❒ Electrical Characteristics

Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	15
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	S1			
Length x Width	mm^2	-	7.0 x 5.0	-
Height	mm	-	-	1.8

Electrical Specification

***Operating Temperature : +25℃**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	189.70	190.00	190.30
Insertion Loss at Fo	dB	-	11.30	13.00
Temperature Coefficient	ppm/°C	-	-86	-
1dB Bandwidth	MHz	21.00	22.30	-
40dB Bandwidth	MHz	-	28.25	29.50
Relative Attenuation				
@175MHz	dB	30	40	-
@205MHz	dB	30	40	-
Ultimate Rejection	dB	40	45	-
Amplitude ripple variation (Fo +/-9.0MHz)	dB_{p-p}	-	0.50	1.00
Group Delay variation (Fo +/-9.0MHz)	nsec	-	42	90
Absolute Group Delay at Fo	usec	-	0.69	0.90

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.

***Operating Temperature : -40℃~+85℃**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	190.00	-
Insertion Loss at Fo	dB	-	11.90	13.50
Temperature Coefficient	ppm/°C	-	-86	-
1dB Bandwidth	MHz	21.00	22.30	-
40dB Bandwidth	MHz	-	28.25	29.50
Relative Attenuation				
@175MHz	dB	15	30	-
@205MHz	dB	15	30	-
Ultimate Rejection	dB	40	45	-
Amplitude ripple variation (Fo +/-9.0MHz)	dB_{p-p}	-	0.60	1.00
Group Delay variation (Fo +/-9.0MHz)	nsec	-	50	90
Absolute Group Delay at Fo	usec	-	0.69	0.90

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

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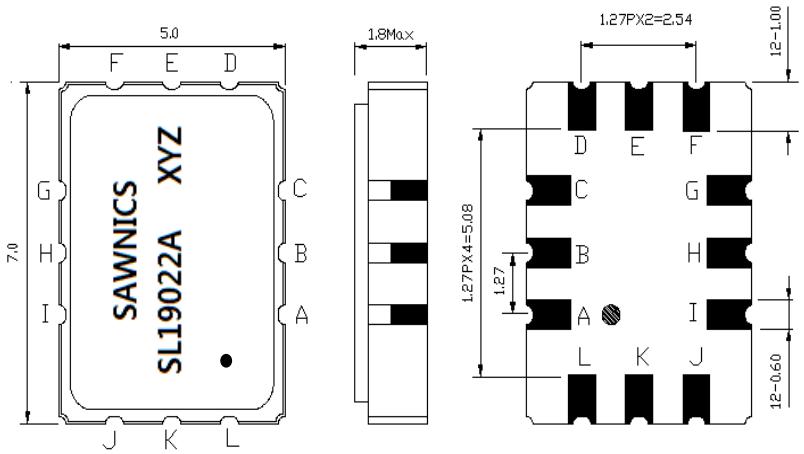
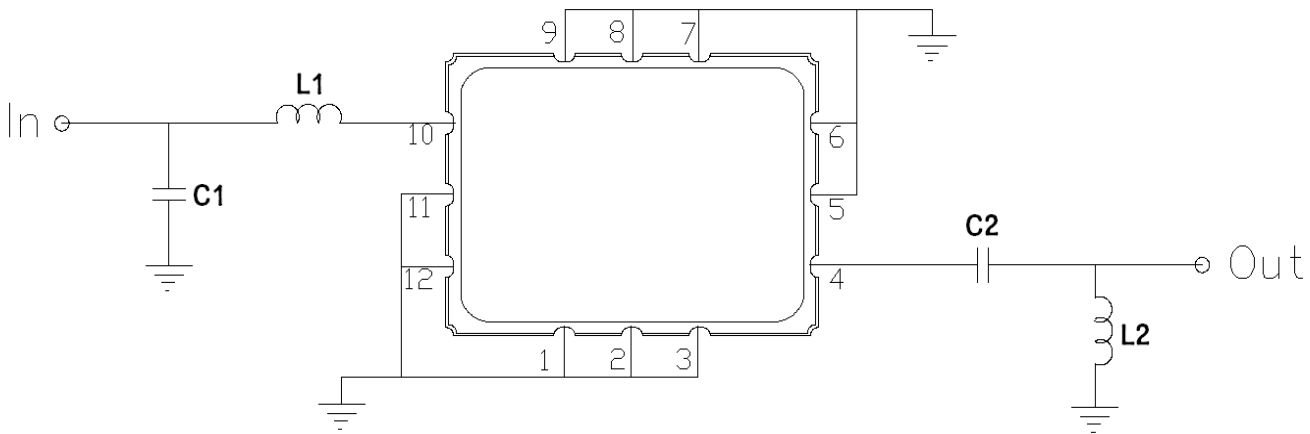


