SL07020AV

70.0MHz IF SAW Filter
19.5 MHz Bandwidth
Revision 0: 16. January. 2008

RoHS compliance
Pb free

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

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❒ Electrical Characteristics

Maximum Ratings

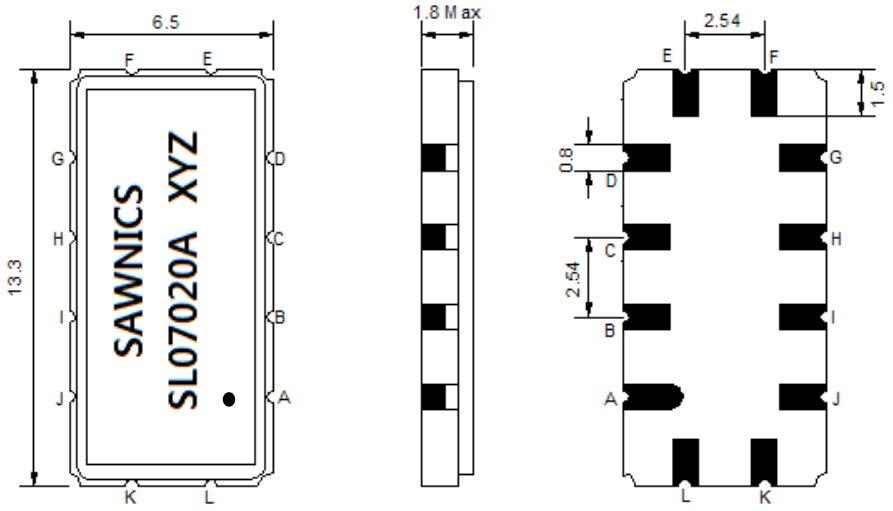
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	V			
Length x Width	mm²	-	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	-	13.9	15.0
Amplitude Ripple Variation at Fo ± 9.75 MHz	dB_{p-p}	-	0.35	0.6
Group Delay Variation at Fo ± 9.75 MHz	nsec	-	28	45
Absolute Delay at Fo	µsec	-	0.68	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at –1.0 dB	MHz	20.8	21.3	-
Bandwidth at –25.0 dB	MHz	-	27.7	28.5
Bandwidth at –40.0 dB	MHz	-	29.7	-
Relative Attenuation				
Lower Sidelobe	dB	40	45	-
Upper Sidelobe	dB	38	42	-

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.

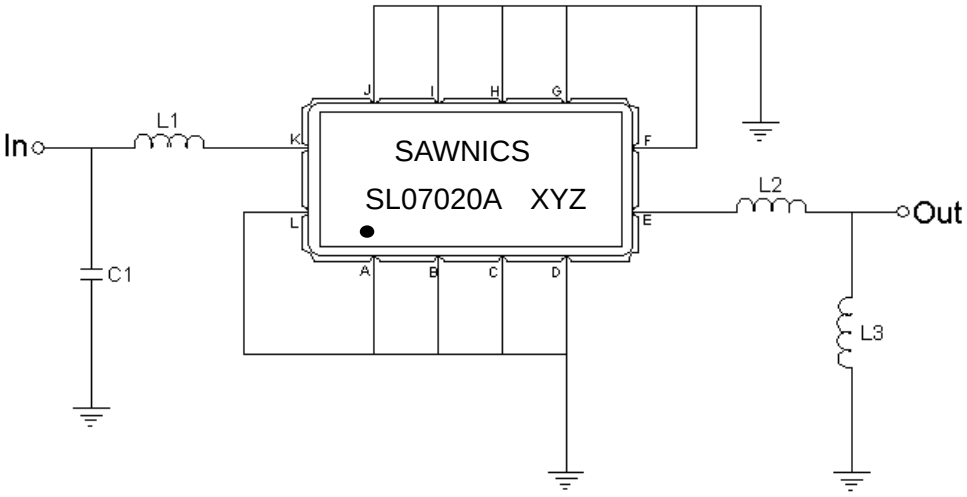
❒ Package Dimensions



① SAWNICS: Brand
② SL07020A: 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

