



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
819-IF70.0M-RA	70.0 MHz IF SAW Filter 1.30 MHz Bandwidth

## Specification Contents

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

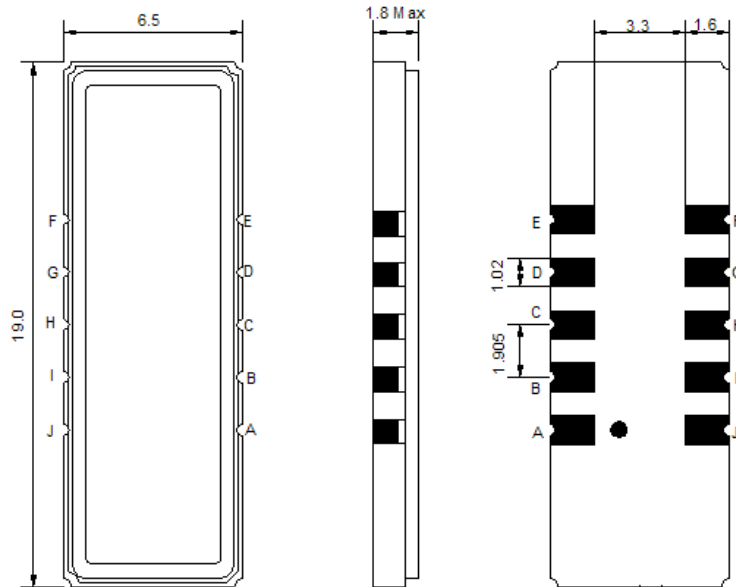
## Notes

- 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)



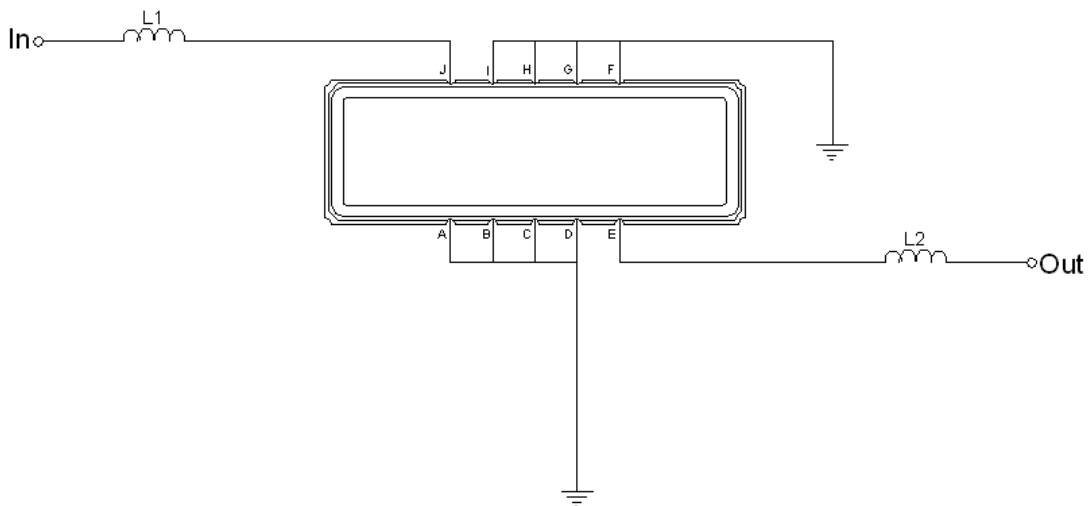


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1 = 470 nH
Output	L2 = 470 nH
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).

