

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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D1			
Length x Width	mm ²	-	20.0 x 9.8	-
Height	mm	-	-	1.8

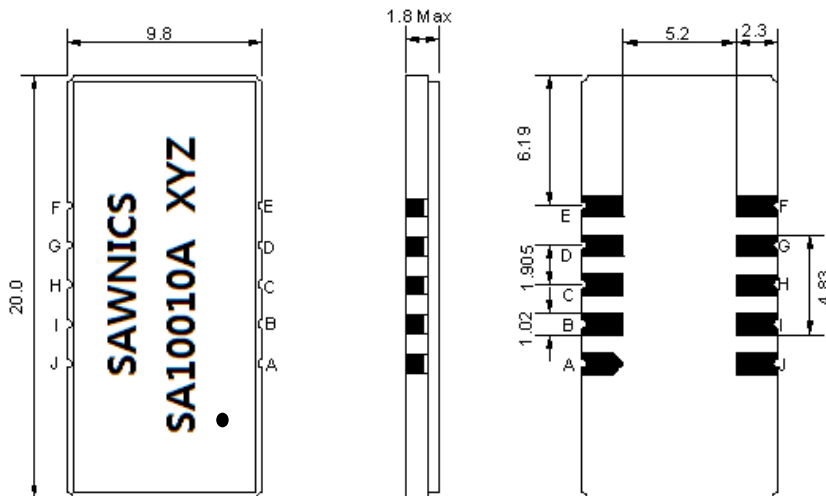
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	100.00	-
Insertion Loss at Fo	dB	-	21.50	23.00
Group Delay Variation (Fo±4.425MHz)	ns	-	53	90
Absolute Delay	us	-	2.07	-
Passband Ripple (Fo±4.425MHz)	dB	-	0.55	0.90
Bandwidth at -1dB	MHz	10.40	10.65	-
Bandwidth at -3dB	MHz	-	11.05	-
Bandwidth at -40dB	MHz	-	12.65	12.80
Relative Attenuation				
Lower Sidelobe	dB	50	53	-
Upper Sidelobe	dB	50	53	-
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.

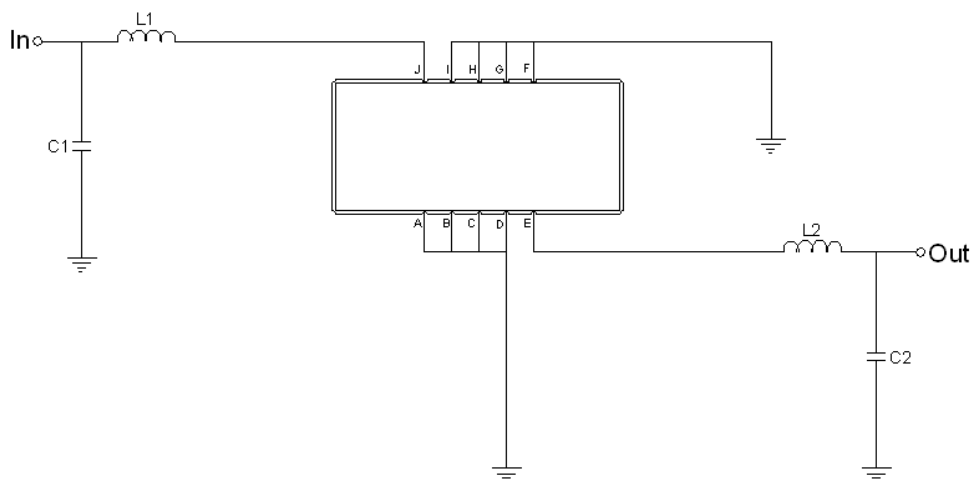
Package Dimensions



- ① SAWNICS: Brand
- ② SA10010A: 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

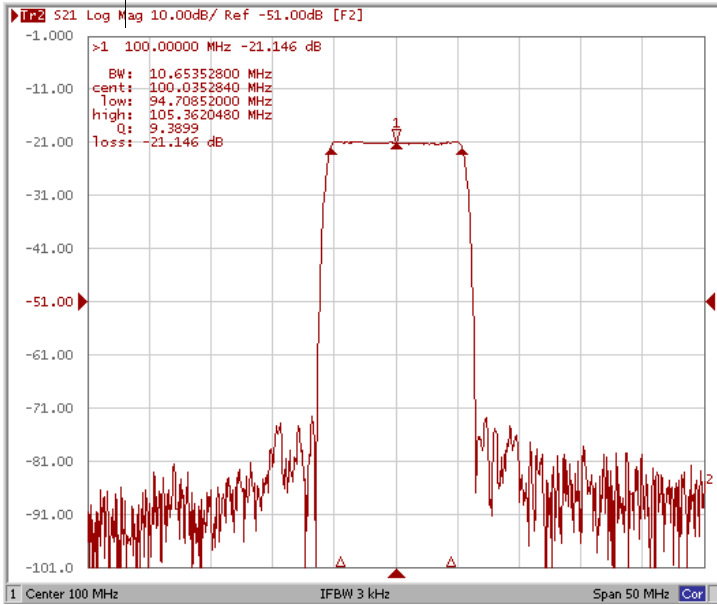


Test Fixture & Values	
Input	L1=10nH, C1=3pF
Output	L2=10nH, C2=3pF
Source/Load Impedance	50 Ω

