



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF70.0M-H	70.0 MHz IF SAW Filter 19.1 MHz Bandwidth

### Specification Contents

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

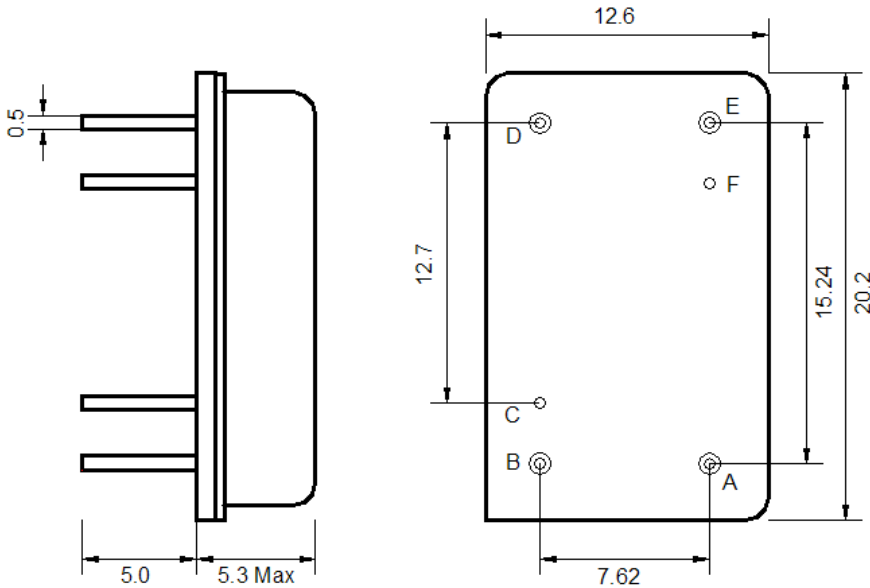
### Notes

- 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)



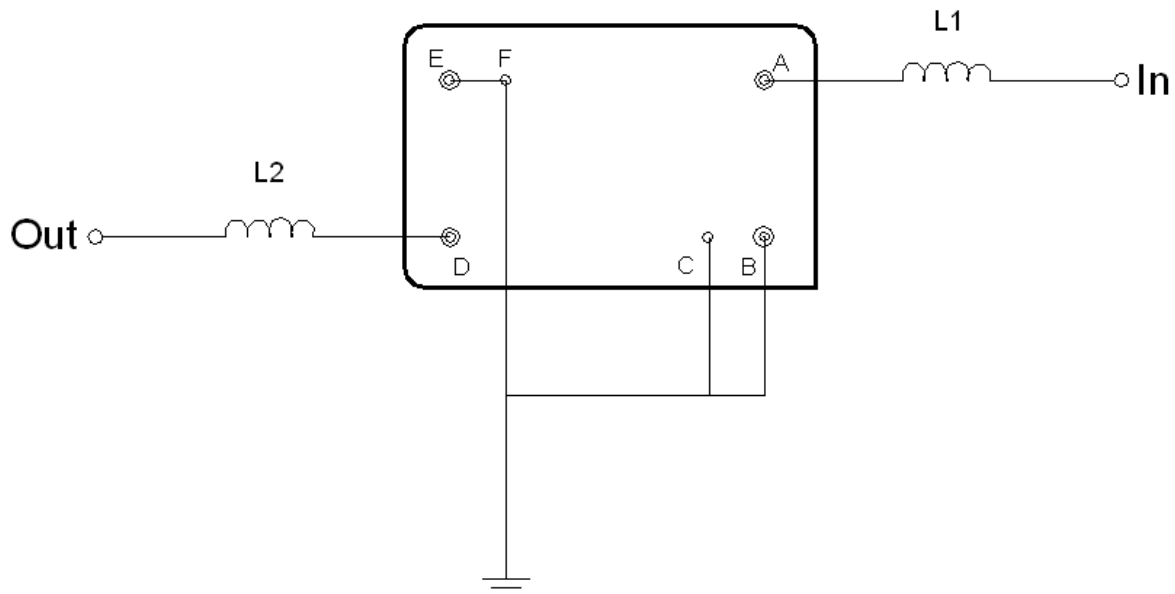


## Mechanical Dimensions (mm)



Pin Description	
B, C, E, F	Ground
A	Input
D	Output

## Test Circuit



Test Fixture & Values	
Input	L1 = (180+27) nH, C1 = 43 pF
Output	L2 = 120 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	-

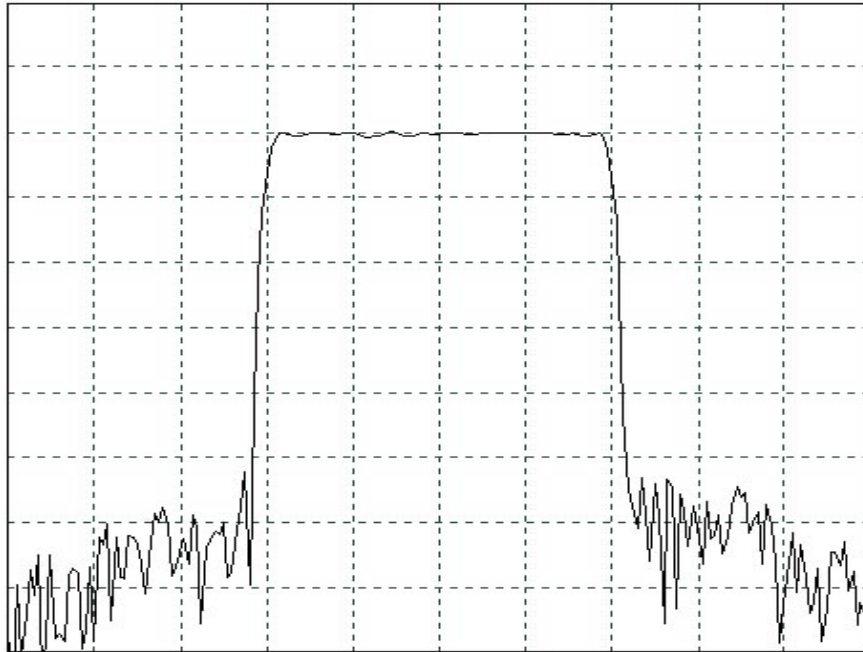
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).  
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.92	70.00	70.08
Insertion Loss at Fo	dB	-	24.5	26.0
Group Delay Variation	nsec	-	35	80
Absolute Delay at Fo	usec	-	1.98	-
Passband Ripple Variation	dB	-	0.85	1.0
Bandwidth at -1dB	MHz	19.0	19.10	-
Bandwidth at -3dB	MHz	19.5	19.57	-
Bandwidth at -40dB	MHz	-	21.43	21.70
Ultimate Rejection	dB	50	55	-
Temperature Coefficient	ppm/°C	-	-72	-



## Frequency Response



Horizontal: 5.0 MHz/Div

Vertical: 10 dB/Div



Horizontal: 3.0 MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div