



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL60.0M-11	60.0MHz IF SAW Filter 12.0MHz Bandwidth

Specification Contents

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

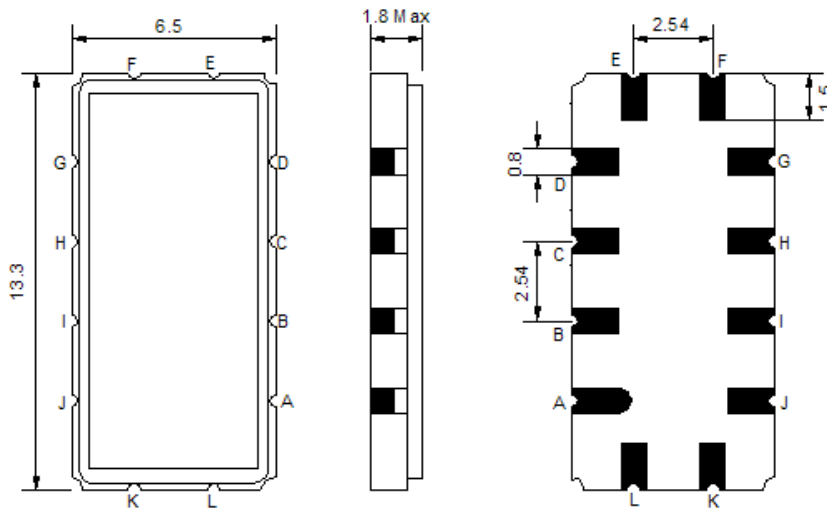
Notes

- 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)



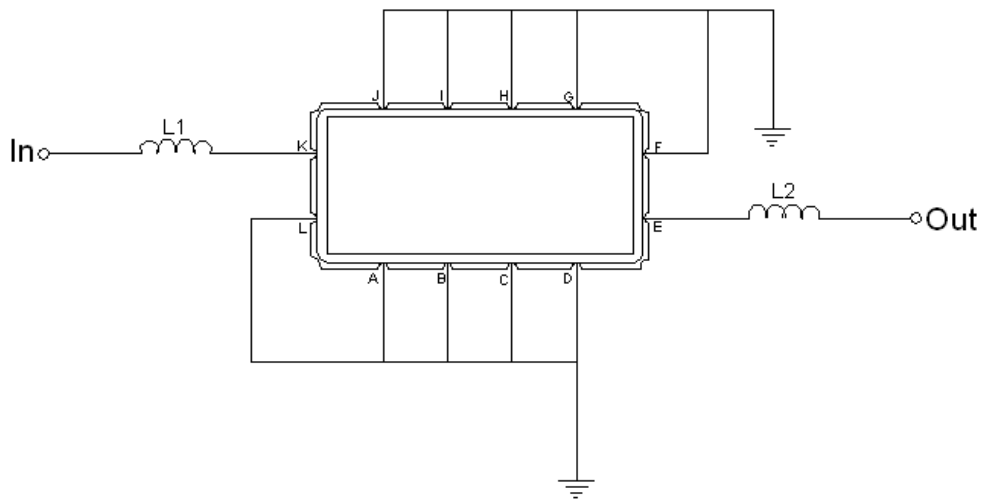


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=270 nH, Q>40
Output	L2=220 nH, Q>40
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).

