



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
867-SL192.0M-13A	192.0MHz IF SAW Filter 11.95 MHz Bandwidth

Specification Contents

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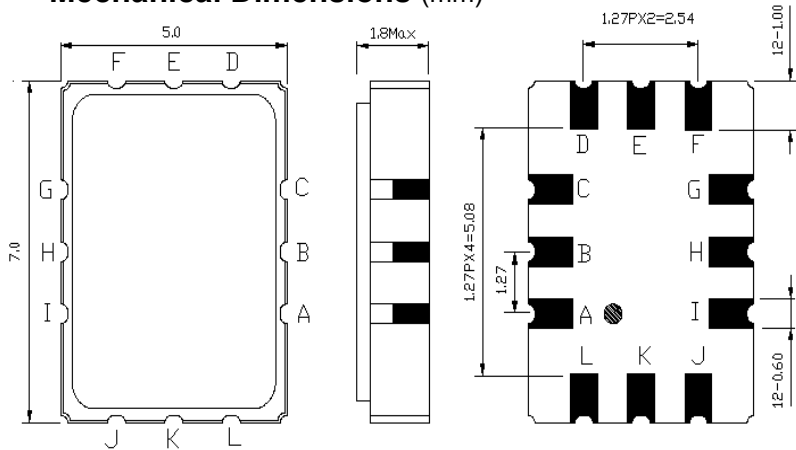
Notes

- 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)



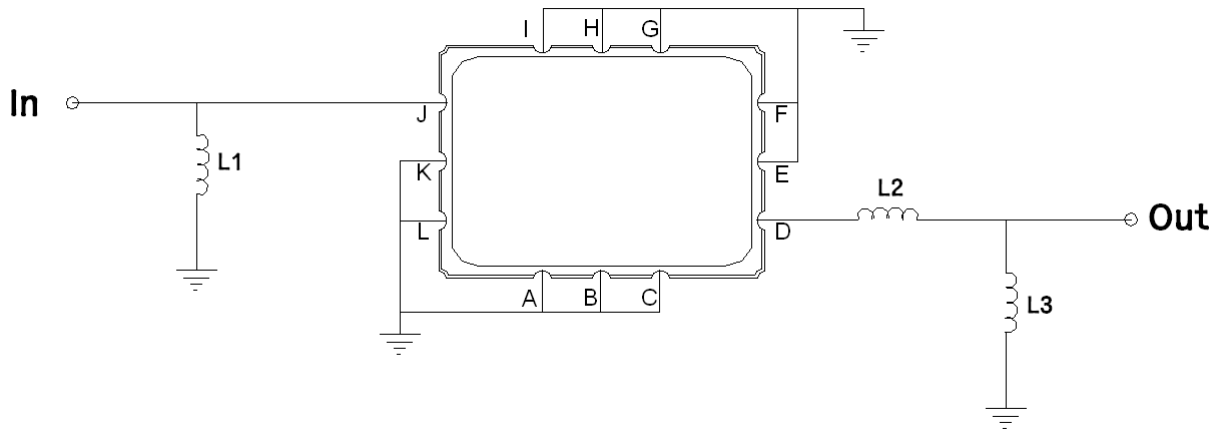


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=12 nH
Output	L2=4.7 nH, L3=15 pF
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	85
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.

