

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-20	-	80
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	D1			
Length x Width	mm <sup>2</sup>	-	20.0 x 9.8	-
Height	mm	-	-	1.8

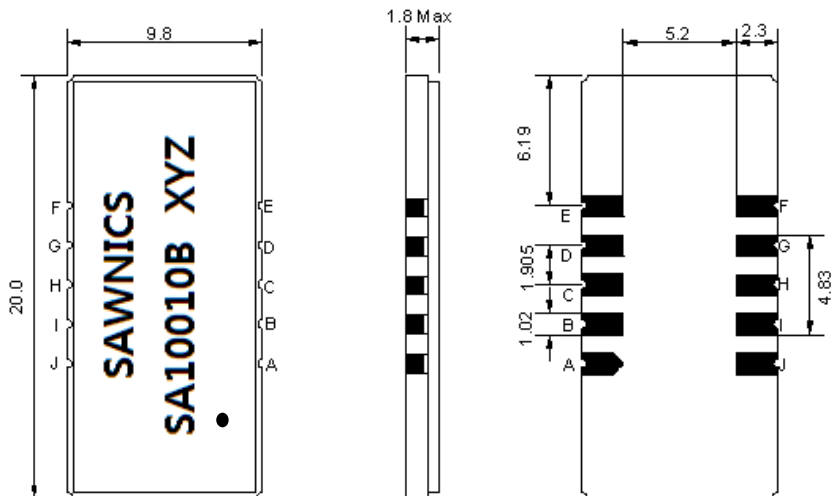
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	100.00	-
Insertion Loss at Fo	dB	-	23.80	25.00
Group Delay Variation (Fo±4.425MHz)	ns	-	18	40
Absolute Delay	us	-	2.56	-
Passband Ripple (Fo±4.425MHz)	dB	-	0.30	0.80
Bandwidth at -1dB	MHz	10.20	10.40	-
Bandwidth at -3dB	MHz	-	10.95	-
Bandwidth at -40dB	MHz	-	12.85	13.00
<b>Relative Attenuation</b>				
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-
Temperature coefficient	ppm/°C	-	-20	-

**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.

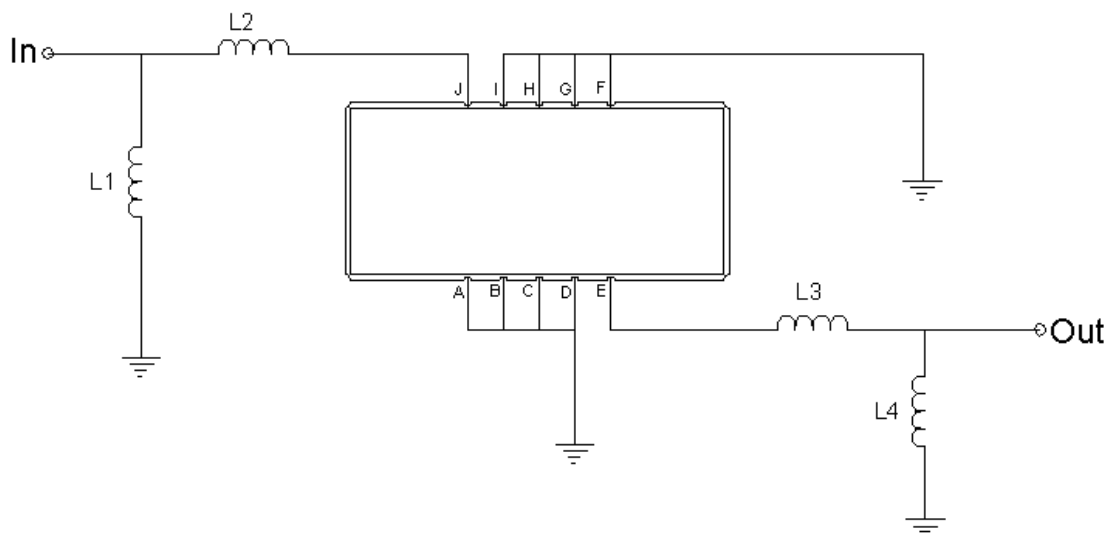
## Package Dimensions



- ① SAWNICS: Brand
- ② SA10010B: 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	Ground
J	Input
E	Output

