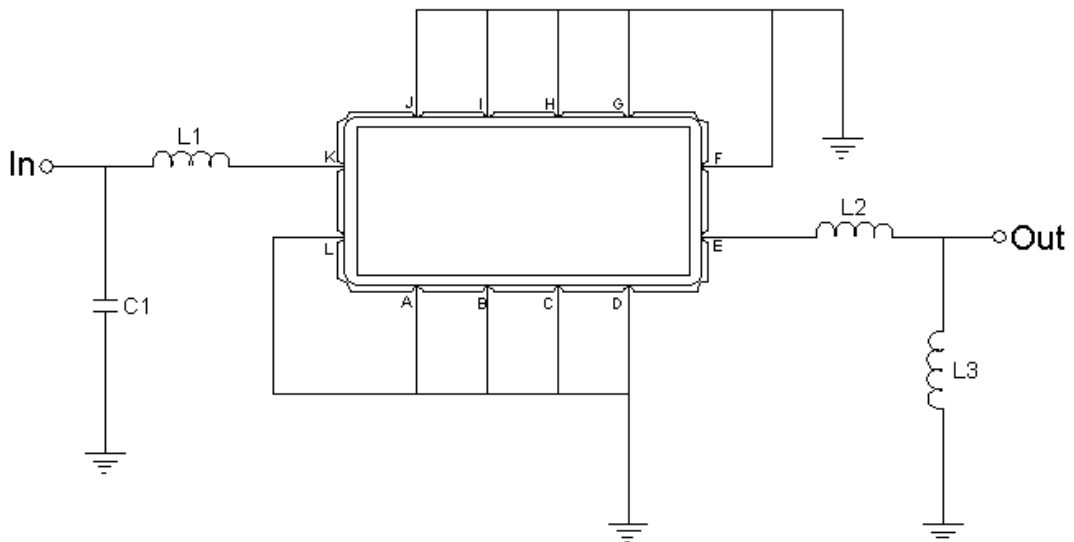
Those impedances could be modified with different impedance values and/or structures, if necessary.

□ Package Dimensions



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

□ Testing Environment

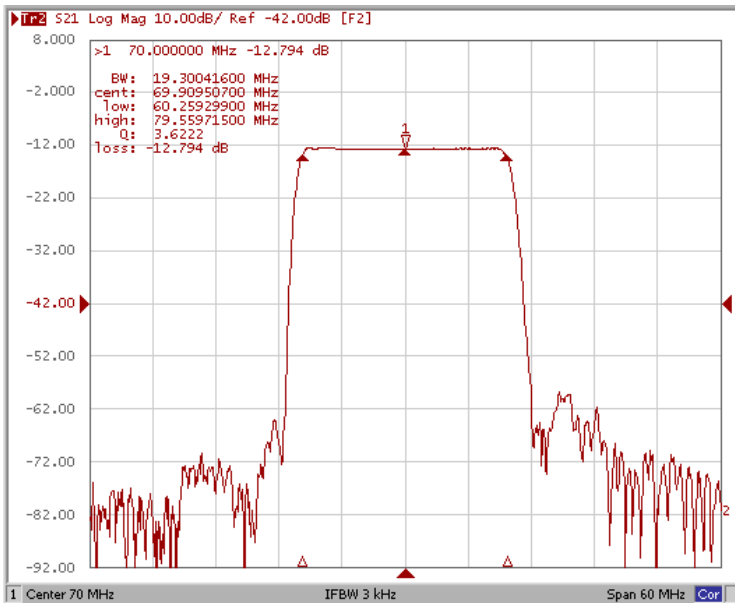


Test Fixture & Values	
Input	L1=100 nH, C1=68 pF
Output	L2=4.7 nH, L3=82 nH
Source/Load Impedance	50 Ω