① Oscilent: Brand
② SL19022A: Model Name
③ XX : Date Code (Year)
④ YY : Date Code (Week)
● : Index Dot

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

❒ Testing Environment



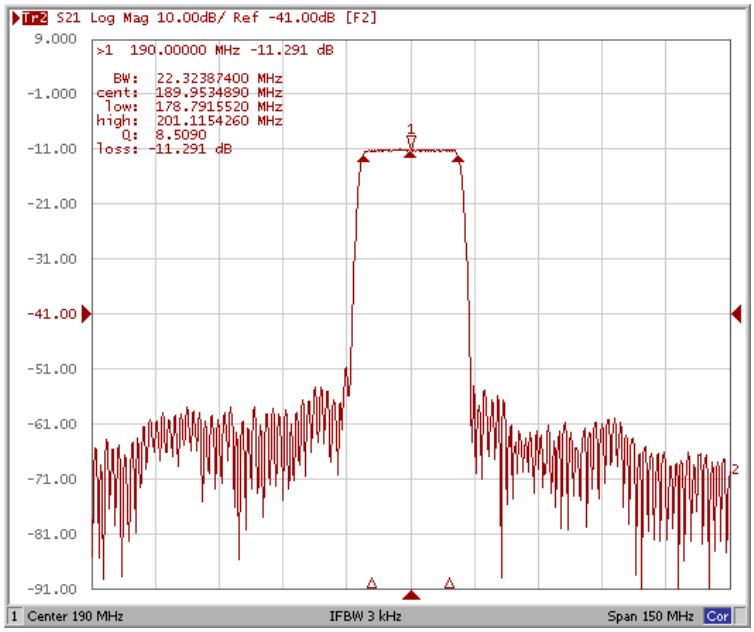
Test Fixture & Values	
Input	L1=56 nH, C1=20 pF
Output	L2=56 nH, C2=180 pF
Source/Load Impedance	50 Ω

