



*Total Solution Provider in Saw Device*

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# SL07042AV

70.0MHz IF SAW Filter  
42.2MHz Bandwidth  
Revision 0 : 15. Dec. 2008



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

### Maximum Ratings

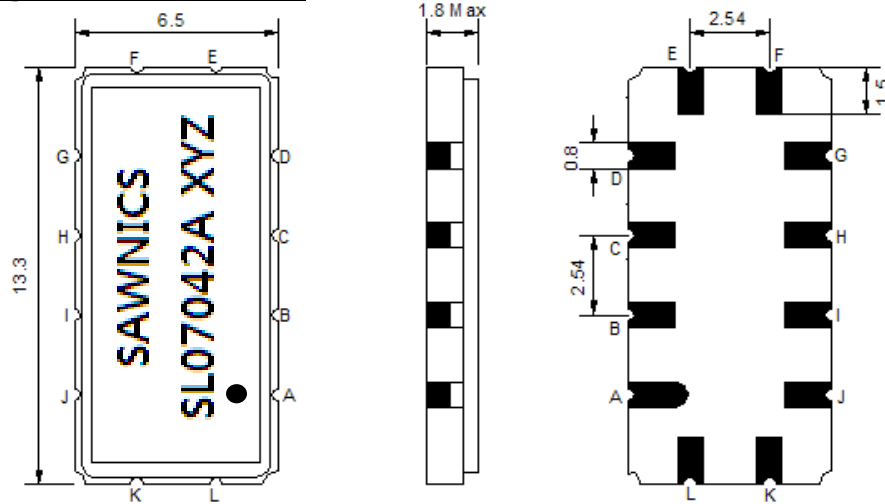
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	V			
Length x Width	mm <sup>2</sup>	-	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	-	21.9	23.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±20.0 MHz	dB <sub>p-p</sub>	-	0.66	1.00
Group Delay Variation within fo ±20.0 MHz	nsec	-	10	30
Absolute Delay at Fo	µsec	-	0.95	-
Bandwidth at -1.0 dB	MHz	40.00	42.20	-
Bandwidth at -3.0 dB	MHz	43.00	43.85	-
Bandwidth at -40.0 dB	MHz	-	50.00	50.80
<b>Relative Attenuation</b>				
0MHz ~ 45.35MHz	dB	40	45	-
97.05MHz ~ 120MHz	dB	30	35	-

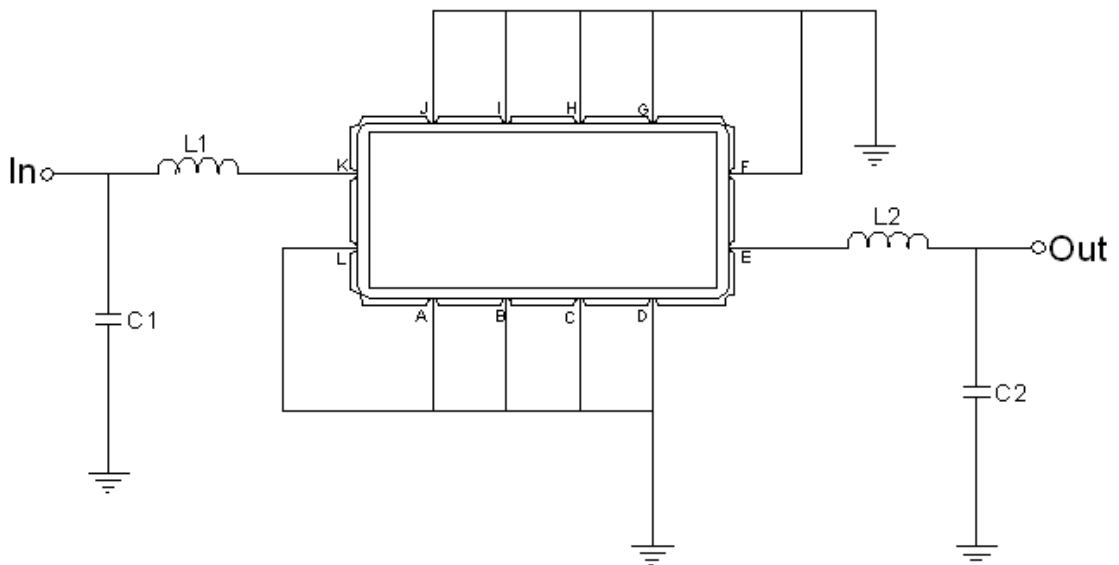
**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).  
Those impedances could be modified with different impedance values and/or structures, if necessary.

