



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
819-IF70.0M-X	70.0 MHz IF SAW Filter 1.10 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)



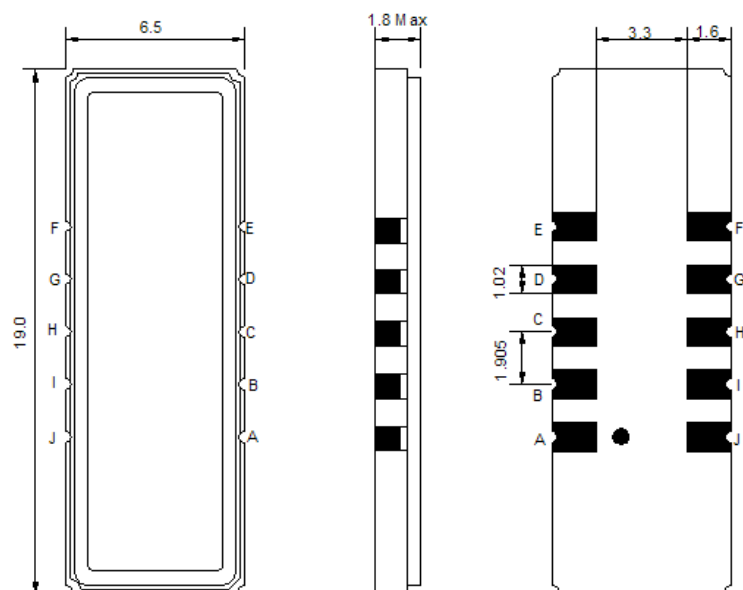


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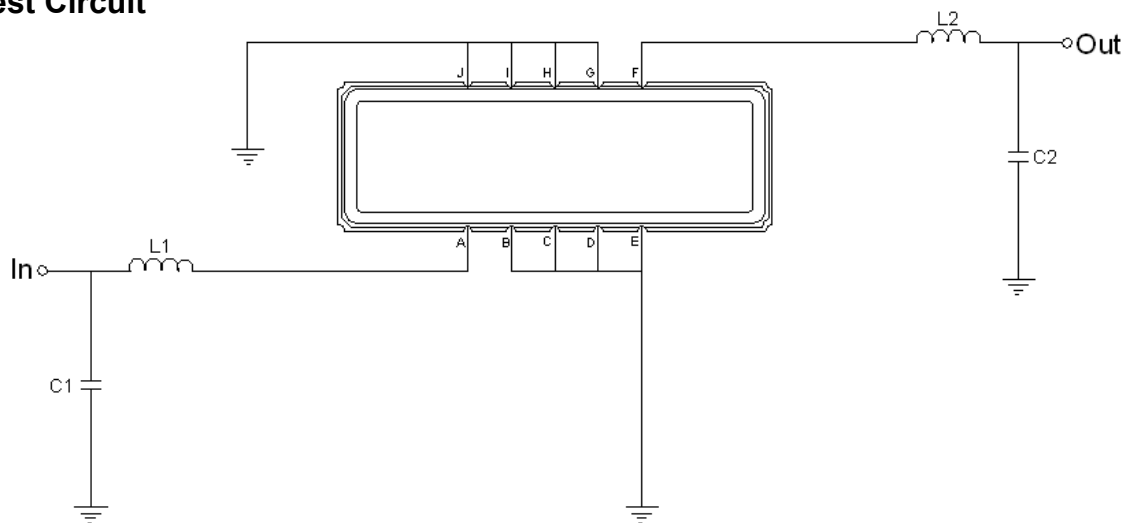
70.0 MHz IF SAW Filter 1.10 MHz Bandwidth

Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 462 nH, C1 = 47 pF
Output	L2 = 348 nH, C2 = 56 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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-

