



*Total Solution Provider in Saw Device*

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# SL071001BV1

71.00 MHz IF SAW Filter  
61.00 KHz Bandwidth  
Revision 0: 29. November. 2011



- 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	-	80
Storage Temperature Range	°C	-40	-	85
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	V1			
Length x Width	mm <sup>2</sup>	-	13.3 x 6.5	-
Height	mm	-	-	1.65



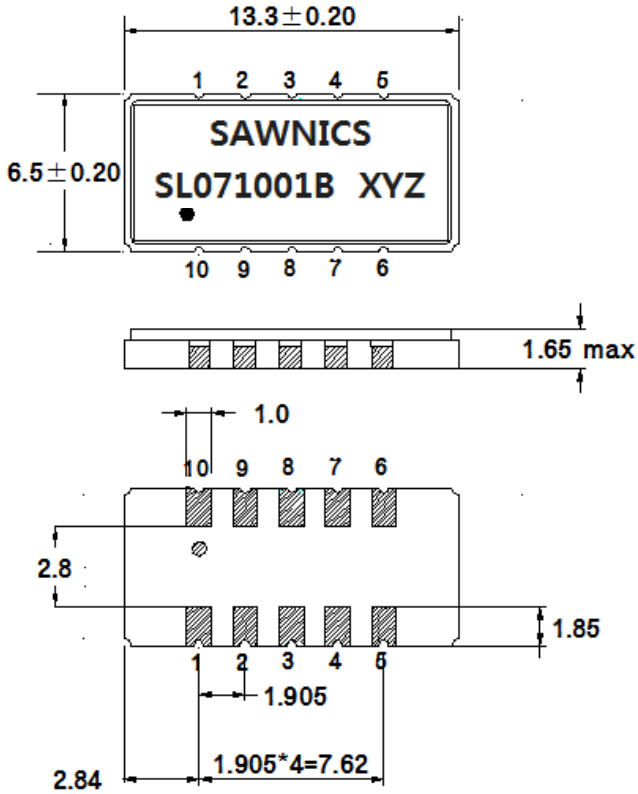
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	71.00	-
Insertion Loss at Fo	dB	-	7.4	9.0
Group Delay Variation at Fo $\pm$ 25 KHz	nsec	-	512	1500
Absolute Delay at Fo	usec	-	4.14	-
Passband Ripple Variation at Fo $\pm$ 25 KHz	dB	-	0.84	1.5
Bandwidth at -1dB	MHz	-	0.061	-
Bandwidth at -2dB	MHz	-	0.089	-
Bandwidth at -3dB	MHz	-	0.109	-
Bandwidth at -7dB	MHz	-	0.170	-
Bandwidth at -35dB	MHz	-	0.663	-
<b>Ultimate Rejection</b>				
Fo $\pm$ 300 KHz ~ Fo $\pm$ 500 KHz	dB	15	30	-
Fo $\pm$ 500 KHz ~ Fo $\pm$ 700 KHz	dB	27	30	-
Fo $\pm$ 700 KHz ~ Fo $\pm$ 3 MHz	dB	35	38	-
Fo $\pm$ 800 KHz	dB	37	46	-
Fo $\pm$ 3 MHz ~ Fo $\pm$ 35 MHz	dB	42	47	-
Temperature Coefficient	ppm/ $^{\circ}$ C	-	-0.036	-

