



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL48.0M-10A	48.0MHz IF SAW Filter 10.10MHz Bandwidth

Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response
- o Pass Band Response and Group Delay Variation

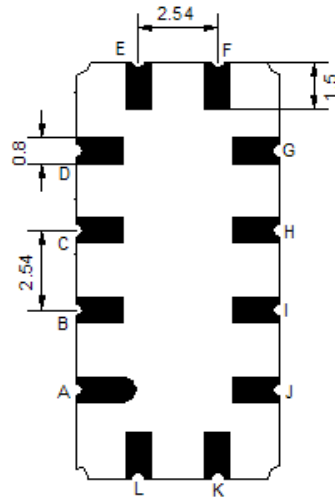
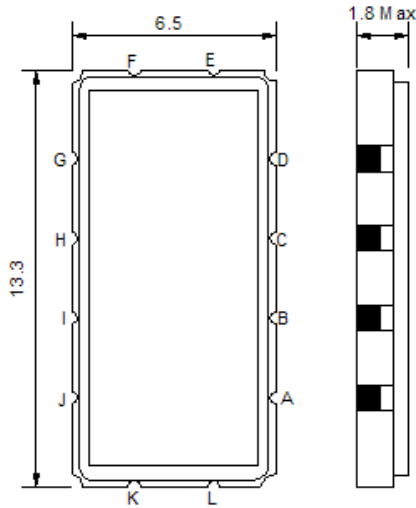
Notes

- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



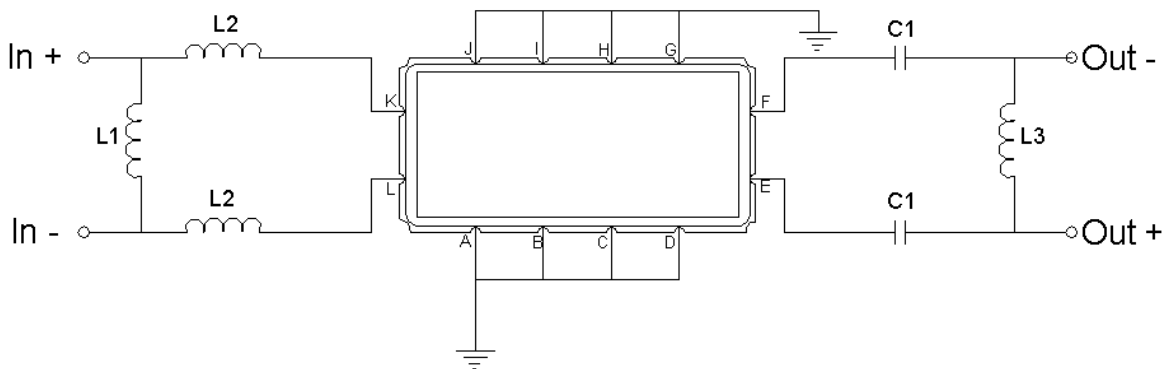


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=890nH, L2=47nH
Output	C1=36pF, L3=970nH
Source/Load Impedance	50/2000 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	25	85
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	-	2000	-

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

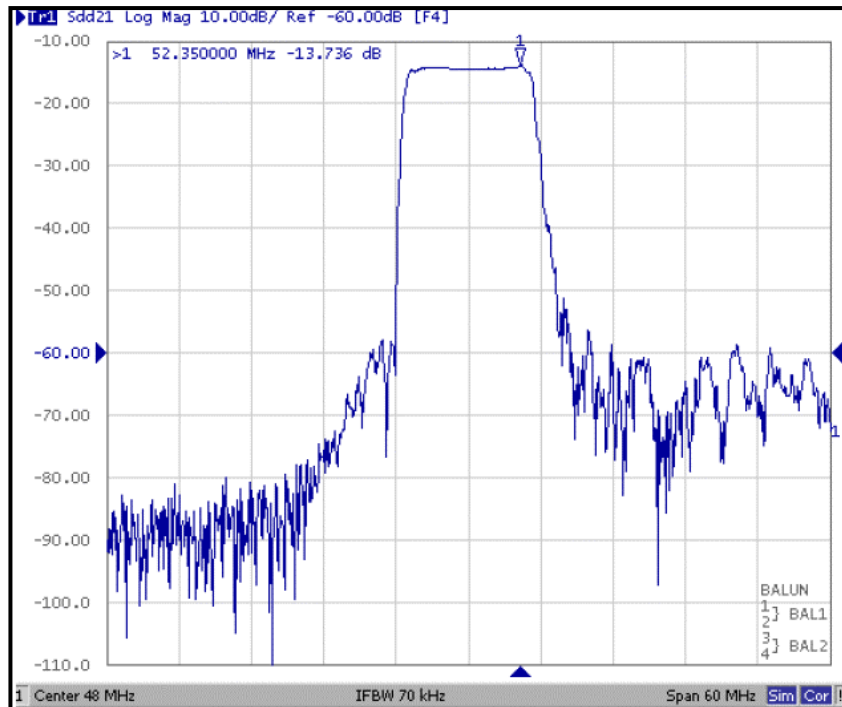
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	48.0	-
Insertion Loss at Fo	dB	-	13.5	16.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±4.25 MHz	dB _{p-p}	-	0.6	1.2
Group Delay Variation within fo ±4.5 MHz	nsec	-	120	220
Absolute Delay at Fo	µsec	-	1.55	-
Bandwidth at -1.0 dB	MHz	9.00	10.10	-
Bandwidth at -3.0 dB	MHz	-	10.50	-
Relative Attenuation (ref: Max IL)				
Fc ±5.5 MHz	dB	-	5.5	-
Fc ±7.75 MHz	dB	35	43	-
Fc ±10.0 MHz	dB	40	53	-
Fc +15.0 ~ 25.0 MHz	dB	40	52	-
Fc -15.0 ~ 25.0 MHz	dB	40	68	-



Frequency Response



Pass Band Response and Group Delay Variation