**Package Dimensions**



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

**Testing Environment**



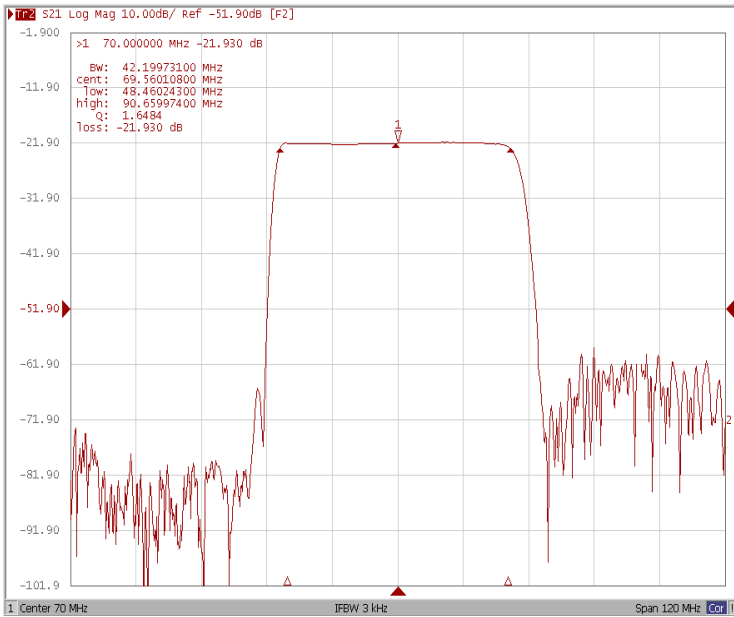
Test Fixture & Values	
Input	L1=150nH , C1=22pF
Output	L2=100nH , C2=24pF
Source/Load Impedance	50 Ω



