



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF70.0M-U	70.0 MHz IF SAW Filter 0.39 MHz Bandwidth

Specification Contents

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

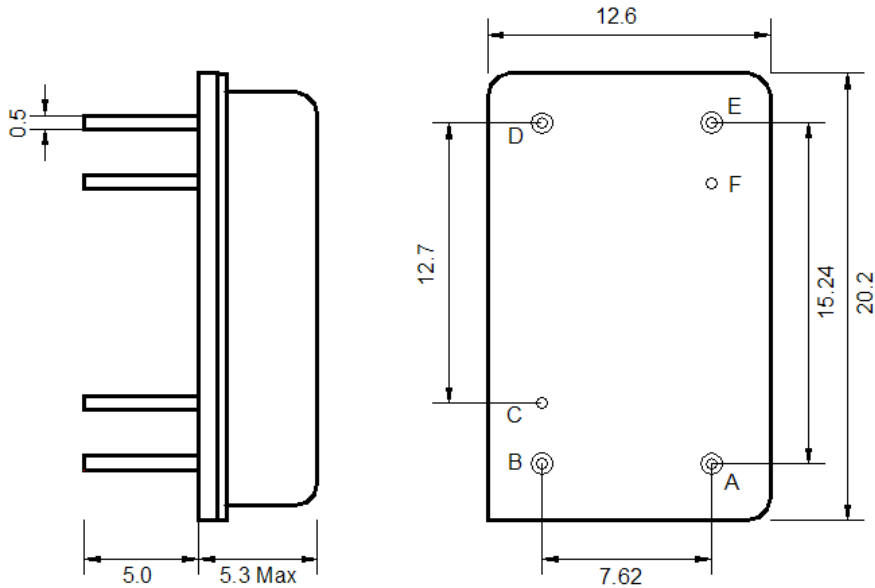
Notes

- 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)



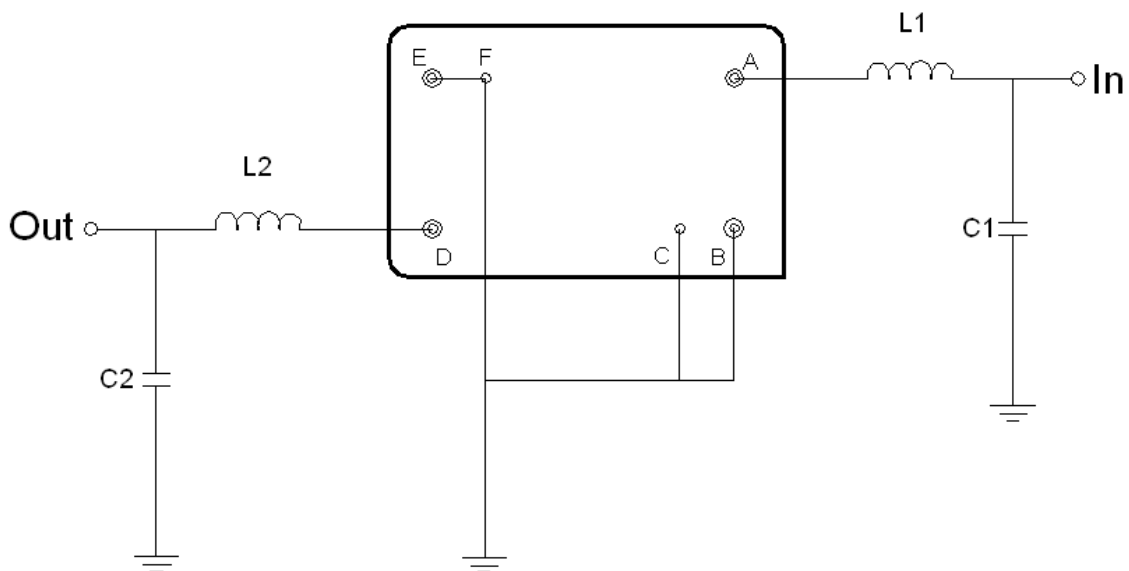


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 560 nH, C1 = 30 pF
Output	L2 = 390 nH, C2 = 22 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	-

