



Total Solution Provider in Saw Device

SA07019BV

70.1MHz IF SAW Filter
19.51MHz Bandwidth
Revision 0 : 10. March. 2008



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

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□ Electrical Characteristics

Maximum Ratings

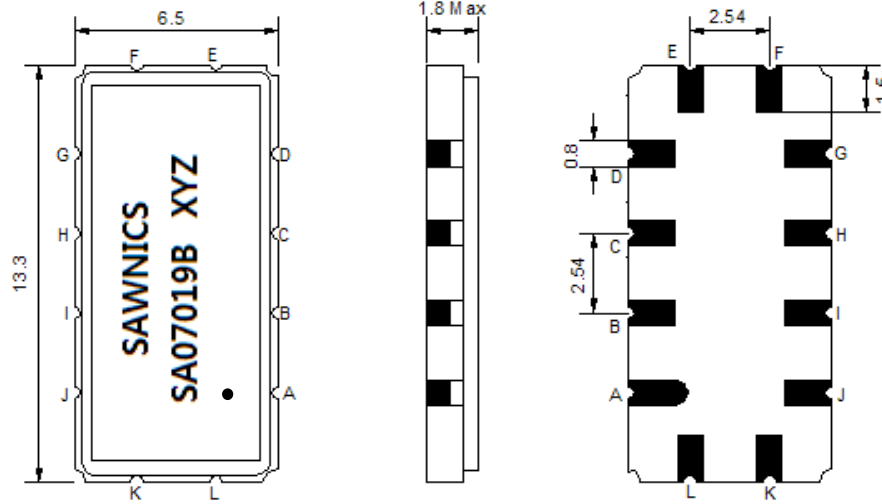
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	V			
Length 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	70.05	70.1	70.20
Insertion Loss at Fo	dB	-	27.3	29.0
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple within fo ±9.65 MHz	dB _{p-p}	-	0.85	1.3
Group Delay Variation within fo ±9.65 MHz	nsec	-	40	80
Absolute Delay at Fo	µsec	-	1.68	-
Bandwidth at -1.0 dB	MHz	19.40	19.51	-
Bandwidth at -3.0 dB	MHz	-	19.98	-
Bandwidth at -40.0 dB	MHz	-	21.88	22.0
Relative Attenuation:				
Fo ±14.42 MHz	dB	-	50	
Lower Sidelobe	dB	-	45	-
Upper Sidelobe	dB	-	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.

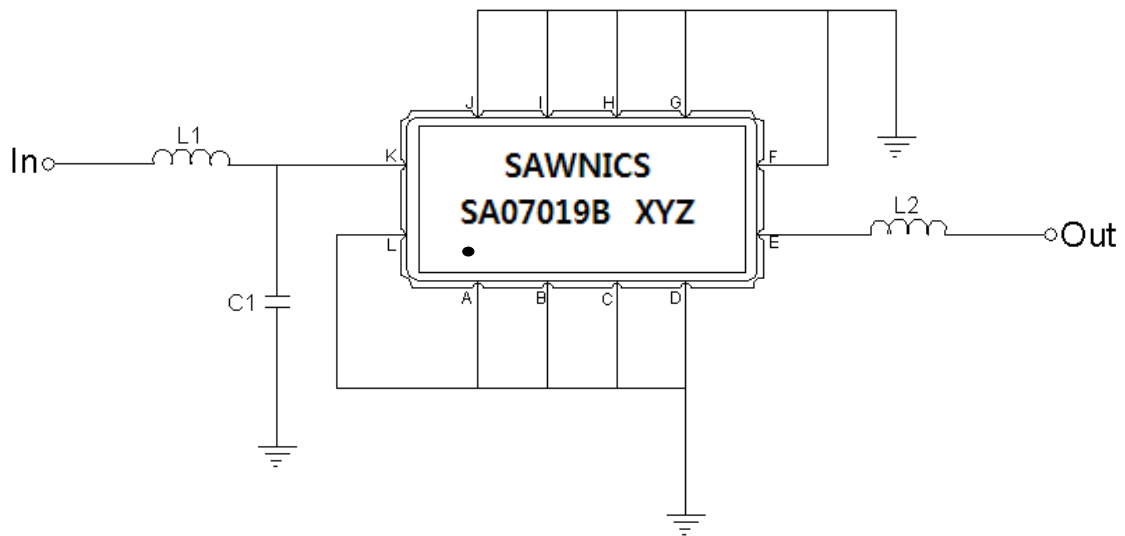
Package Dimensions



- ① SAWNICS: Brand
- ② SA07019B: 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



