SL1405V

Low-Loss 140MHz IF SAW Filter
4.8MHz Bandwidth
Revision 1: 29. Oct. 2007

RoHS compliance
Pb free

- ❒ Electrical Characteristics
- ❒ Package Dimensions
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❒ Electrical Characteristics

Maximum Ratings

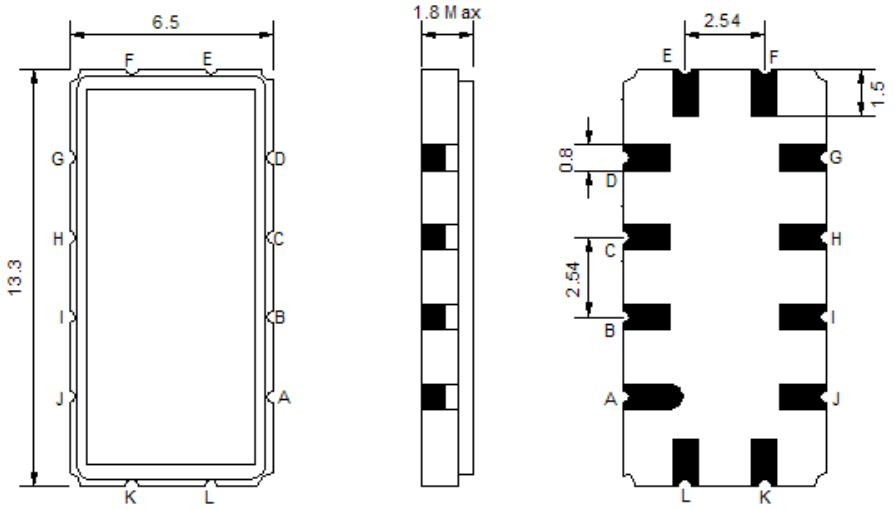
Parameters Description	Unit	Minimum	Typical	Maximum
Operation Temperature Range	°C	-30	-	80
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended)(1)	Ω	-	50	-
Load Impedance (single ended)(1)	Ω	-	50	-
Package type & size	V			
Length x Width	mm²	-	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	-	10.5	12.0
Amplitude Ripple Variation	dB_{p-p}	-	0.3	1.0
Group Delay Variation	nsec	-	50	100
Absolute Delay at Fo	µsec	-	0.94	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at –1.0 dB	MHz	4.0	4.3	-
Bandwidth at –3.0 dB	MHz	4.8	5.08	-
Bandwidth at –40.0 dB	MHz	-	7.7	7.9
Bandwidth at –45.0 dB	MHz	-	7.85	8.1
Relative Attenuation:				
Lower sidelobe	dB	45	50	-
Upper sidelobe	dB	45	50	-

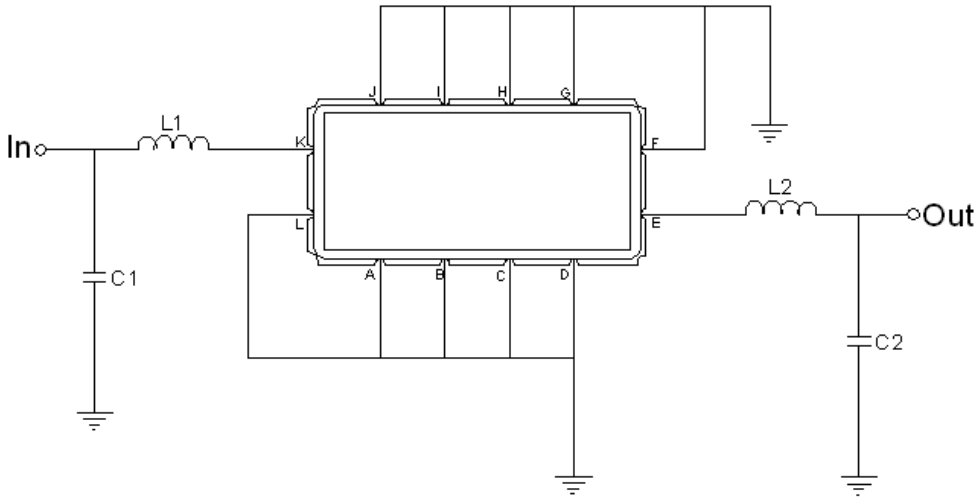
Notes : (1) With Matching Network (Ref. Testing Environment Circuit as shown below).
Those impedances could be modified with different impedance values and/or structures, if necessary.

❒ Package Dimensions



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

❒ Testing Environment



Test Fixture & Values	
Input	L1=47nH Q >40 , C1=43pF
Output	L2=47nH Q.>40 , C2=43pF
Source/Load Impedance	50 Ω

❒ Frequency Characteristics

Frequency Response