



REV A August 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
819-IF100.0M-C	100.0MHz IF SAW Filter 0.47 MHz Bandwidth

Specification Contents

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

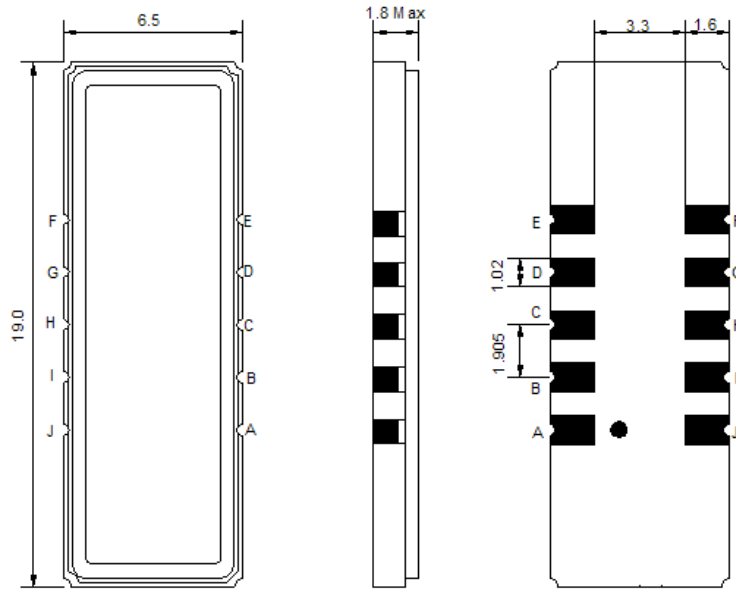
Notes

- 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)



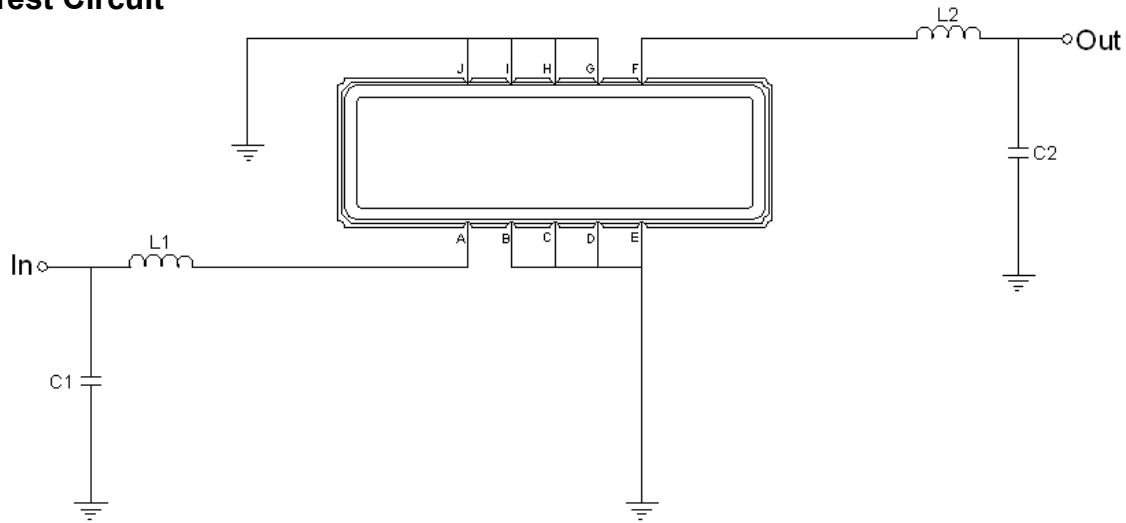


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 162 nH, C1 = 18 pF
Output	L2 = 132 nH, C2 = 39 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	-