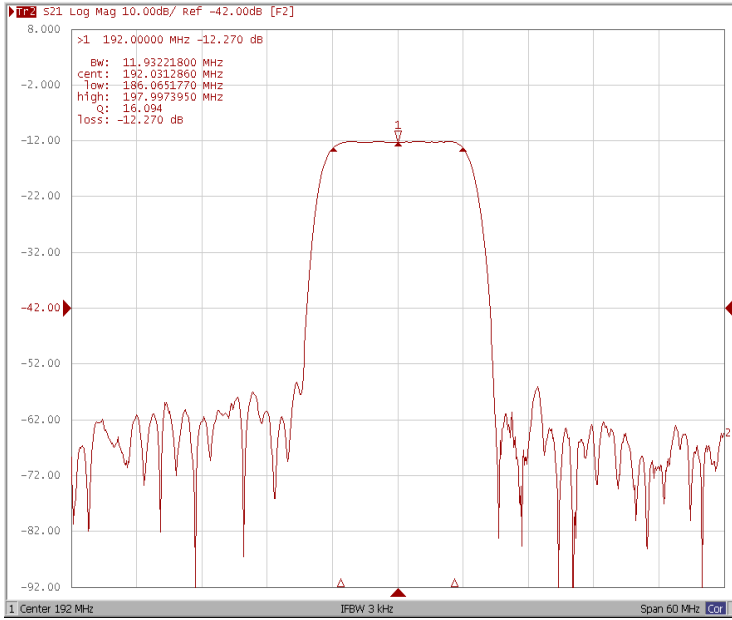
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	191.8	192.0	192.2
Insertion Loss at Fo	dB	-	12.2	13.0
Amplitude Ripple at Fo ± 5.25MHz	dB _{p-p}	-	0.35	1.0
Group Delay Variation at Fo ± 5.25MHz	ns	-	27	80
Absolute Delay at Fo	μs	-	0.66	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at -1.0 dB	MHz	11.00	11.93	-
Bandwidth at -40.0 dB	MHz	-	17.40	19.00
Return Loss	dB	12	-	-
Relative Attenuation				
Fo ± 5.25MHz	dB	-	0.35	1.0
Fo ± 7.5MHz ~ Fo ± 11.0MHz	dB	3	11	-
Fo ± 11.0MHz ~ Fo ± 58.0MHz	dB	40	46	-
Fo ± 58.0MHz ~ Fo ± 92.0MHz	dB	50	58	-

