



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF120.0M-D	20.0 MHz IF SAW Filter 20.25 MHz Bandwidth

### Specification Contents

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

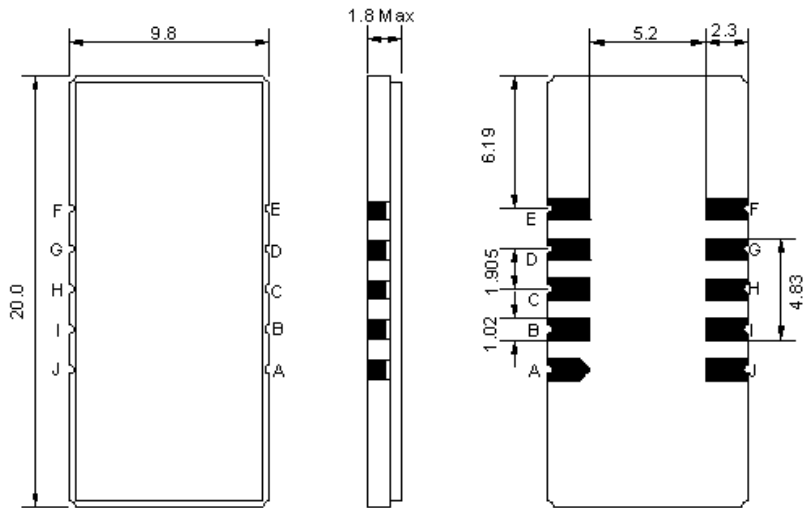
### Notes

- 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)



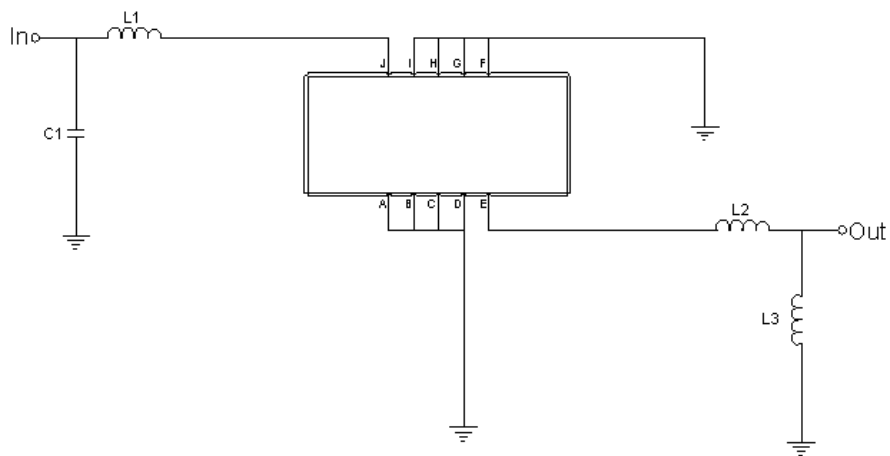


**Mechanical Dimensions (mm)**



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

**Test Circuit**



Test Fixture & Values	
Input	C1= 5 pF, L1= 56 nH
Output	L2= 5.6 nH, L3= 68 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	120.00	120.10	120.20
Insertion Loss at Fo	dB	-	24.0	25.5
Amplitude Ripple Variation Fo ±9.75 MHz	dB <sub>p-p</sub>	-	0.55	1.0
Group Delay Variation at Fo ±9.75 MHz	nsec	-	50	100
Absolute Delay at Fo	μsec	-	2.2	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -1.0 dB	MHz	-	20.25	-
Bandwidth at -3.0 dB	MHz	20.40	20.55	-
Bandwidth at -40.0 dB	MHz	-	21.85	21.98
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-



### Frequency Response

