❒ Electrical Characteristics

Maximum Ratings

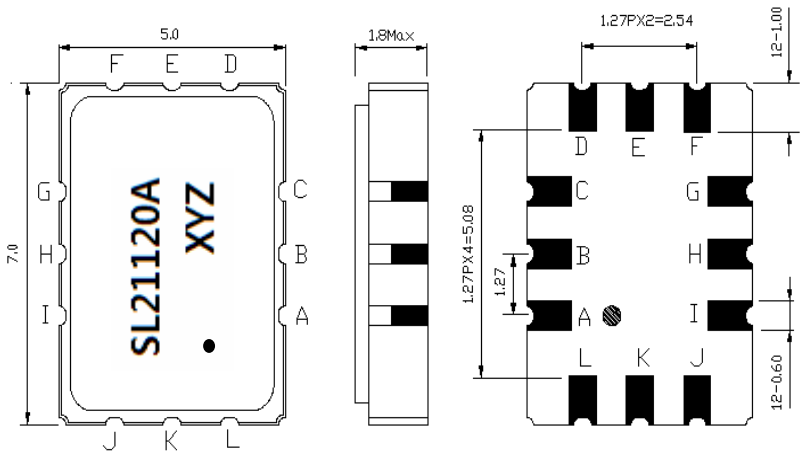
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	S1			
Length x Width	mm²	-	7.0 x 5.0	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	211.2	-
Insertion Loss at Fo	dB	-	17.6	19.0
Amplitude Ripple at Fo ± 9.42MHz	dB_{p-p}	-	0.8	1.5
Amplitude Ripple at Fo ± 10.0MHz	dB_{p-p}	-	0.9	2.0
Group Delay Variation at Fo ± 10.0MHz	ns	-	70	120
Absolute Delay at Fo	µs	-	0.68	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at –1.0 dB	MHz	18.84	20.84	-
Bandwidth at –40.0 dB	MHz	-	27.66	29.00
VSWR	-	-	-	2.2
Relative Attenuation				
10MHz ~ 100MHz	dB	50	-	-
100MHz ~ 168MHz	dB	52	-	-
168MHz ~ 196.5MHz	dB	35	-	-
250MHz ~ 270MHz	dB	58	-	-
270MHz ~ 350MHz	dB	60	-	-
350MHz ~ 1000MHz	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.

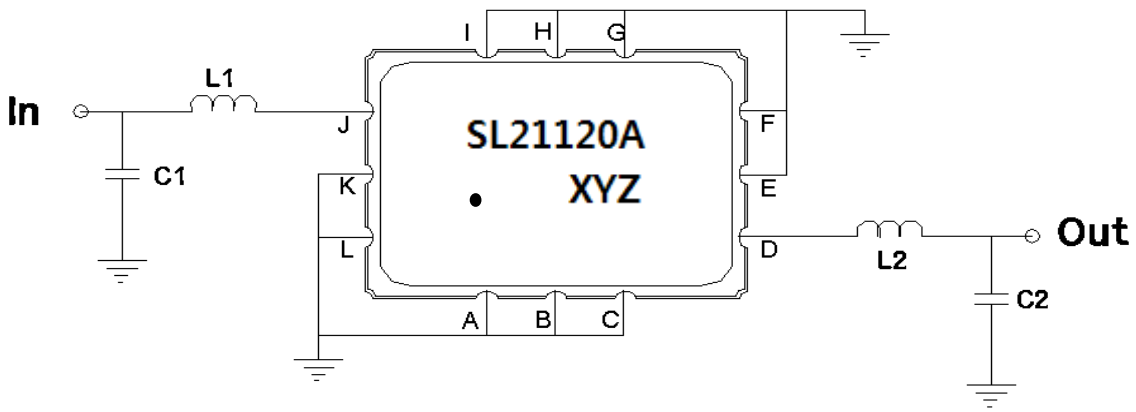
❒ Package Dimensions



① SAWNICS: Brand
② SL21120A: Model Name
③ X : Date Code (Year)
④ Y : Date Code (Month)
⑤ Z : Date Code (Date)
● : Index Dot

