



Total Solution Provider in Saw Device

SL19222AS1

192.0MHz IF SAW Filter
24.13 MHz Bandwidth
Revision 0: 24. Mar. 2009



- Electrical Characteristics
 - Package Dimensions
 - Testing Environment
 - Frequency Characteristics
-

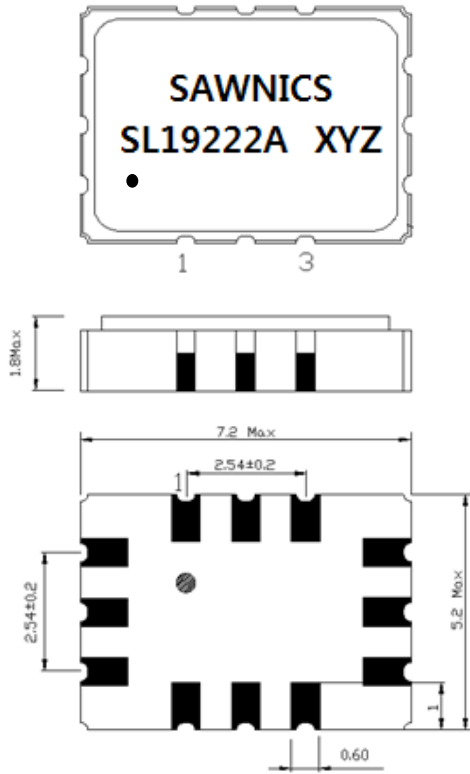
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PRELIMINARY INFORMATION (Based upon simulation)

D a t a		typ. value		tolerance / limit		
Insertion loss (reference level)		a_e	11.2 dB		max.	13.5 dB
Nominal frequency		f_N	-			192,0 MHz
Centre frequency		f_C	192 MHz			-
Passband		PB	-		$f_N \pm$	10,25 MHz
Pass band ripple		p-p	0,4 dB		max.	1 dB
Amplitude ripple over any 200kHz of the PB		p-p	0.3 dB		max.	0,4 dB
Bandwidth		BW				
1	dB		24,13 dB		min.	20.5 MHz
40	dB		29,73 dB		max.	42 MHz
Relative attenuation		a_{rel}				
f_N	...	$f_N \pm 10,25$ MHz	0,40 dB		max.	1 dB
$f_N \pm 15$ MHz	...	$f_N \pm 21$ MHz	43,0 dB		min.	3 dB
$f_N - 92$ MHz	...	$f_N - 62$ MHz	50,0 dB		min.	45 dB
$f_N - 62$ MHz	...	$f_N - 21$ MHz	45,0 dB		min.	40 dB
$f_N + 21$ MHz	...	$f_N + 58$ MHz	45,0 dB		min.	40 dB
$f_N + 58$ MHz	...	$f_N + 98$ MHz	53,0 dB		min.	45 dB
Absolute group delay in PB			0,7 us		Max.	1 us
Group delay ripple in PB		GDR	35 ns		max.	100 ns
Group delay ripple over any 200kHz of the PB			25 ns		max.	30 ns
Return loss			6,7		min.	6 dB
Input power level			-		max.	18 dBm
Operating temperature range		OTR	-			- 40 °C ... + 85 °C
Storage temperature range			-			- 40 °C ... + 85 °C
Temperature coefficient of frequency		TCf **	-86 ppm/K			-

