



*Total Solution Provider in Saw Device*

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# SL24028AV

240MHz IF SAW Filter  
28.0MHz Bandwidth  
Revision 1 : 20. FEB. 2008



- 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	-30	-	80
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

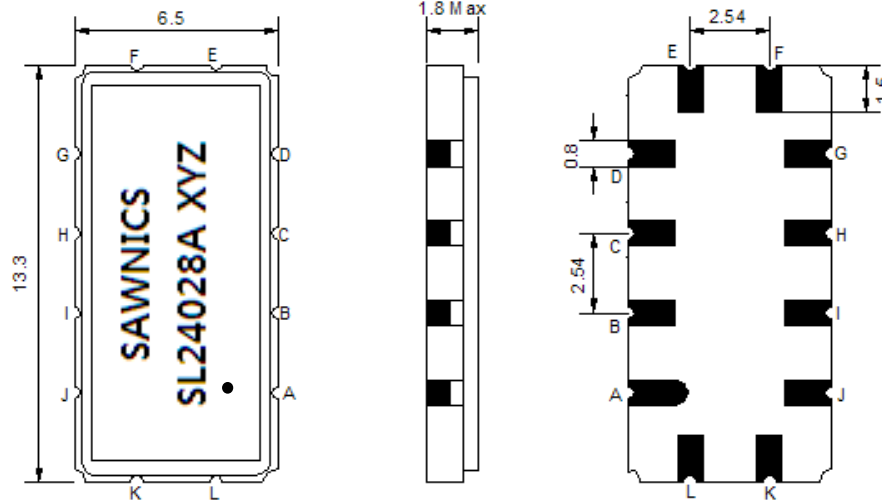
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	240.0	-
Insertion Loss at Fo	dB	-	15.5	18.0
Amplitude Ripple within fo ±12.5 MHz	dB <sub>p-p</sub>	-	0.35	1.00
Group Delay Variation within fo ±12.5 MHz	nsec	-	22	50
Absolute Delay at Fo	µsec	-	0.7	-
Bandwidth at -1.0 dB	MHz	27.20	28.02	-
Bandwidth at -20.0 dB	MHz	-	32.20	-
Bandwidth at -40.0 dB	MHz	-	33.77	34.50
Ultimate Rejection	dB	40	48	-
Temperature Coefficient	ppm/°C	-	-86	-

**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.

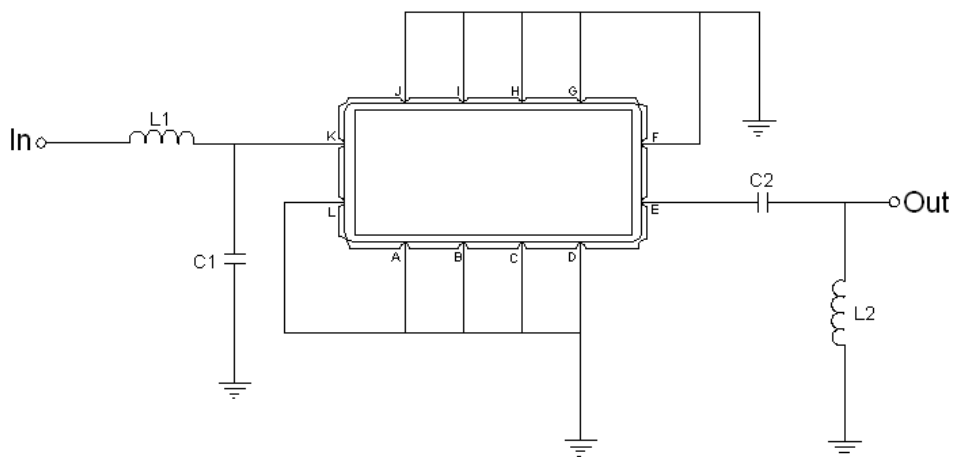
### Package Dimensions



- ① SAWNICS: Brand
- ② SL24028A: 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