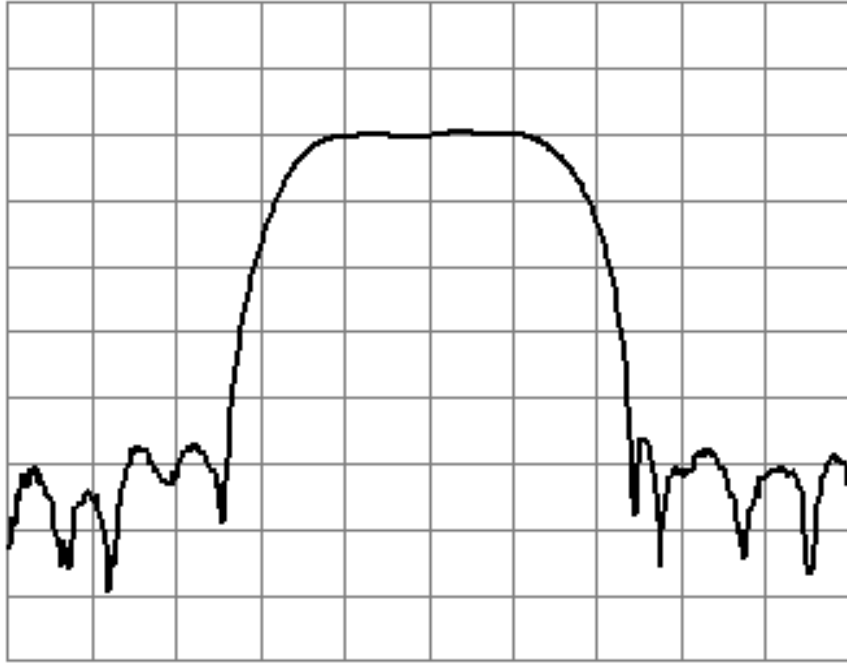
Those impedances could be modified with different impedance values and/or structures, if necessary.

**Electrical Specification**

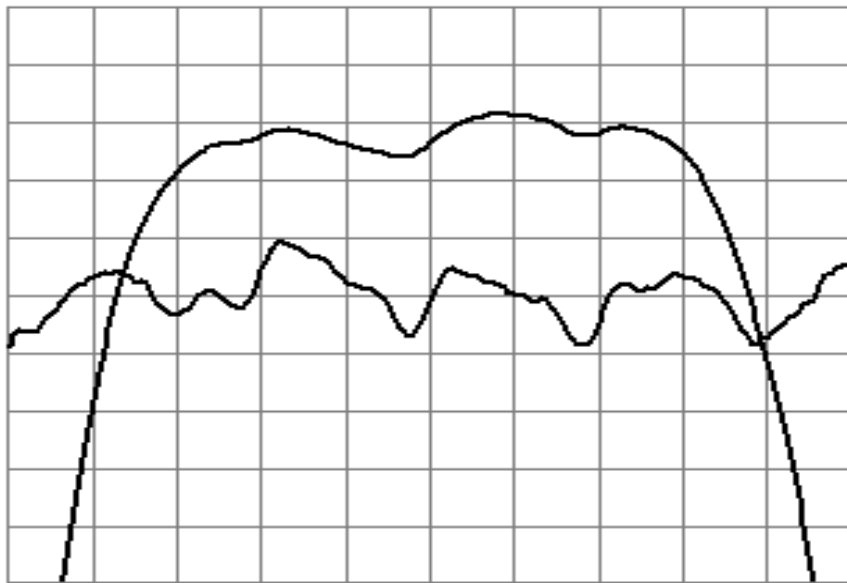
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.95	70.00	70.05
Insertion Loss at Fo	dB	-	20.0	22.0
Absolute Delay at Fo	usec	-	2.6	-
Phase Linearity	°rms	-	1.54	2.00
Amplitude Ripple Variation at Fo±0.5MHz	dB	-	0.8	1.0
Bandwidth at -1dB	MHz	1.26	1.30	-
Bandwidth at -40dB	MHz	-	2.36	-
Relative Attenuation				
at Fo±1.25MHz	dB	40	45	-
at Fo±1.7MHz	dB	40	45	-
Ultimate Rejection	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-0.03	-



## Frequency Response



Horizontal: 0.5 MHz/Div  
Vertical: 10 dB/Div



Horizontal: 0.2MHz/Div  
Vertical: 1 dB/Div  
Vertical: 100 ns/Div