**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.

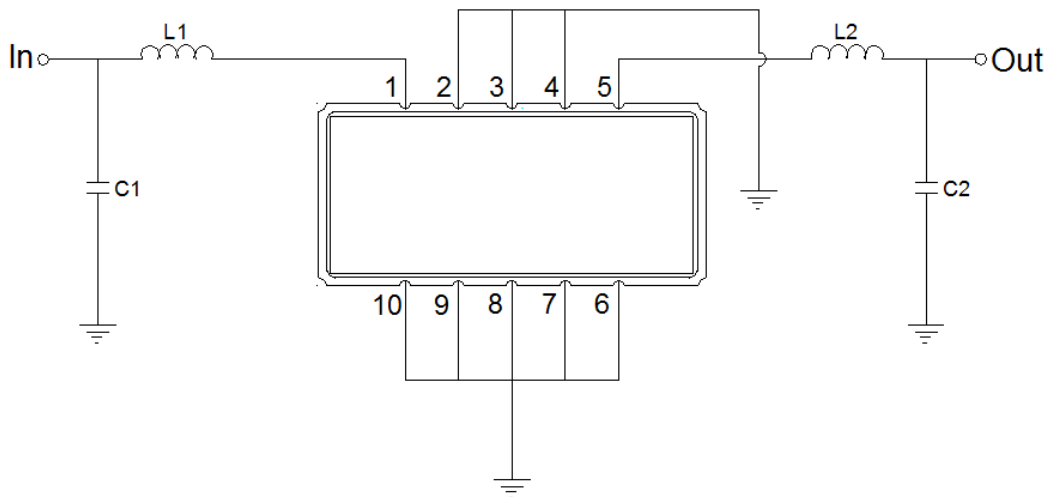
### Package Dimensions



Pin Description	
2,3,4,6,7,8,9,10	Ground
1	Input
5	Output

- ① SAWNICS: Brand
- ② SL071001B: 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 = (390+18)nH, C1=27pF
Output	L2 = (390+15)nH, C2=36pF
Source/Load Impedance	50 Ω