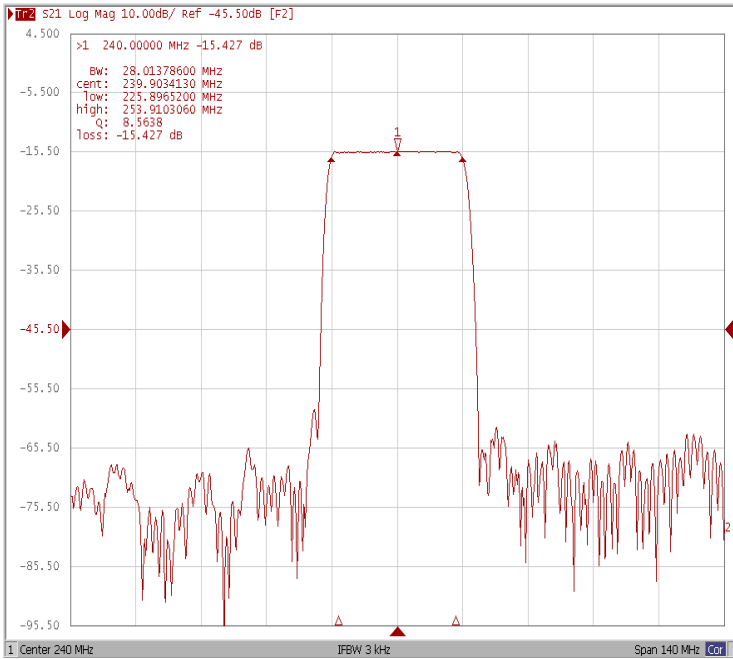
Test Fixture & Values	
Input	L1=10nH, C1=9pF
Output	L2=15nH, C2=56pF
Source/Load Impedance	50 Ω



