

## Maximum Ratings

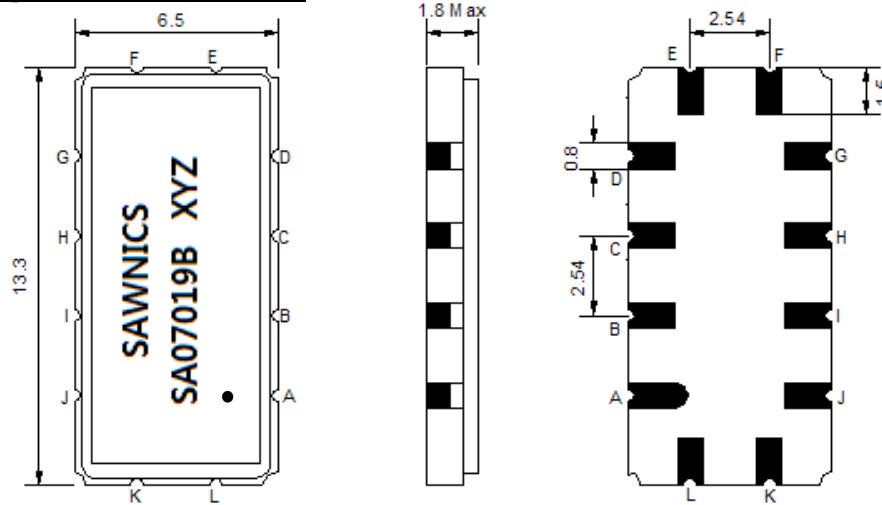
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package 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	70.05	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 <sub>p-p</sub>	-	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
<b>Relative Attenuation:</b>				
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.