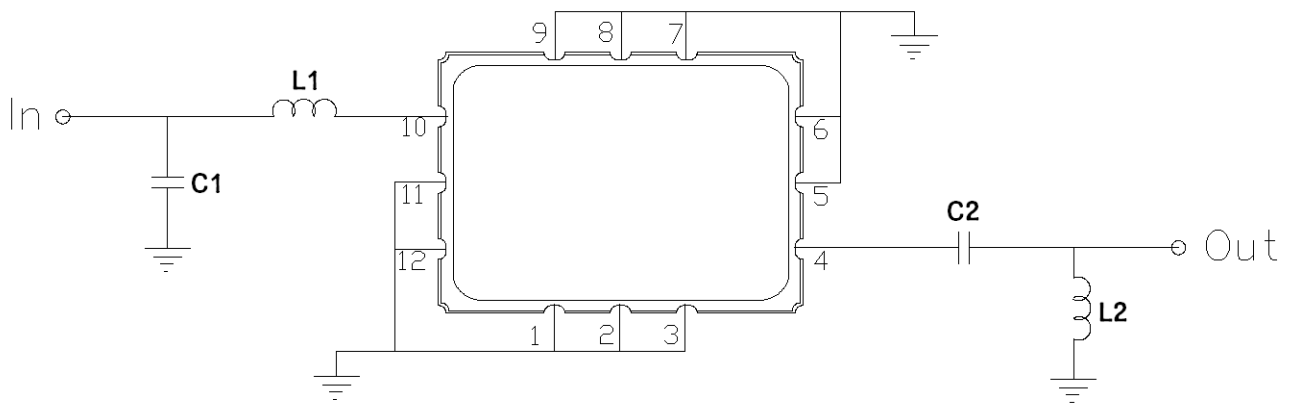
Package Dimensions



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

- ① SAWNICS: Brand
- ② SL19222A: Model Name
- ③ X : Date Code (Year)
- ④ Y : Date Code (Month)
- ⑤ Z : Date Code (Date)
- : Index Dot

Testing Environment

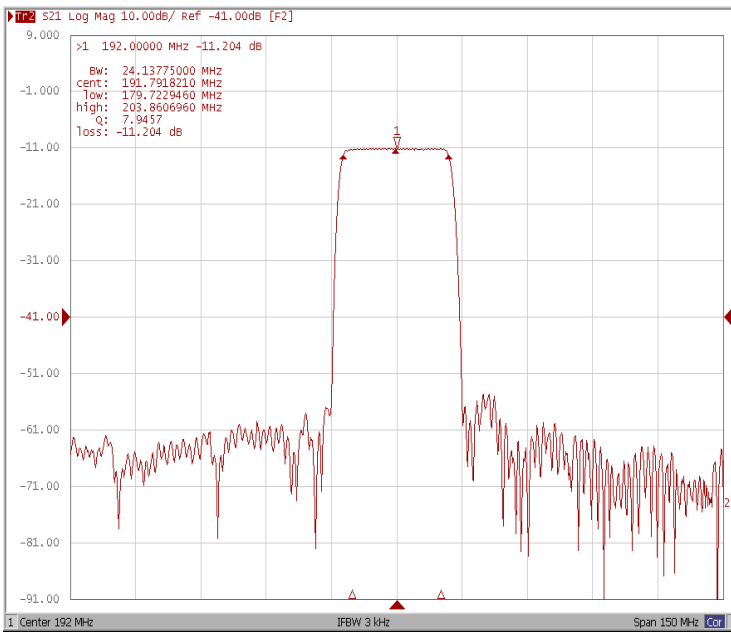


Test Fixture & Values	
Input	L1=56 nH, C1=18 pF
Output	L2=39 nH, C2=180 pF
Source/Load Impedance	50 Ω