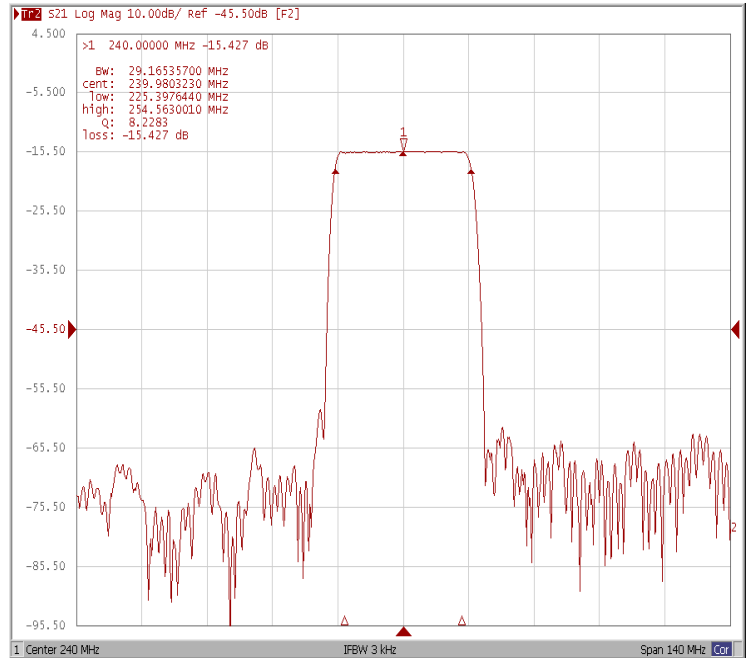
# Frequency Characteristics

## Frequency Response

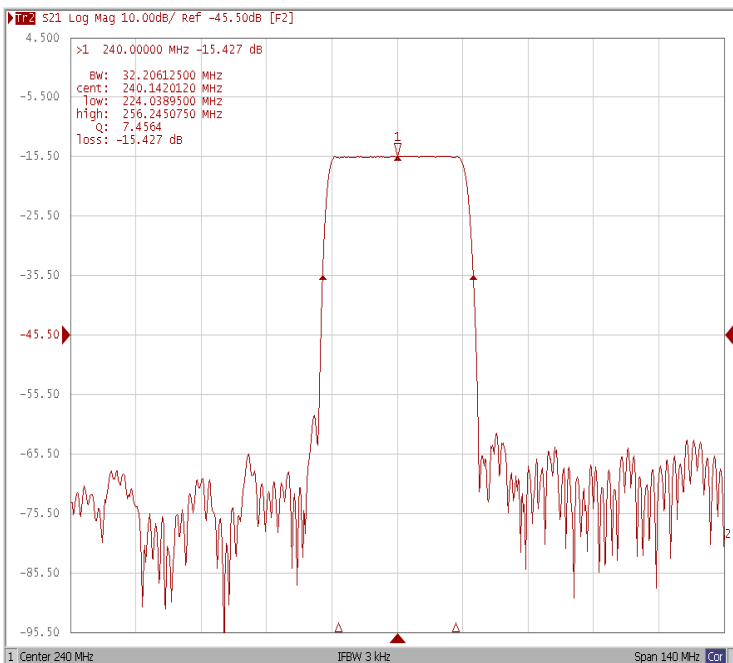
Bandwidth at -1.0 dB



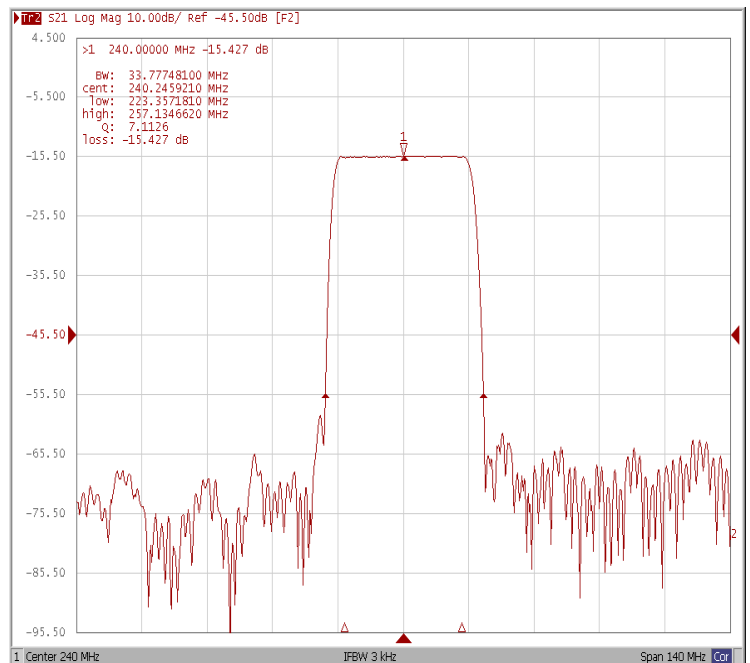
Bandwidth at -3.0 dB



Bandwidth at -20.0 dB



Bandwidth at -40.0 dB