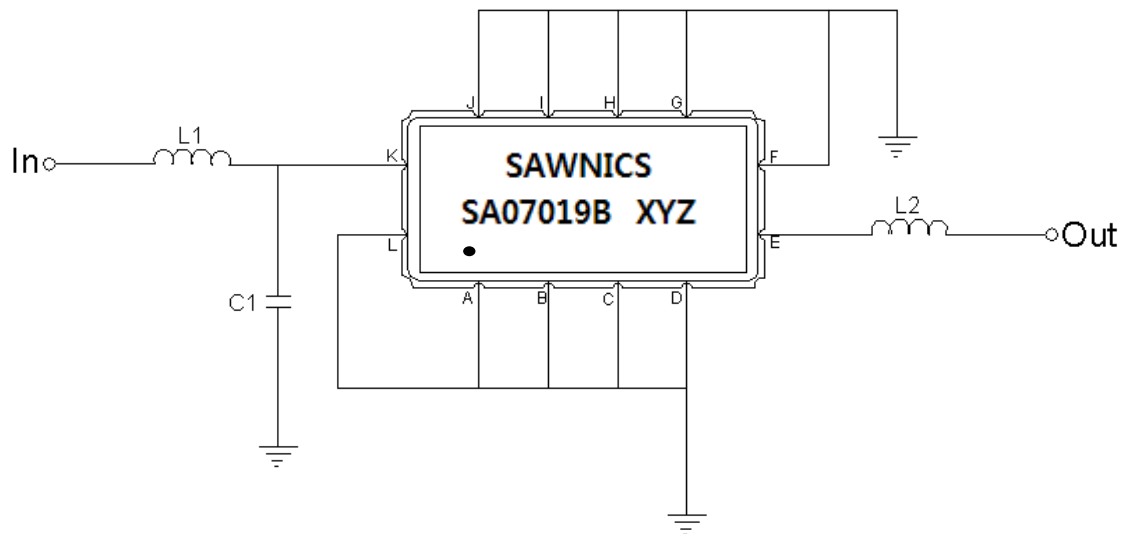
## Package Dimensions



- 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

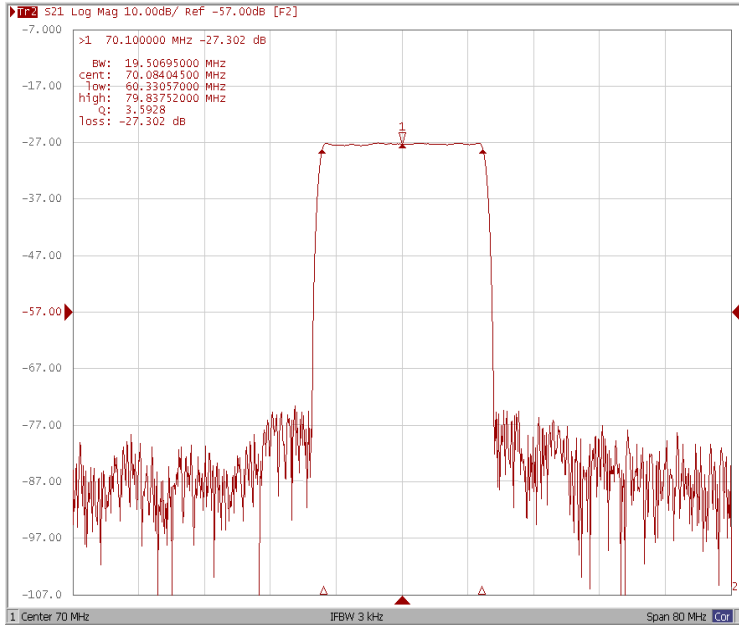
## Testing Environment



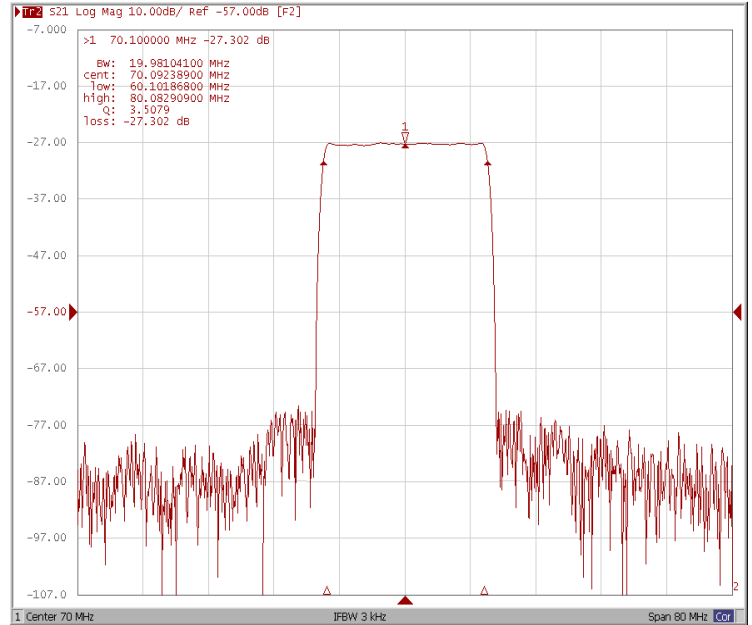
Test Fixture & Values	
Input	L1=180nH, C1=12pF
Output	L2=150nH,
Source/Load Impedance	50 Ω

## Frequency Response

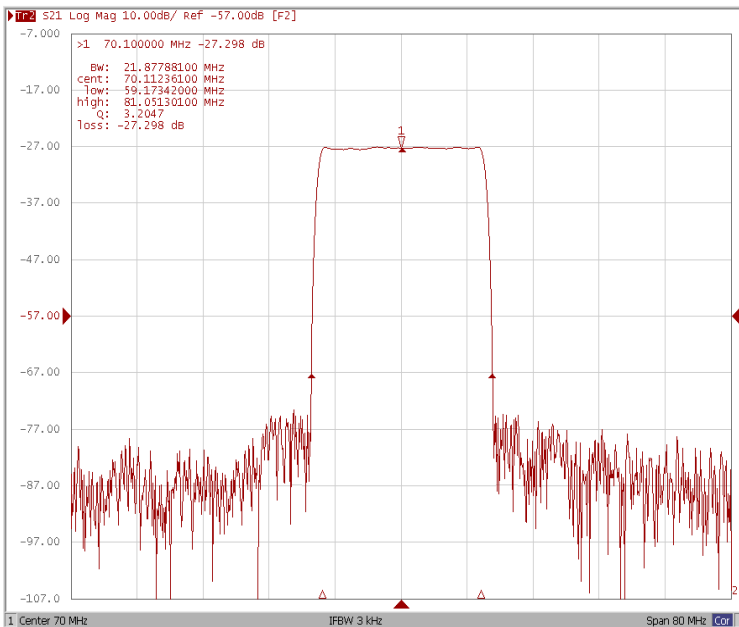
Bandwidth at -1.0 dB



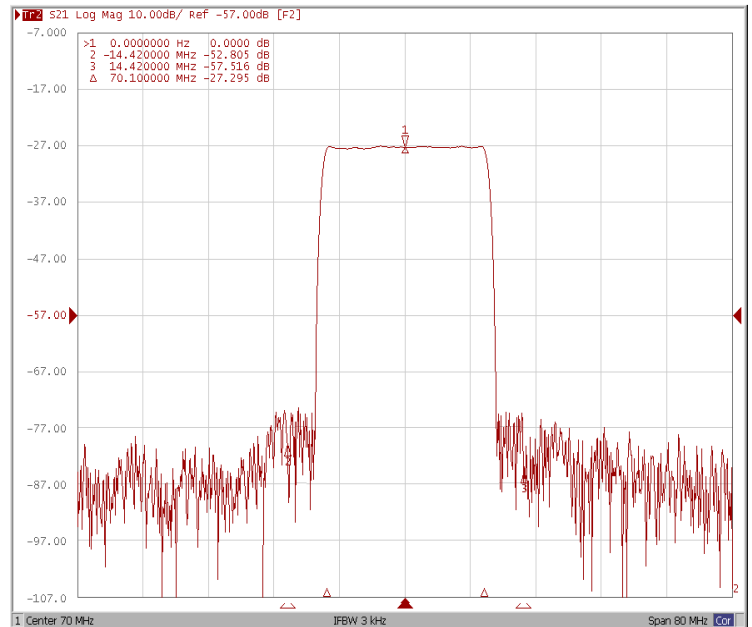
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