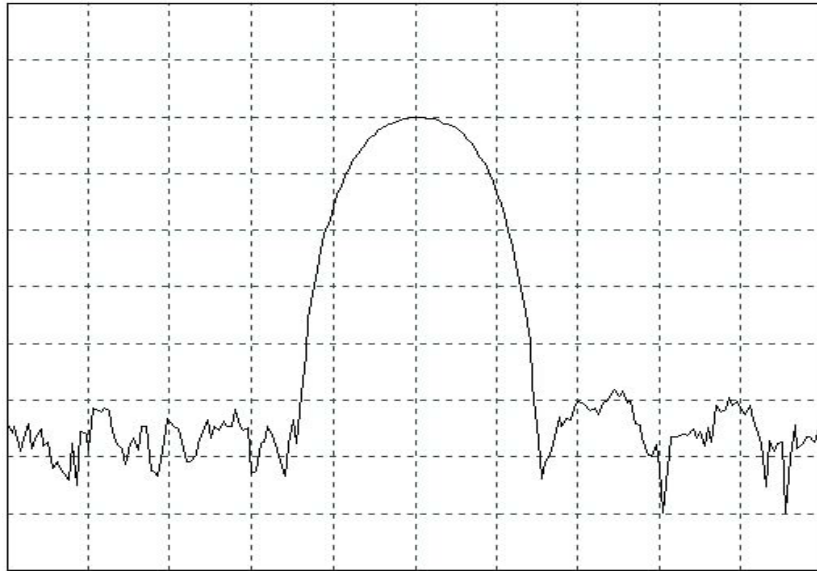
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.95	70.00	70.05
Insertion Loss at Fo	dB	-	13.7	15.0
Group Delay Variation	nsec	-	300	500
Absolute Delay at Fo	usec	-	2.5	-
Phase Linearity	degc	-	3.0	6.0
Passband Ripple Variation	dB	-	0.8	1.5
Bandwidth at -1dB	MHz	0.30	0.39	-
Bandwidth at -3dB	MHz	0.47	0.59	-
Bandwidth at -40dB	MHz	-	1.395	1.42
Ultimate Rejection	dB	40	50	-
Temperature Coefficient	ppm/°C	-	-0.03	-

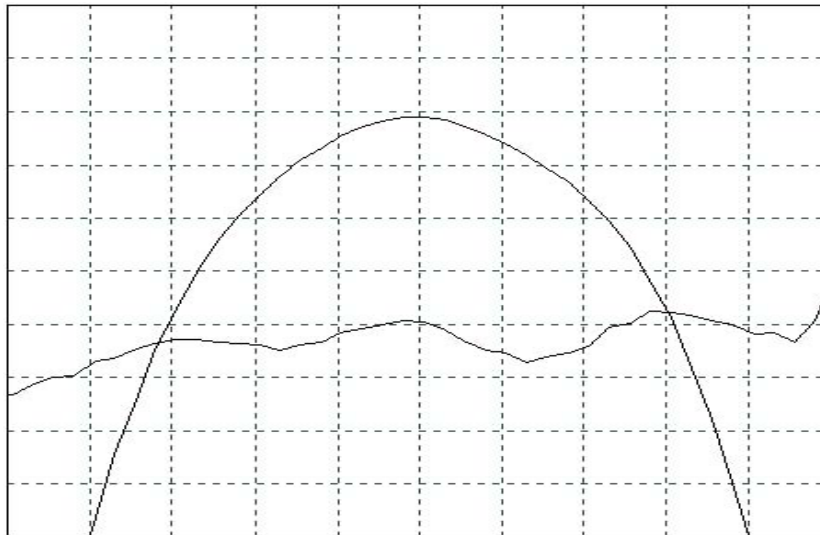


Frequency Response



Horizontal: 0.5 MHz/Div

Vertical: 10 dB/Div



Horizontal: 0.1MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div