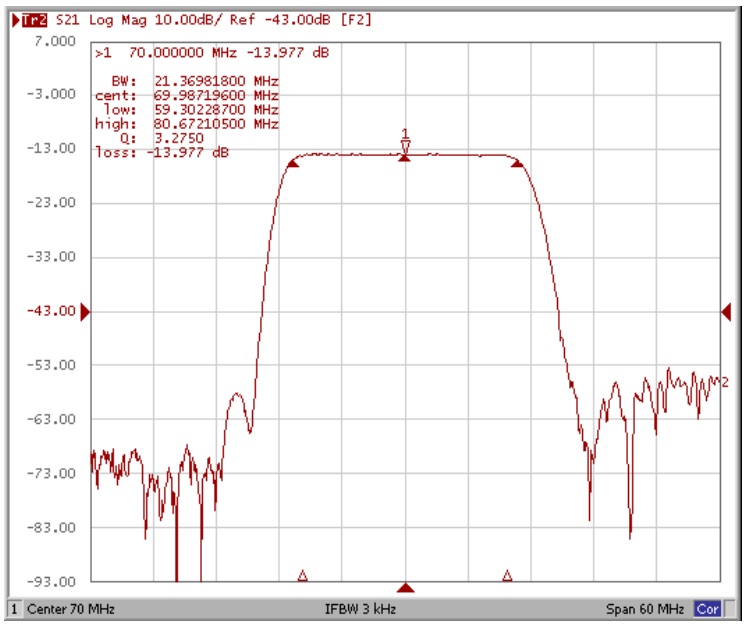


Test Fixture & Values	
Input	L1=150 nH, C1=20pF Q>35
Output	L2=100 nH, L3=270nH Q>35
Source/Load Impedance	50 Ω

