



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
867-SL174.0M-08A	174.0 MHz IF SAW Filter 8.15 MHz Bandwidth

Specification Contents

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

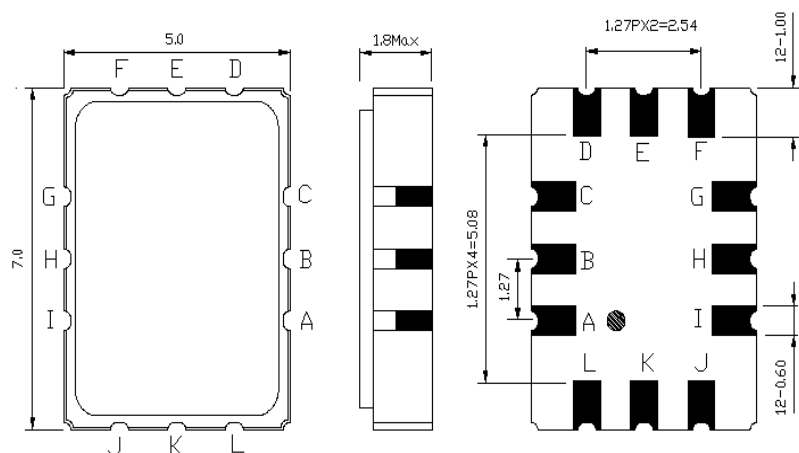
Notes

- 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)



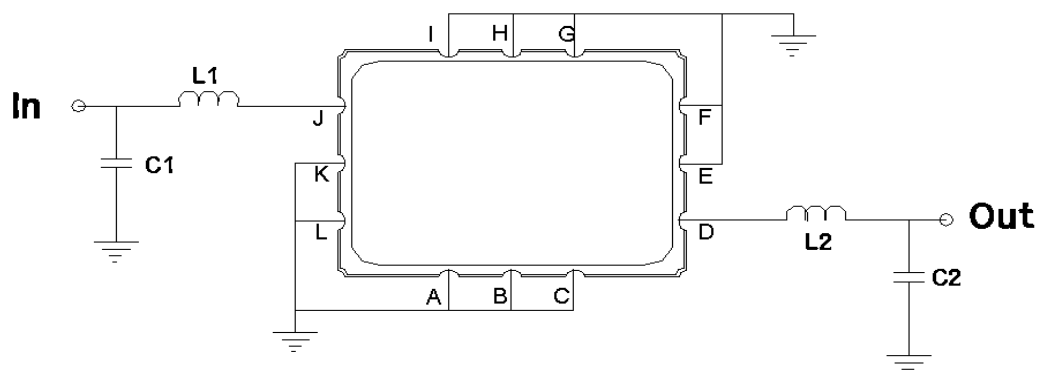


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=47 nH, C1=27 pF
Output	L1=47 nH, C2=33 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	173.80	174.00	174.20
Insertion Loss at Fo	dB	-	12.70	15.0
Amplitude Ripple Variation at Fo $\pm$ 3.0 MHz	dB _{p-p}	-	0.3	0.8
Group Delay Variation at Fo $\pm$ 3.0 MHz	nsec	-	30	80
Absolute Delay at Fo	μ sec	-	0.70	-
Temperature Coefficient	ppm/°C	-	-18	-
Bandwidth at -1.0 dB	MHz	8.00	8.15	-
Bandwidth at -3.0 dB	MHz	-	9.35	-
Bandwidth at -40.0 dB	MHz	-	13.30	14.00
Relative Attenuation				
Lower Sidelobe	dB	40	45	-
Upper Sidelobe	dB	40	50	-



