



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
809-SL140.0M-18	140MHz IF SAW Filter 18.0MHz Bandwidth

## Specification Contents

- o Mechanical Dimensions
- o Test Circuit
- o Maximum Ratings
- o Electrical Specification
- o Frequency Response

## Notes

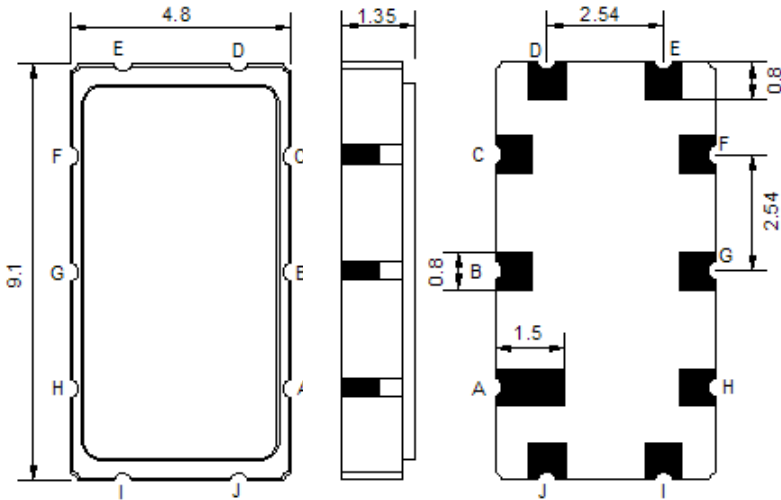
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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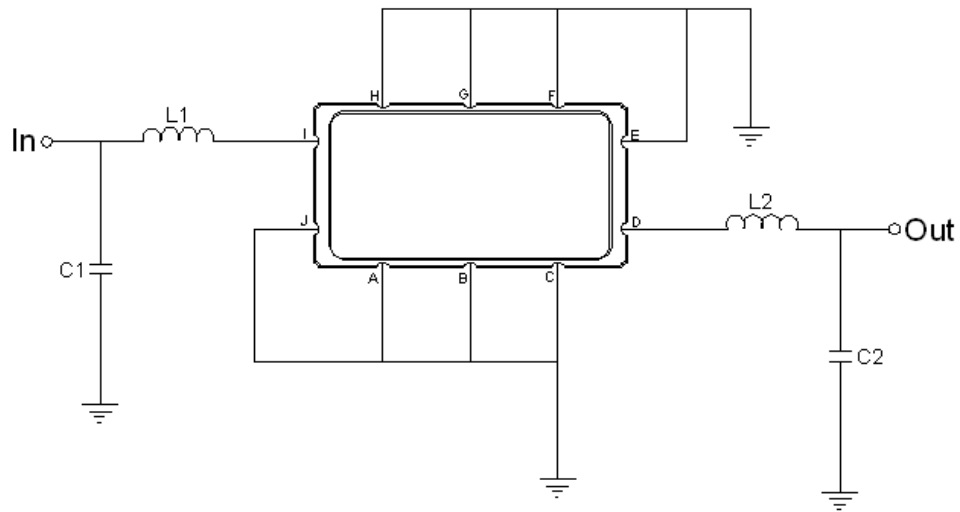


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 39 nH, C1 = 43 pF
Output	L2 = 39 nH, C2 = 43 pF
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating 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) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-

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

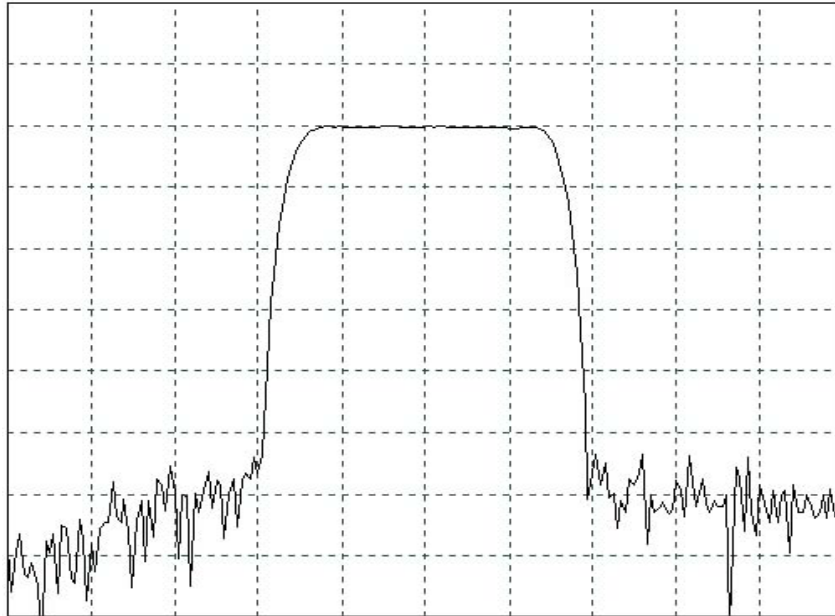
Those impedances could be modified with different impedance values and/or structures, if necessary.

**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	140.0	-
Insertion Loss at Fo	dB	-	8.5	11.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple Variation	dB <sub>p-p</sub>	-	0.6	1.0
Group Delay Variation	nsec	-	55	100
Absolute Delay at Fo	µsec	-	0.88	-
Bandwidth at -1.0 dB	MHz	17.2	18.2	-
Bandwidth at -3.0 dB	MHz	18.0	19.2	-
Bandwidth at -35.0 dB	MHz	-	22.8	25.0
Relative Attenuation: (Ref 140MHz)				
100 MHz ~ 124 MHz	dB	40	46	-
156 MHz ~ 180 MHz	dB	40	44	-

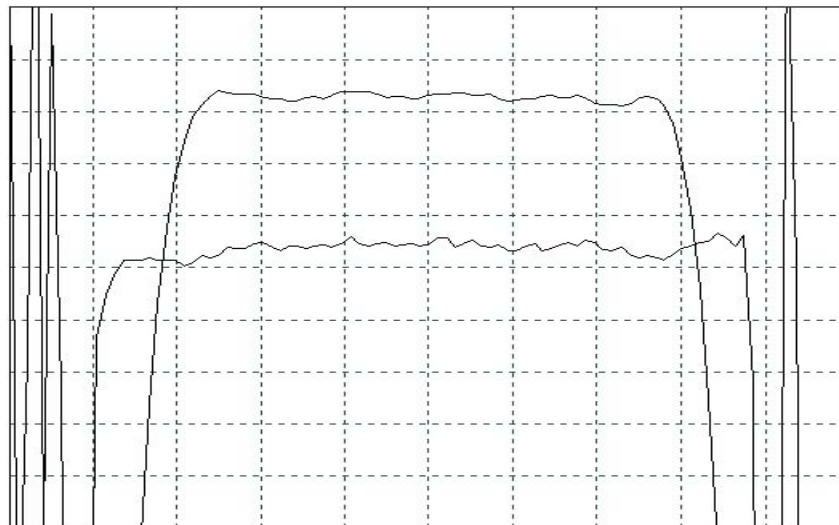


## Frequency Response



Horizontal: 2.5MHz/Div

Vertical: 10 dB/Div



Horizontal: 1.2 MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div