



*Total Solution Provider in Saw Device*

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# SL19006AS1

190.0MHz IF SAW Filter

5.95 MHz Bandwidth

Revision 0: 17. September. 2010

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- Electrical Characteristics
  - Package Dimensions
  - Testing Environment
  - Frequency Characteristics
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## □ 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	S1			
Length x Width	mm <sup>2</sup>	-	7.0 x 5.0	-
Height	mm	-	-	1.8

### Electrical Specification

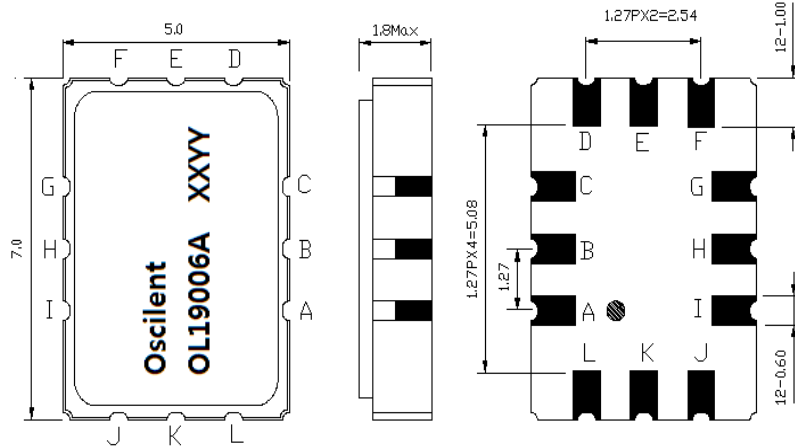
**\*Operating Temperature : +25°C**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	189.70	190.00	190.30
Insertion Loss at Fo	dB	-	9.60	12.00
Temperature Coefficient	ppm/°C	-	-20	-
1dB Bandwidth	MHz	5.50	5.95	-
3dB Bandwidth	MHz	-	7.05	-
40dB Bandwidth	MHz	-	10.95	12.00
<b>Relative Attenuation</b>				
@180MHz	dB	40	50	-
@200MHz	dB	40	50	-
Ultimate Rejection	dB	40	47	-
Amplitude ripple variation (Fo +/-2.26MHz)	dB <sub>p-p</sub>	-	0.35	0.90
Group Delay variation (Fo +/-2.26MHz)	nsec	-	30	70
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.

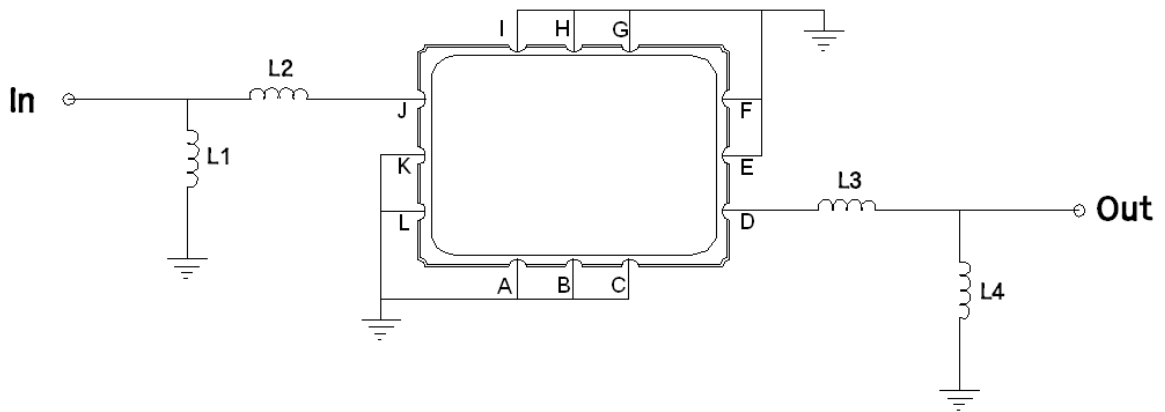
**Package Dimensions**



- ① Oscilent: Brand
- ② OL19006A: Model Name
- ③ XX : Date Code (Year)
- ④ YY : Date Code (Week)

