



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL315.0M-34A	15.0 MHz IF SAW Filter 33.38MHz 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)



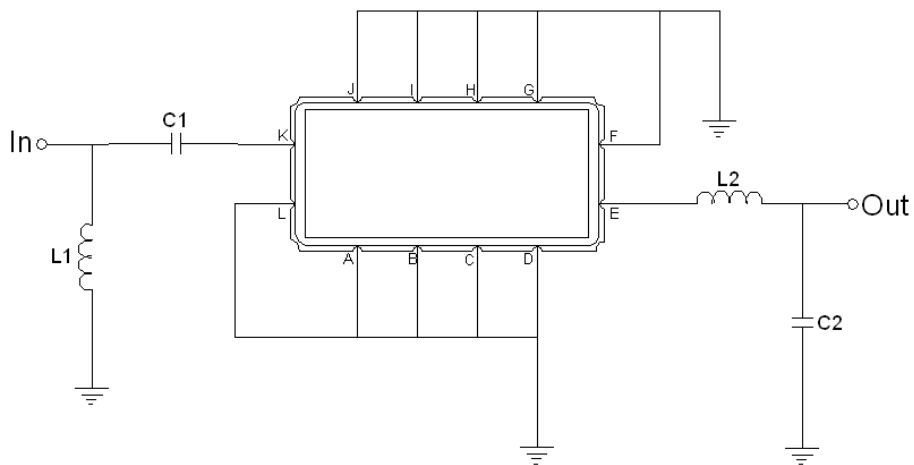


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 39 nH, C1 = 13 pF
Output	L2 = 12 nH, C2 = 22 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.

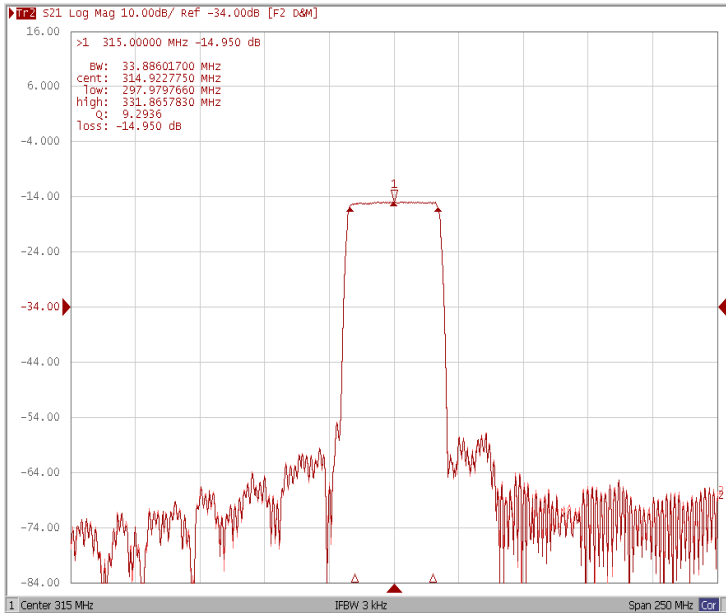
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	315.0	-
Insertion Loss at Fo	dB	-	14.9	16.5
Group Delay Variation at Fo ± 15.0 MHz	nsec	-	28.0	60
Absolute Delay at Fo	usec	-	0.59	-
Passband Ripple Variation at Fo ± 15.0 MHz	dB	-	0.45	1.0
Bandwidth at -1dB	MHz	33.60	33.88	-
Bandwidth at -20dB	MHz	-	39.29	-
Bandwidth at -40dB	MHz	-	41.37	41.50
Ultimate Rejection	dB	40	43	-
Temperature Coefficient	ppm/°C	-	-86	-