Pin Description	
A,B,C,E,F,G,H,I,K,L	Ground
J	Input
L	Input Ground
D	Output
F	Output Ground

❒ Testing Environment

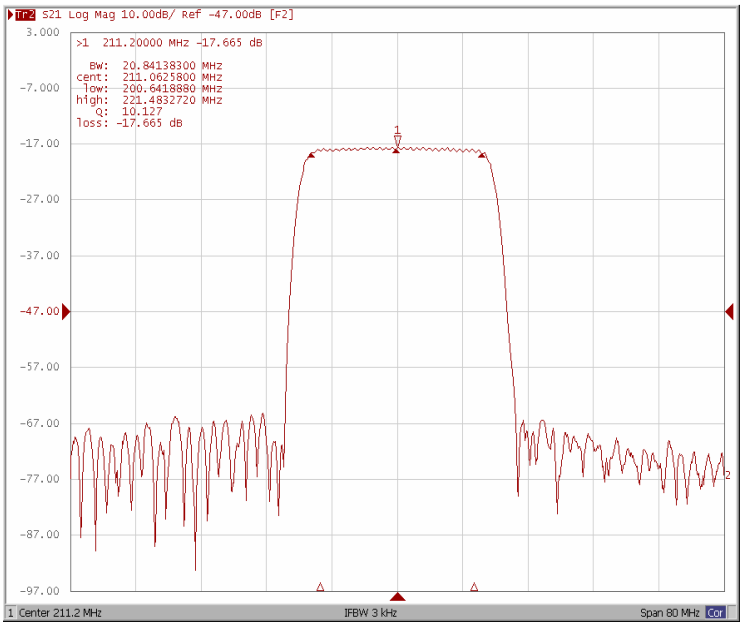


Test Fixture & Values	
Input	L1=27 nH , C1=33 pF
Output	L2=27 nH , C2=33 pF
Source/Load Impedance	50 Ω