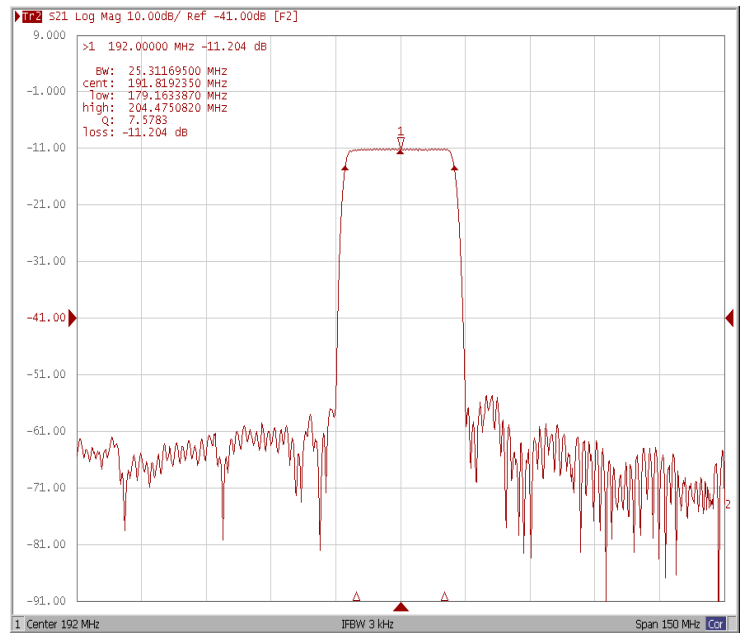
□ Frequency Characteristics

Frequency Response

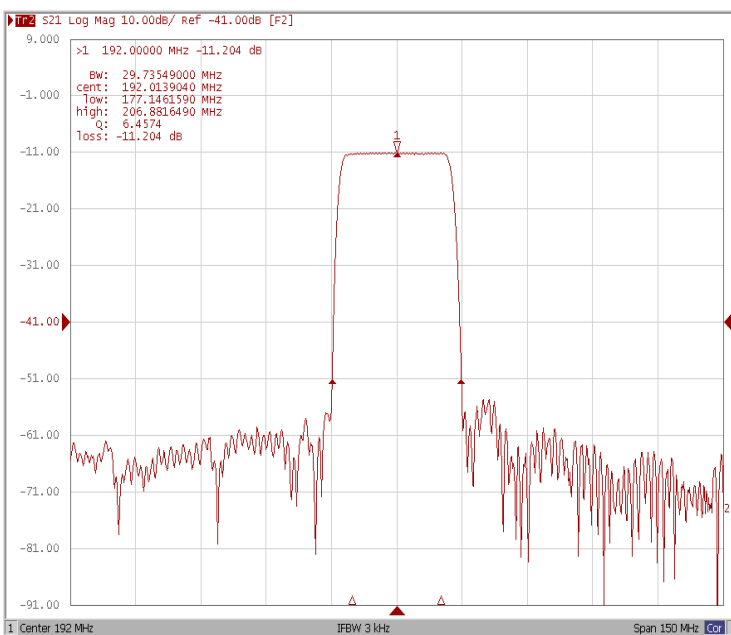
Bandwidth at -1.0 dB



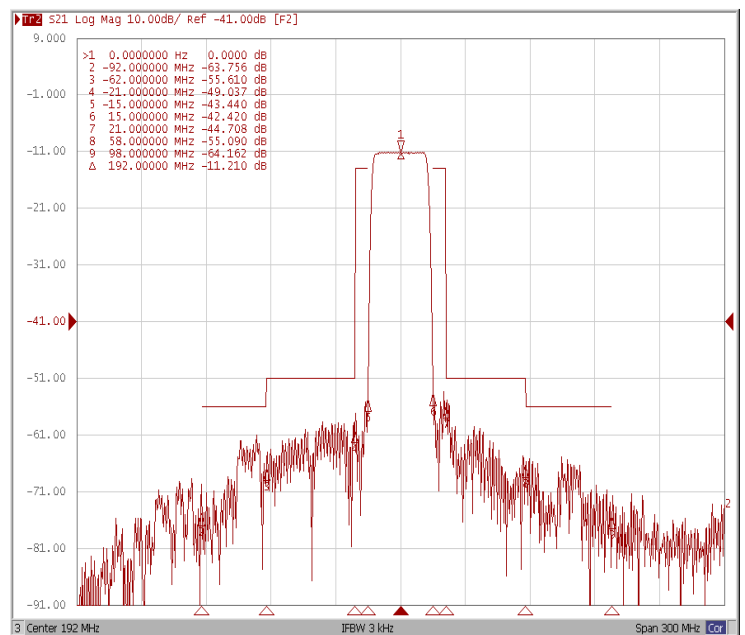
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