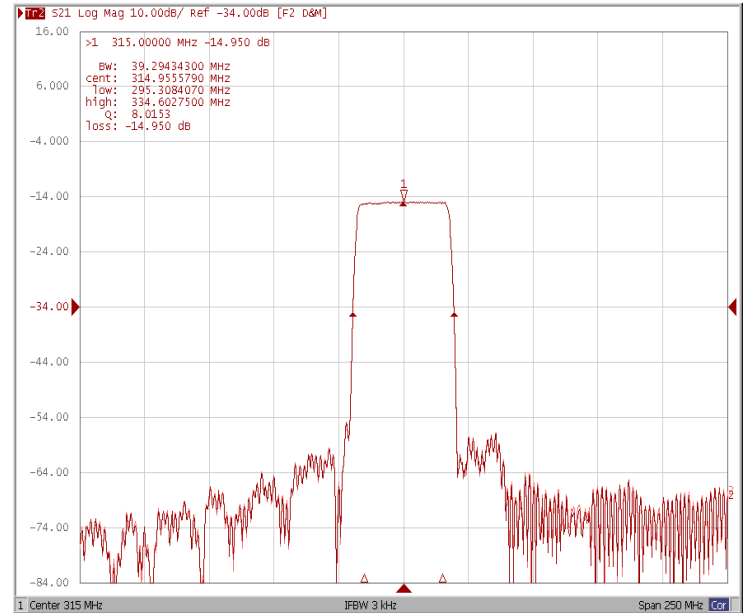


Frequency Response

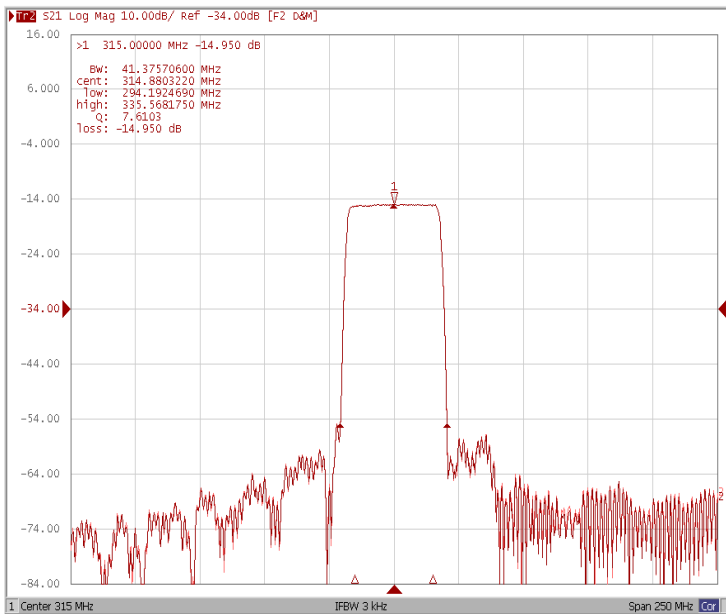
Bandwidth at -1.0 dB



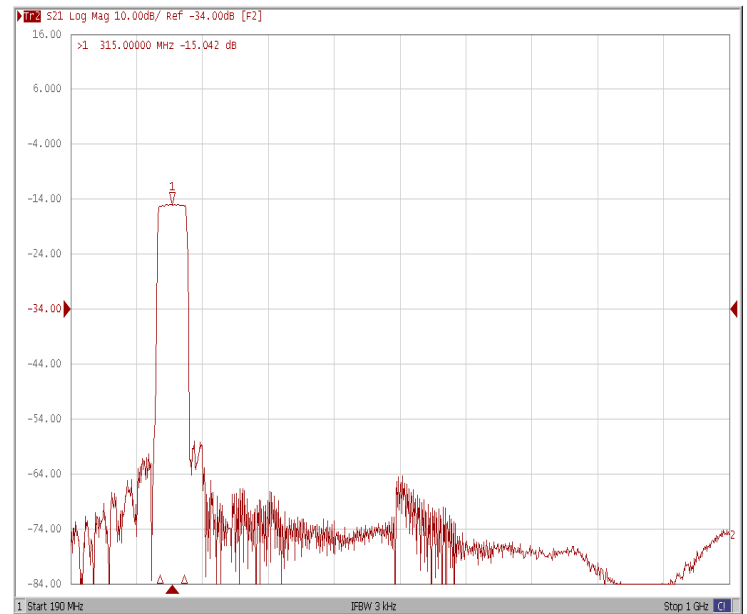
Bandwidth at -20 dB



Bandwidth at -40 dB