# Frequency Characteristics

## Frequency Response

Operating Temperature : +25 °C

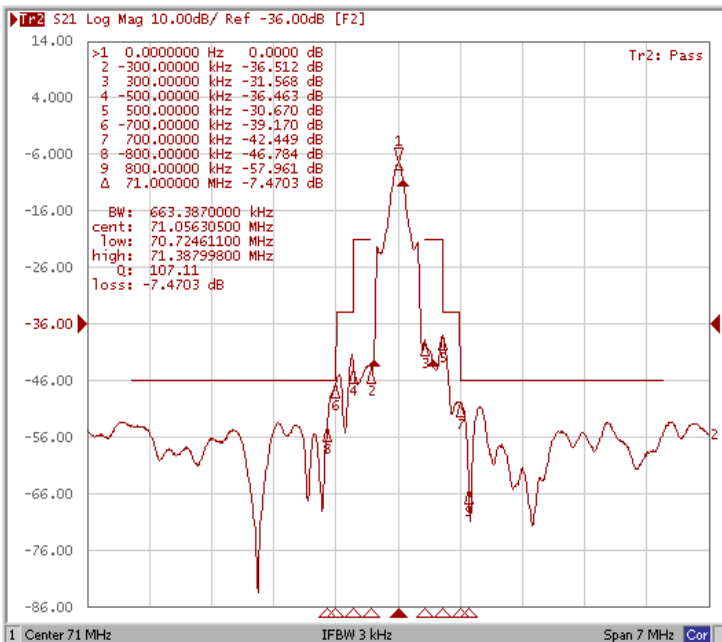
Bandwidth at -1.0 dB



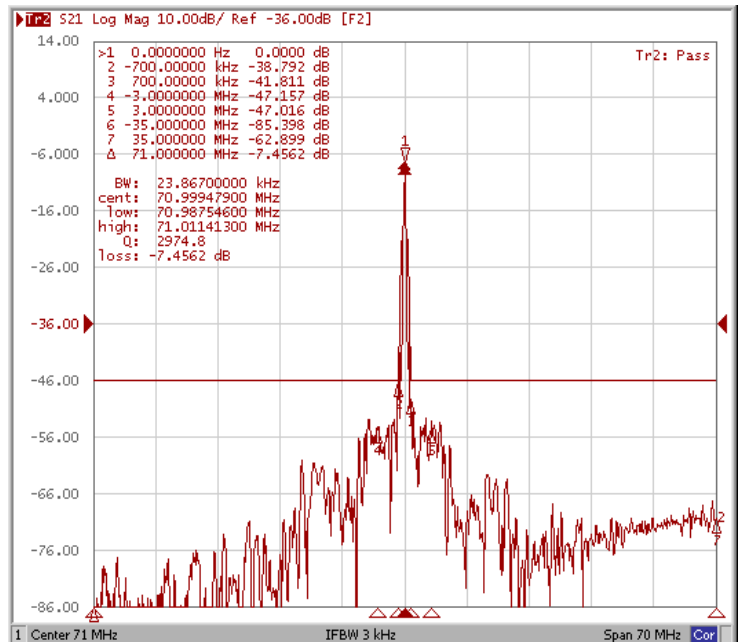
Bandwidth at -3.0 dB



Bandwidth at -35.0 dB



Wide - Band



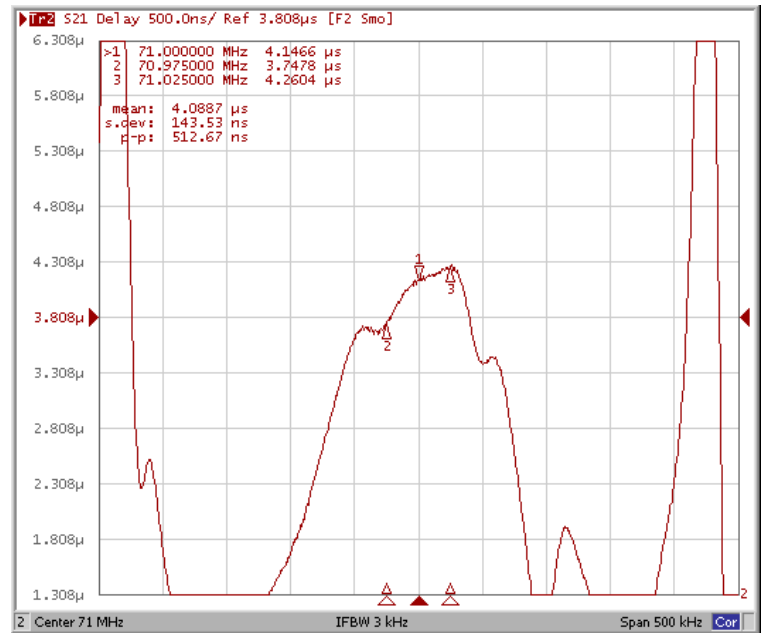
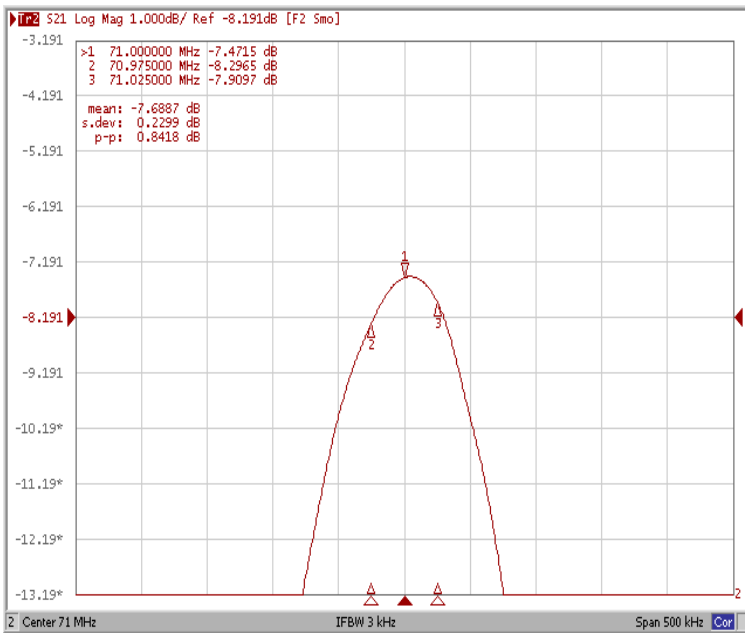


### Frequency Characteristics

#### Frequency Response

Ripple Variation  $F_o \pm 25\text{KHz}$

Group Delay Variation  $F_o \pm 25\text{KHz}$



Smith Chart

VSWR

