



*Total Solution Provider in Saw Device*

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# SL12529AV

125.0 MHz IF SAW Filter  
29.9 MHz Bandwidth  
Revision 0: 26. May. 2008



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

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package type & size	V			
Length x Width	mm <sup>2</sup>	-	13.3 x 6.5	-
Height	mm	-	-	1.8

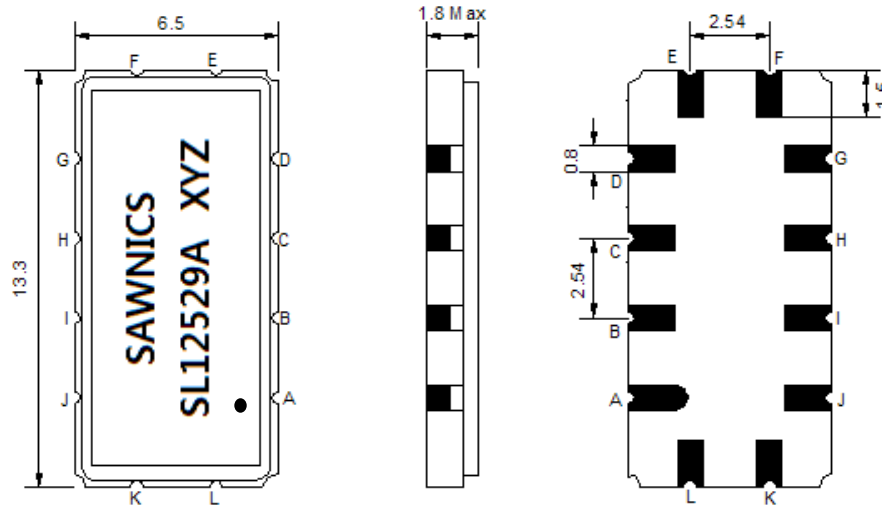
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	124.85	125.0	125.15
Insertion Loss at Fo	dB	-	12.0	13.50
Amplitude Ripple within fo ±13.5 MHz	dB <sub>p-p</sub>	-	0.35	0.80
Group Delay Variation within fo ±13.5 MHz	nsec	-	20	50
Absolute Delay at Fo	μsec	-	0.68	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	29.0	29.9	-
Bandwidth at -3.0 dB	MHz	30.0	31.1	-
Bandwidth at -40.0 dB	MHz	-	36.9	37.5
<b>Relative Attenuation:</b>				
Lower sidelobe	dB	40	48	-
Upper sidelobe	dB	40	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.

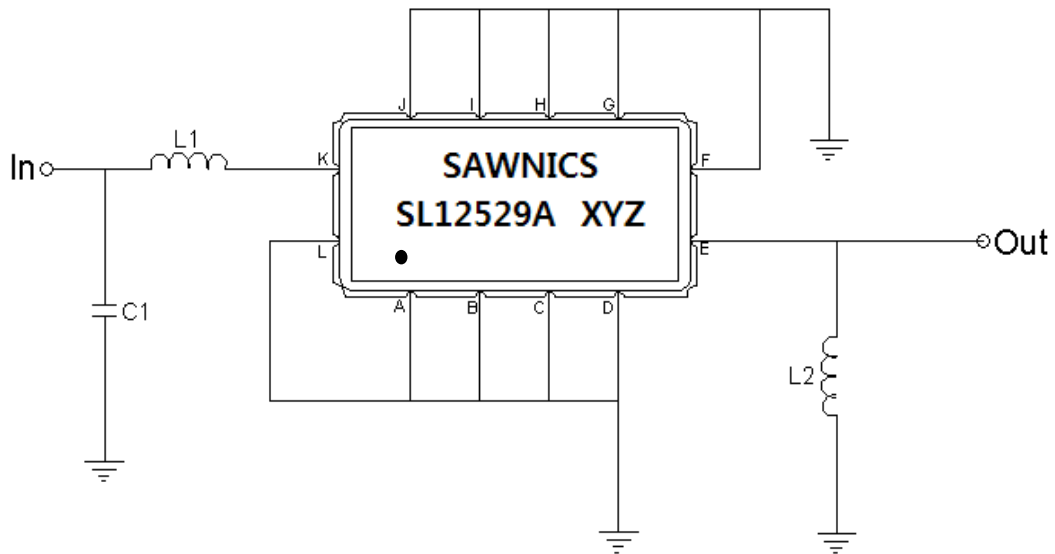
### Package Dimensions



- ① SAWNICS: Brand
- ② SL12529A: 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, J, L	Ground
K	Input
E	Output