Oscilent Part Number

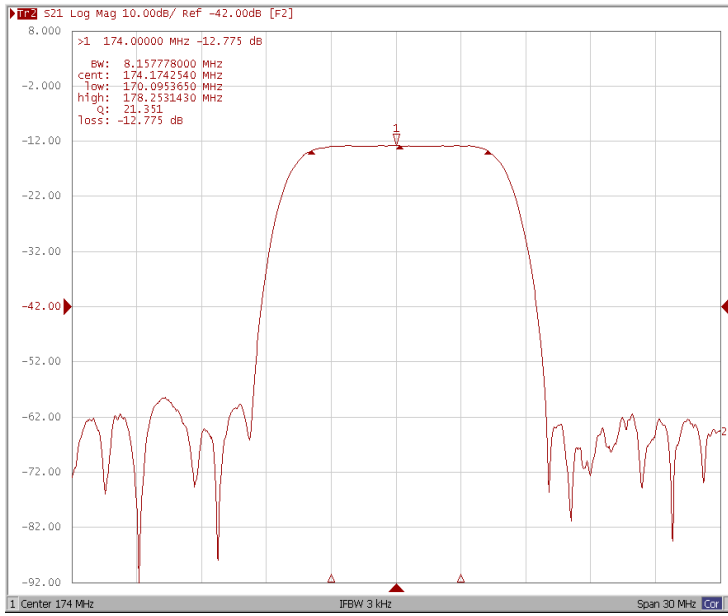
867-SL174.0M-08A

January 2011 Rev A

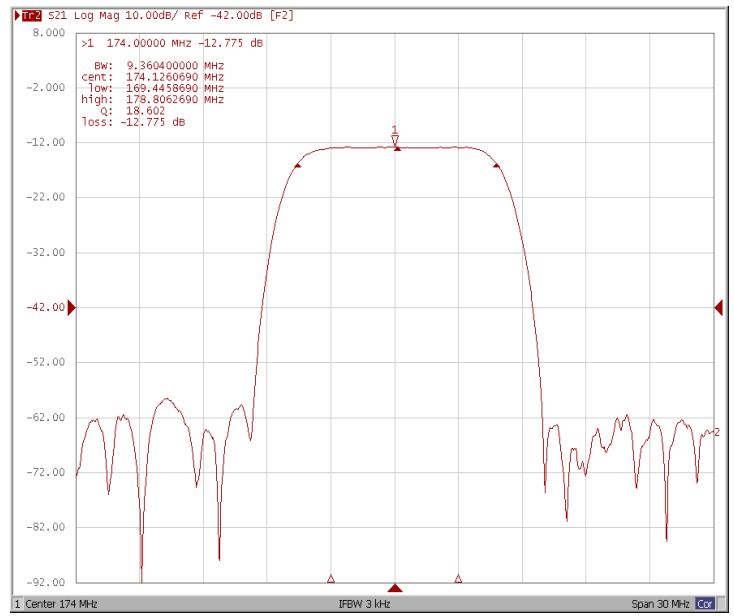
174.0 MHz IF SAW Filter 8.15 MHz Bandwidth

Frequency Response

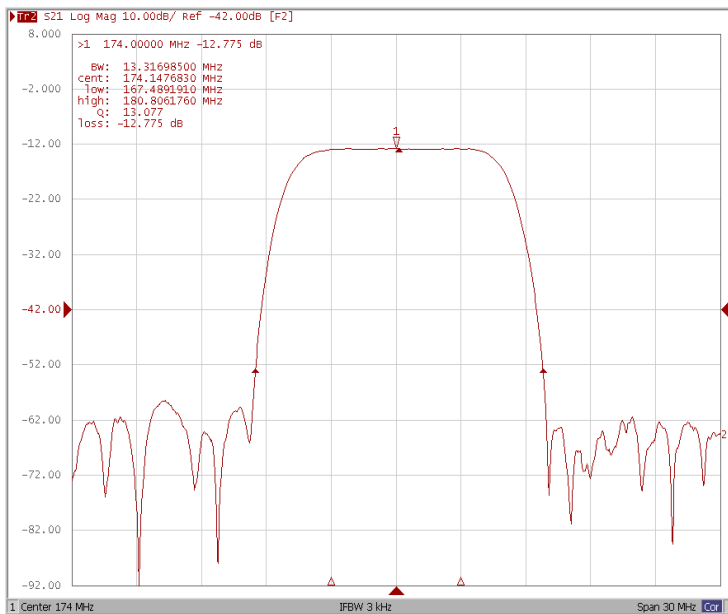
Bandwidth at -1.0 dB



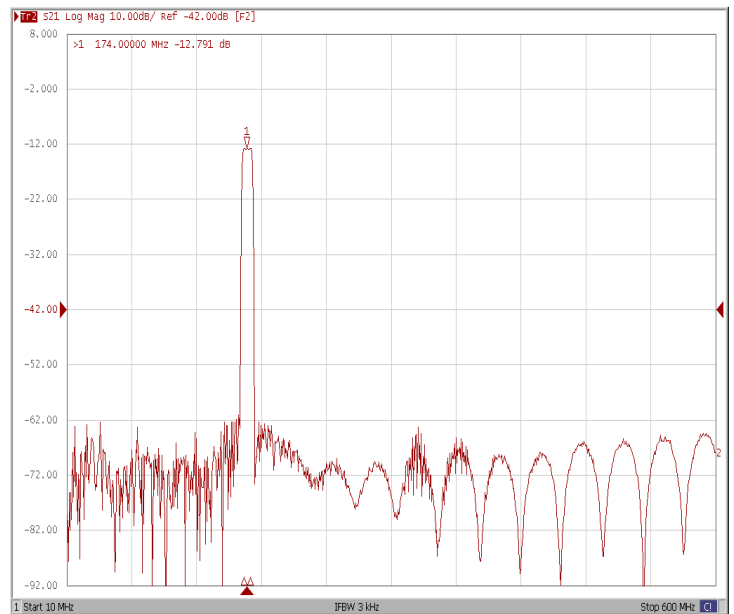
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB



