

## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	70
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

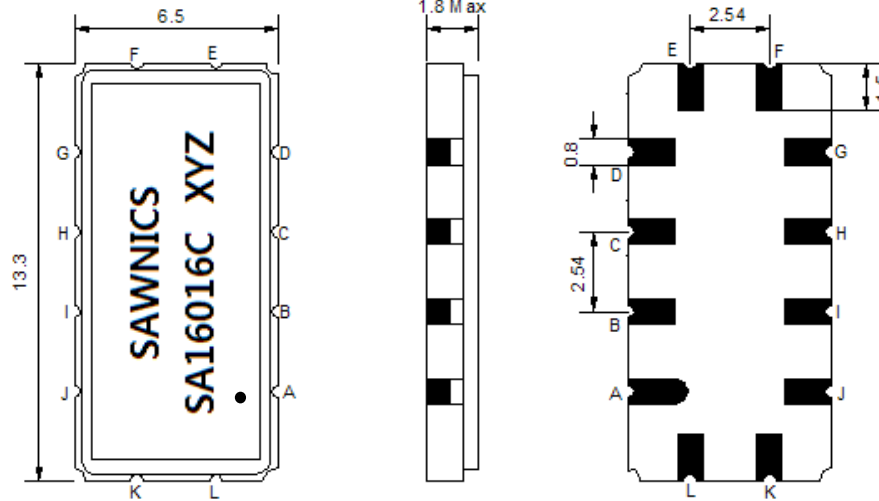
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	160.0	-
Insertion Loss at Fo	dB	-	21.4	23.5
Group Delay Variation at Fo ± 7.50 MHz	nsec	-	42	80
Absolute Delay at Fo	usec	-	1.61	-
Passband Ripple Variation at Fo ± 7.50 MHz	dB	-	0.70	1.0
Bandwidth at -1dB	MHz	16.10	16.26	-
Bandwidth at -3dB	MHz	-	16.67	-
Bandwidth at -40dB	MHz	-	18.52	18.70
Ultimate Rejection	dB	50	55	-
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.

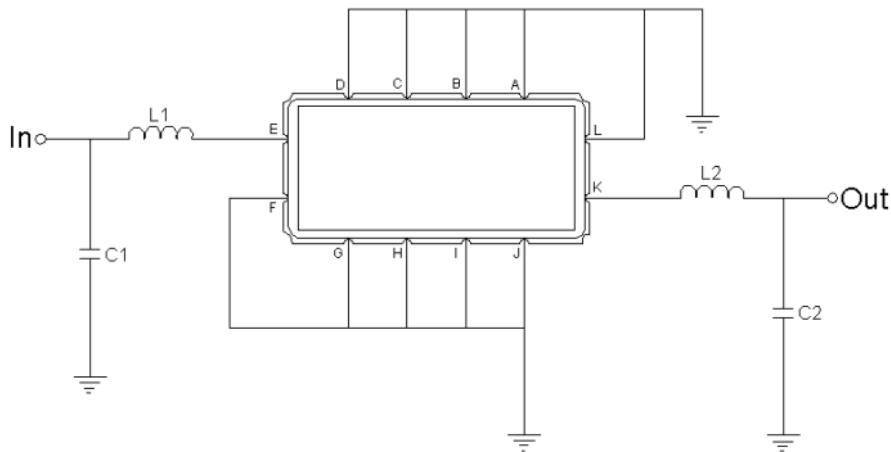
## Package Dimensions



- ① SAWNICS: Brand
- ② SA16016C: 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