### Testing Environment

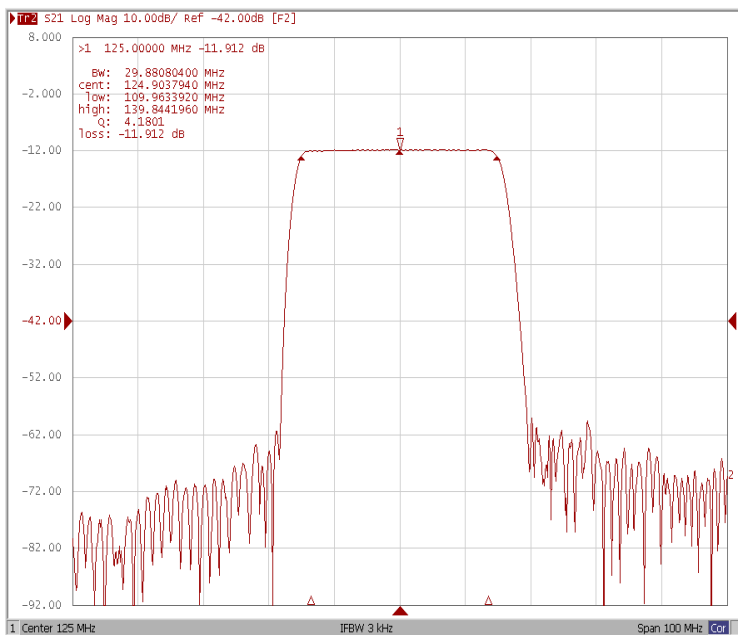


Test Fixture & Values	
Input	L1=56nH, C1=30pF
Output	L2=39nH,
Source/Load Impedance	50 Ω

