



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF120.0M-C	120.0 MHz IF SAW Filter 20.1 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)





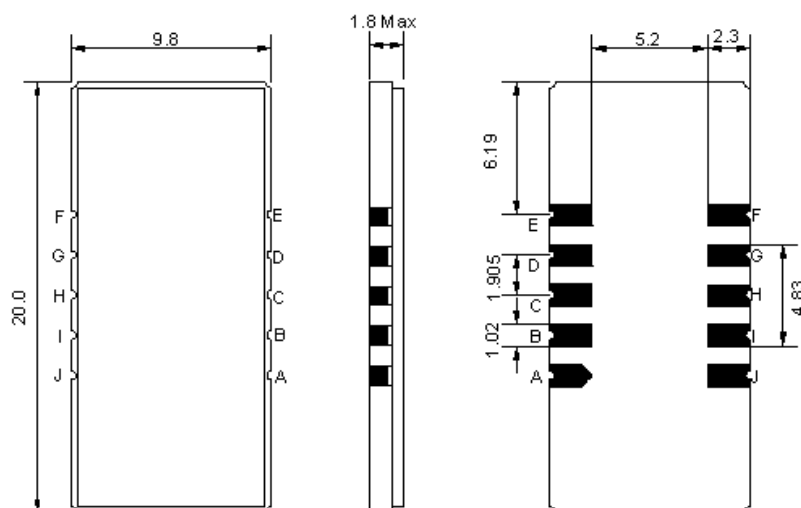
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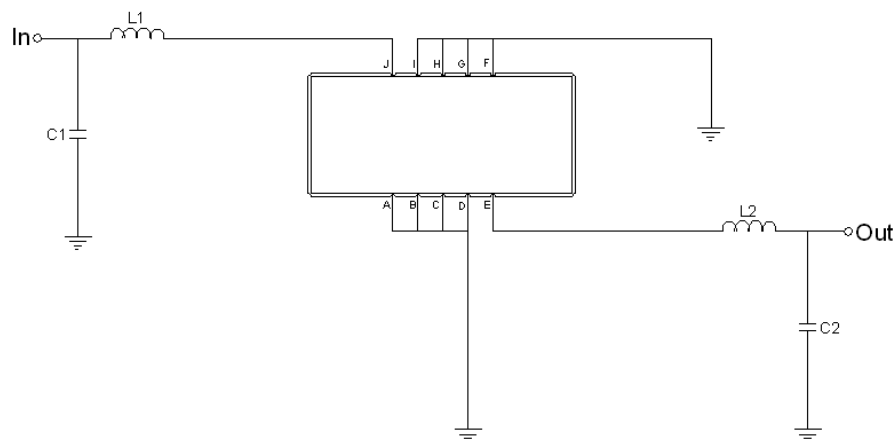
Mechanical Dimensions (mm)



Pin Description

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

Test Circuit



Test Fixture & Values

Input	L1= 56 nH, C1= 33 pF
Output	L2= 68 nH, C2= 20 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	119.9	120.0	120.1
Insertion Loss at Fo	dB	-	21.5	25.5
Amplitude Ripple Variation at Fo ±9.75 MHz	dB _{p-p}	-	0.7	1.0
Group Delay Variation at Fo ±9.75 MHz	nsec	-	40	100
Absolute Delay at Fo	μsec	-	2.3	-
Temperature Coefficient	ppm/°C	-	-72	-
Bandwidth at -1.0 dB	MHz	-	20.2	-
Bandwidth at -3.0 dB	MHz	20.4	20.5	-
Bandwidth at -40.0 dB	MHz	-	21.8	22.0
Lower Sidelobe	dB	50	-	-
Upper Sidelobe	dB	50	-	-



Frequency Response