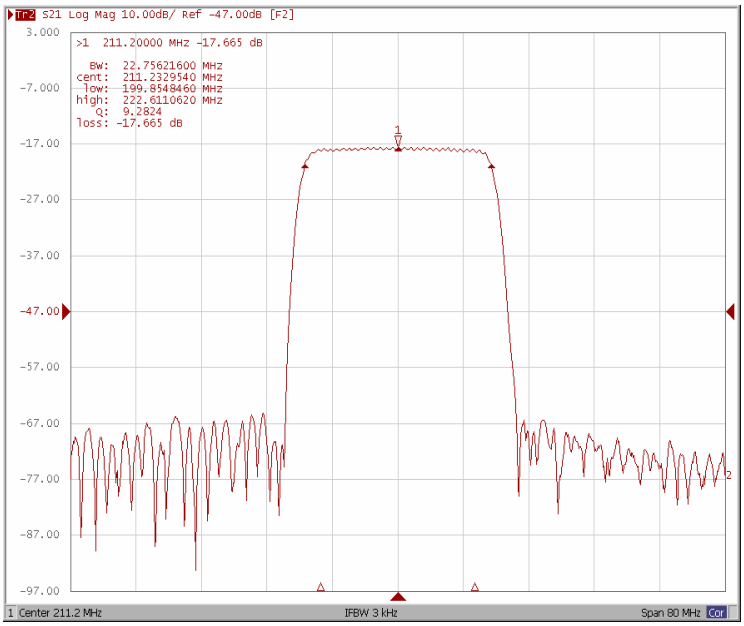
❒ Frequency Characteristics

Frequency Response

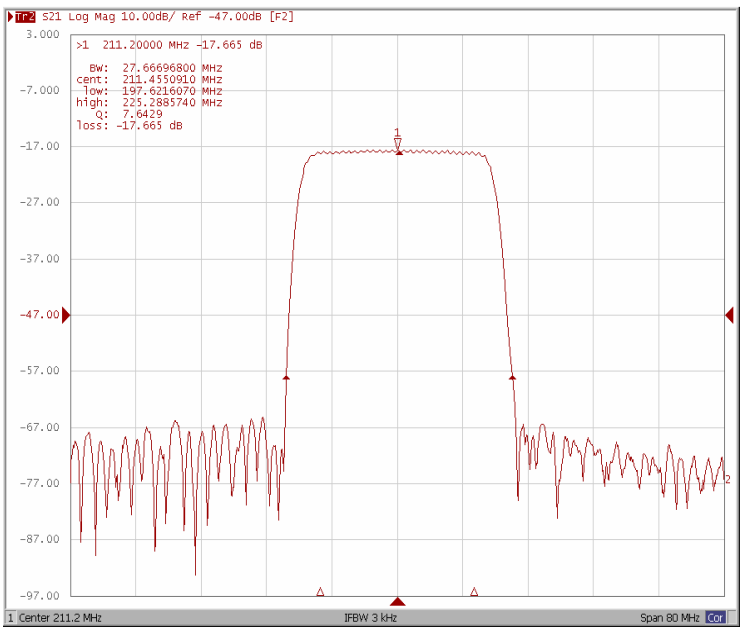
Bandwidth at –1.0 dB



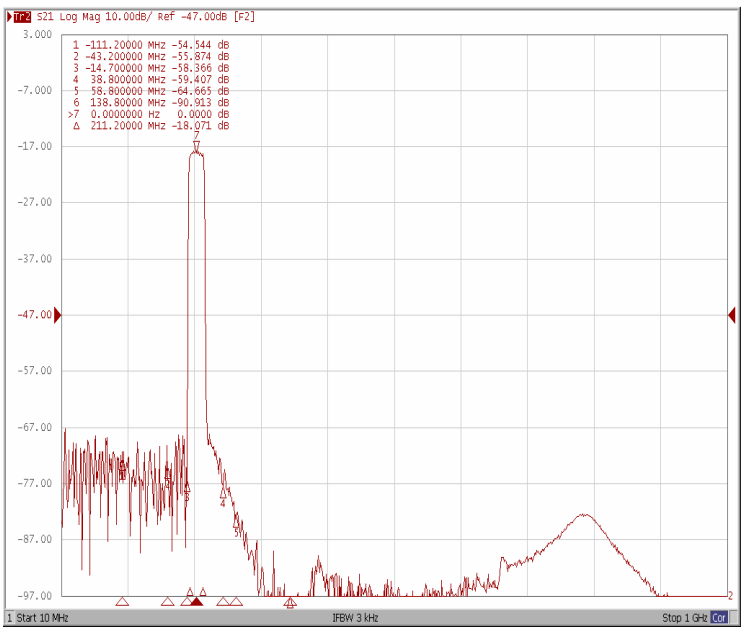
Bandwidth at –3.0 dB



Bandwidth at –40.0 dB



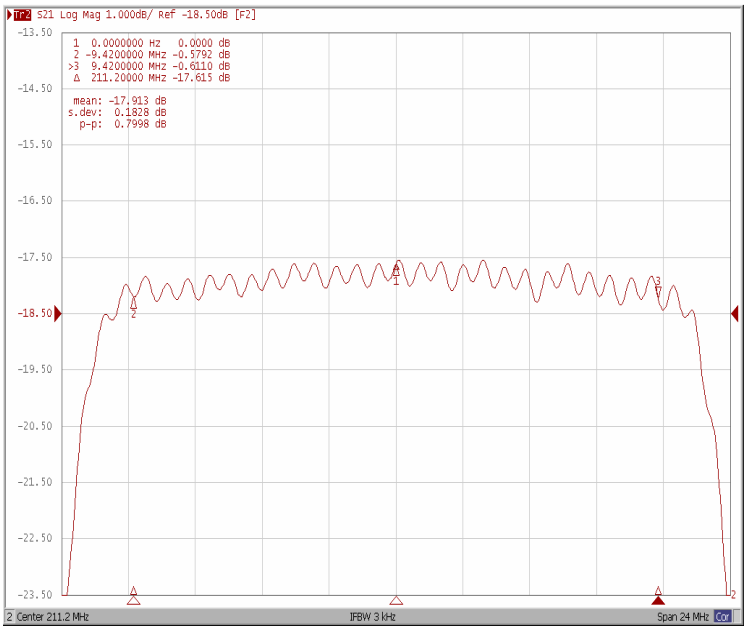