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

**Testing Environment**



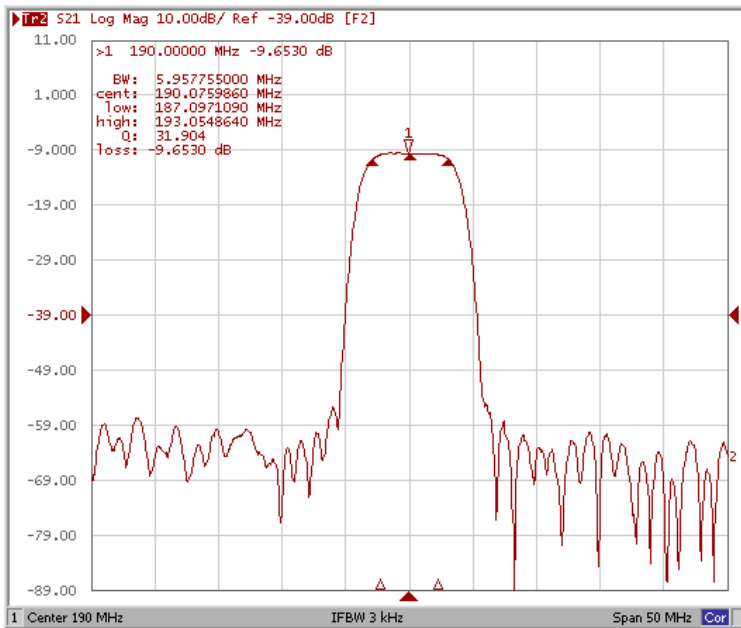
Test Fixture & Values	
Input	L1=27 nH, L2=8.2 nH
Output	L3=5.6 nH, L4=33 nH
Source/Load Impedance	50 Ω