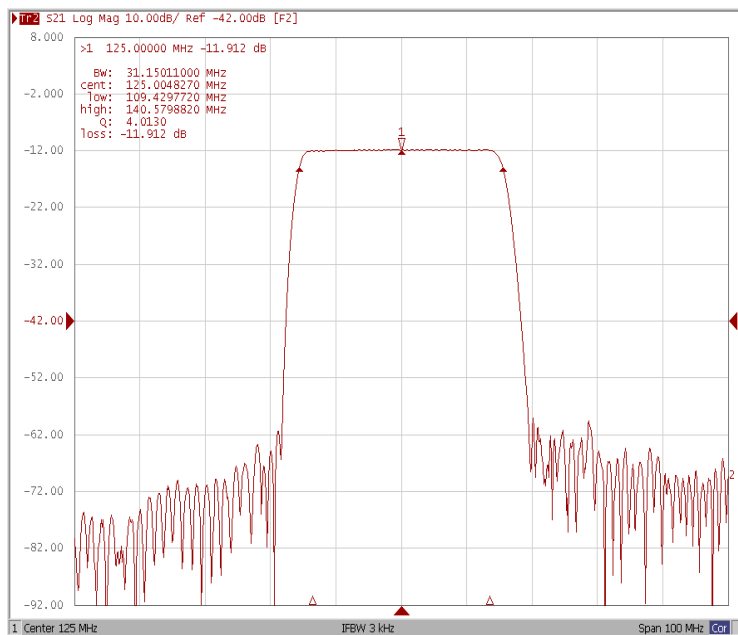
### Frequency Characteristics

#### Frequency Response

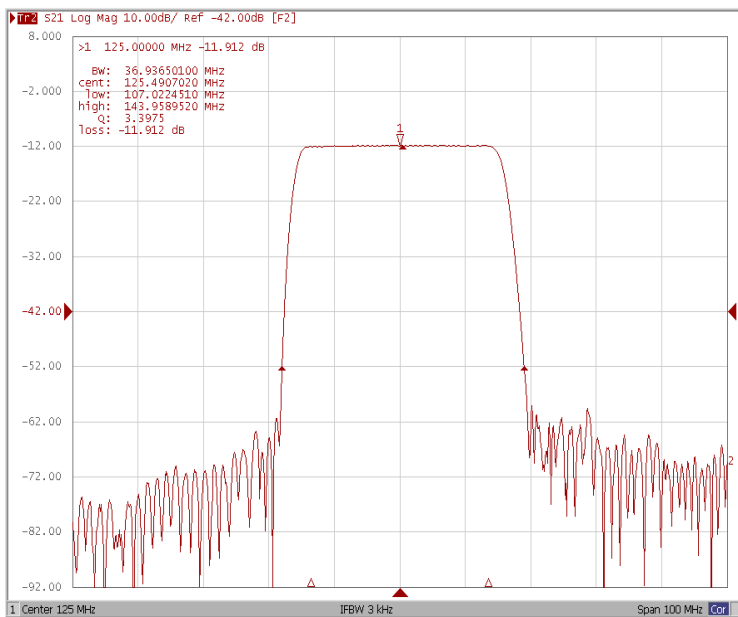
**Bandwidth at -1.0 dB**



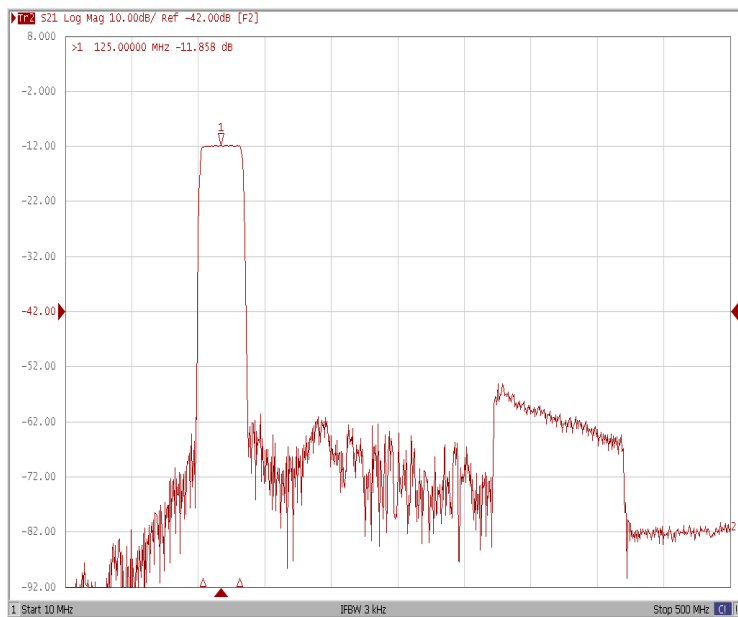
**Bandwidth at -3.0 dB**



**Bandwidth at -40.0 dB**



**Wide-Band**