Wide-Band



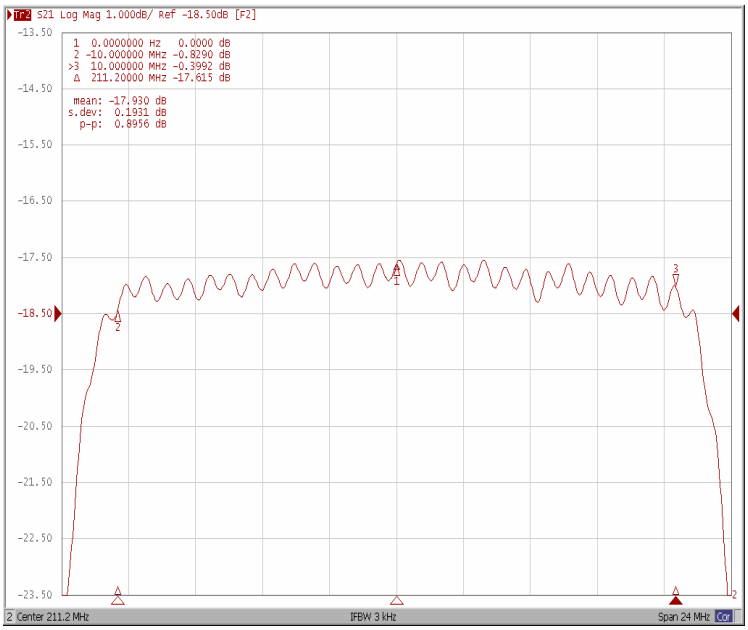
❒ Frequency Characteristics

Frequency Response

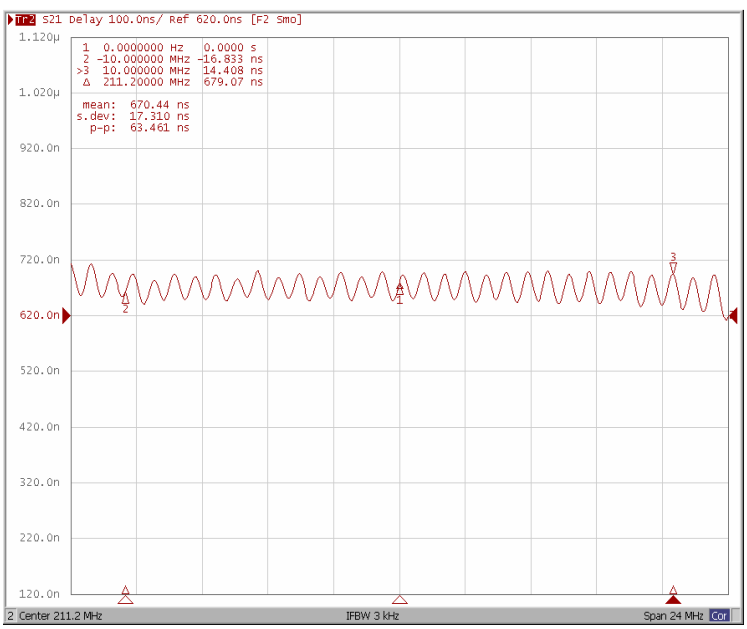
Ripple Variation at Fo ±9.42MHz



Ripple Variation at Fo ±10.0MHz



Group Delay Variation at Fo ±10.0MHz



Smith Chart