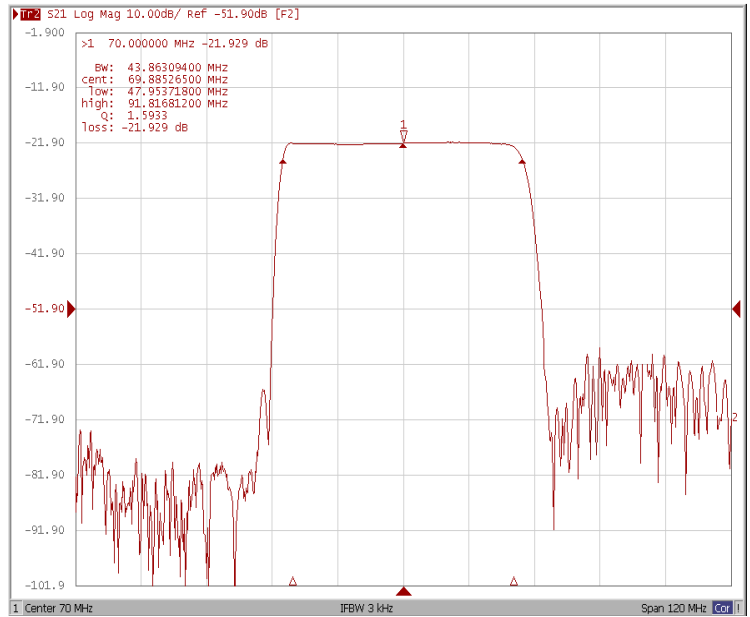
### Frequency Characteristics

#### Frequency Response

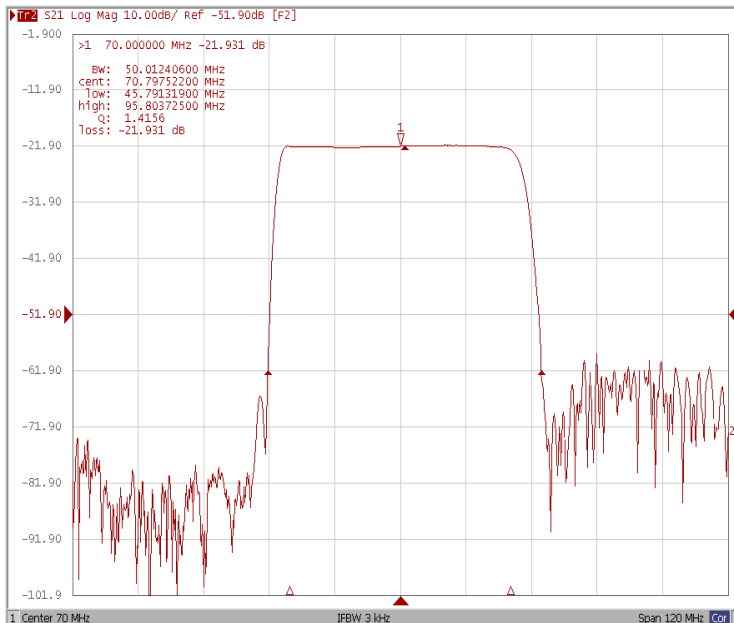
Bandwidth at -1.0 dB



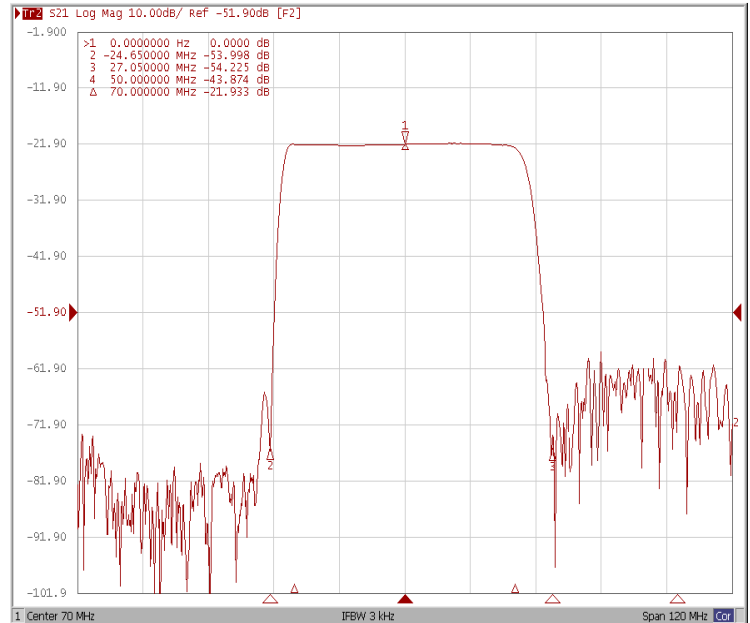
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Relative Attenuation