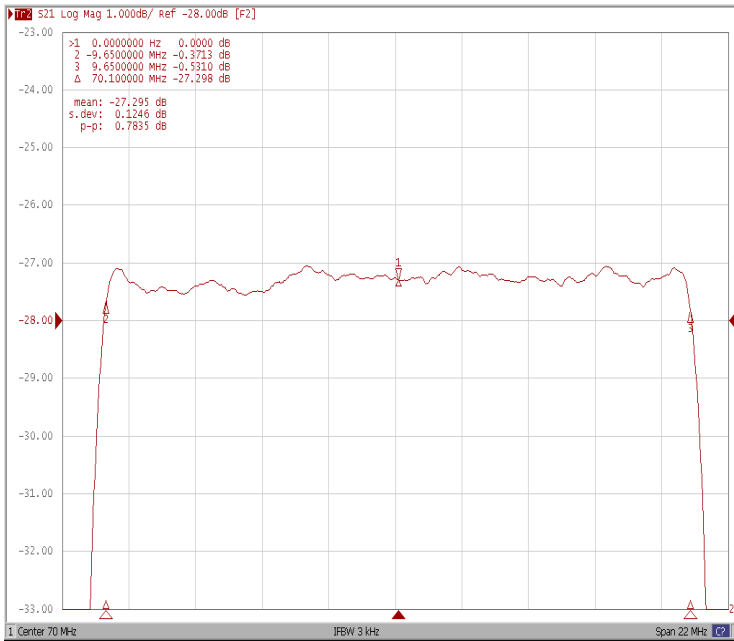


Attenuation  $Fo \pm 14.42$  MHz

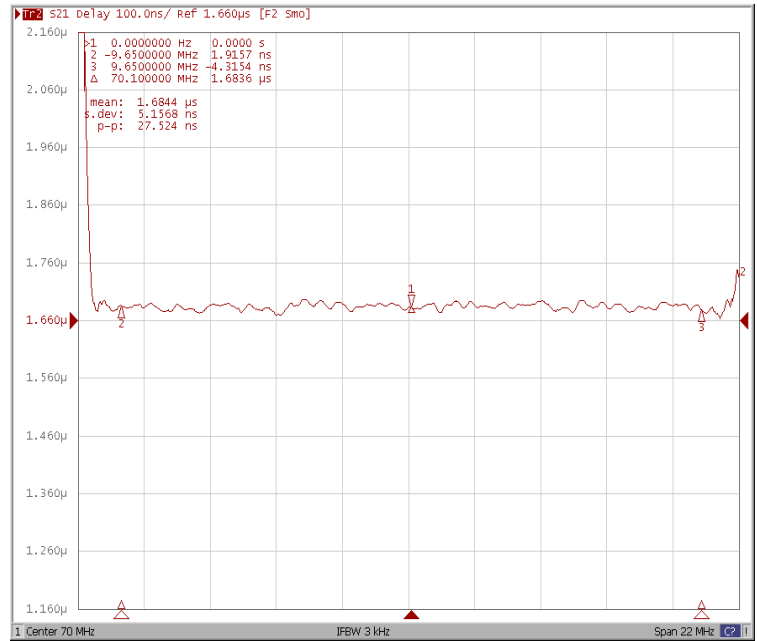


## Frequency Response

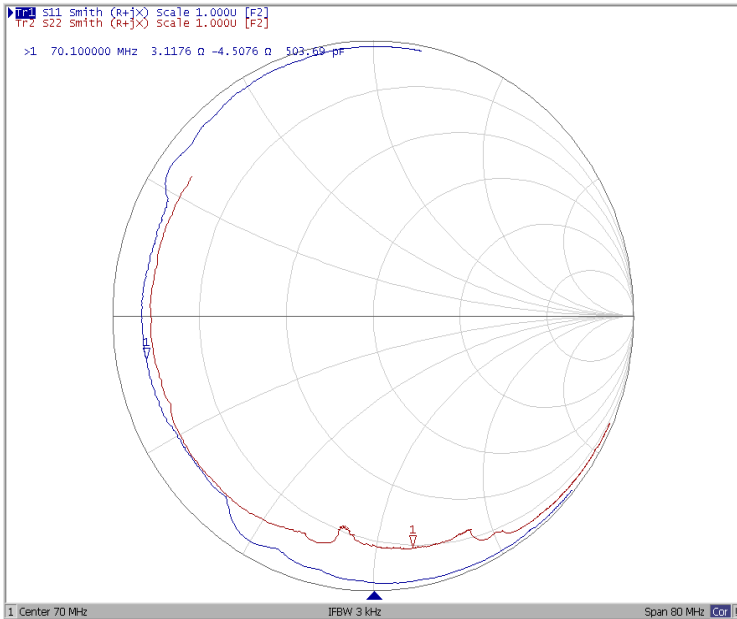
### Ripple Variation Fo±9.65MHz



### Group Delay Variation Fo±9.65MHz



### Smith Chart



### SWR

