



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF70.0M-HR	70.0 MHz IF SAW Filter 19.15 MHz Bandwidth

Specification Contents

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

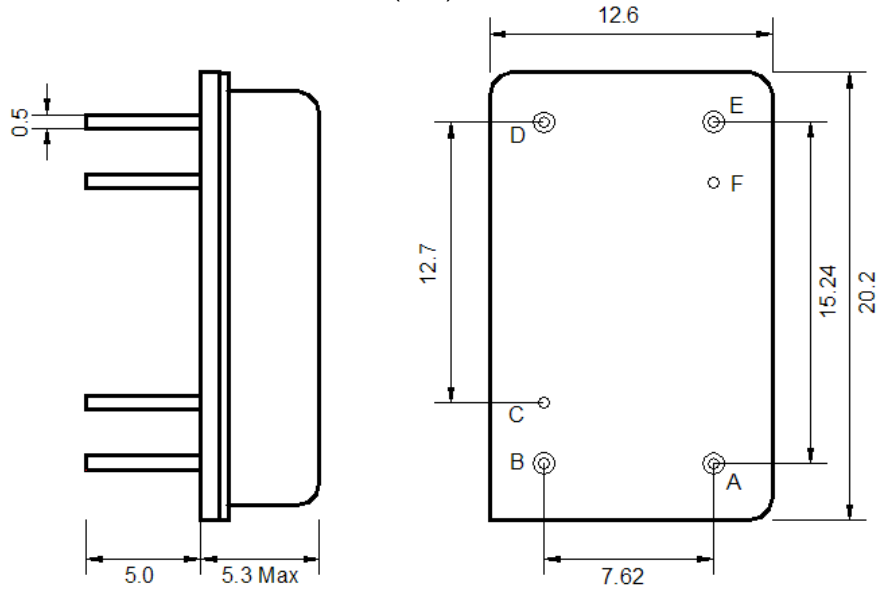
Notes

- 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)



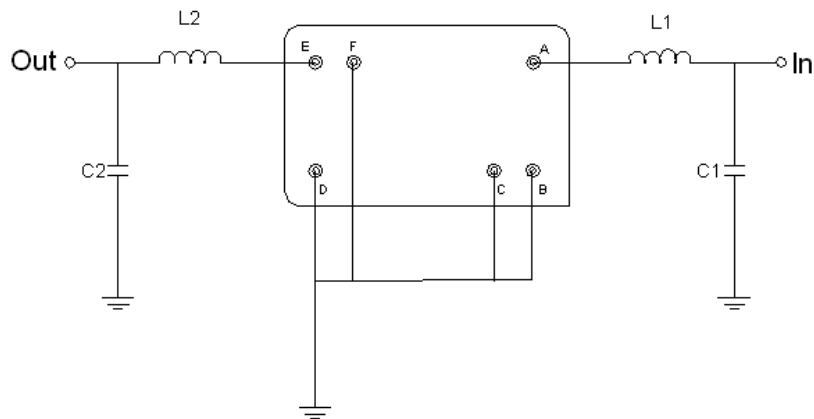


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 150 nH, C1 = 0 pF
Output	L2 = 220 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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-

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

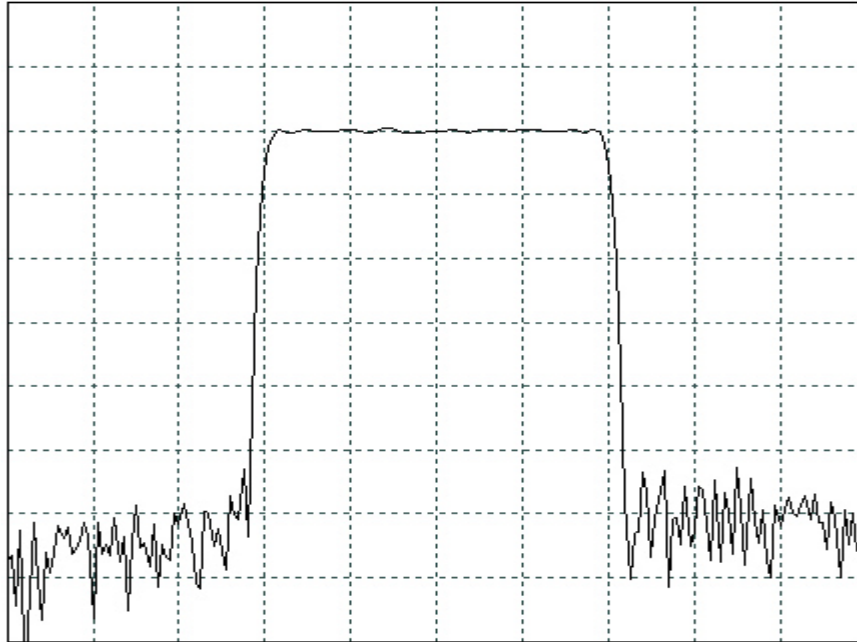
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.92	70.00	70.08
Insertion Loss at Fo	dB	-	24.0	26.0
Group Delay Variation	nsec	-	30	80
Absolute Delay at Fo	usec	-	1.98	-
Passband Ripple Variation	dB	-	0.8	1.0
Bandwidth at -1dB	MHz	19.0	19.15	-
Bandwidth at -3dB	MHz	19.5	19.6	-
Bandwidth at -40dB	MHz	-	21.45	21.70
Ultimate Rejection	dB	50	55	-
Temperature Coefficient	ppm/°C	-	-72	-

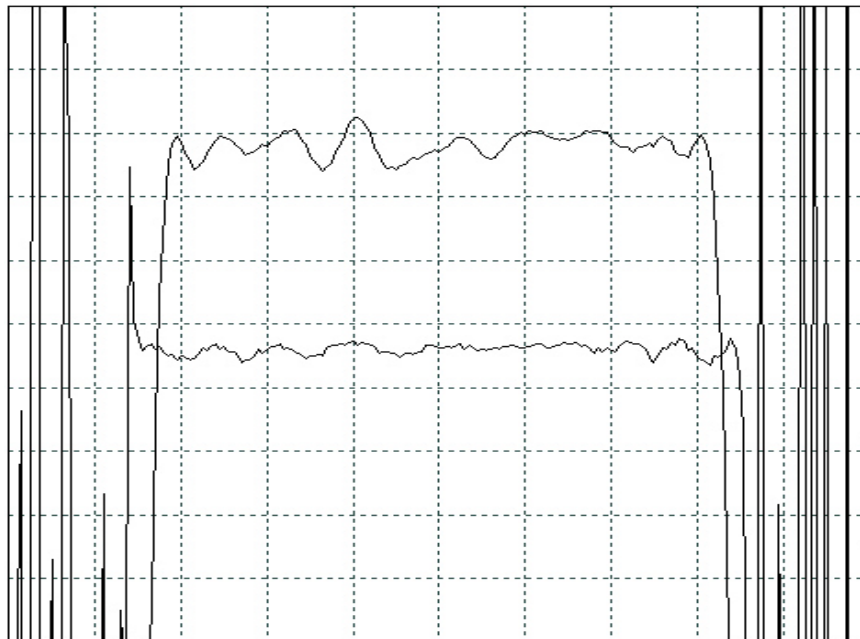


Frequency Response



Horizontal: 5.0 MHz/Div

Vertical: 10 dB/Div



Horizontal: 3.0 MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div