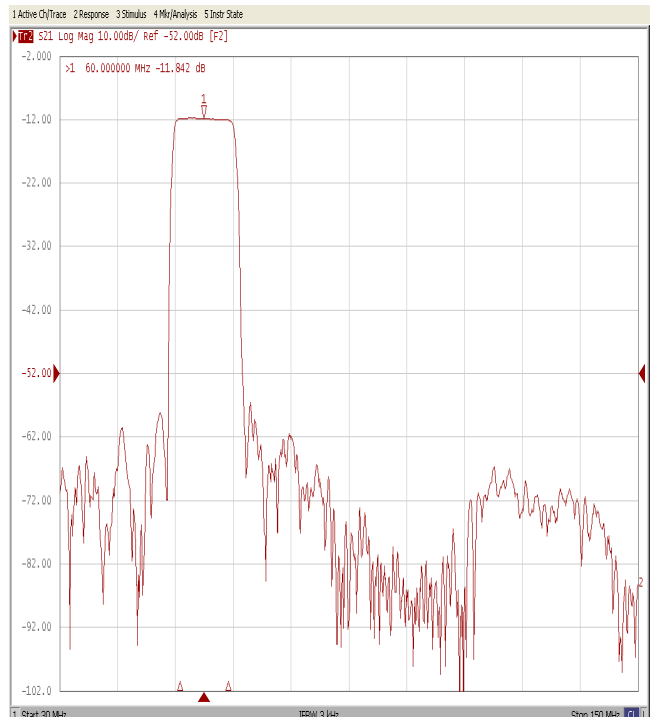
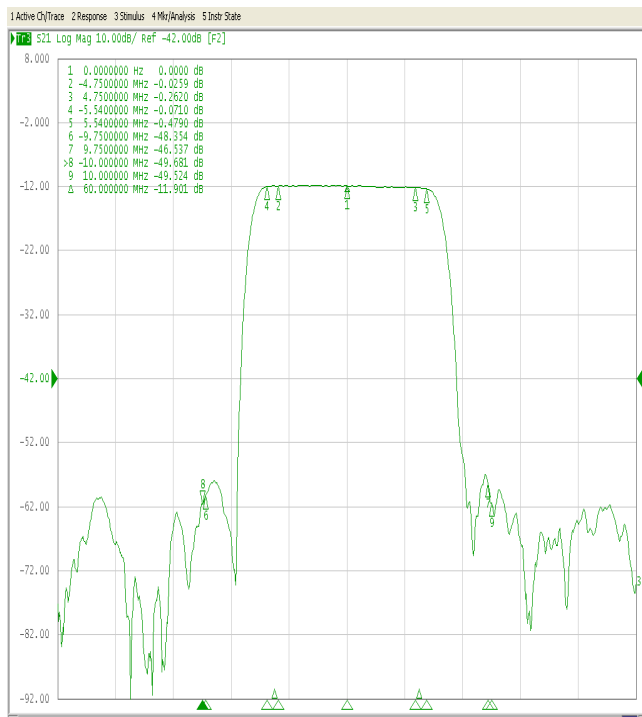
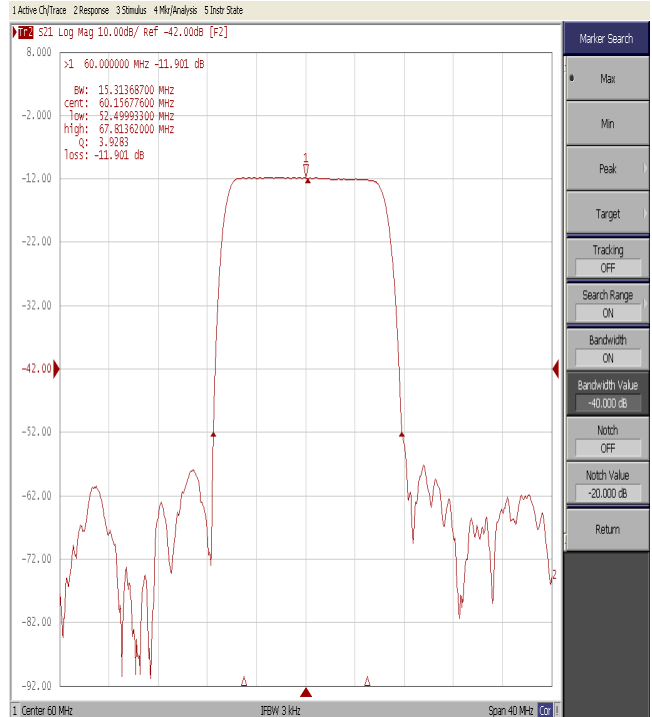
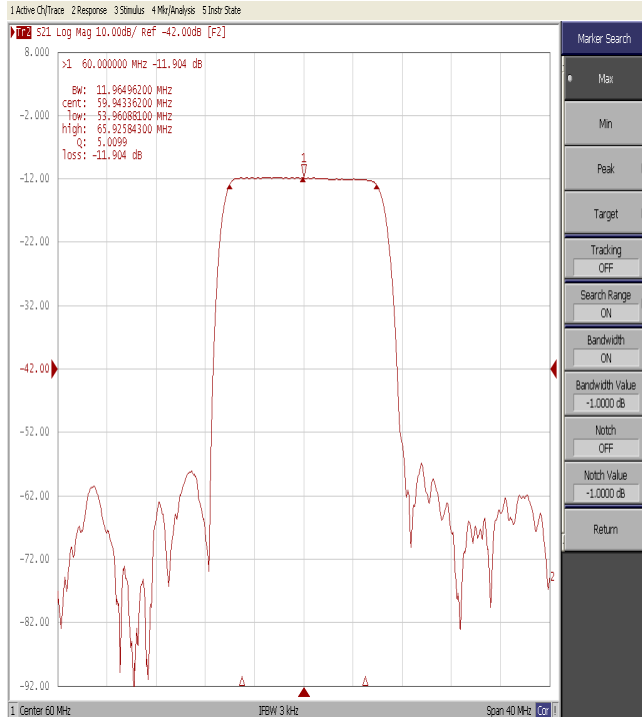
Those impedances could be modified with different impedance values and/or structures, if necessary.

