



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
821-IF57.0M-09A	57.0 MHz IF SAW Filter 9.84 MHz Bandwidth

Specification Contents

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

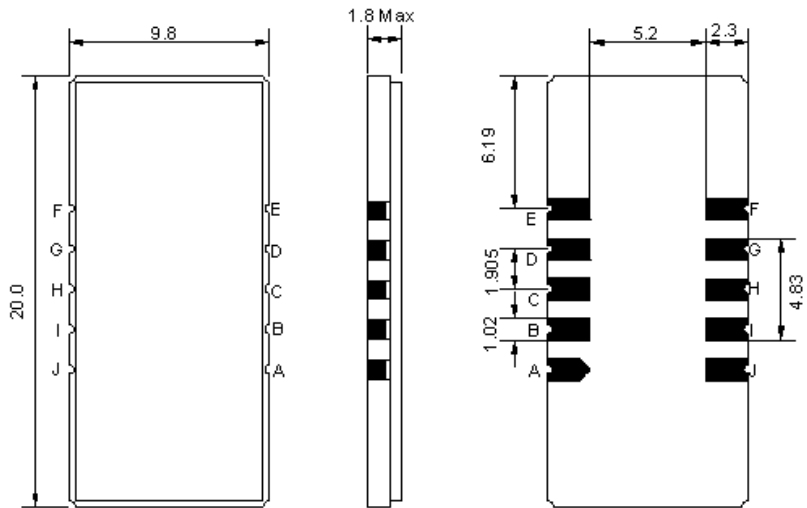
Notes

- 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)



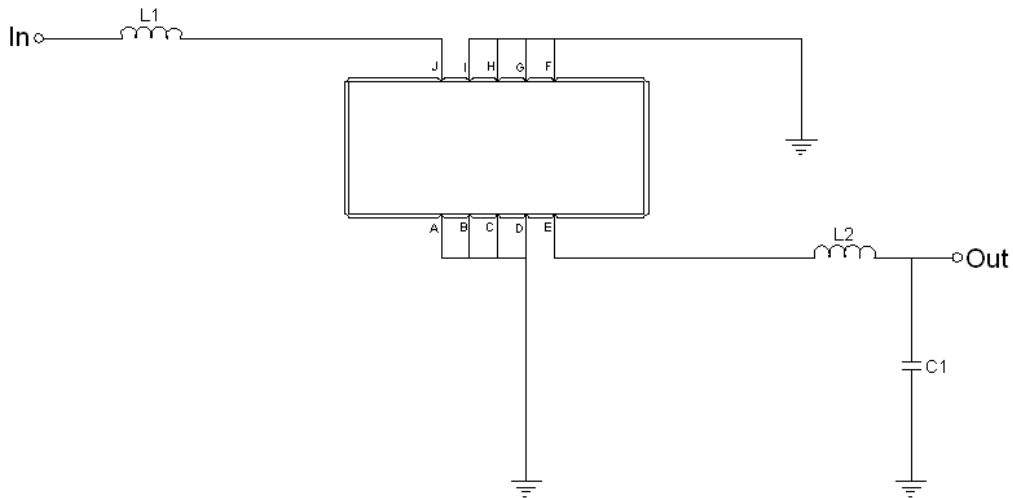


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=270nH
Output	L2=150nH, C1=27pF
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.