Wide-Band





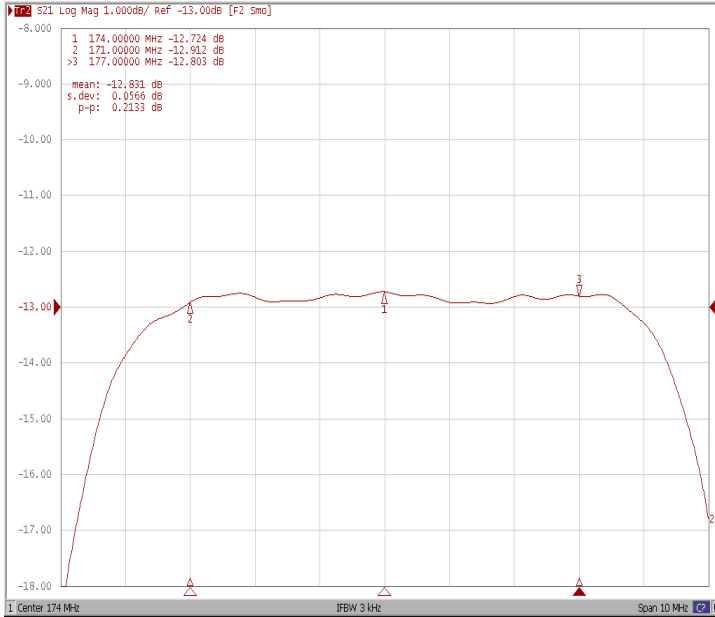
Oscilent Part Number

867-SL174.0M-08A

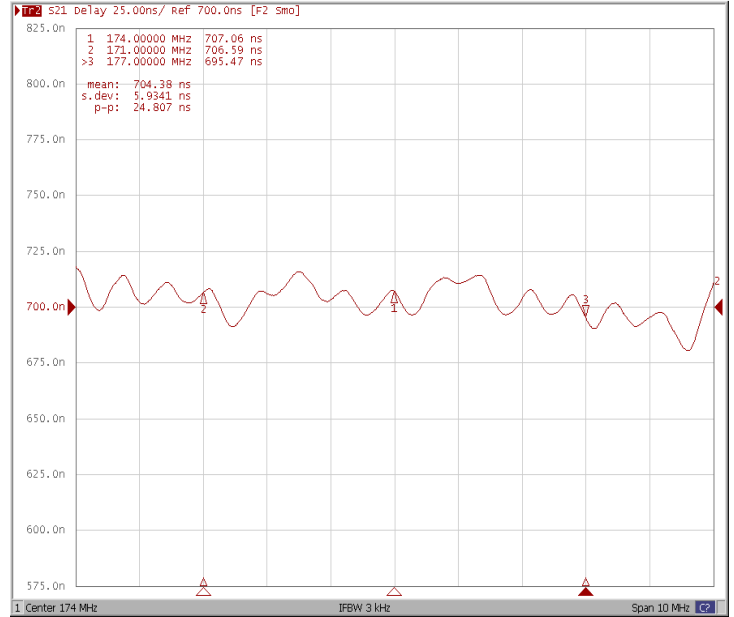
January 2011 Rev A

174.0 MHz IF SAW Filter 8.15 MHz Bandwidth

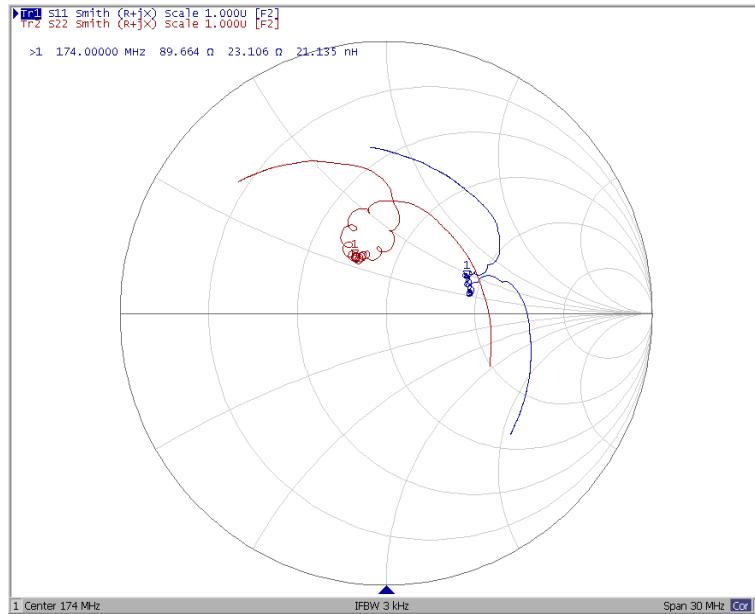
Ripple Variation $F_o \pm 3.0\text{MHz}$



Group Delay Variation $F_o \pm 3.0\text{MHz}$



Smith Chart





Attenuation