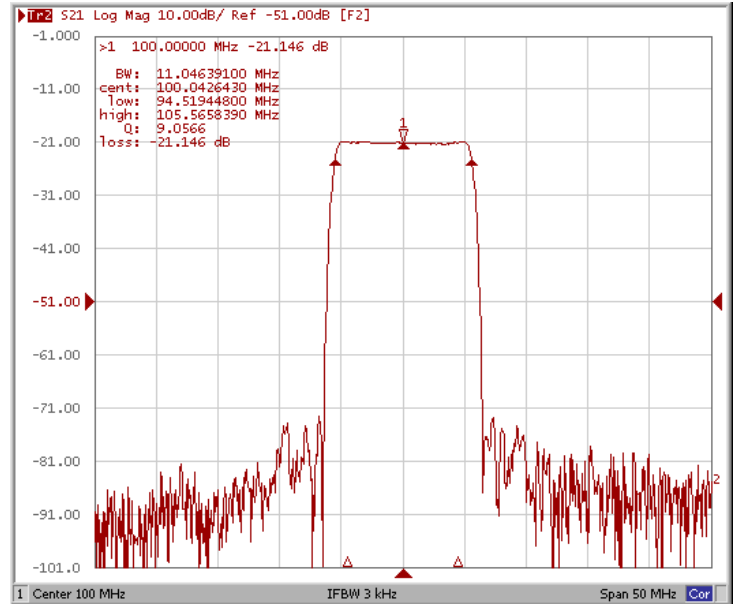
Frequency Response

Operating Temperature : +25 °C

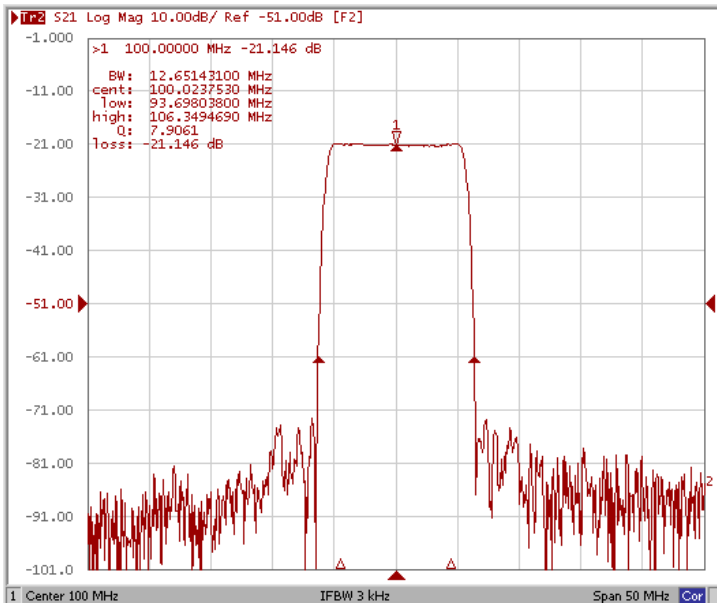
Bandwidth at -1.0 dB



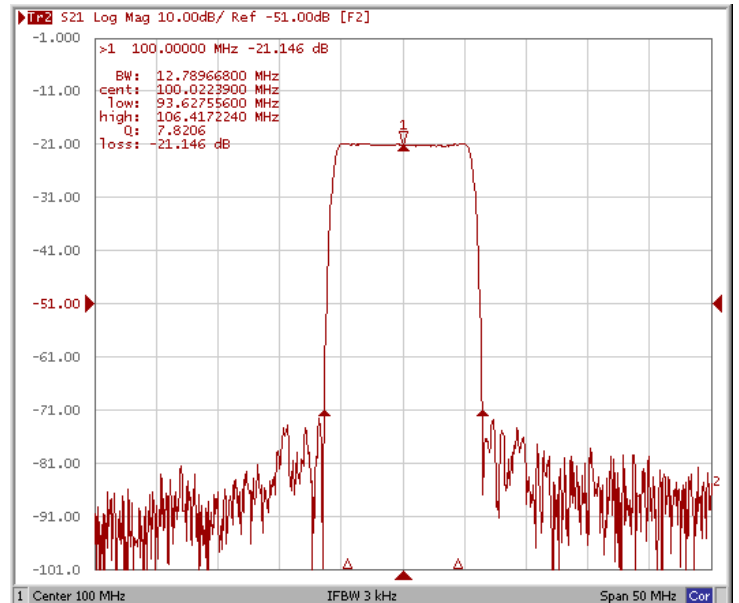
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