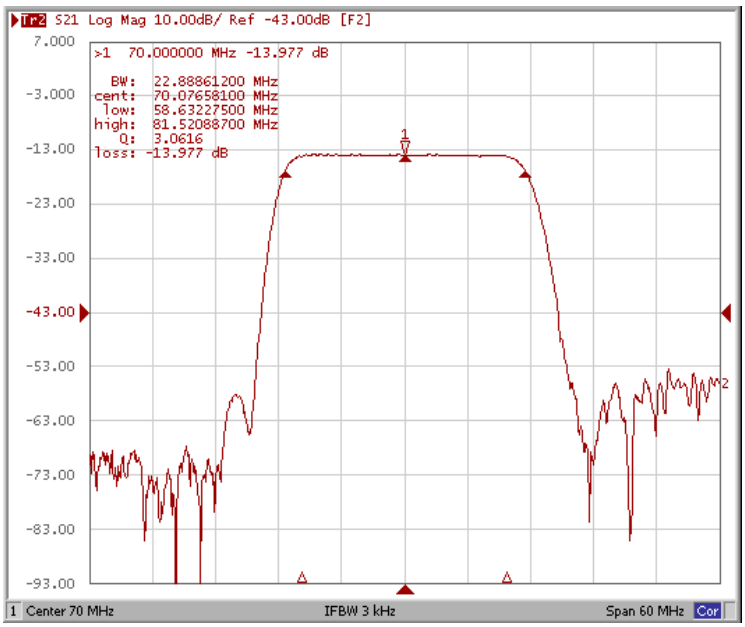
❒ Frequency Characteristics

Frequency Response

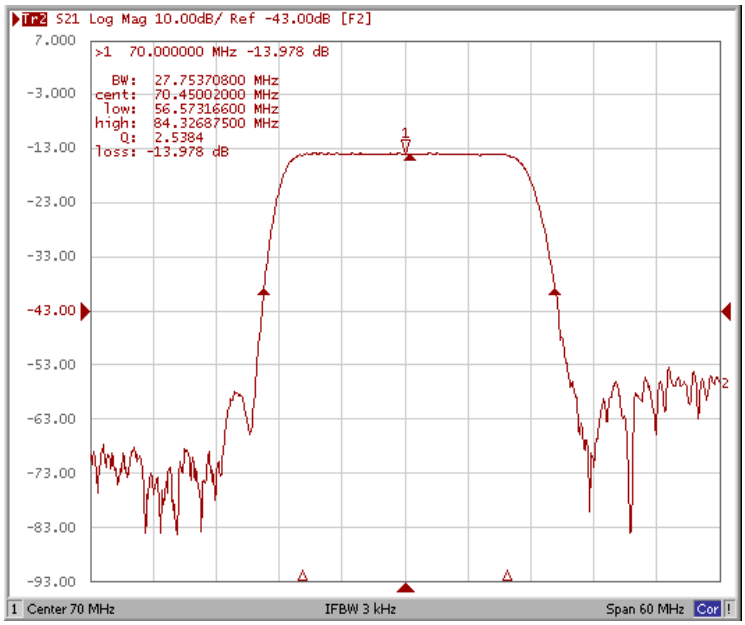
Bandwidth at –1.0 dB



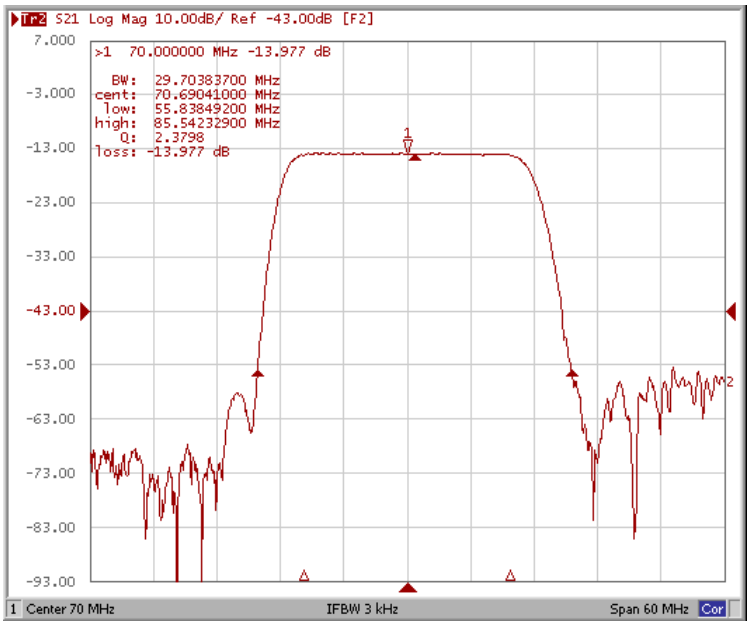
Bandwidth at –3.0 dB



Bandwidth at –25.0 dB



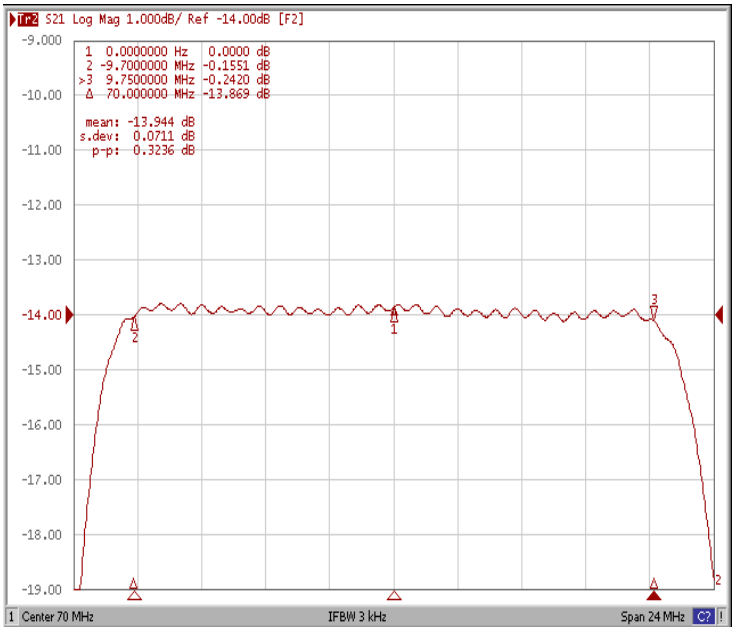