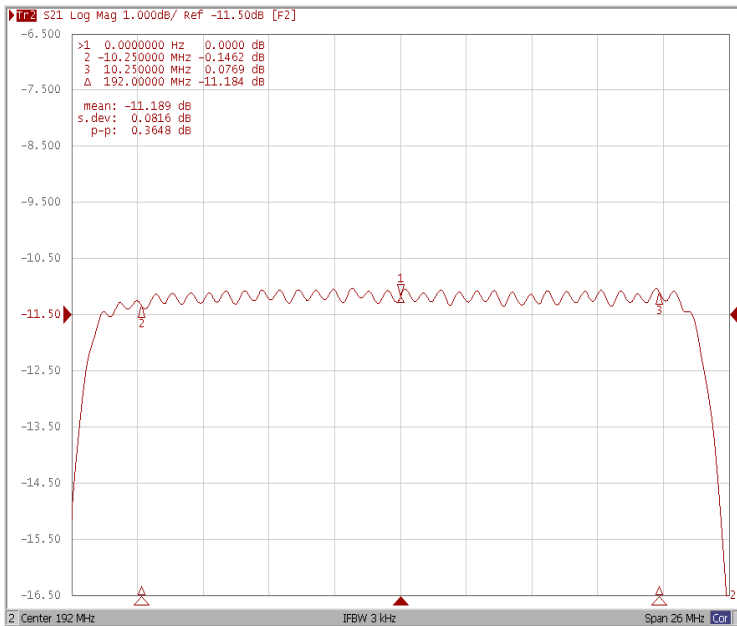
Relative Attenuation



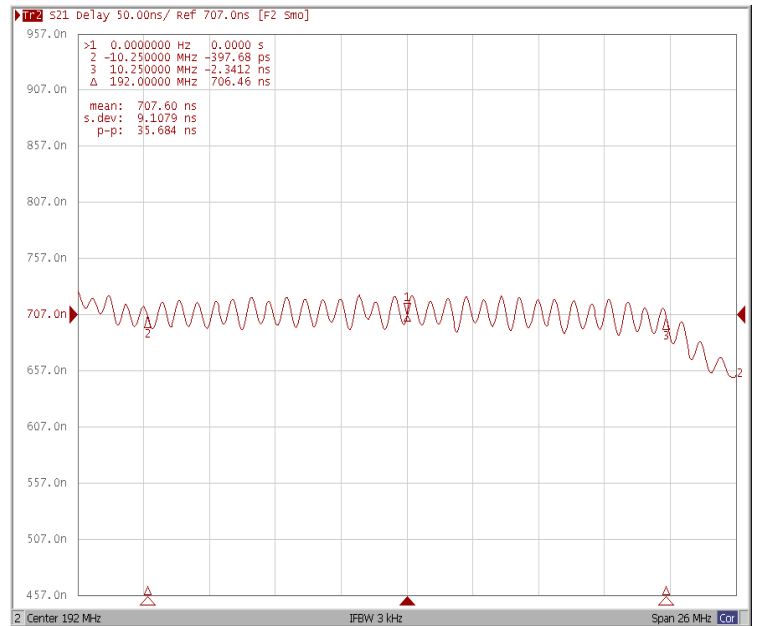
Frequency Characteristics

Frequency Response

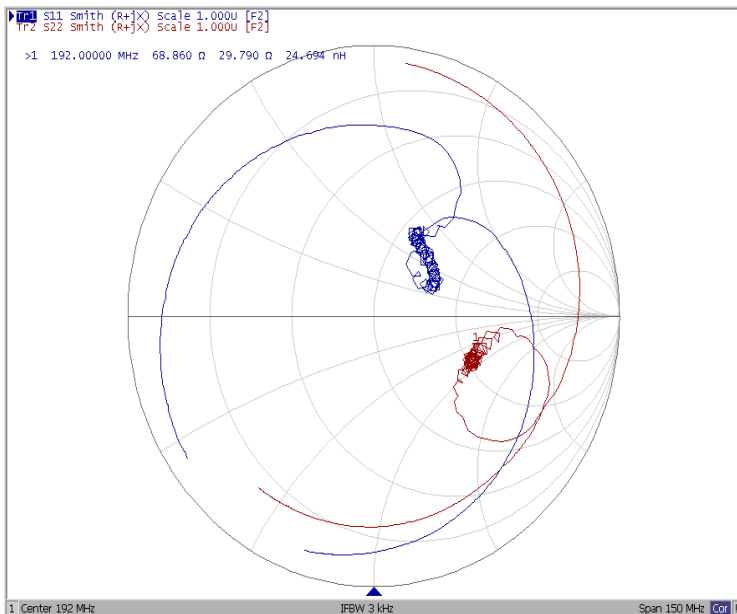
Ripple Variation at Fo ±10.25MHz



Ripple Variation at Fo ±10.25MHz



Smith Chart



Return Loss