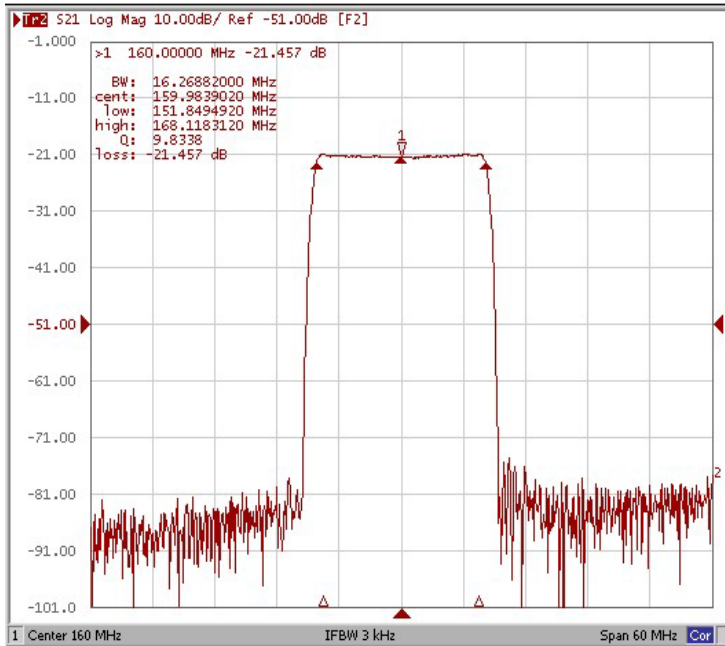
## Testing Environment



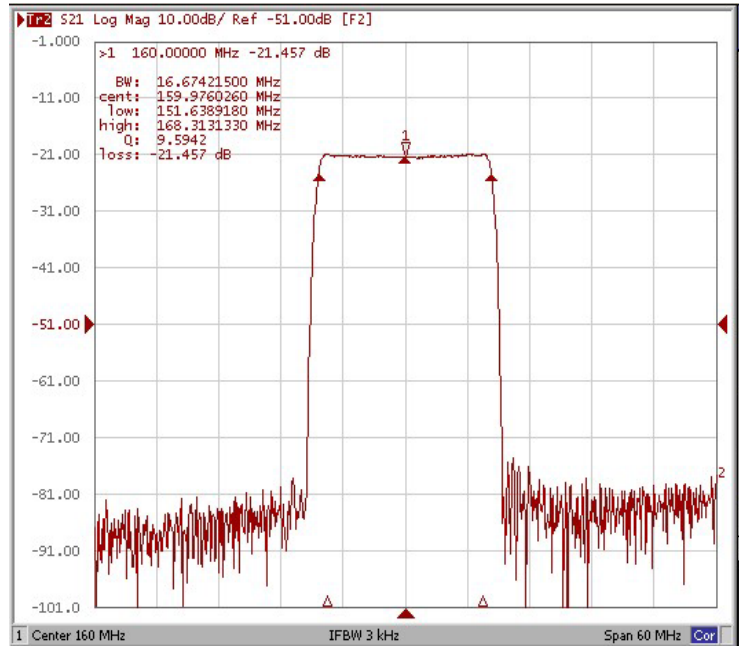
Test Fixture & Values	
Input	L1 = 8.2 nH, C1 = 10 pF
Output	L2 = 22 nH, C2 = 10 pF
Source/Load Impedance	50 $\Omega$