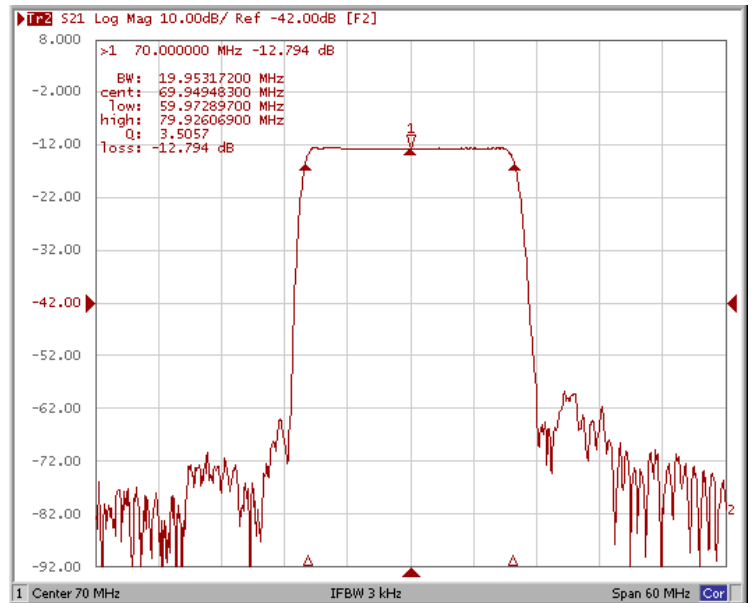
□ Frequency Characteristics

Frequency Response

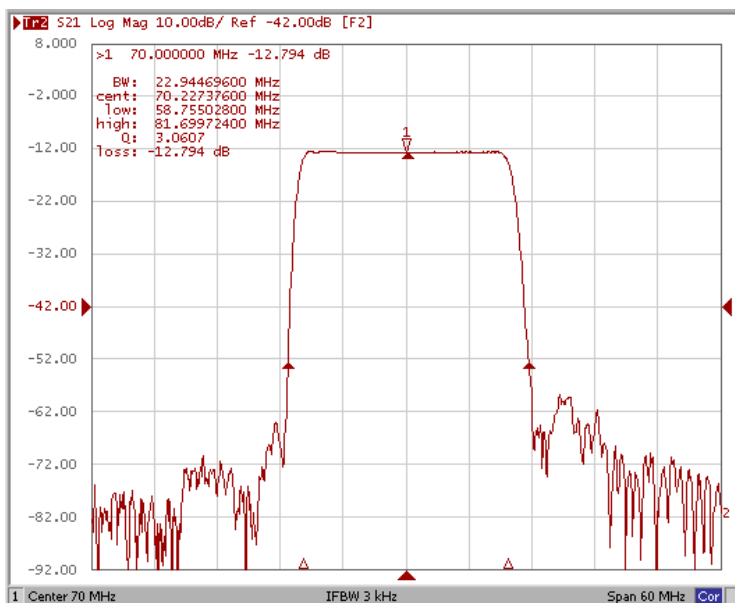
Bandwidth at -1.0 dB



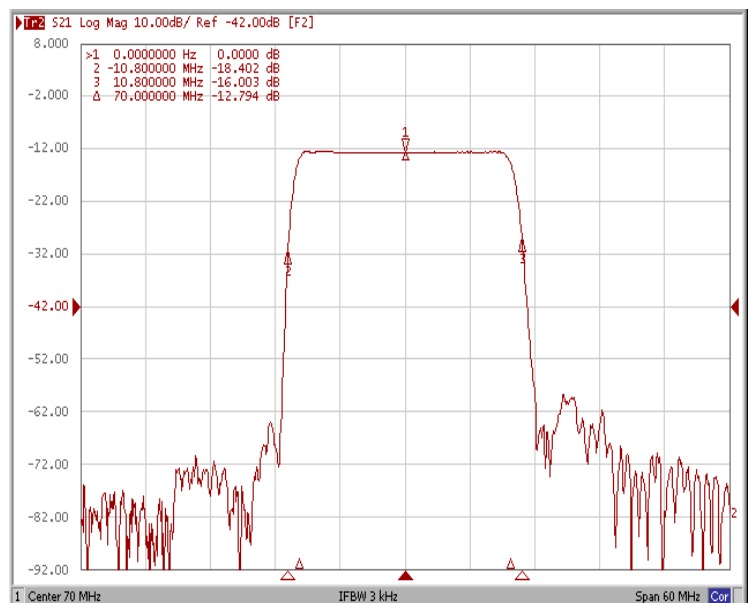
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