## Testing Environment

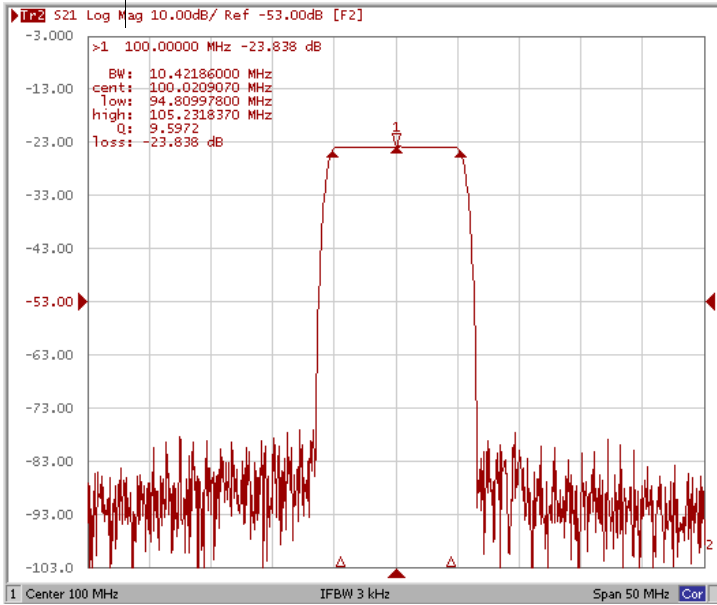


Test Fixture & Values	
Input	L1 = 56 nH, L2 = 22 nH
Output	L3 = 22 nH, L4 = 56 nH
Source/Load Impedance	50 Ω

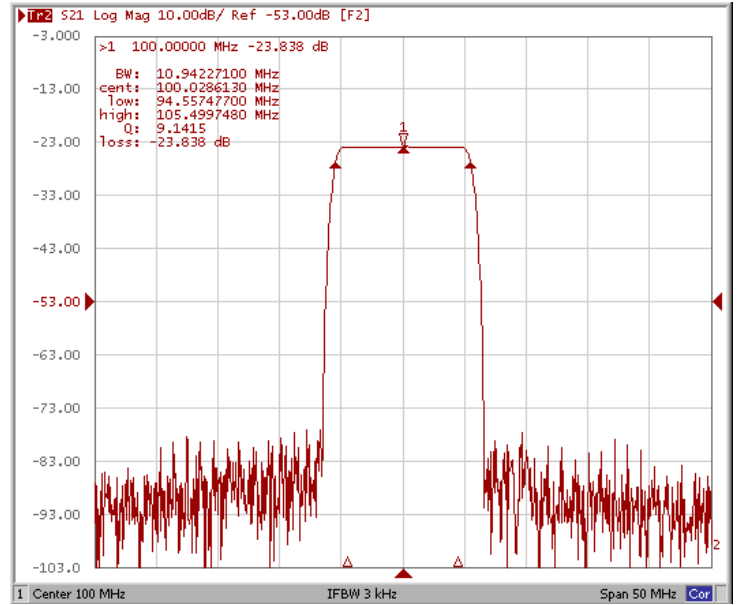
## Frequency Response

Operating Temperature : +25 °C

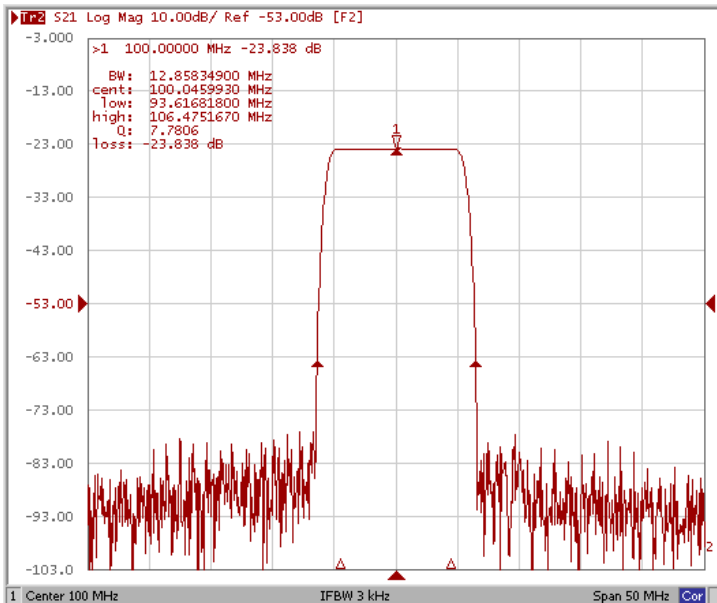
### Bandwidth at -1.0 dB



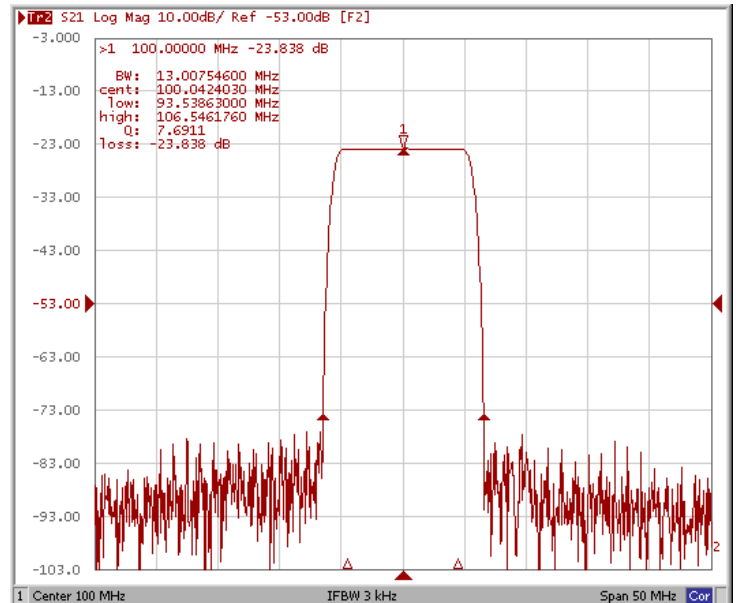
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