Bandwidth at –40.0 dB



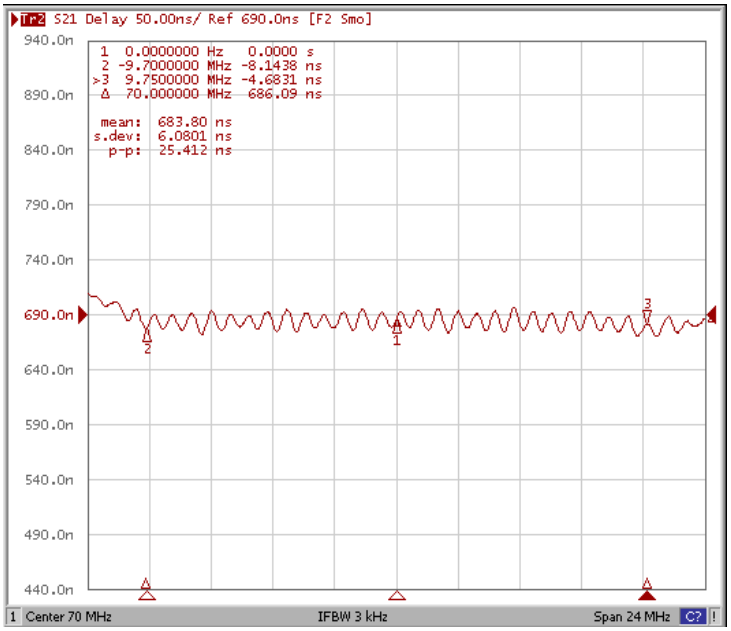
❒ Frequency Characteristics

Frequency Response

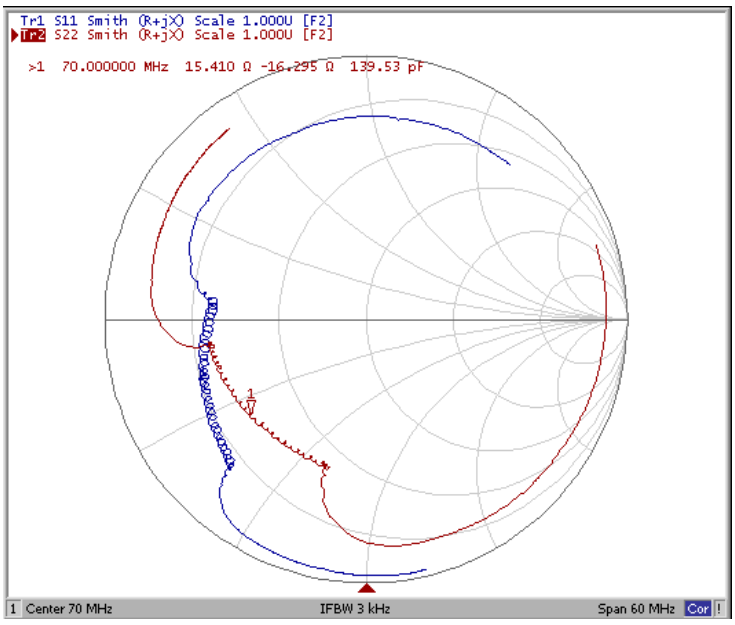
Ripple Variation Fo±9.75MHz



Group Delay Variation Fo±9.75MHz



Smith Chart



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