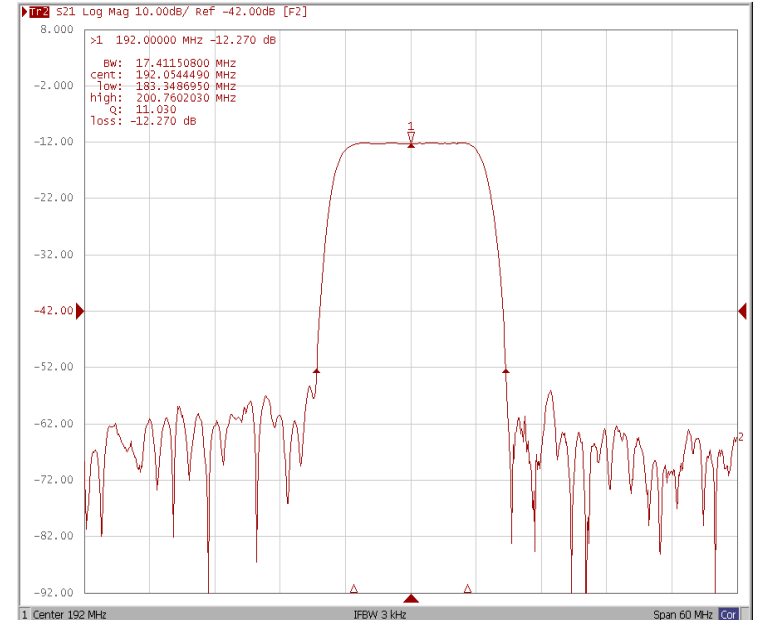


Frequency Response

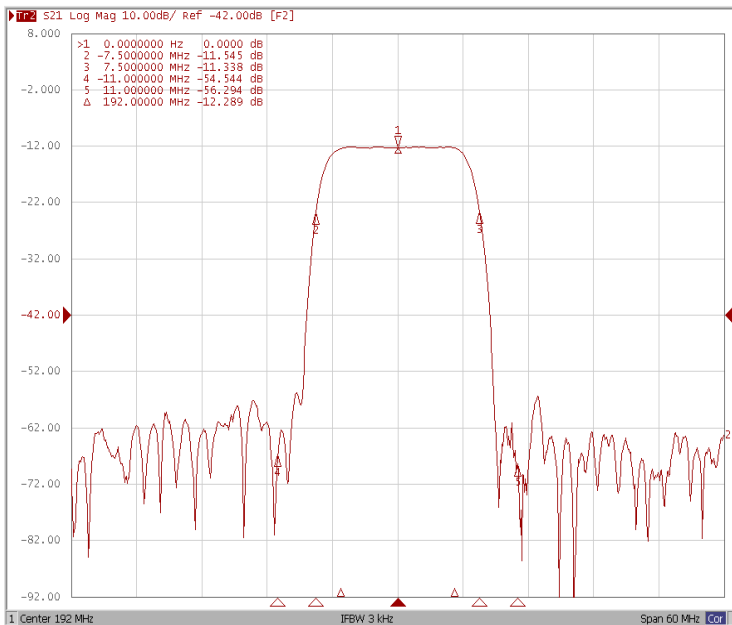
Bandwidth at -1.0 dB



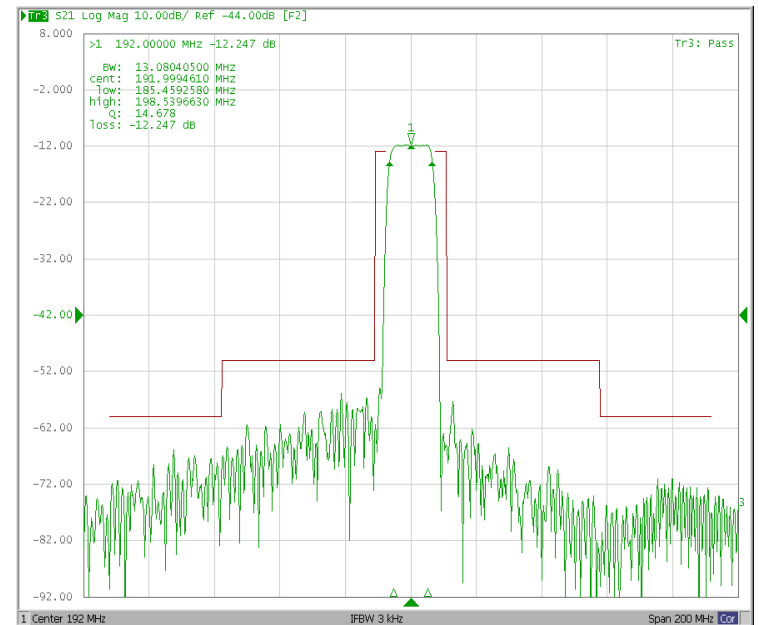
Bandwidth at -40.0 dB



Fo±7.5MHz, Fo±11.0MHz

