



*Total Solution Provider in Saw Device*

---

# SA70J2D

70.0 MHz IF SAW Filter  
19.15 MHz 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	D			
Length x Width	mm <sup>2</sup>	-	20.0 x 12.6	-
Height	mm	-	-	5.05

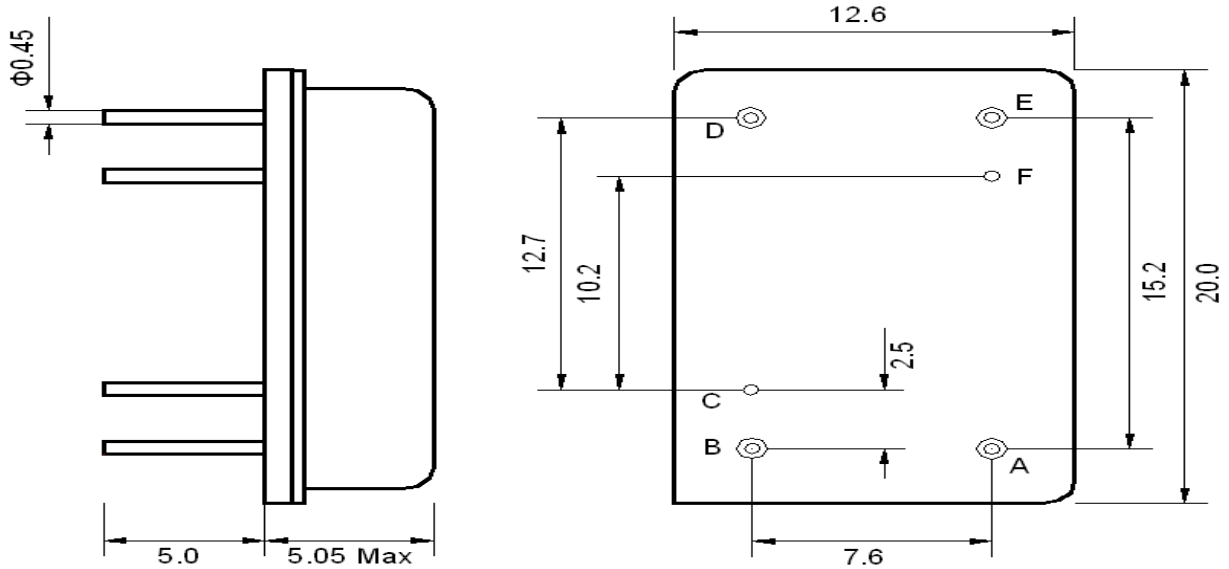
### Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	70.0	-
Insertion Loss at Fo	dB	-	22.5	24.0
Amplitude Ripple Variation at Fo ±9.22 MHz	dB <sub>p-p</sub>	-	0.7	1.0
Temperature Coefficient	ppm/°C	-	-72	-
Group Delay Variation at Fo ±9.22 MHz	nsec	-	50	100
Absolute Delay at Fo	µsec	-	2.42	-
Bandwidth at -1.0 dB	MHz	-	19.15	-
Bandwidth at -3.0 dB	MHz	19.2	19.47	-
Bandwidth at -50.0 dB	MHz	-	20.92	21.0
<b>Relative Attenuation:</b>				
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-

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

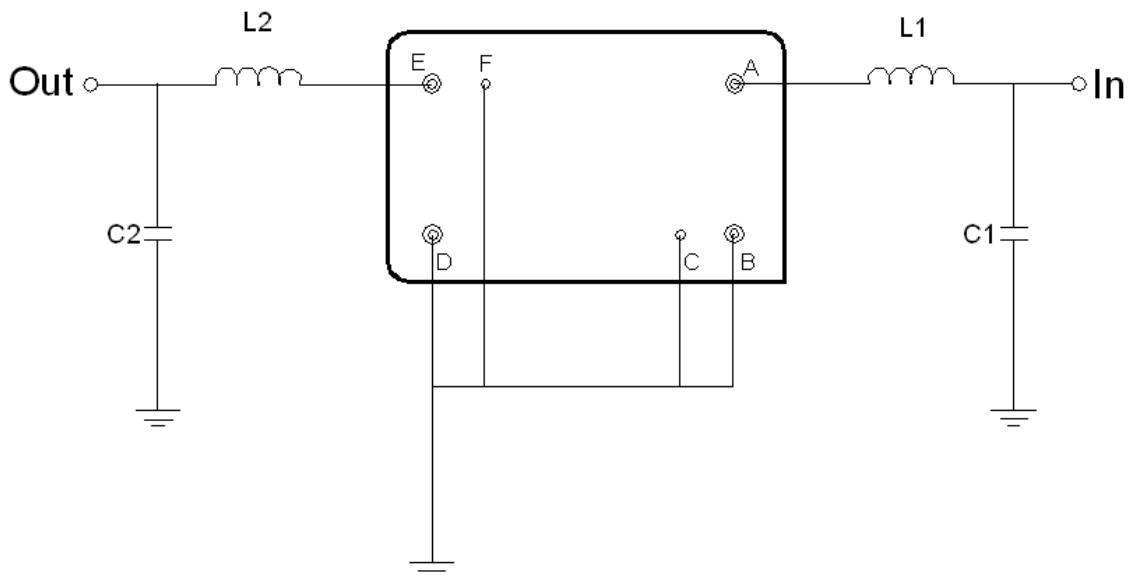
Those impedances could be modified with different impedance values and/or structures, if necessary.

**Package Dimensions**



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

**Testing Environment**



Test Fixture & Values	
Input	L1 = 150 Nh, C1 = 15pF
Output	L2 = 180 nH, C2 = 15pF
Source/Load Impedance	50 $\Omega$

### □ Frequency Characteristics

Frequency Response