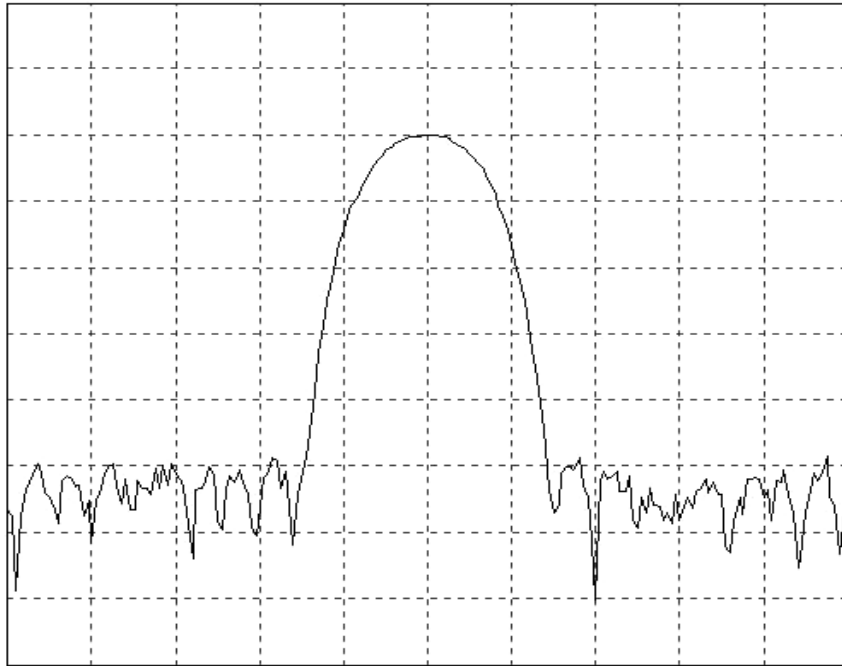
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

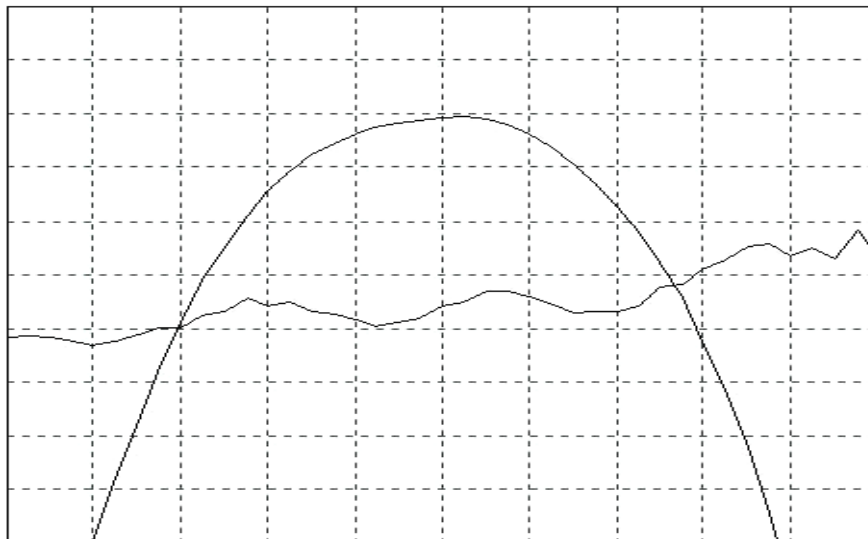
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	99.91	100.00	100.09
Insertion Loss at Fo	dB	-	13.7	15.0
Group Delay Variation	nsec	-	250	500
Absolute Delay at Fo	usec	-	2.4	-
Phase Linearity	deg	-	3.0	6.0
Passband Ripple Variation	dB	-	0.8	1.5
Bandwidth at -1dB	MHz	0.30	0.34	-
Bandwidth at -3dB	MHz	0.47	0.55	-
Bandwidth at -40dB	MHz	-	1.38	1.45
Ultimate Rejection	dB	45	55	-
Substrate Material		-	Qz	-
Ambient Temperature	°C	-	25	-



Frequency Response



Horizontal: 0.5 MHz/Div
Vertical: 10 dB/Div



Horizontal: 0.1MHz/Div
Vertical: 1 dB/Div
Vertical: 100 ns/Div