### □ Frequency Characteristics

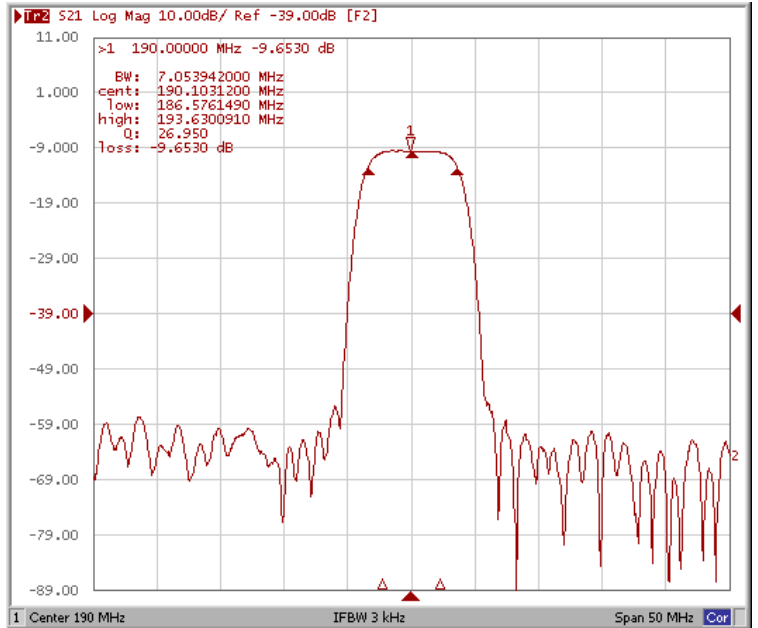
#### Frequency Response

\*Room Temp. 25 degree

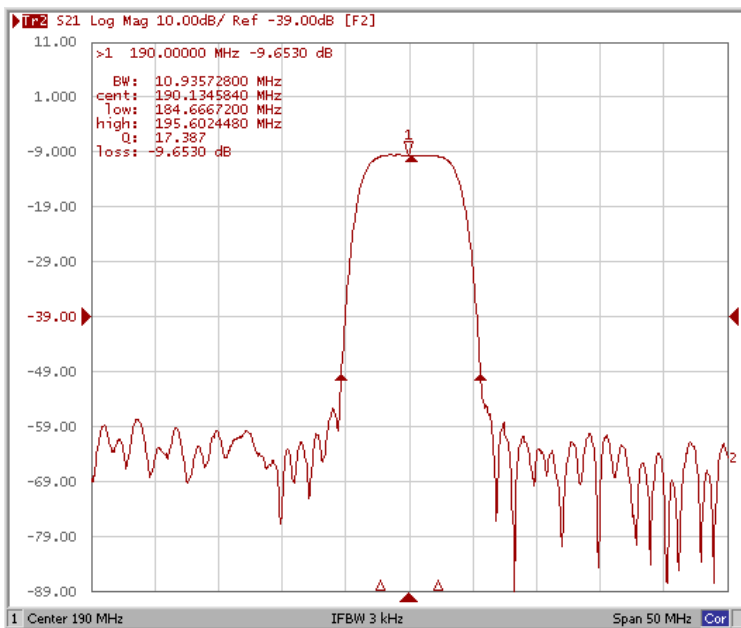
Bandwidth at -1.0 dB



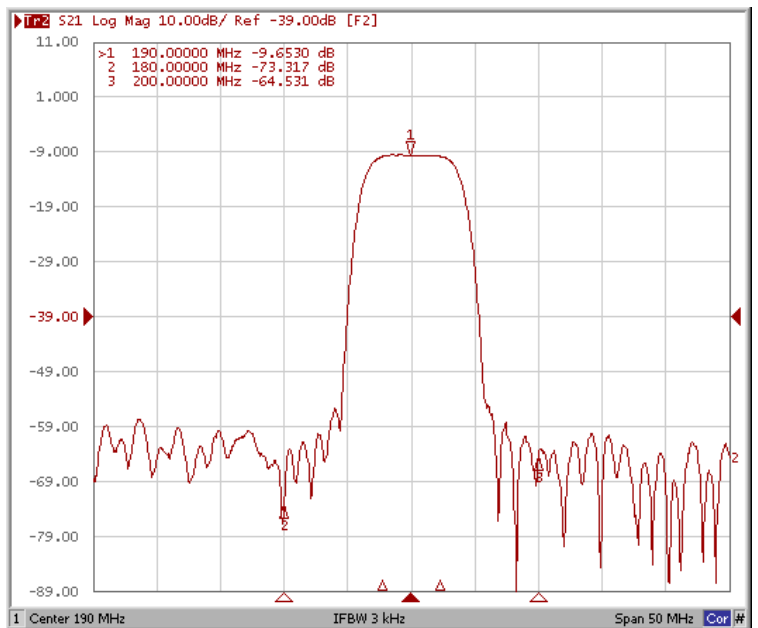
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



