

## Electrical Characteristics

### Maximum Ratings

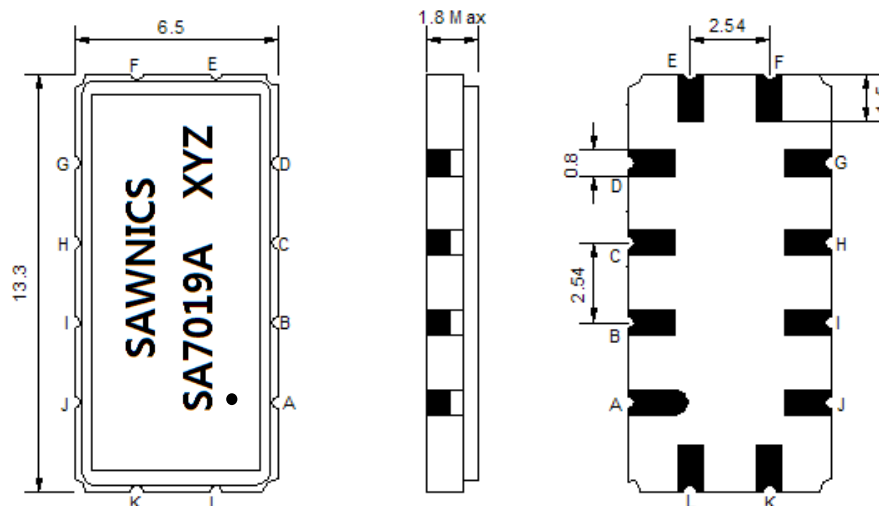
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-45	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package 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	-	70.00	-
Insertion Loss at Fo	dB	-	26.0	28.0
Group Delay Variation (Fo±9.22MHz)	ns	-	20	50
Absolute Delay	us	-	1.61	-
Passband Ripple (Fo±9.22MHz)	dB	-	0.55	1.00
Bandwidth at -1dB	MHz	-	19.36	-
Bandwidth at -3dB	MHz	19.60	19.88	-
Bandwidth at -40dB	MHz	-	21.77	22.00
Ultimate Rejection	dB	45	50	-
Relative Attenuation Fo±10.8MHz	dB	20	33	-
Temperature Coefficient	ppm/°C	-	-72	-

**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.

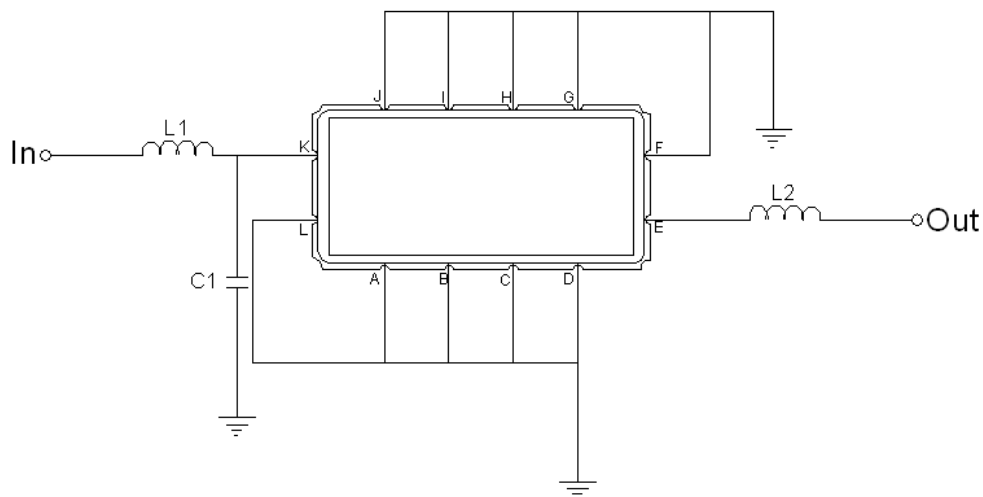
## Package Dimensions



- ① SAWNICS: Brand
- ② SA7019A: 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