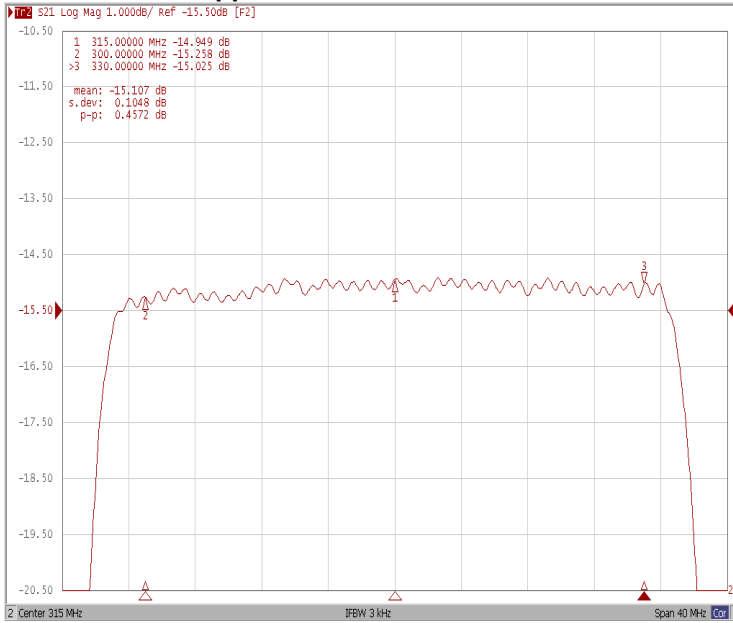


Wide Band

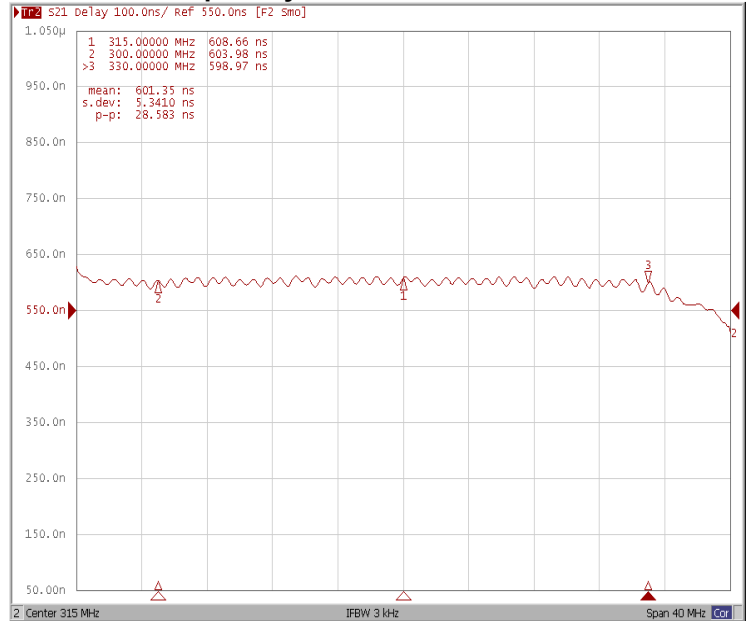




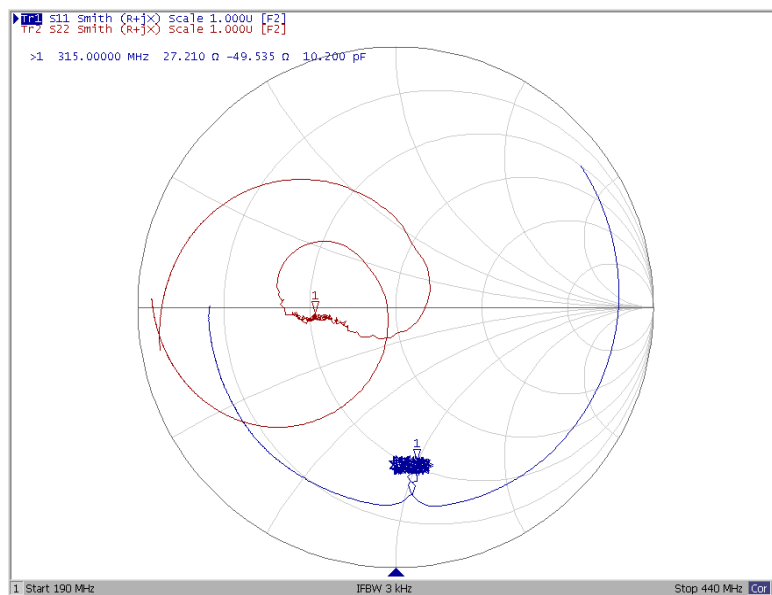
Ripple Variation Fo±15.0MHz



Group Delay Variation Fo±15.0MHz



Smith Chart





VSWR

