



*Total Solution Provider in Saw Device*

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# SA28029AV

280.0 MHz IF SAW Filter  
29.51 MHz Bandwidth  
Revision 0: 07. October. 2010



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

### Maximum Ratings

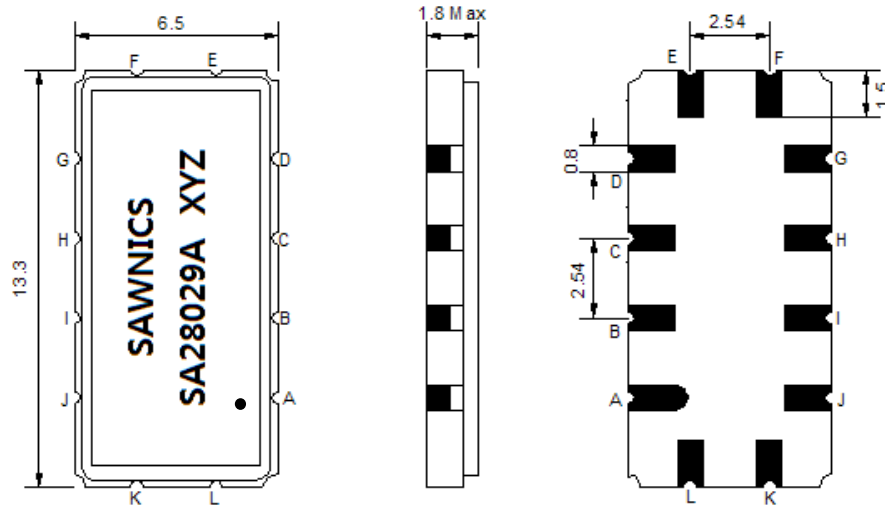
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-	25	-
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Package 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	-	280.0	-
Insertion Loss at Fo	dB	-	29.20	32.00
Group Delay Variation at Fo ± 14.32 MHz	nsec	-	30	70
Absolute Delay at Fo	usec	-	2.03	-
Passband Ripple Variation at Fo ± 14.32 MHz	dB	-	0.80	-
Bandwidth at -1dB	MHz	29.20	29.51	-
Bandwidth at -3dB	MHz	-	29.96	-
Bandwidth at -40dB	MHz	-	31.86	32.05
Ultimate Rejection	dB	47	52	-
Temperature Coefficient	ppm/°C	-	-20	-

**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.

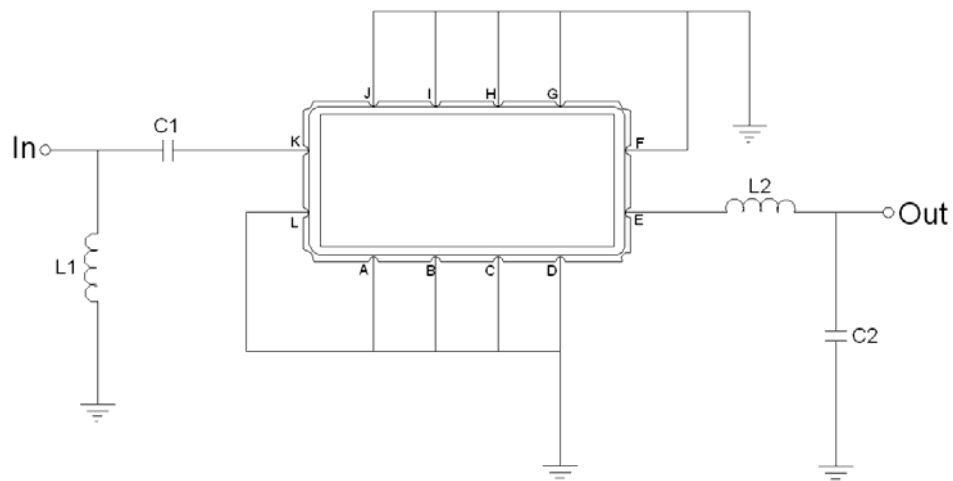
### □ Package Dimensions



- ① SAWNICS: Brand
- ② SA28029A: 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 = 10 nH, C1 = 82 pF
Output	L2 = 15 nH, C2 = 33 pF
Source/Load Impedance	50 Ω