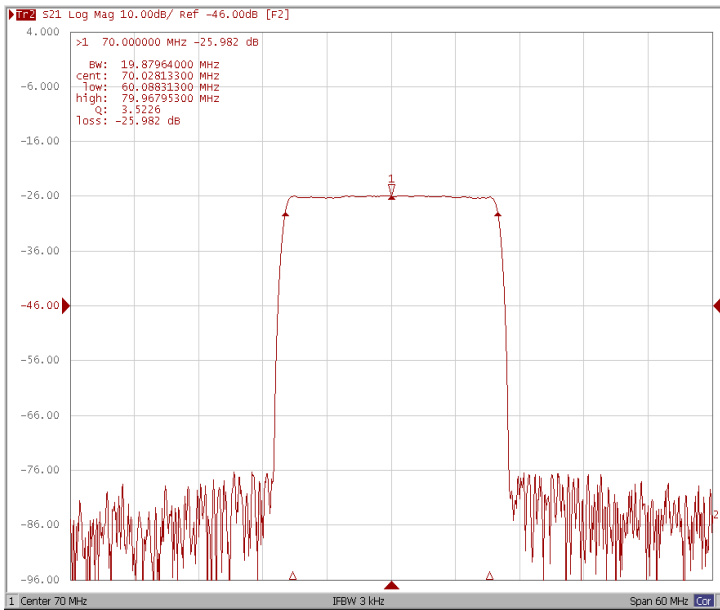
## Testing Environment



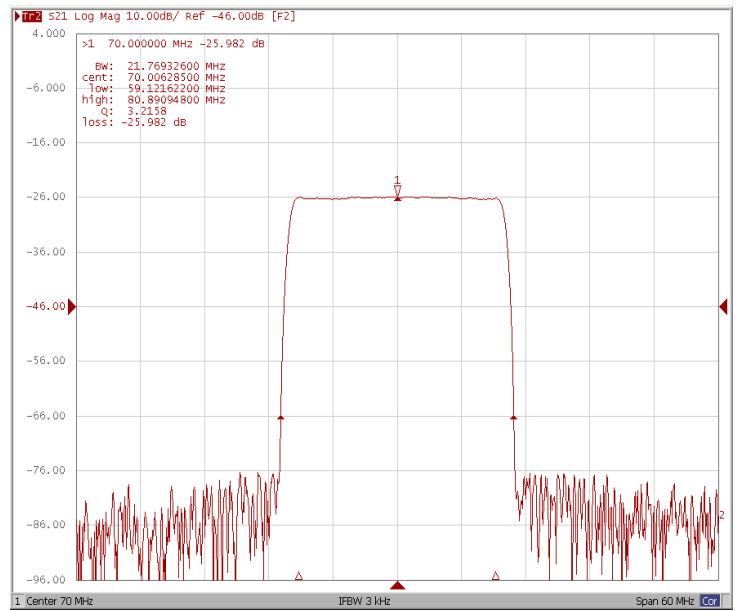
Test Fixture & Values	
Input	L1=180 nH, C1=12pF
Output	L2=150 nH
Source/Load Impedance	50 $\Omega$