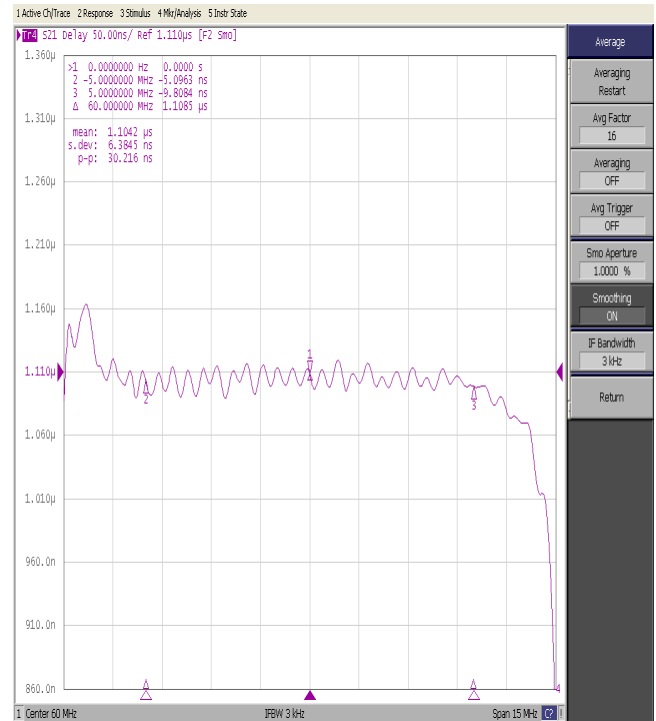
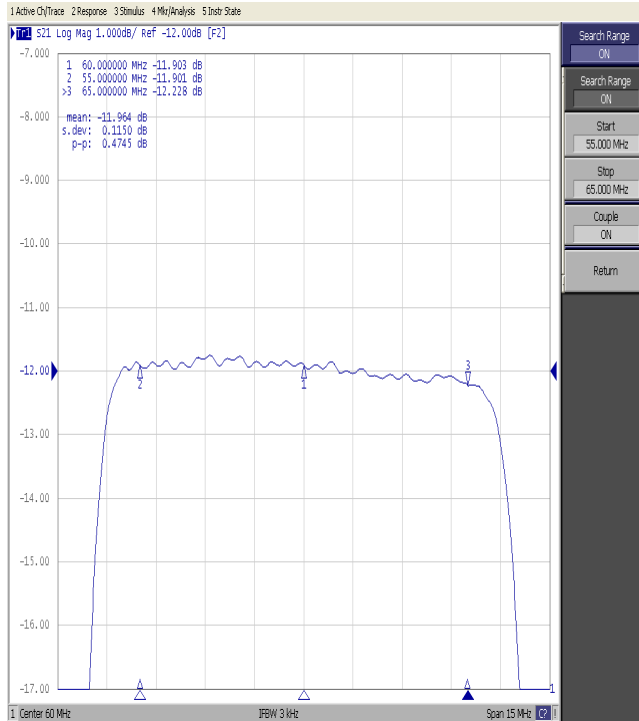
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	60.0	-
Insertion Loss at Fo	dB	-	11.8	13.0
Amplitude Ripple Variation at Fo±5.0MHz	dB _{p-p}	-	0.4	1.0
Group Delay Variation at Fo±5.0MHz	nsec	-	38	70
Absolute Delay at Fo	µsec	-	1.1	-
Temperature Coefficient	ppm/°C	-	-94	-
Bandwidth at -1.0 dB	MHz	10.0	12.0	-
Bandwidth at -3.0 dB	MHz	-	12.7	-
Bandwidth at -40.0 dB	MHz	-	15.3	17.0
Relative Attenuation:				
Fo±9.75 MHz	dB	40	45	
Fo±10 MHz	dB	40	48	
Fo±20 MHz	dB	45	55	
DC ~ 45.25MHz	dB	40	45	-
74.75 ~ 120MHz	dB	40	45	-
VSWR (55.0 ~ 65.0MHz)	dB	-	3.0	4.5