## Frequency Response

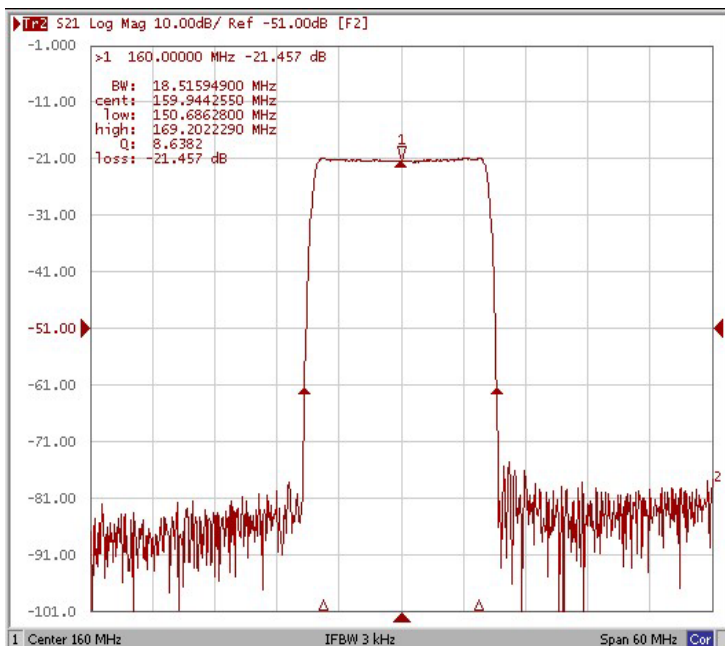
### Bandwidth at -1.0 dB



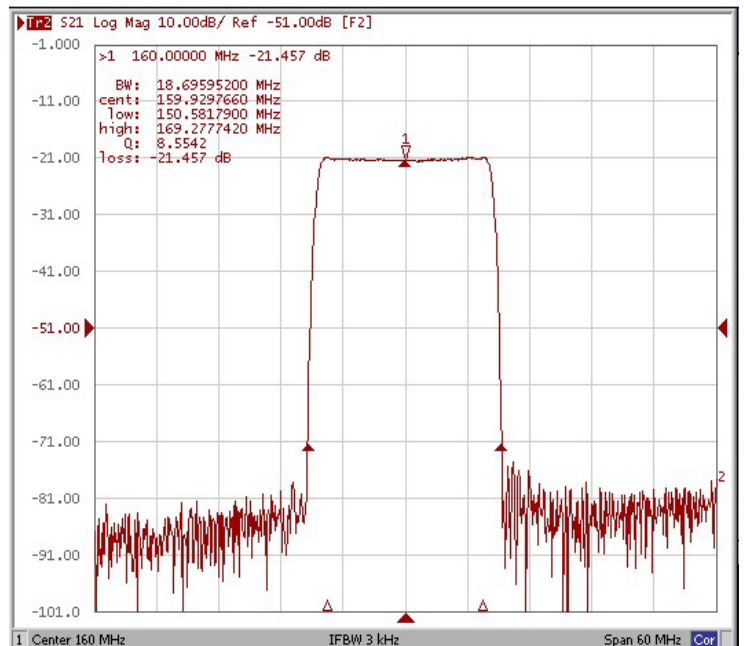
### Bandwidth at -3.0 dB



### Bandwidth at -40 dB

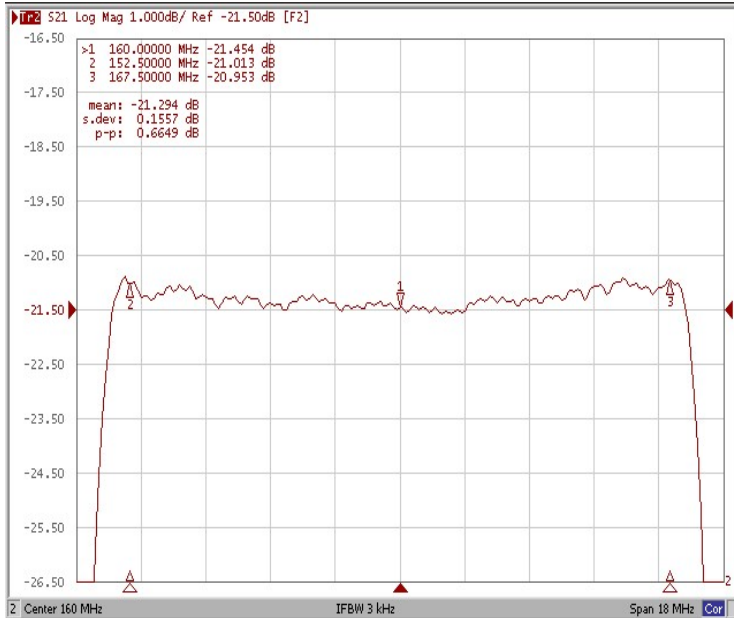


### Bandwidth at -50 dB

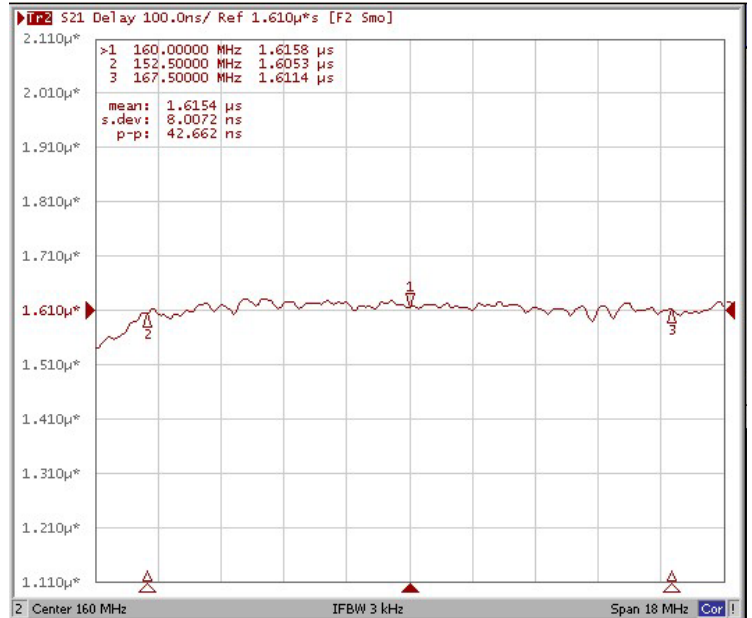


## Frequency Response

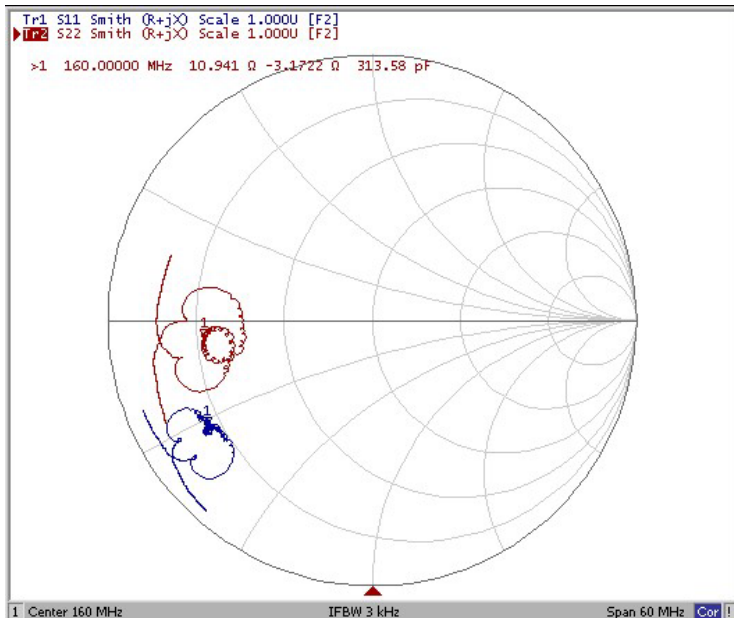
### Ripple Variation $F_0 \pm 7.50$ MHz



### Group Delay Variation $F_0 \pm 7.50$ MHz



### Smith Chart



### VSWR