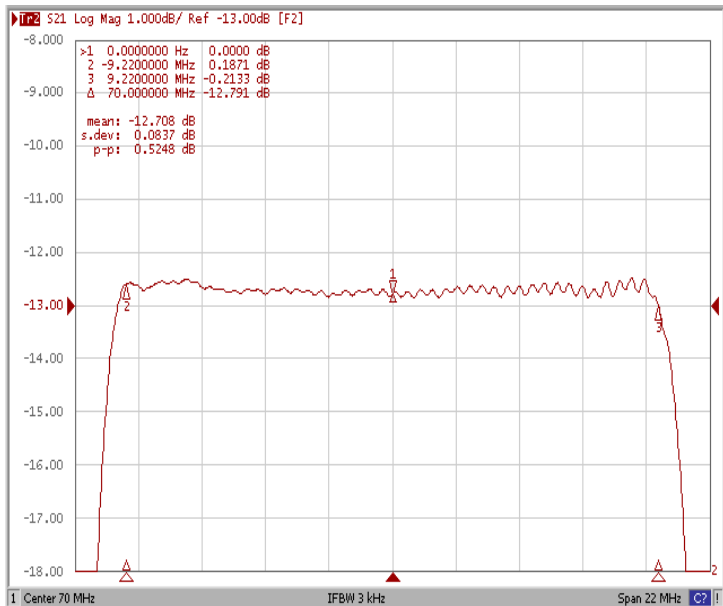
Relative Attenuation Fo +10.8MHz



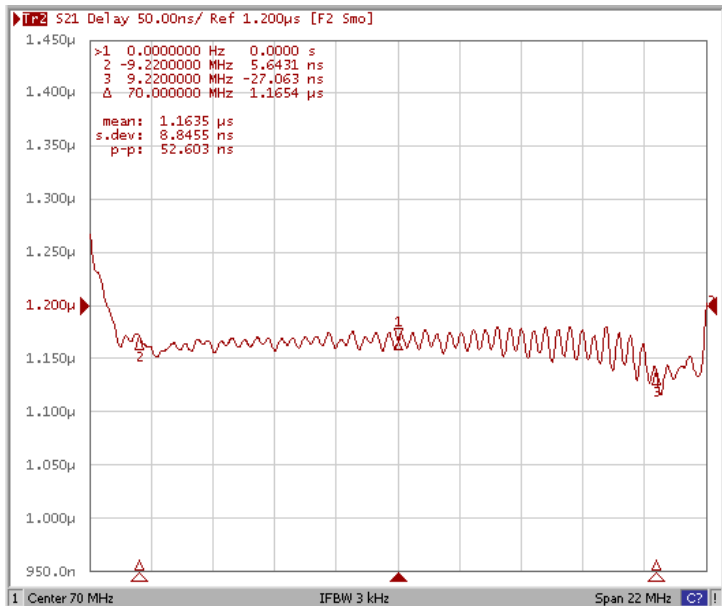
Frequency Characteristics

Frequency Response

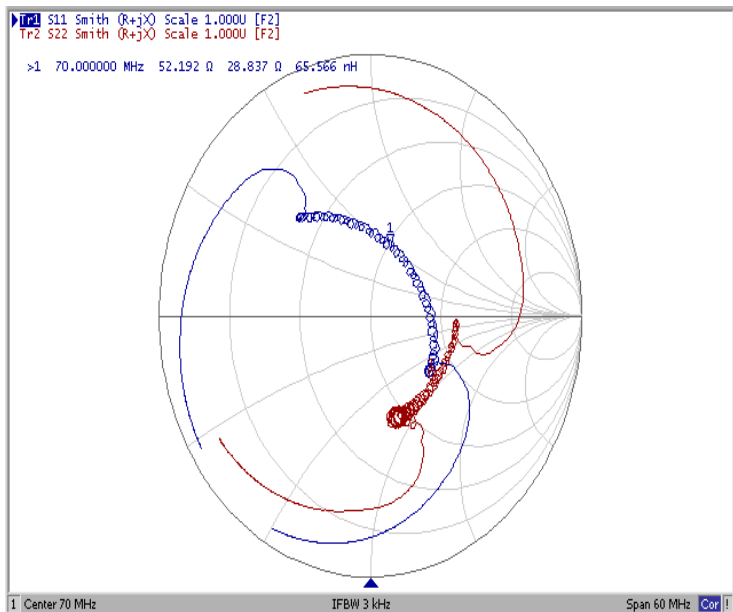
Ripple Variation $F_o \pm 9.22\text{MHz}$



Group Delay Variation $F_o \pm 9.22\text{MHz}$



Smith Chart



Wide Band

