



*Total Solution Provider in Saw Device*

---

# SL1410B

Low-Loss 140MHz IF SAW Filter  
9.1MHz Bandwidth  
Revision 1: 29. Oct. 2007



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

**SAWNICS Inc.**

---

460 Cheonheung-ri, Seonggeo-eup, Cheonan-si, Chungcheongnam-do, 330-836 / Korea.  
Tel: +82 41 550 9372 / Fax: +82 41 550 9399 / [www.sawnics.com](http://www.sawnics.com)

## □ Electrical Characteristics

### Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operation 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

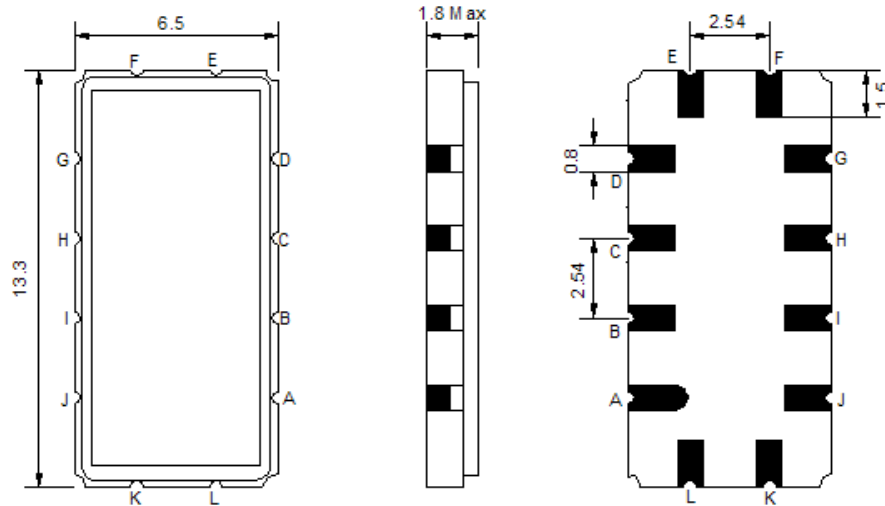
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	139.85	140.0	140.15
Insertion Loss at Fo	dB	-	13.6	15.0
Amplitude Ripple Variation	dB <sub>p-p</sub>	-	0.4	1.0
Group Delay Variation	nsec	-	64	100
Absolute Delay at Fo	μsec	-	0.97	-
Temperature Coefficient	ppm/°C	-	-20	-
Bandwidth at -1.0 dB	MHz	9.1	9.3	-
Bandwidth at -3.0 dB	MHz	9.9	10.1	-
Bandwidth at -40.0 dB	MHz	-	12.9	13.1
Bandwidth at -45.0 dB	MHz	-	13.2	14.0
<b>Relative Attenuation:</b>				
Lower sidelobe	dB	45	48	-
Upper sidelobe	dB	41	45	-

**Notes :** (1) With Matching Network (Ref. Testing Environment Circuit as shown below).

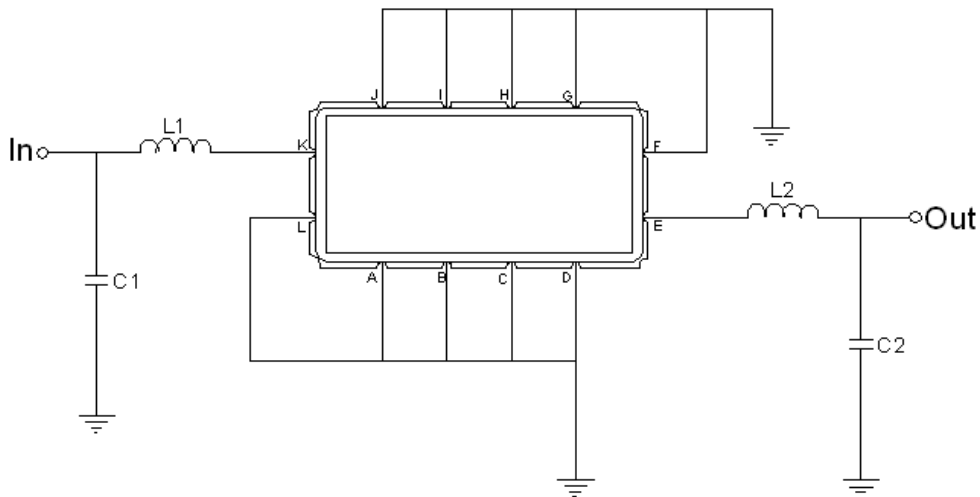
Those impedances could be modified with different impedance values and/or structures, if necessary.

**□ Package Dimensions**



Pin Description	
A, B, C, D, F, G, H, I, J, L	Ground
K	Input
E	Output

**□ Testing Environment**



Test Fixture & Values	
Input	L1=47nH Q >40 ,C1=51pF
Output	L2=47nH Q.>40 ,C2=51pF
Source/Load Impedance	50 Ω

## □ Frequency Characteristics

### Frequency Response

