



Total Solution Provider in Saw Device

SL07018AV

70.00 MHz IF SAW Filter
18.10 MHz Bandwidth
Revision 0 : 22. July. 2009



- 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) ⁽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

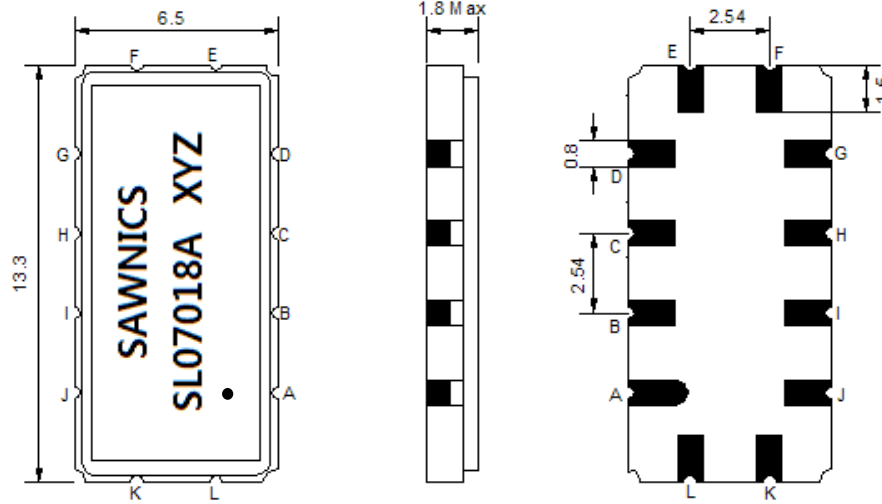
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.00	-
Insertion Loss at Fo	dB	-	13.5	15.5
Group Delay Variation (Fo±7.50MHz)	ns	-	18	35
Absolute Delay Time at Fo	us	-	0.99	-
Amplitude Ripple (Fo±7.50MHz)	dB	-	0.30	0.90
Bandwidth at -1dB	MHz	17.80	18.10	-
Bandwidth at -10dB	MHz	-	20.10	-
Bandwidth at -20dB	MHz	-	21.10	21.40
Bandwidth at -40dB	MHz	-	22.35	-
Ultimate Rejection	dB	40	45	-
Temperature Coefficient	ppm/°C	-	-86	-

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.

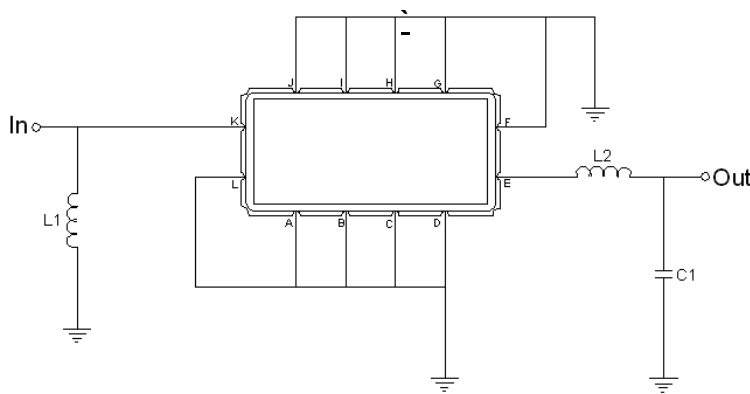
Package Dimensions



- ① SAWNICS: Brand
- ② SL07018A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

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

Testing Environment



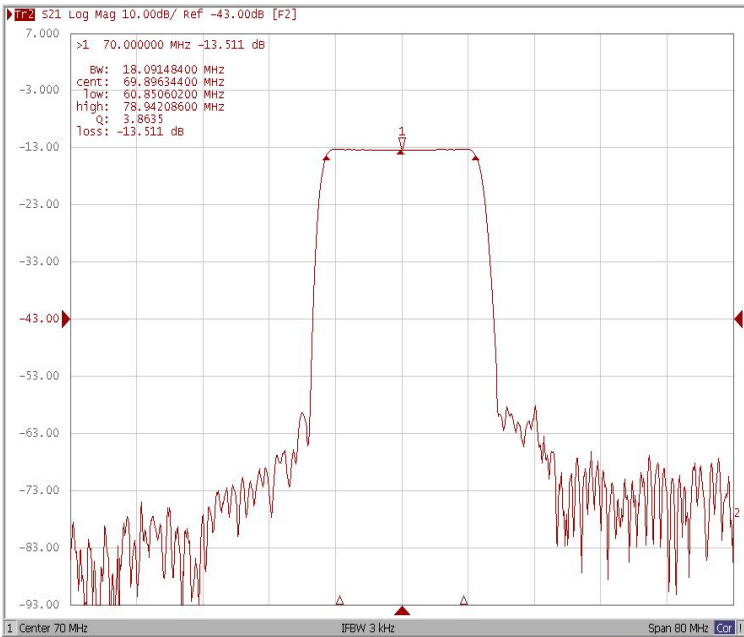
Test Fixture & Values	
Input	L1 = 100 nH
Output	L2 = 100 nH , C2 = 20 pF
Source/Load Impedance	50 Ω