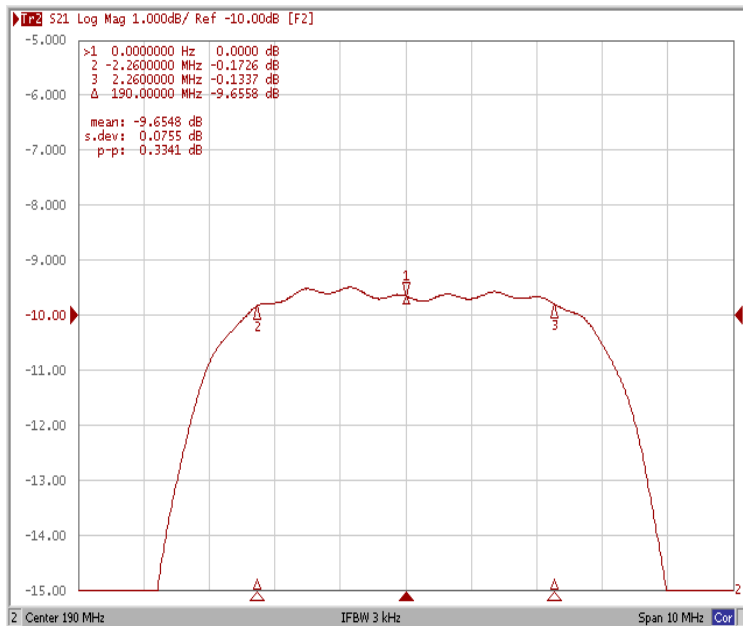
@175MHz, @205MHz



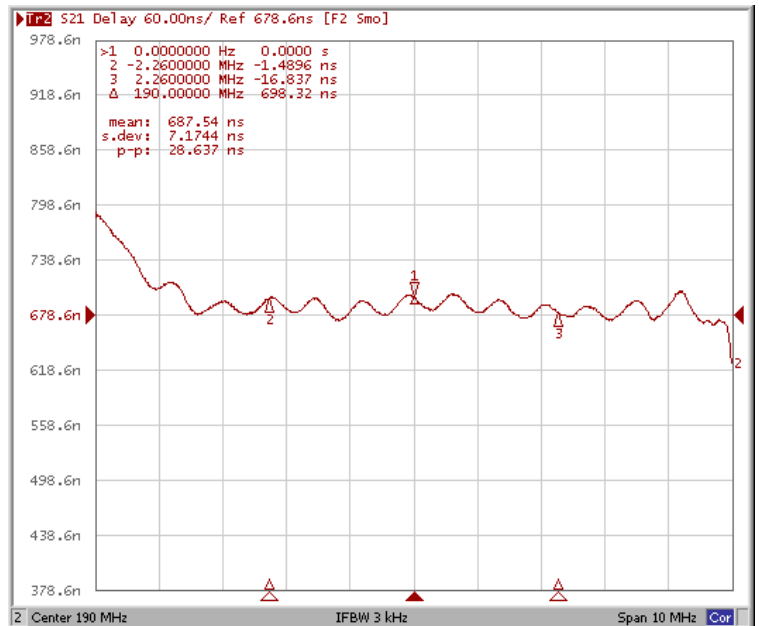
### Frequency Characteristics

#### Frequency Response

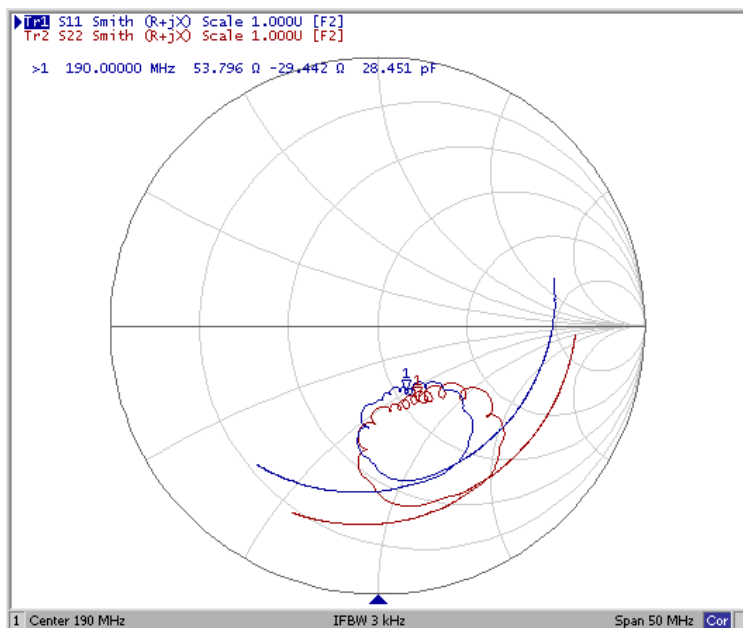
Ripple Variation at Fo ±2.26MHz



Ripple Variation at Fo ±2.26MHz



Smith Chart



VSWR