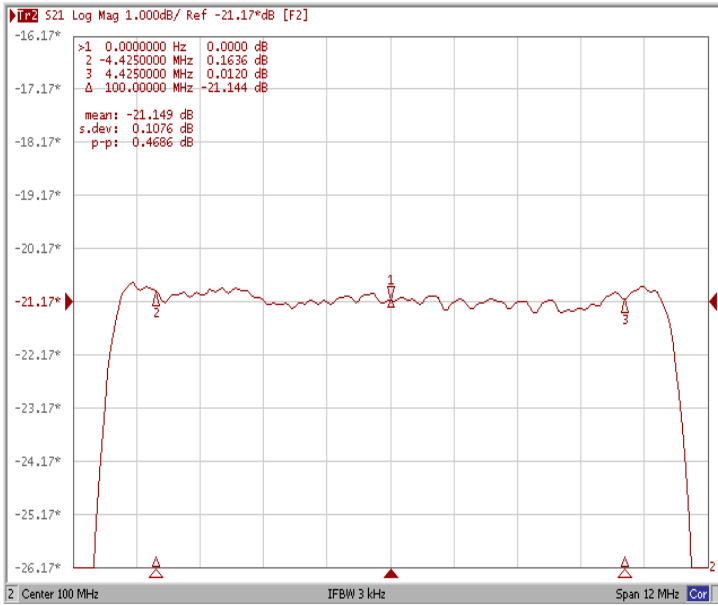


Bandwidth at -50.0 dB

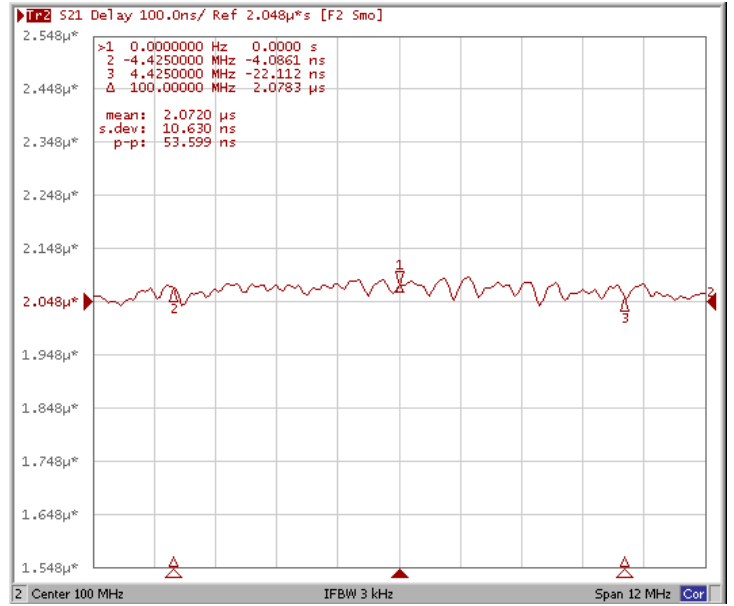


Frequency Response

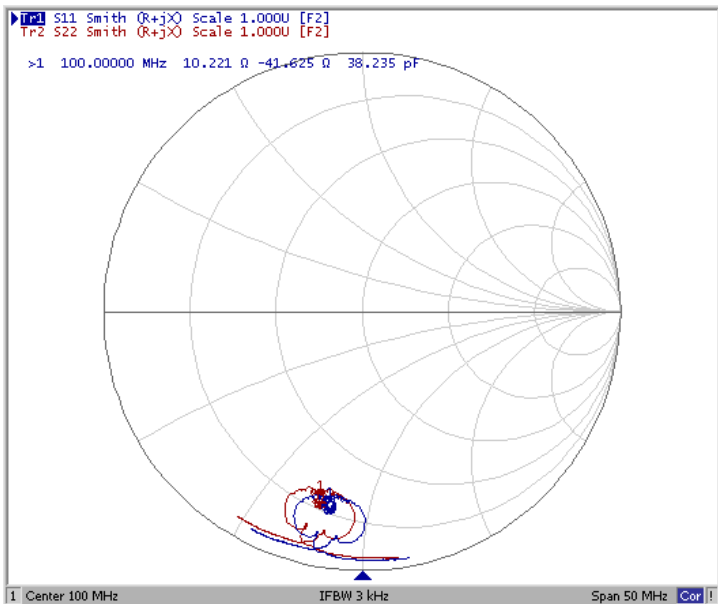
Ripple Variation $Fo \pm 4.425\text{MHz}$



Group Delay Variation $Fo \pm 4.425\text{MHz}$



Smith Chart



VSWR