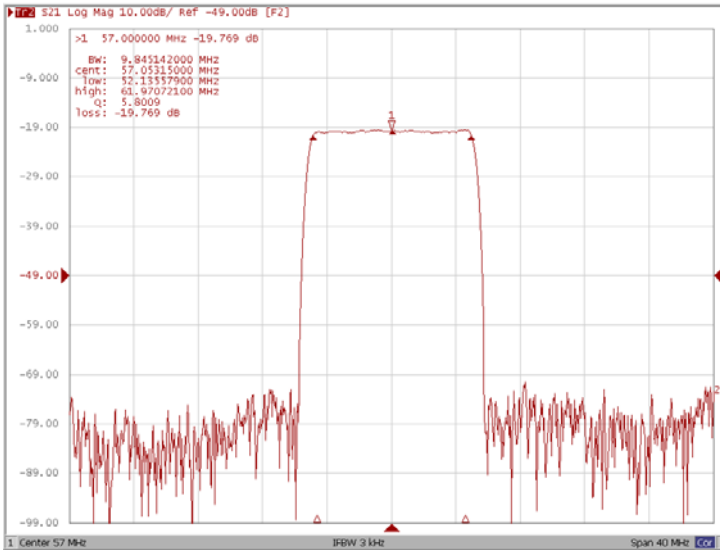
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	56.92	57.00	57.08
Insertion Loss at Fo	dB	-	20.00	22.00
Group Delay Variation	ns	-	55	100
Absolute Delay at Fo	us	-	2.31	-
Passband Ripple Variation	dB	-	0.50	0.95
Bandwidth at -1dB	MHz	-	9.84	-
Bandwidth at -3dB	MHz	10.00	10.13	-
Bandwidth at -50dB	MHz	-	11.49	11.55
Ultimate Rejection	dB	50	53	-
Temperature coefficient	ppm/°C	-	-72	-