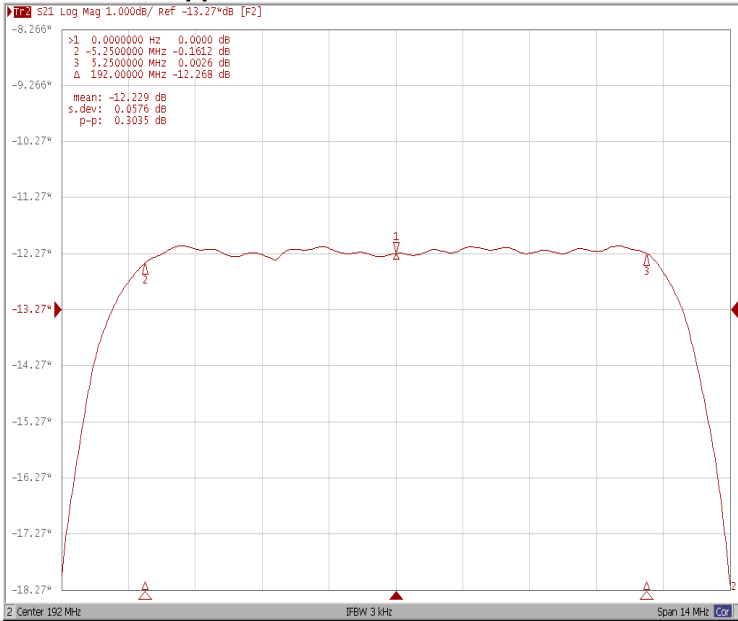


Relative Attenuation

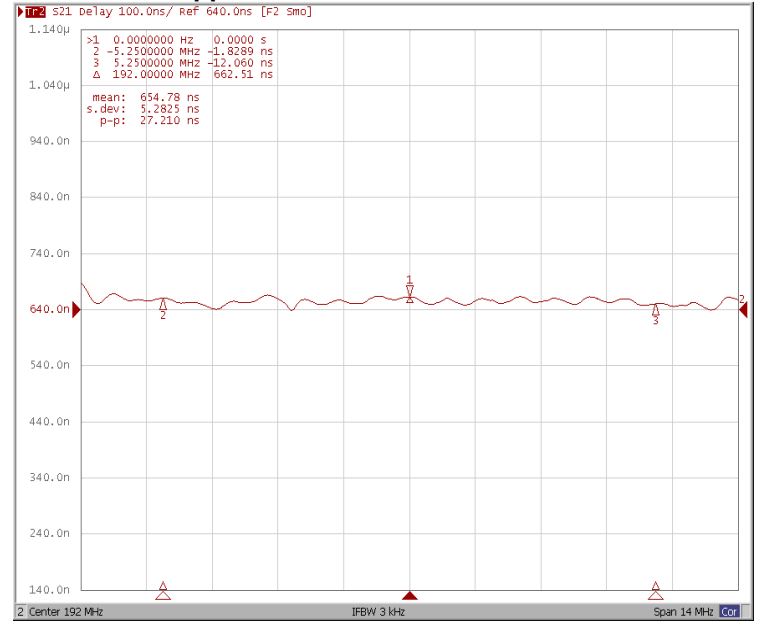




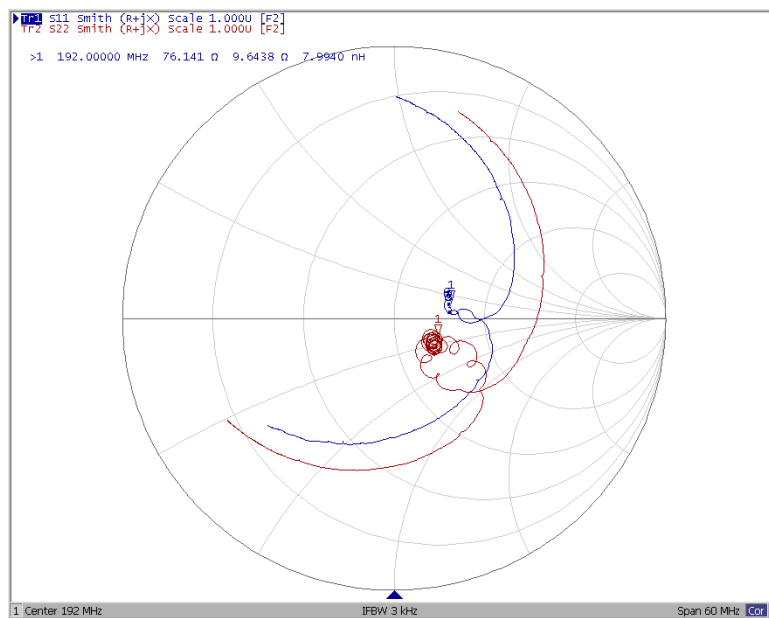
Ripple Variation at Fo ± 5.25 MHz



Ripple Variation at Fo ± 5.25 MHz



Smith Chart





Return Loss