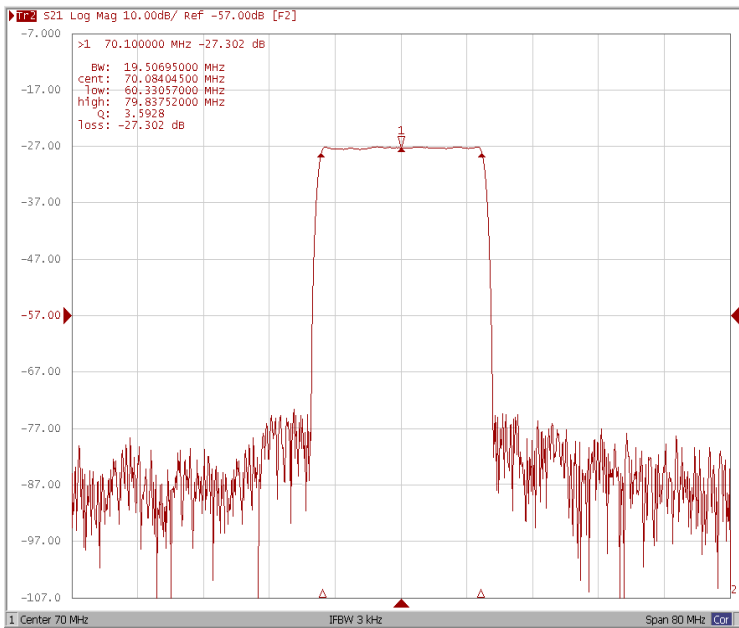
Test Fixture & Values	
Input	L1=180nH, C1=12pF
Output	L2=150nH,
Source/Load Impedance	50 Ω