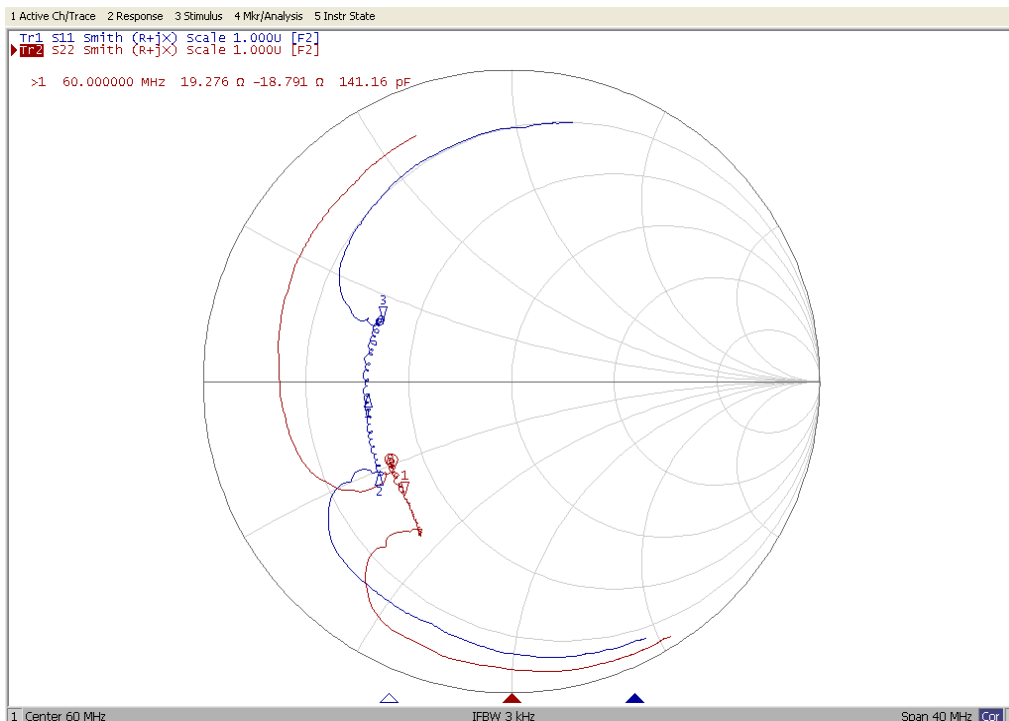


Frequency Response





Smith Chart





VSWR