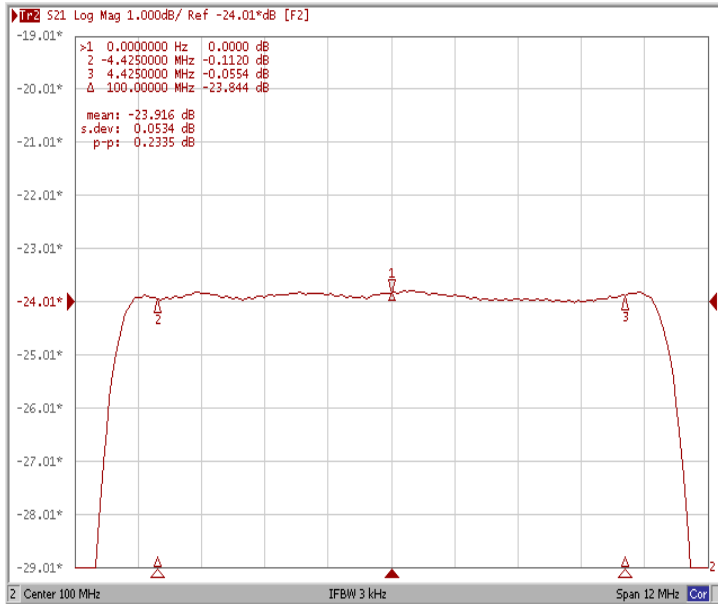


### Bandwidth at -50.0 dB

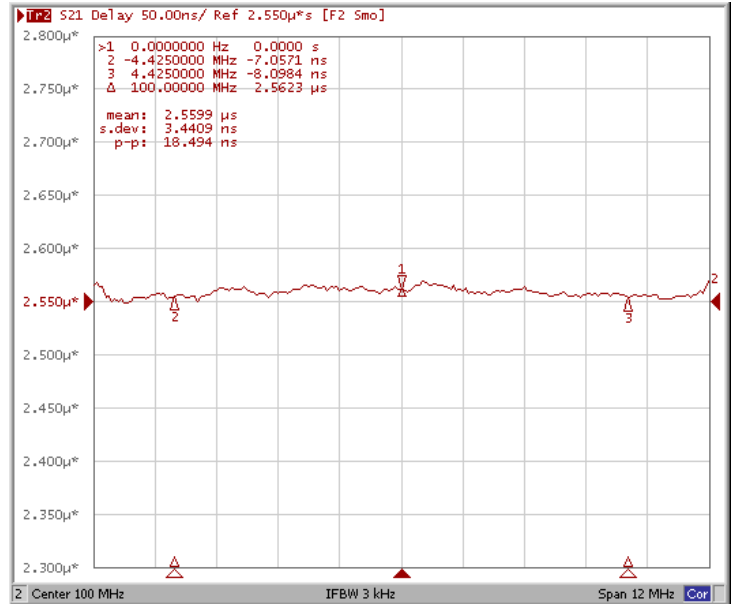


## Frequency Response

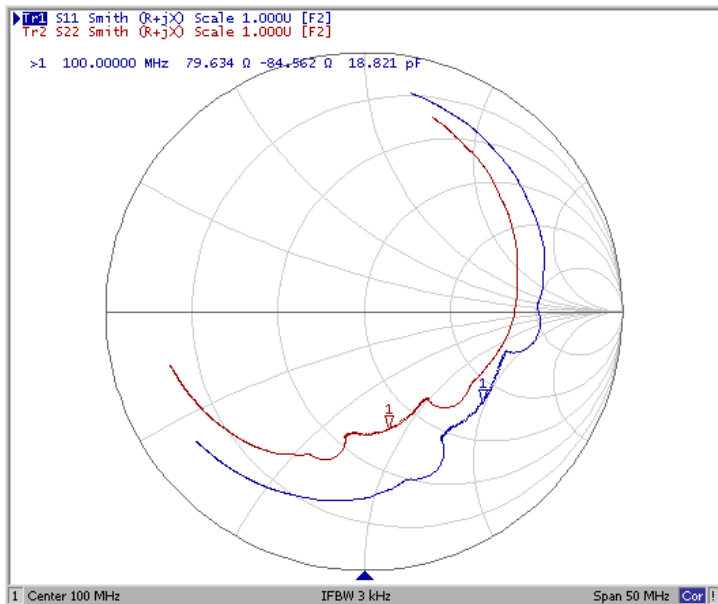
### Ripple Variation Fo±4.425MHz



### Group Delay Variation Fo±4.425MHz



### Smith Chart



### VSWR