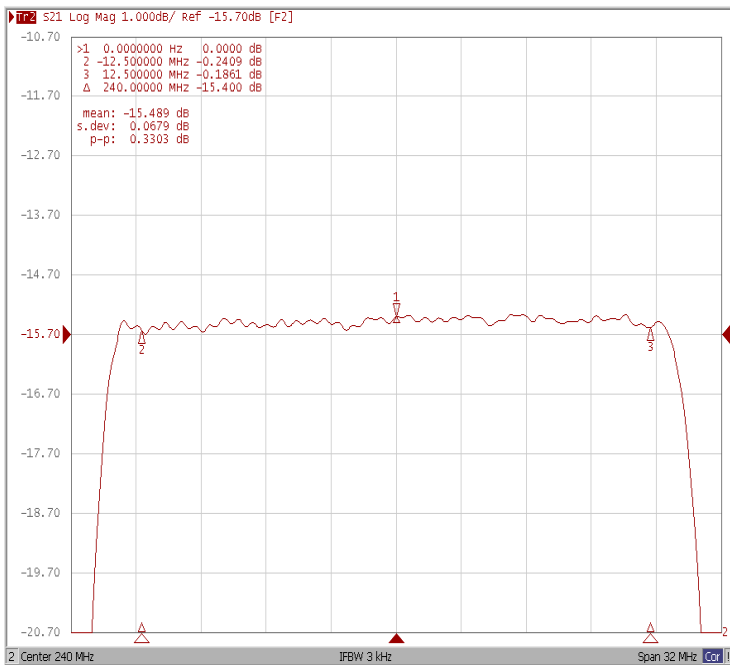




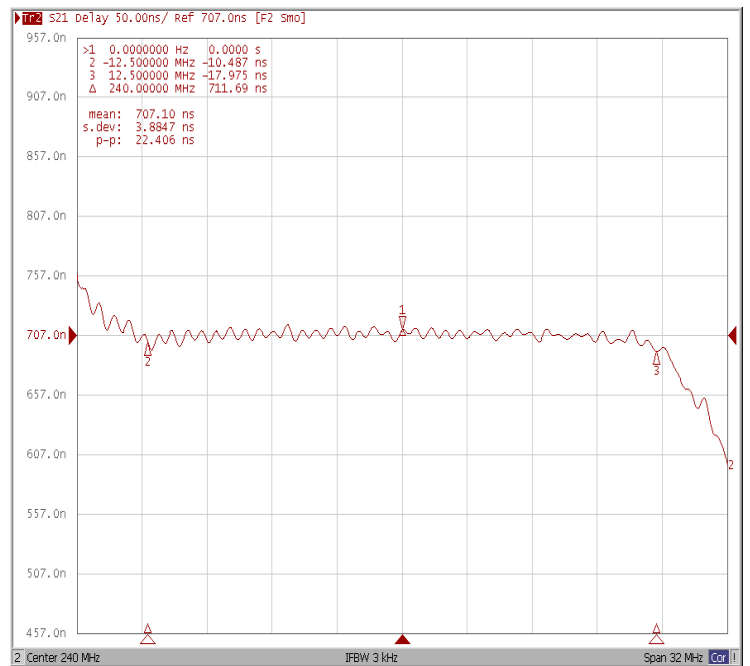
### Frequency Characteristics

#### Frequency Response

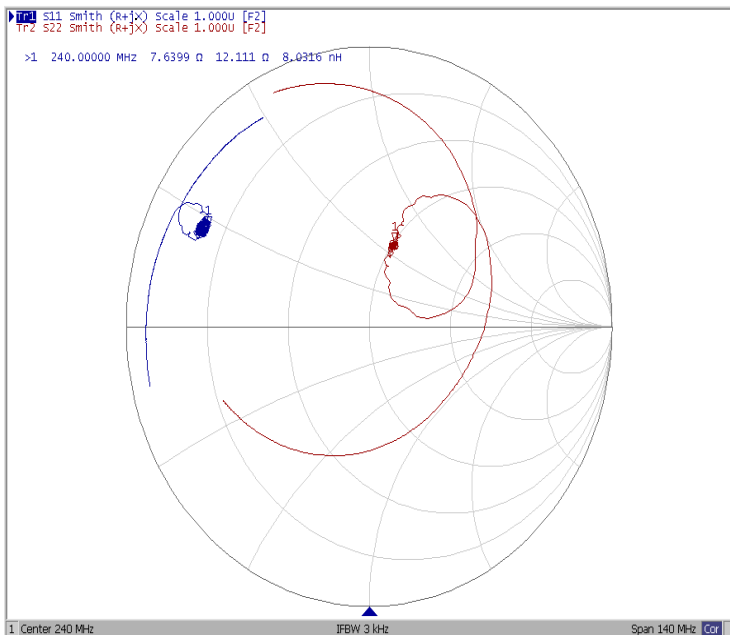
Ripple Variation  $F_0 \pm 12.5\text{MHz}$



Group Delay Variation  $F_0 \pm 12.5\text{MHz}$



Smith Chart



SWR