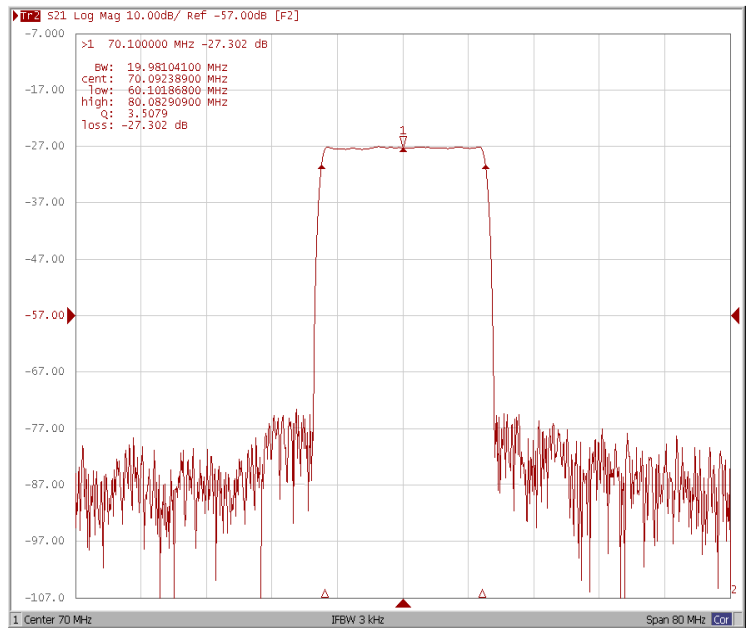
Frequency Characteristics

Frequency Response

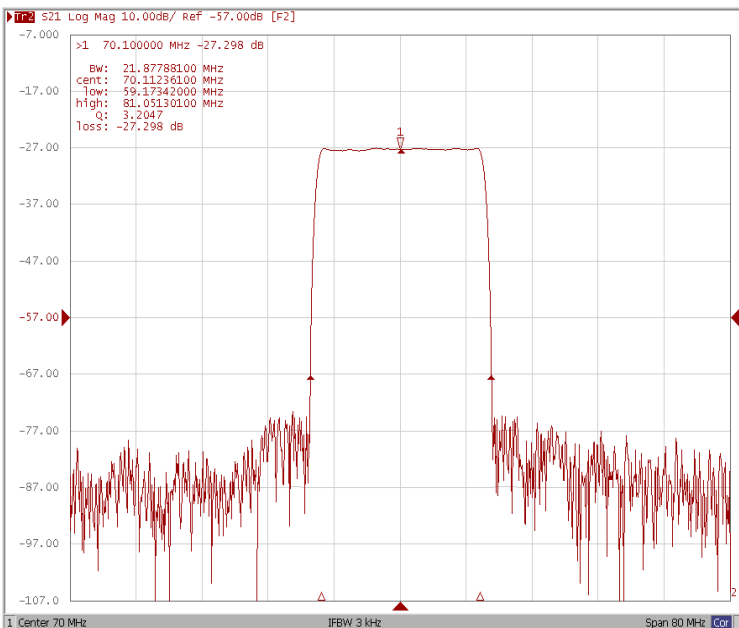
Bandwidth at -1.0 dB



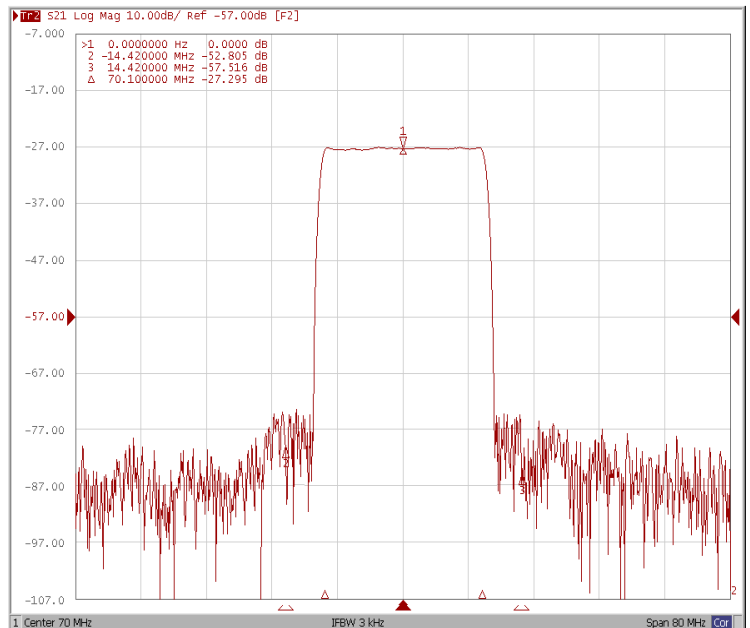
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Attenuation Fo±14.42MHz