❒ Frequency Characteristics

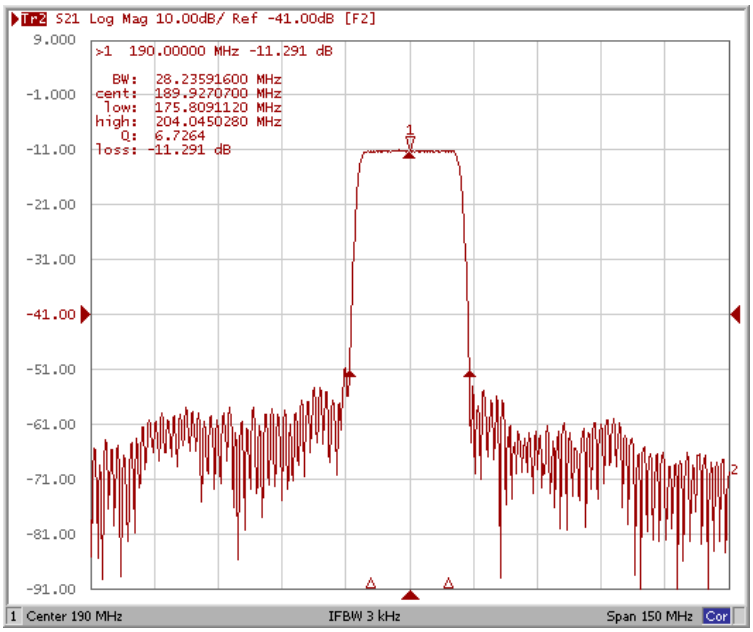
Frequency Response

***Room Temp. 25 degree**

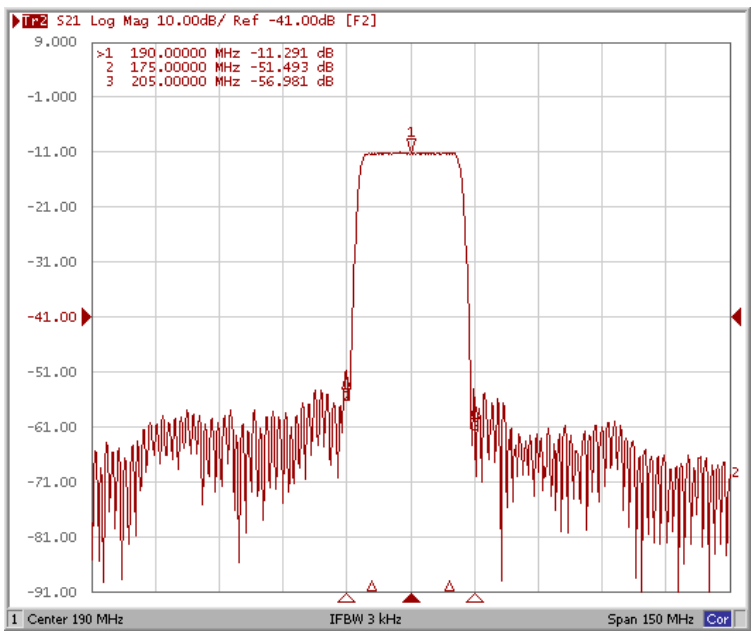
Bandwidth at –1.0 dB



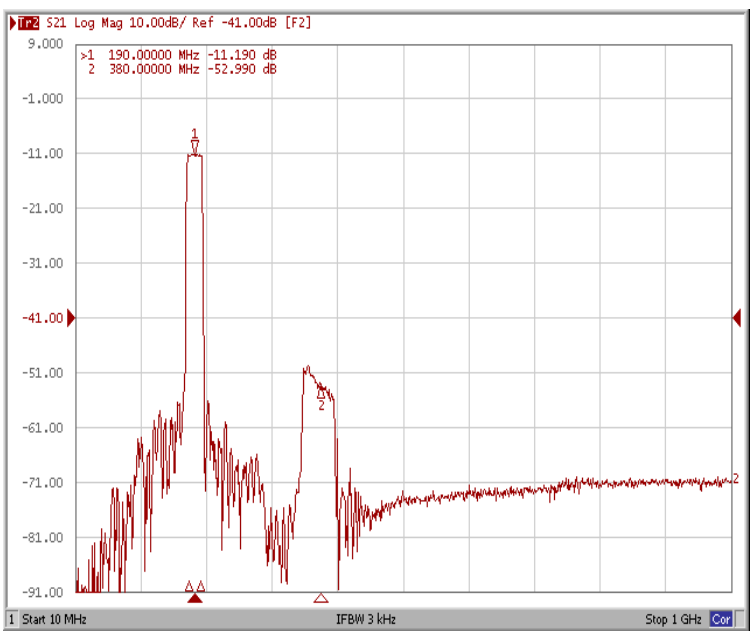
Bandwidth at –40.0 dB



@175MHz, @205MHz



Wide-Band



❒ Frequency Characteristics