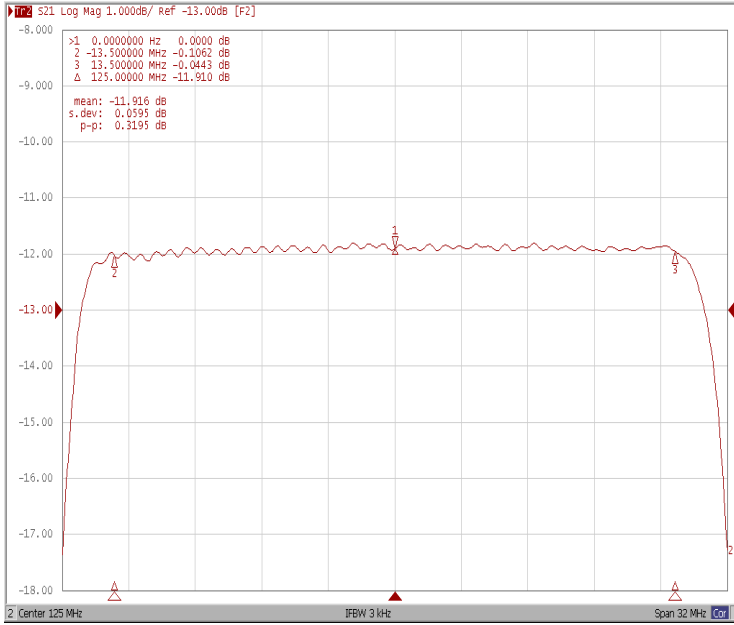




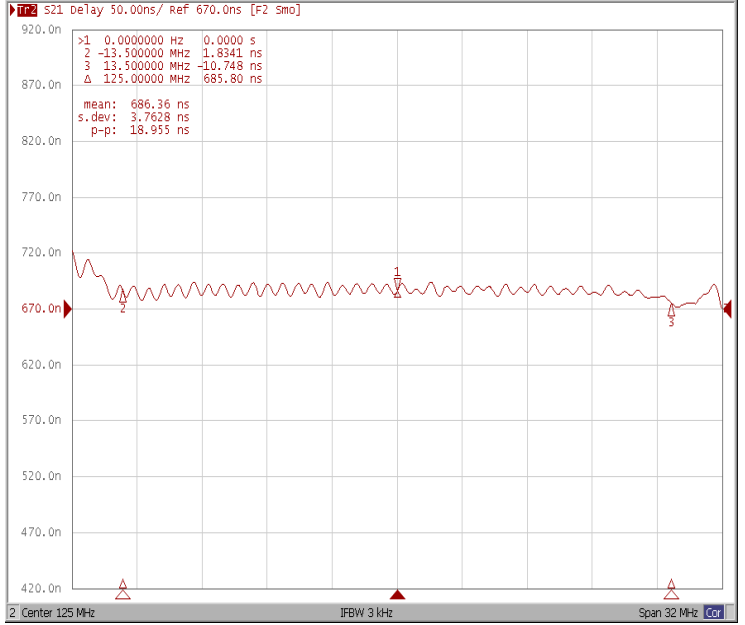
# Frequency Characteristics

## Frequency Response

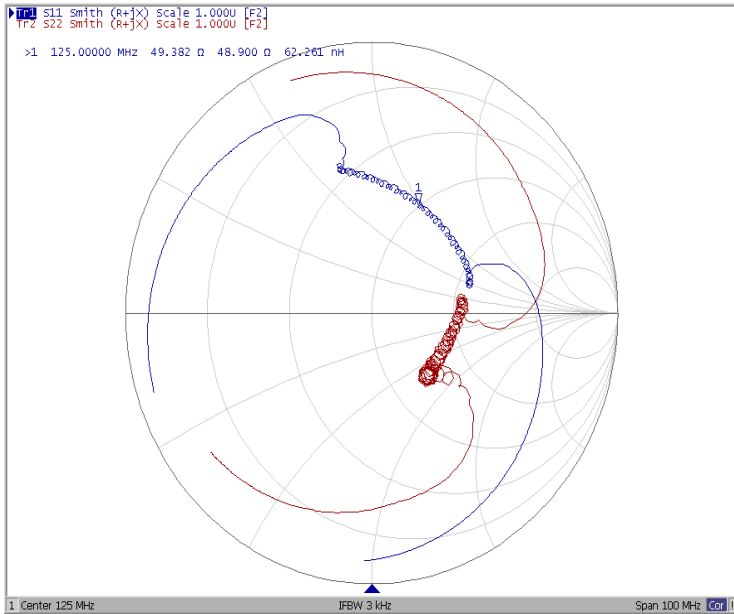
Ripple Variation Fo±13.5MHz



Group Delay Variation Fo±13.5MHz



Smith Chart



SWR