## Frequency Response

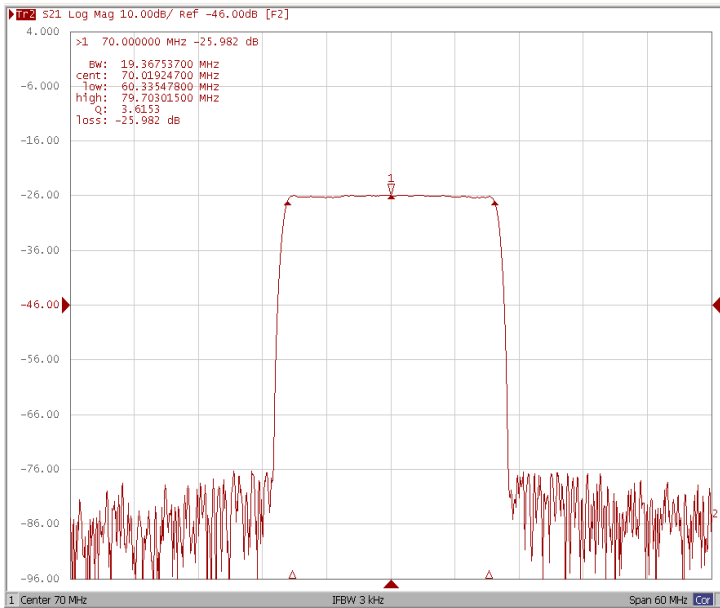
Bandwidth at -3.0 dB



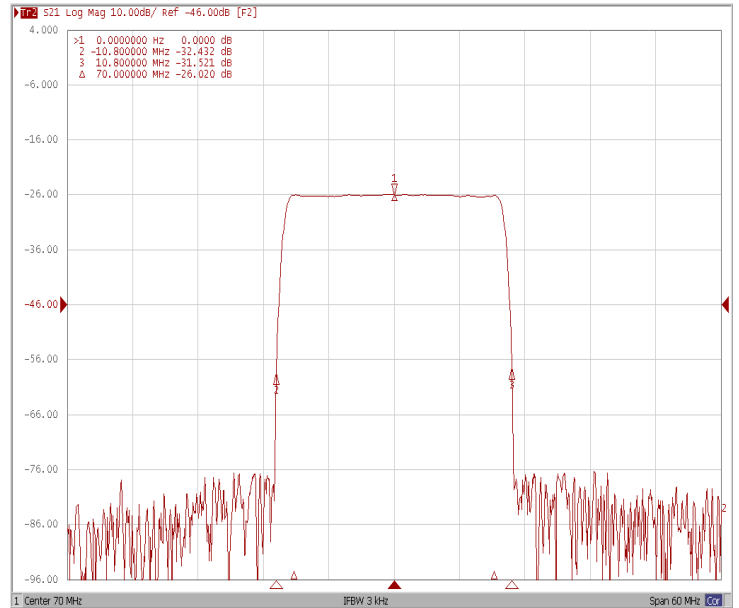
Bandwidth at -40.0 dB



Bandwidth at -1.0 dB

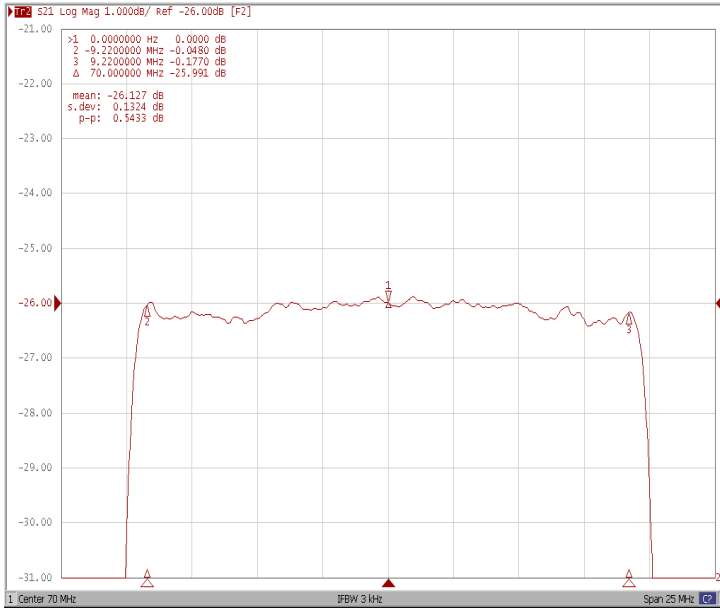


Relative Attenuation  $F_{0\pm 10.8\text{MHz}}$

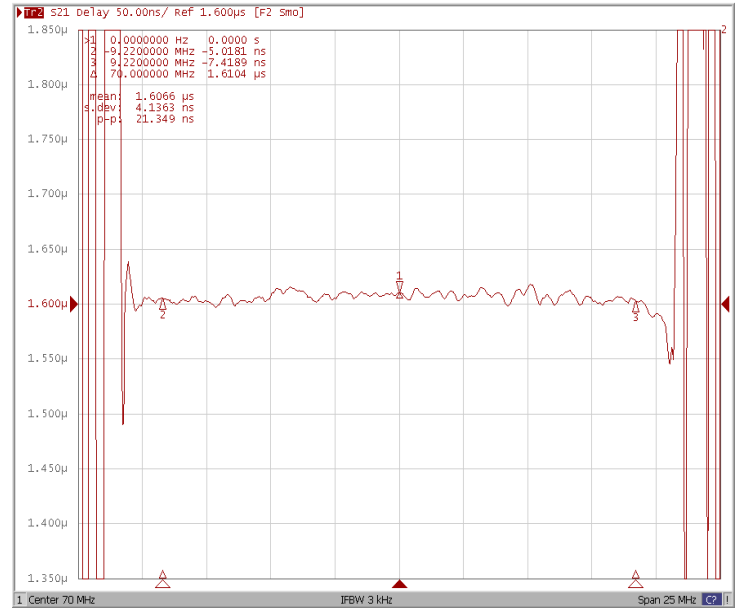


## Frequency Response

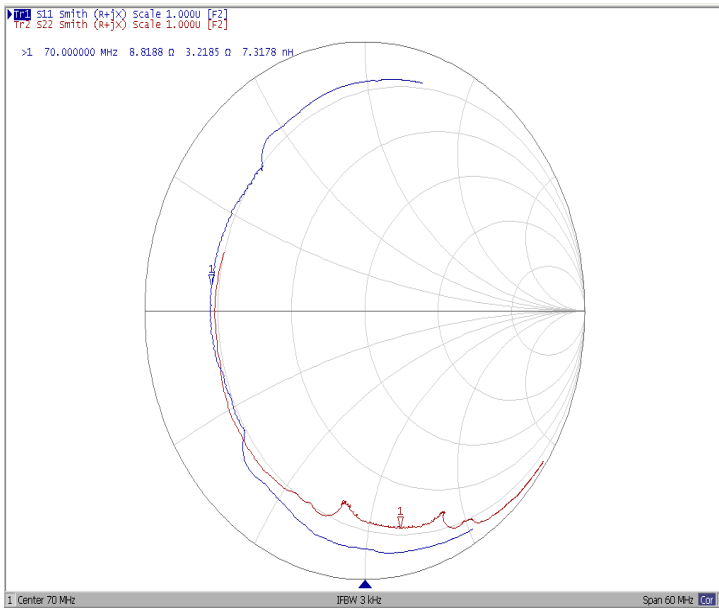
### Ripple Variation



### Group Delay Variation



### Smith Chart



### VSWR