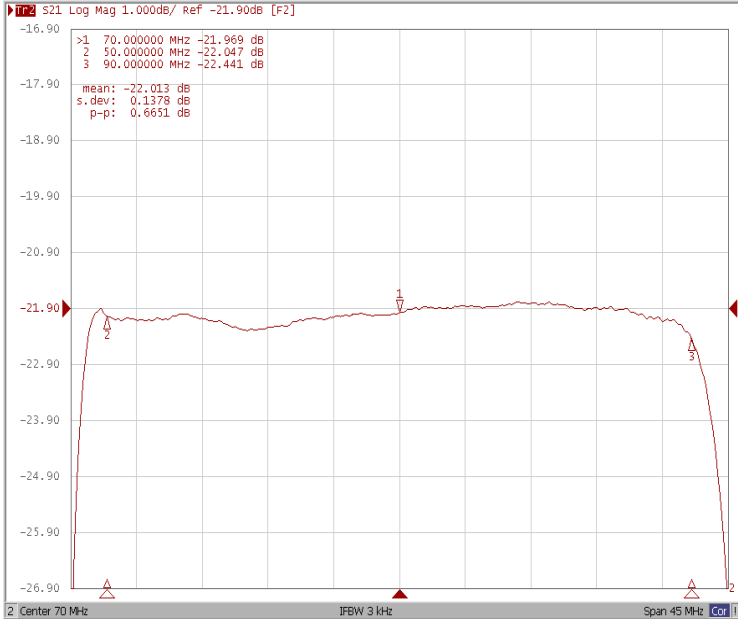




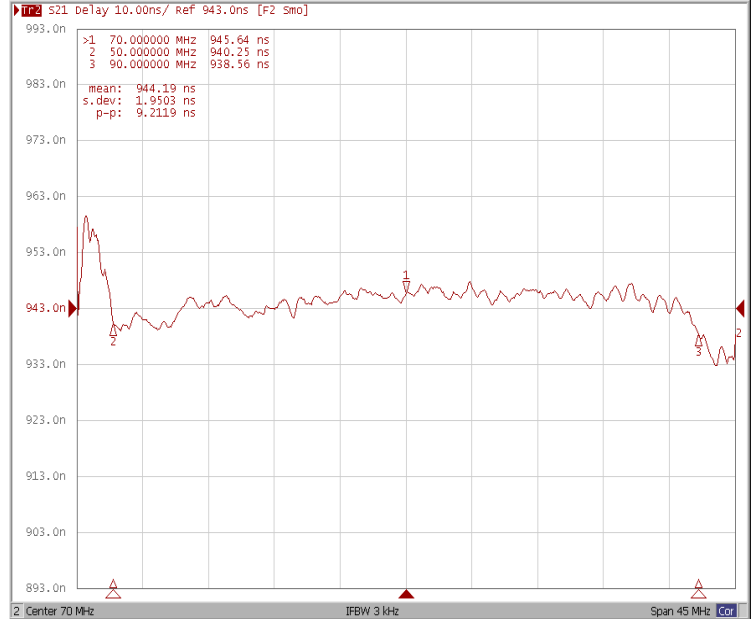
### Frequency Characteristics

#### Frequency Response

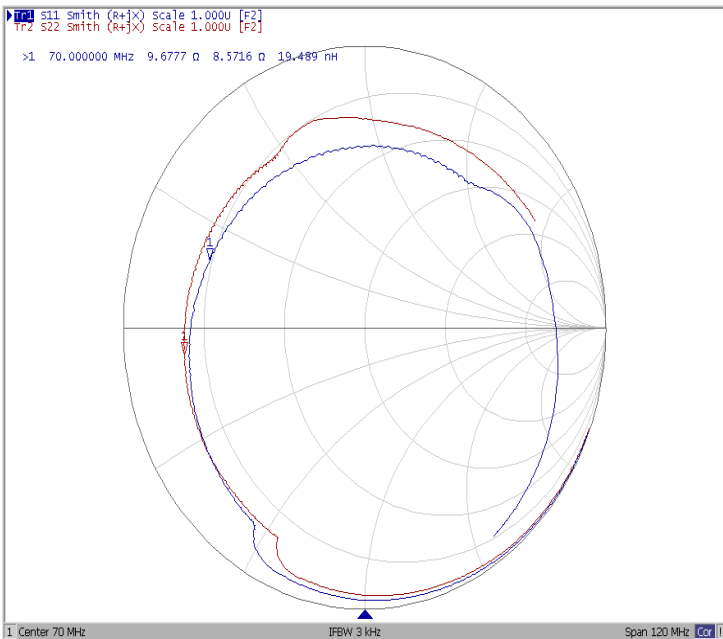
Ripple Variation Fo±20.0MHz



Group Delay Variation Fo±20.0MHz



Smith Chart



VSWR

