SL04810AV

48.0MHz IF SAW Filter
10.10MHz Bandwidth
Revision 0 : 6. March. 2008

RoHS compliance
Pb free

- ❒ Electrical Characteristics
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- ❒ Testing Environment
- ❒ Frequency Characteristics

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❒ Electrical Characteristics

Maximum Ratings

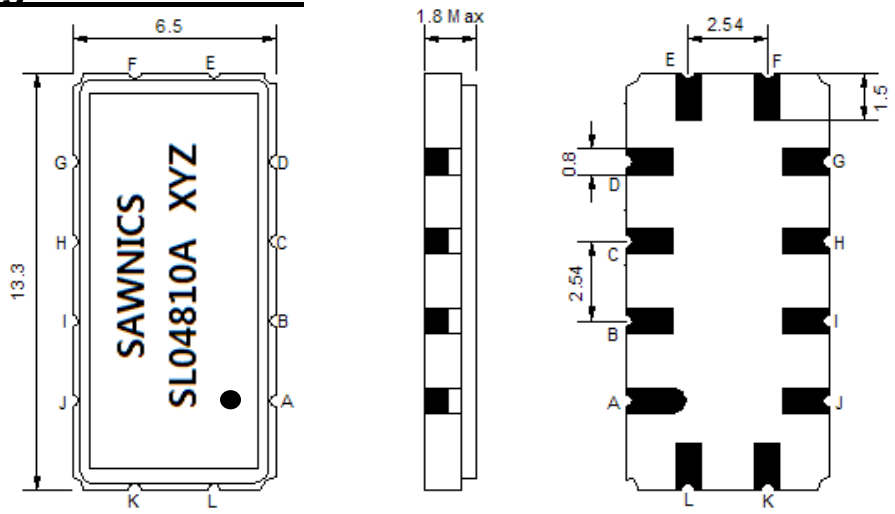
Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	2000	-
Package type & size	V			
Length x Width	mm²	-	13.3 x 6.5	-
Height	mm	-	-	1.8

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	48.0	-
Insertion Loss at Fo	dB	-	13.5	16.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±4.25 MHz	dB_{p-p}	-	0.6	1.2
Group Delay Variation within fo ±4.5 MHz	nsec	-	120	220
Absolute Delay at Fo	μsec	-	1.55	-
Bandwidth at –1.0 dB	MHz	9.00	10.10	-
Bandwidth at –3.0 dB	MHz	-	10.50	-
Relative Attenuation (ref: Max IL)				
Fc ±5.5 MHz	dB	-	5.5	-
Fc ±7.75 MHz	dB	35	43	-
Fc ±10.0 MHz	dB	40	53	-
Fc +15.0 ~ 25.0 MHz	dB	40	52	-
Fc -15.0 ~ 25.0 MHz	dB	40	68	-

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.

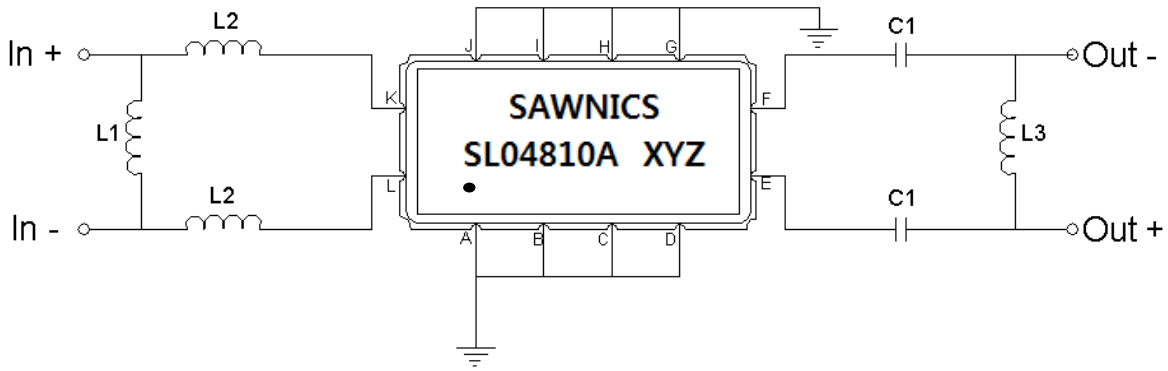
❒ Package Dimensions



① SAWNICS: Brand
② SL04810A: 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 +
L	Input -
E	Output +
F	Output -

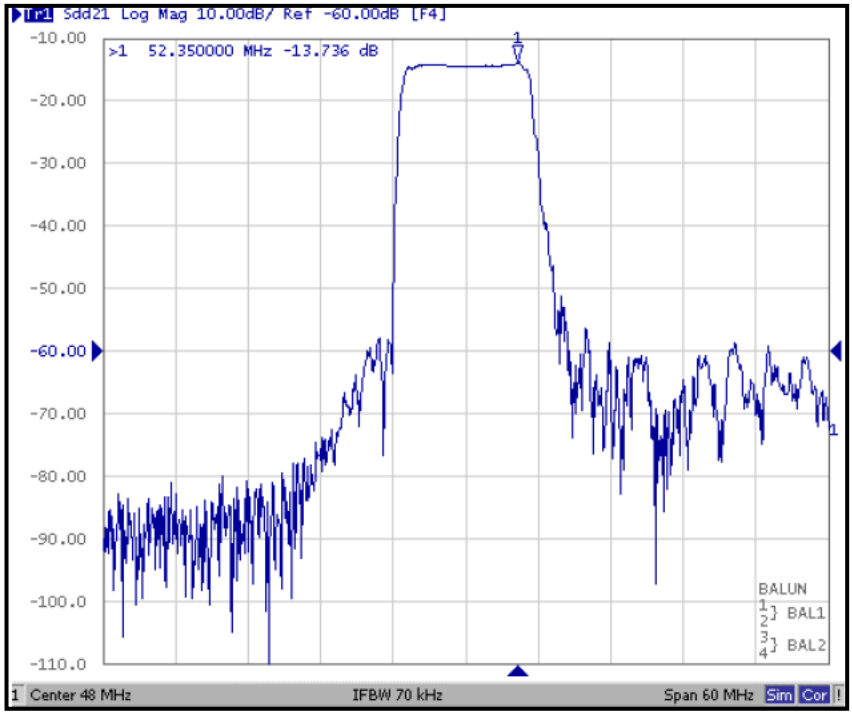
❒ Testing Environment



Test Fixture & Values	
Input	L1=890nH , L2=47nH
Output	C1=36pF , L3=970nH
Source/Load Impedance	50/2000 Ω

❒ Frequency Characteristics

Frequency Response



Pass Band Response and Group Delay Variation