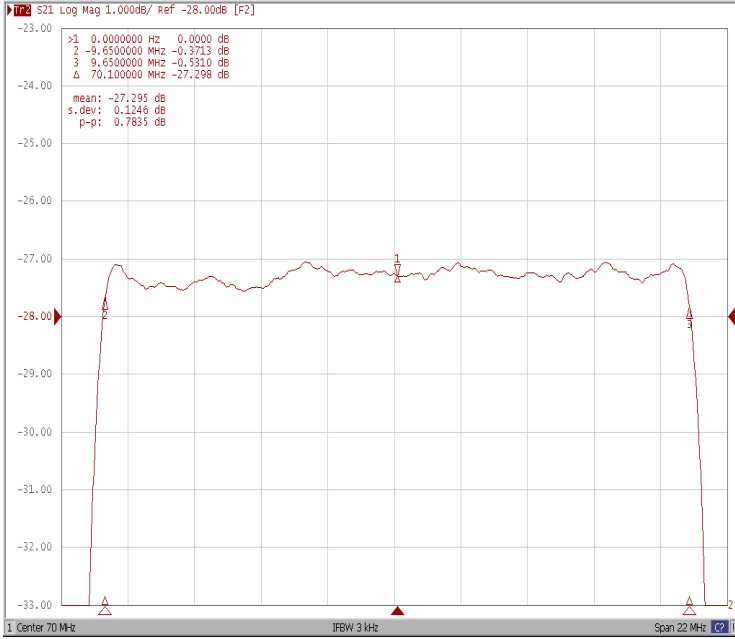




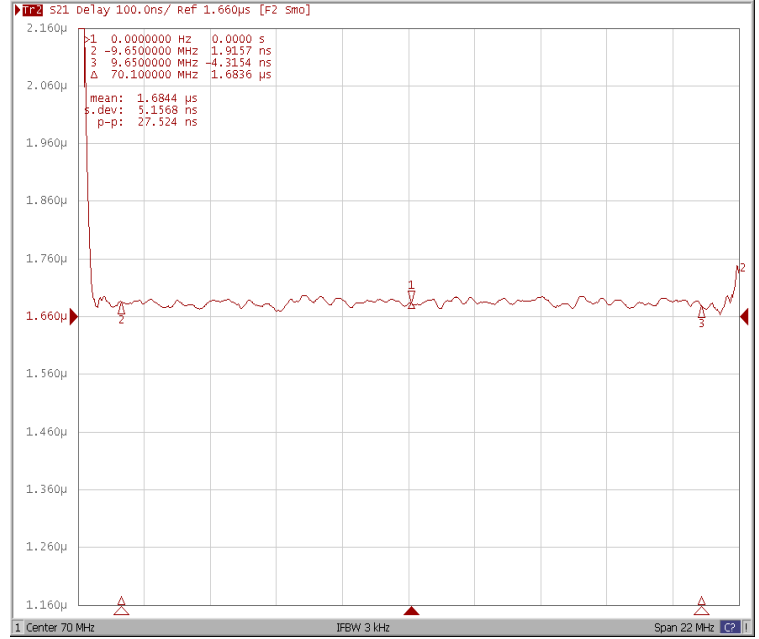
Frequency Characteristics

Frequency Response

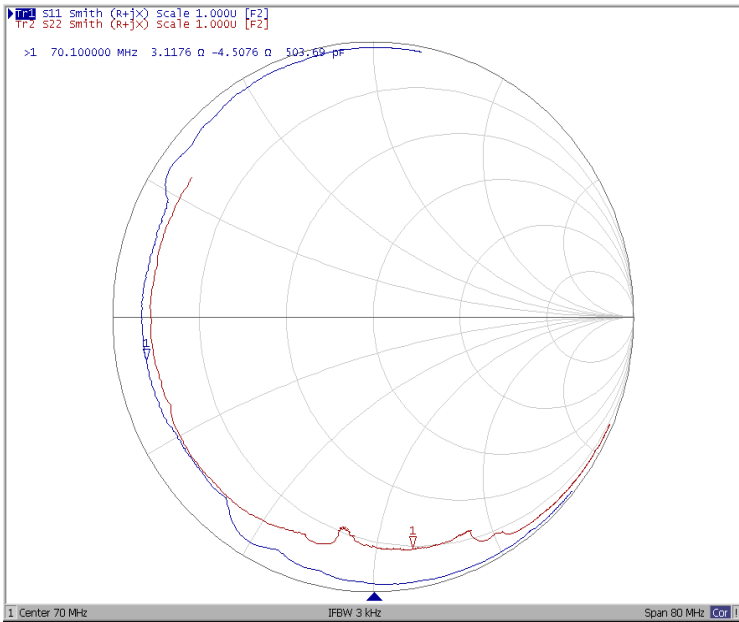
Ripple Variation Fo±9.65MHz



Group Delay Variation Fo±9.65MHz



Smith Chart



SWR