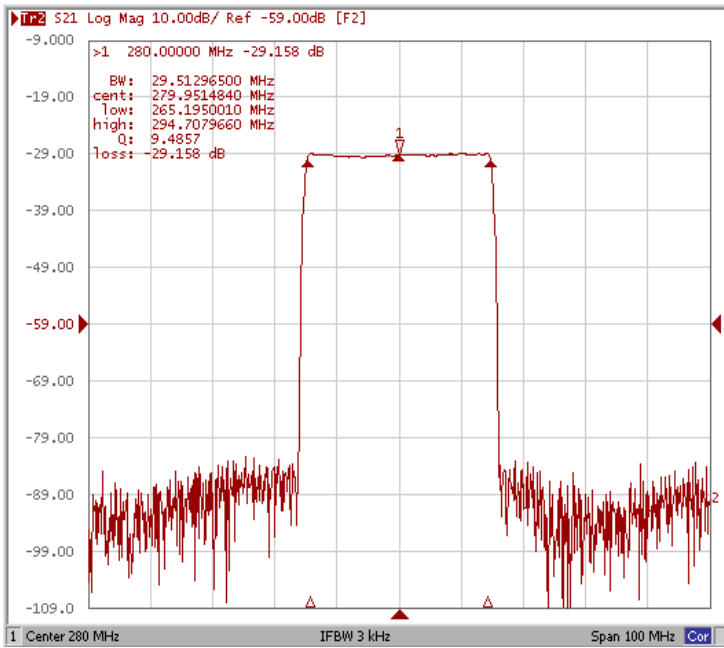


## □ Frequency Characteristics

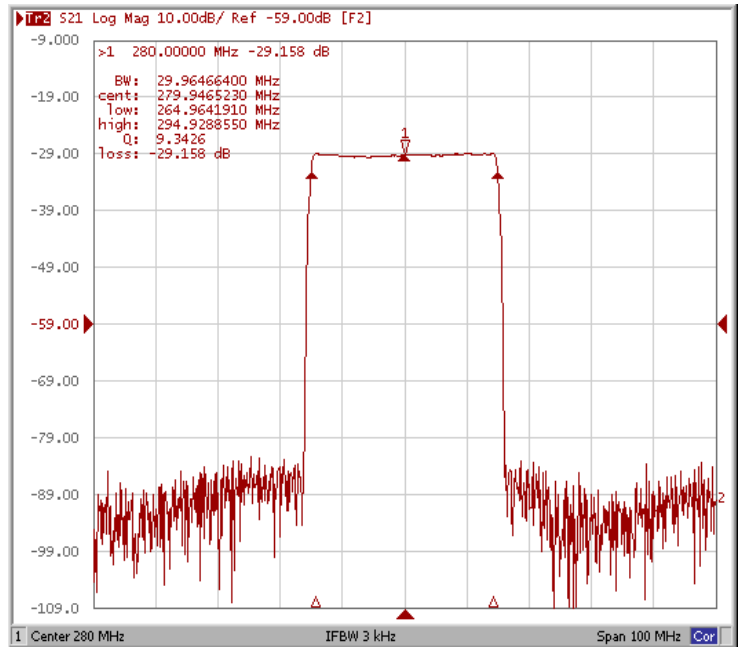
### Frequency Response

\*Room Temp. 25 degree

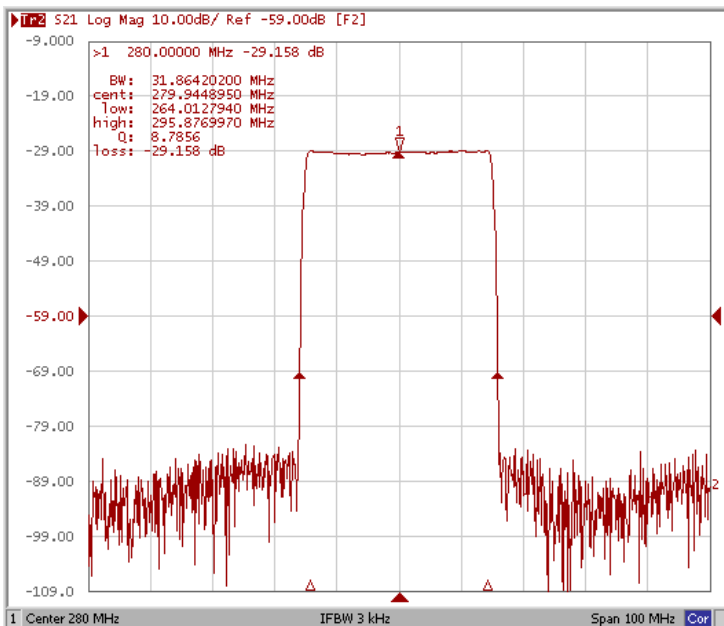
Bandwidth at -1.0 dB



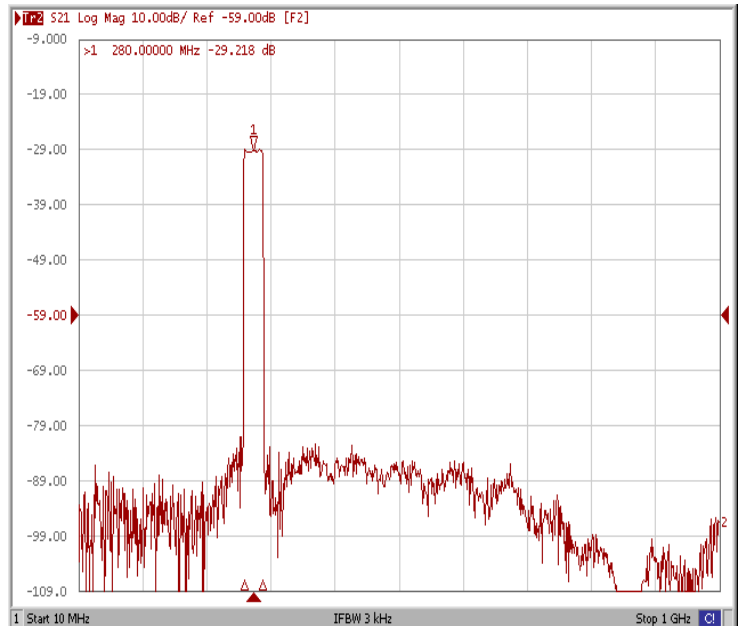
Bandwidth at -3.0 dB