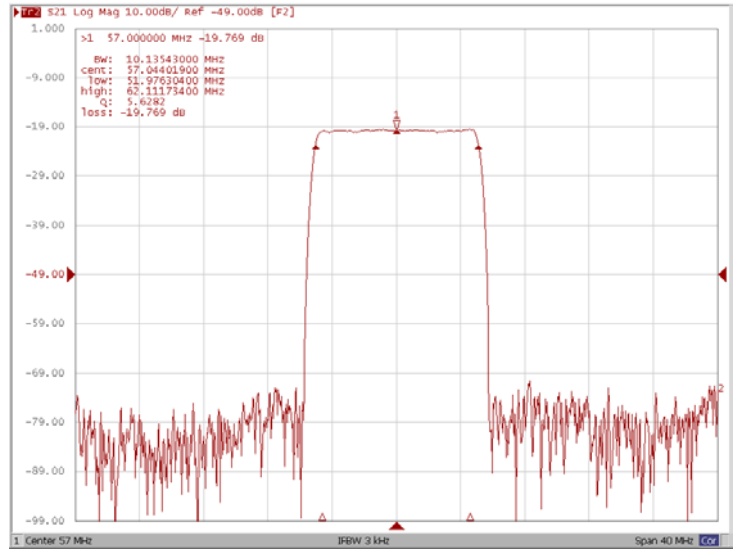


Frequency Response

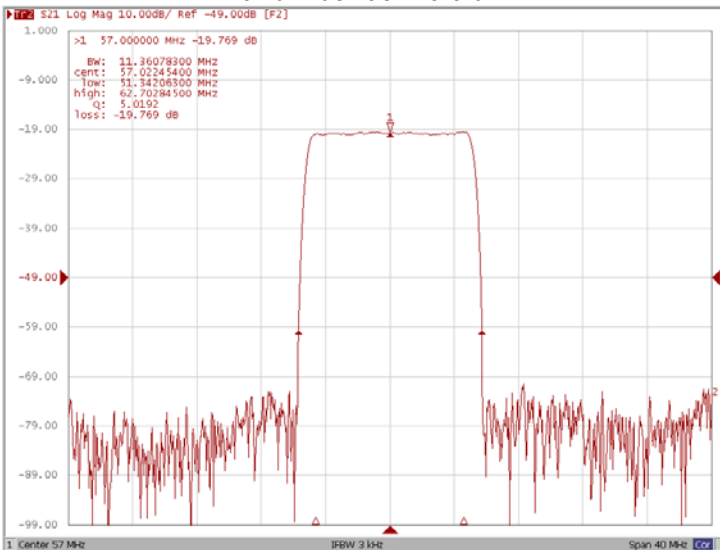
Bandwidth at -1.0 dB



Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

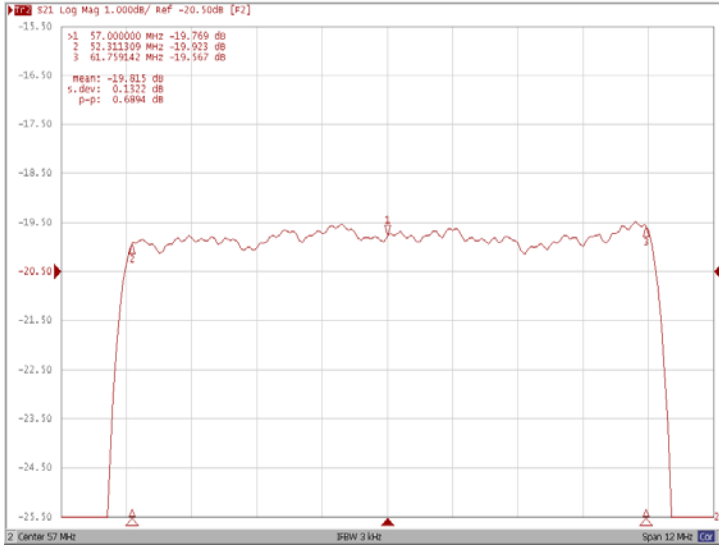


Bandwidth at -50.0 dB

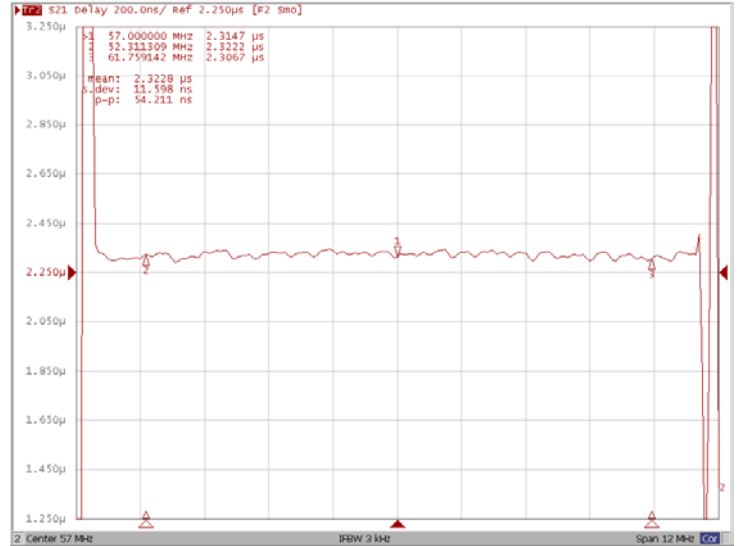




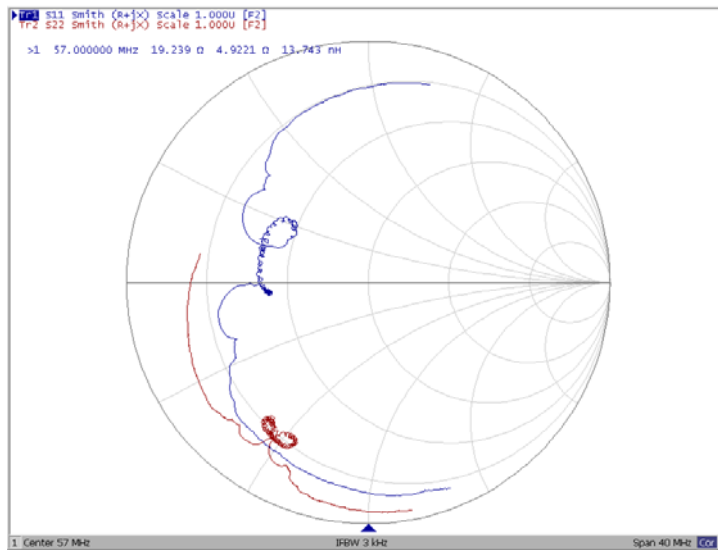
Ripple Variation



Group Delay Variation



Smith Chart





VSWR