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

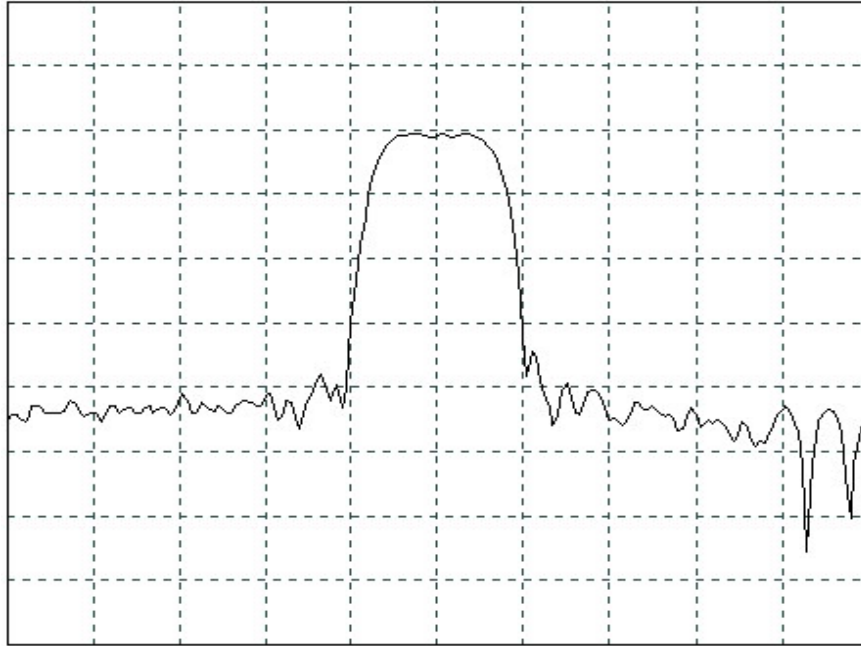
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

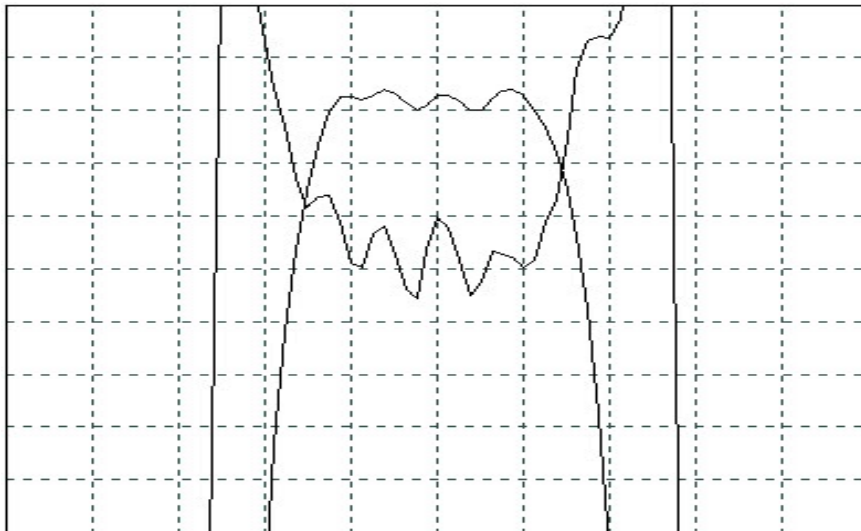
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.95	70.00	70.05
Insertion Loss at Fo	dB	-	18.2	20.0
Group Delay Variation	nsec	-	194	220
Absolute Delay at Fo	usec	-	2.04	-
Phase Linearity at Fo±0.5MHz	degc	-	3.9	6.0
Amplitude Ripple Variation	dB	-	0.5	0.8
Bandwidth at -1dB	MHz	0.95	1.10	-
Bandwidth at -3dB	MHz	1.10	1.30	-
Bandwidth at -35dB	MHz	-	2.05	2.20
Ultimate Rejection	dB	40	45	-
Temperature Coefficient	ppm/°C	-	-0.03	-



Frequency Response



Horizontal: 1.0 MHz/Div
Vertical: 10 dB/Div



Horizontal: 0.4MHz/Div
Vertical: 1 dB/Div
Vertical: 100 ns/Div