SL120AM1

120MHz IF SAW Bandpass Filter
Revision 0:

RoHS compliance
Pb free

- ❒ Electrical Characteristics
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❒ Electrical Characteristics

Maximum Ratings

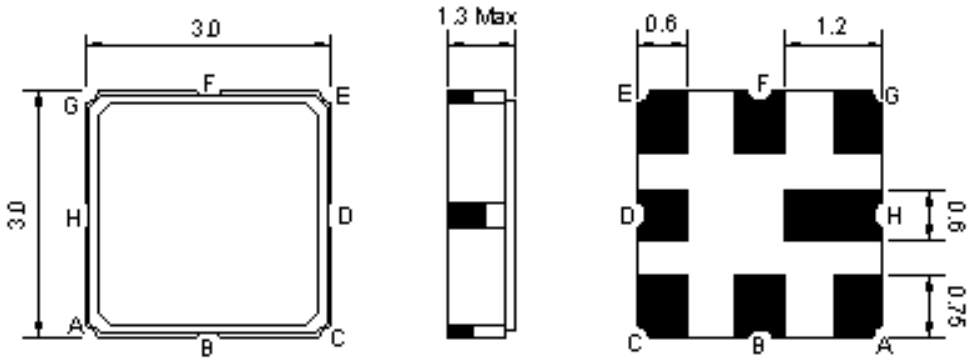
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-20	-	85
Storage Temperature Range	°C	-40	-	105
Maximum DC Voltage	V	-	-	3
Maximum Input Power	dBm	-	-	20
Source Impedance (Balanced)(1)	Ω	-	600	-
Load Impedance (Balanced)(1)	Ω	-	400	-
Package type & size	M1			
Length x Width	mm^2	-	3.0 x 3.0	-
Height	mm	-	-	1.3

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	120.0	-
Insertion Loss at Fo	dB	-	8.0	9.0
Amplitude Ripple (Fo ± 0.5 MHz)	dB_{p-p}	-	0.5	1.5
Phase Linearity (Fo±0.5MHz)	deg RMS	-	0.6	2.5
Group Delay Variation (Fo ± 0.5 MHz)	ns	-	25	100
Absolute Delay at Fo	µs	-	0.27	-
Temperature Coefficient	ppm/°C	-	-23	-
Bandwidth at –3.0 dB	MHz	-	4.0	-
Template on the amplitude, reference is minimum insertion loss				
At Fo±3.95MHz	dB	15	18	
In Fo –10MHz±0.63MHz	dB	30	35	

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.

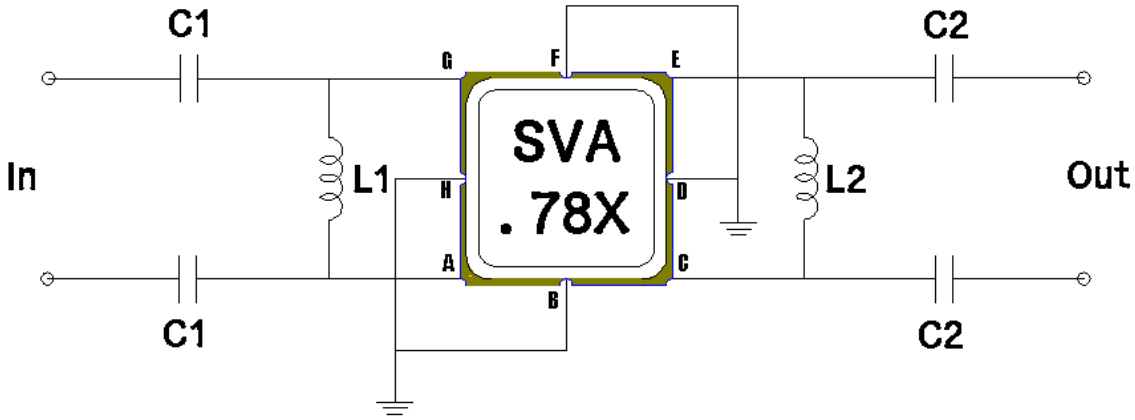
❒ Package Dimensions



Pin Description	
B,D,F,H	Ground
A,G	In
C,E	Out

❒ Testing Environment

Matching Network for 600Ω/400Ω Balanced Configuration



Test Fixture & Values	
Input	L1=82+47 nH , C1=43 pF
Output	L2=180 nH, C2=15 pF
Source/Load Impedance	600/400 Ω

❒ Frequency Characteristics

Frequency Response