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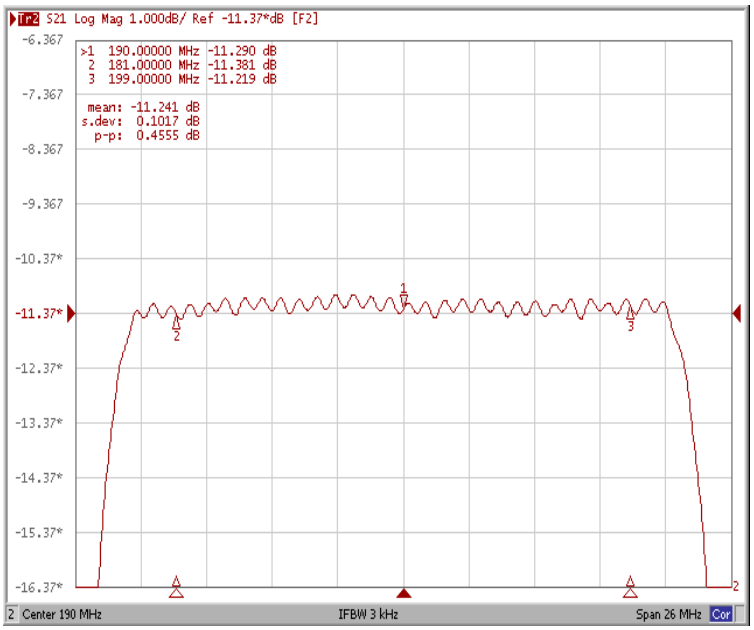
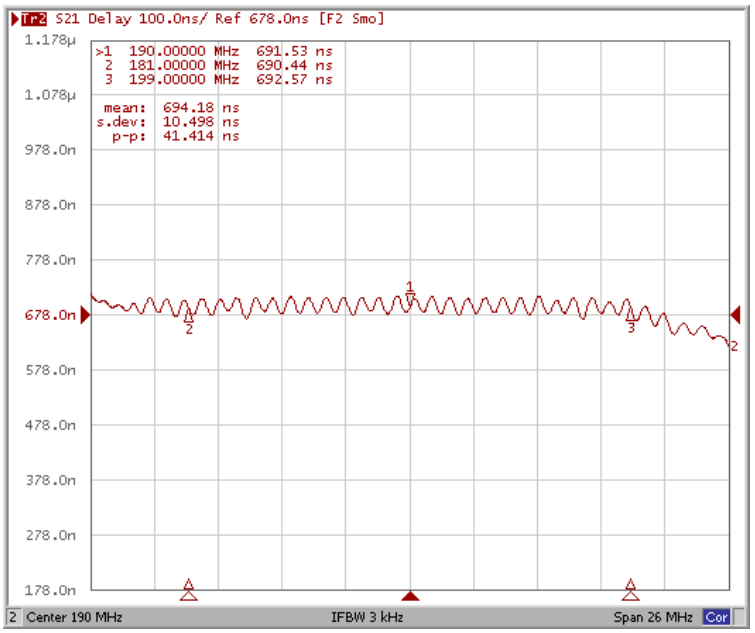
Frequency Response

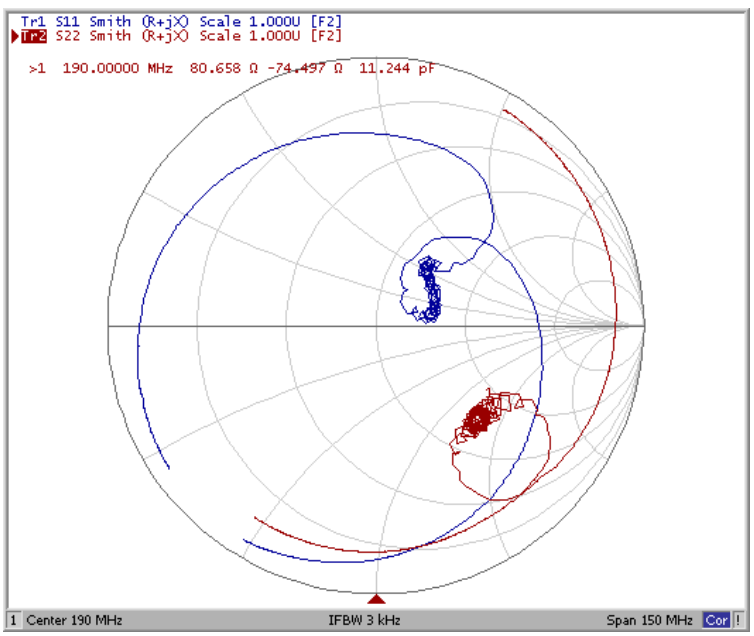
Ripple Variation at Fo ±9.0MHz



Ripple Variation at Fo ±9.0MHz



Smith Chart



VSWR