Bandwidth at -40 dB



Wide Band





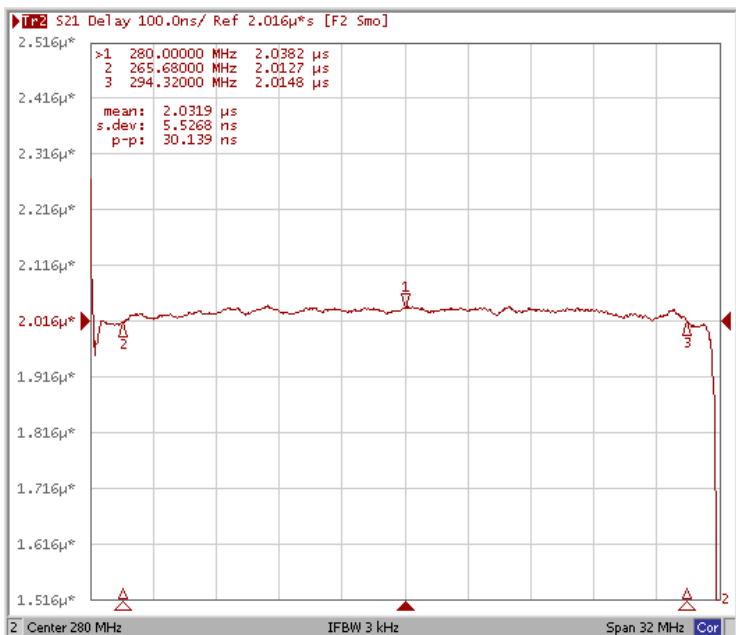
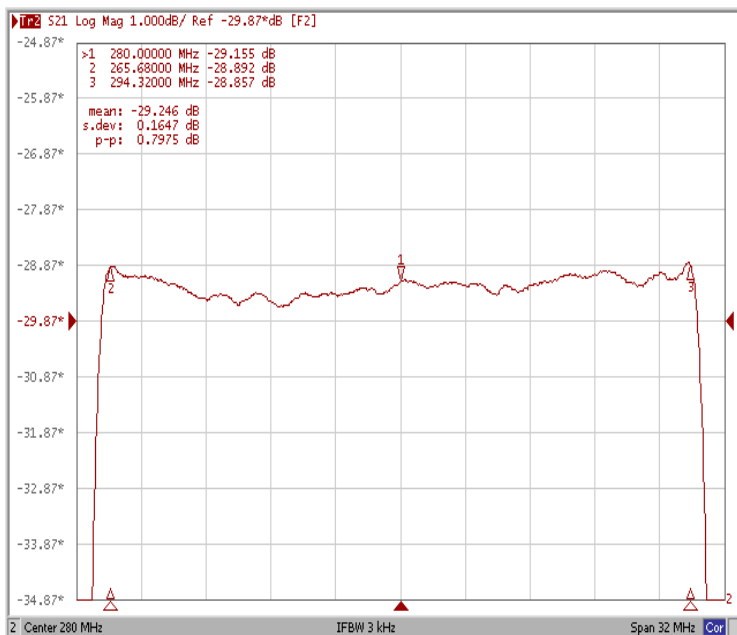
### Frequency Characteristics

#### Frequency Response

\*Room Temp. 25 degree

Ripple Variation  $Fo \pm 14.32$  MHz

Group Delay Variation  $Fo \pm 14.32$  MHz



Smith Chart

VSWR