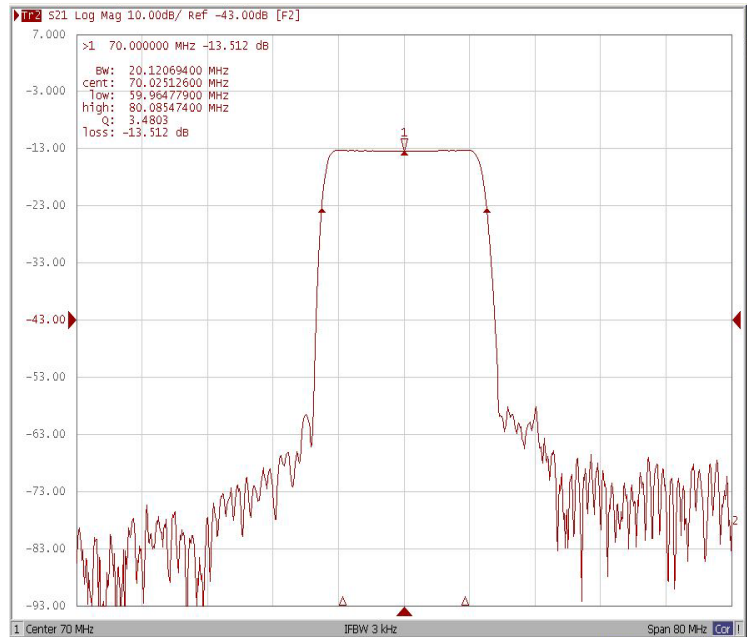
Frequency Characteristics

Frequency Response

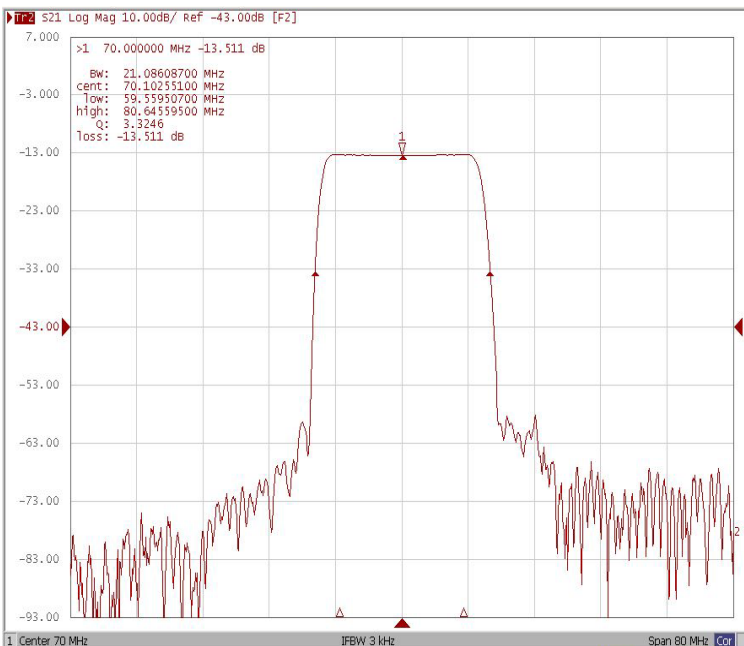
Bandwidth at -1.0 dB



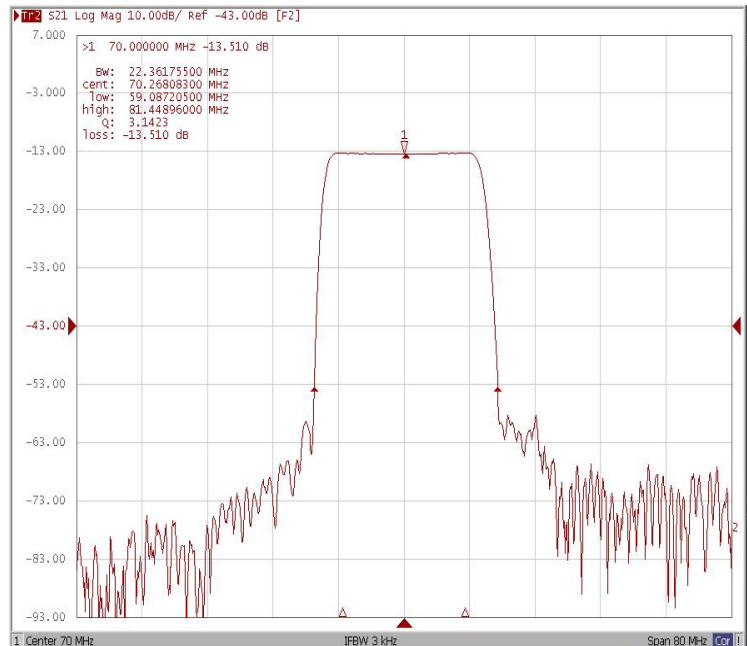
Bandwidth at -10.0 dB



Bandwidth at -20.0 dB



