SA120CD1

120.0 MHz IF SAW Filter
20.1 MHz Bandwidth
Revision 1: 29. Oct. 2007

RoHS compliance
Pb free

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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

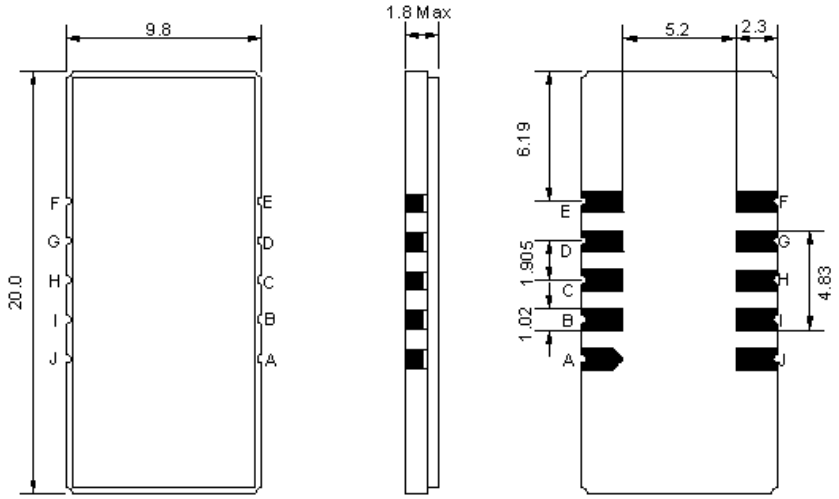
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	D1			
Length x Width	mm²	-	20.0 x 9.8	-
Height	mm	-	-	5.2

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	119.9	120.0	120.1
Insertion Loss at Fo	dB	-	21.5	25.5
Amplitude Ripple Variation at Fo ±9.75 MHz	dB_{p-p}	-	0.7	1.0
Group Delay Variation at Fo ±9.75 MHz	nsec	-	40	100
Absolute Delay at Fo	µsec	-	2.3	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at –1.0 dB	MHz	-	20.2	-
Bandwidth at –3.0 dB	MHz	20.4	20.5	-
Bandwidth at –40.0 dB	MHz	-	21.8	22.0
Lower Sidelobe	dB	50	-	-
Upper Sidelobe	dB	50	-	-

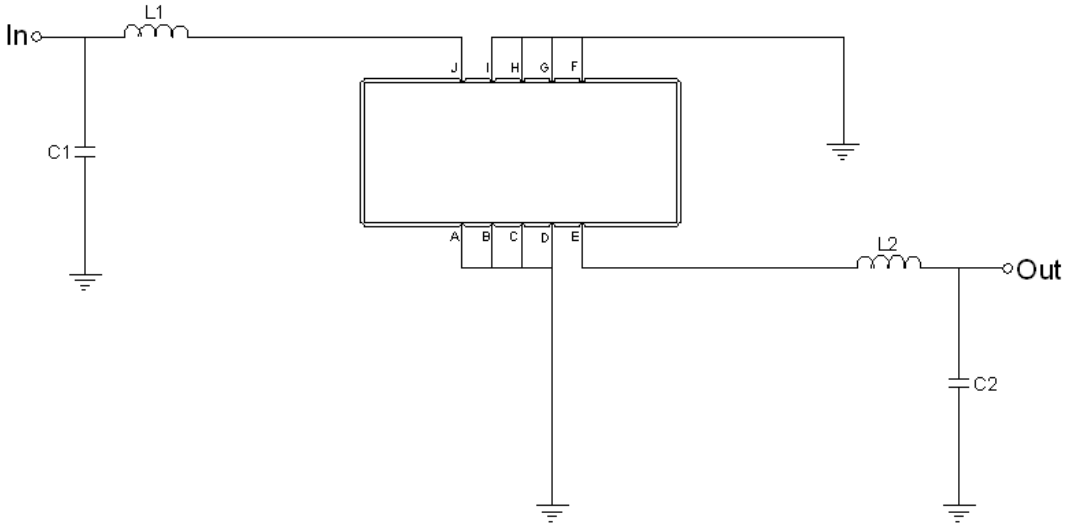
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

❒ Package Dimensions



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

❒ Testing Environment



Test Fixture & Values	
Input	L1= 56 nH, C1= 33 pF
Output	L2= 68 nH, C2= 20 pF
Source/Load Impedance	50 Ω

❒ Frequency Characteristics

Frequency Response