



Total Solution Provider in Saw Device

SA70ED

70.0 MHz IF SAW Filter
1.0 MHz Bandwidth
Revision 1: 29. Oct. 2007



- Electrical Characteristics
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 - 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

□ 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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-
Package type & size	D			
Length x Width	mm ²	-	20.0 x 12.6	-
Height	mm	-	-	5.05

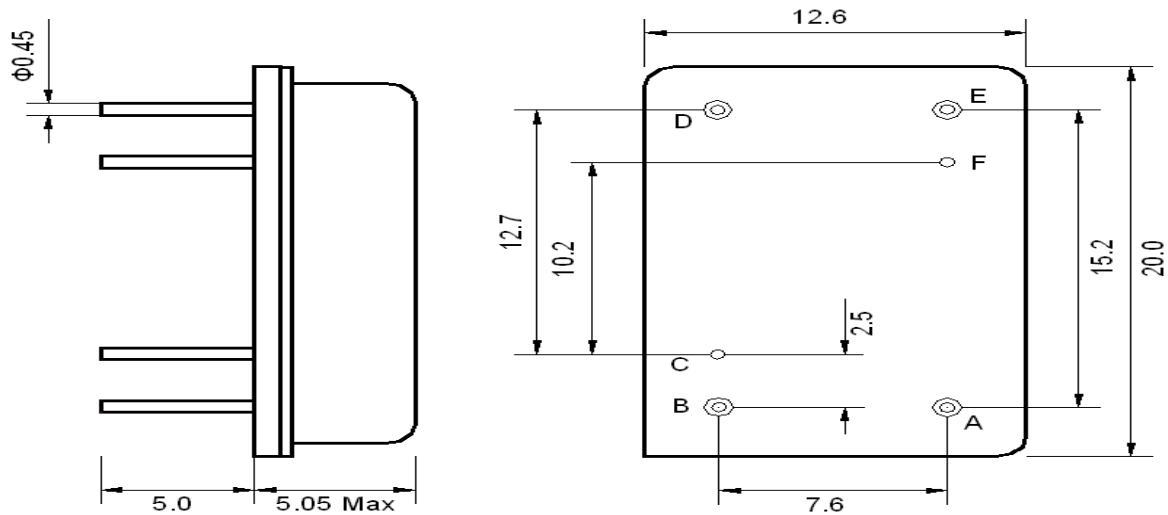
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.92	70.00	70.08
Insertion Loss at Fo	dB	-	23.0	28.0
Group Delay Variation	ns	-	100	150
Absolute Delay at Fo	us	-	2.6	-
Passband Ripple Variation	dB	-	0.4	0.8
Bandwidth at -1dB	MHz	0.91	1.0	-
Bandwidth at -3dB	MHz	1.1	1.2	-
Bandwidth at -40dB	MHz	-	1.95	2.0
Ultimate Rejection	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-0.03	-

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

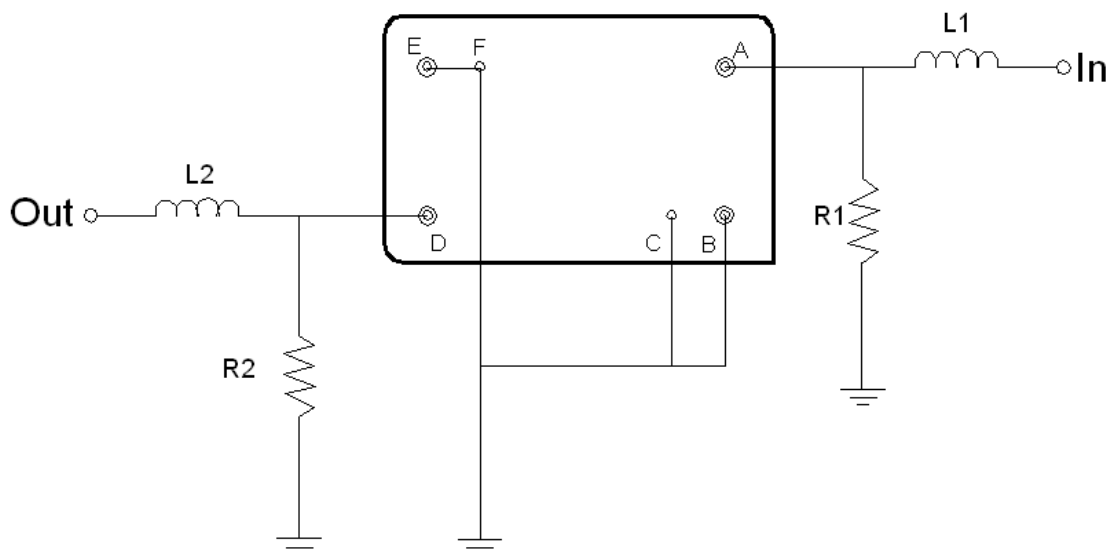
Those impedances could be modified with different impedance values and/or structures, if necessary.