Bandwidth at -40.0 dB

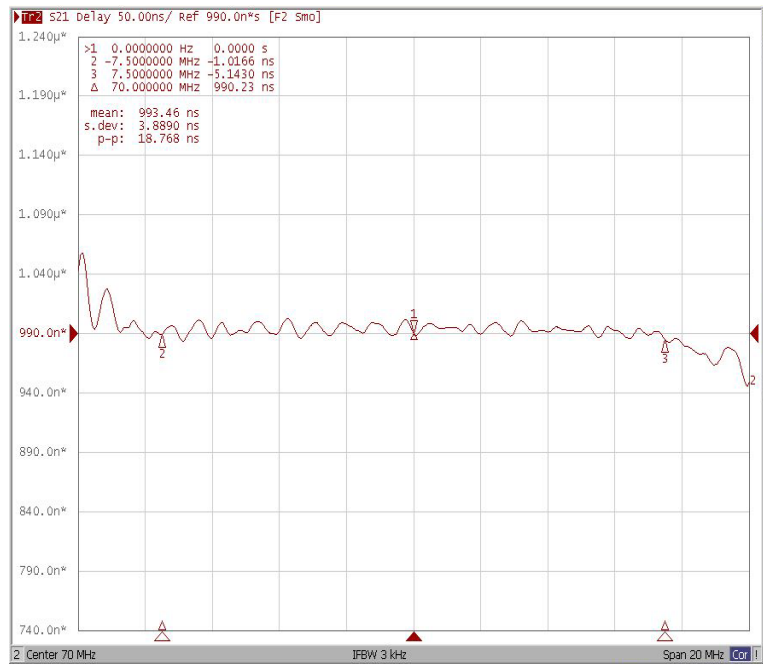
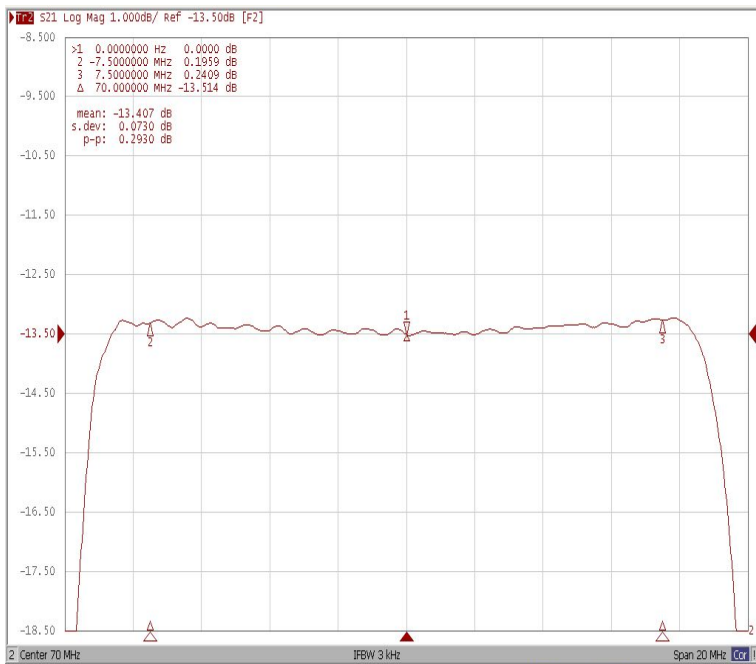


Frequency Characteristics

Frequency Response

Ripple Variation $F_o \pm 7.50\text{MHz}$

Group Delay Variation $F_o \pm 7.50\text{MHz}$



Smith Chart

SWR