□ Package Dimensions



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

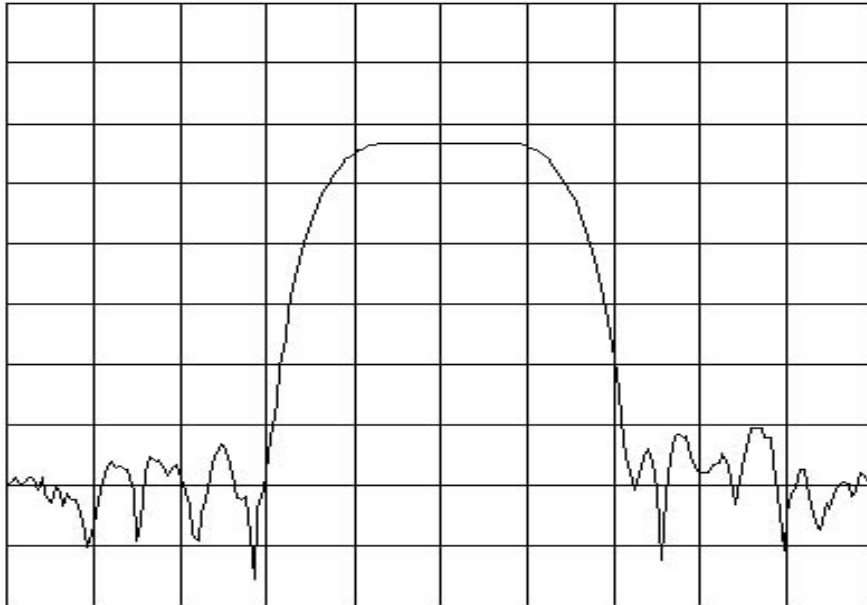
□ Testing Environment



Test Fixture & Values	
Input	L1 = 220 nH , R1 = 1.0 k Ω
Output	L2 = 180 nH , R2 = 1.0 k Ω
Source/Load Impedance	50 Ω

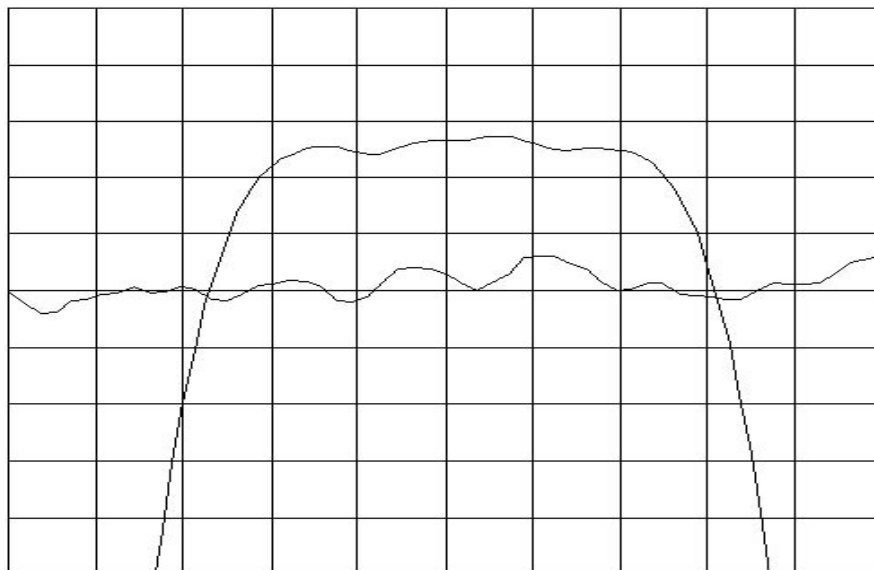
□ Frequency Characteristics

Frequency Response



Horizontal : 0.5 MHz/Div

Vertical : 10 dB/Div



Horizontal : 0.2MHz/Div

Vertical : 1 dB/Div

Vertical : 100 ns/Div