



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL125.0M-29A	125.0 MHz IF SAW Filter 29.9 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)



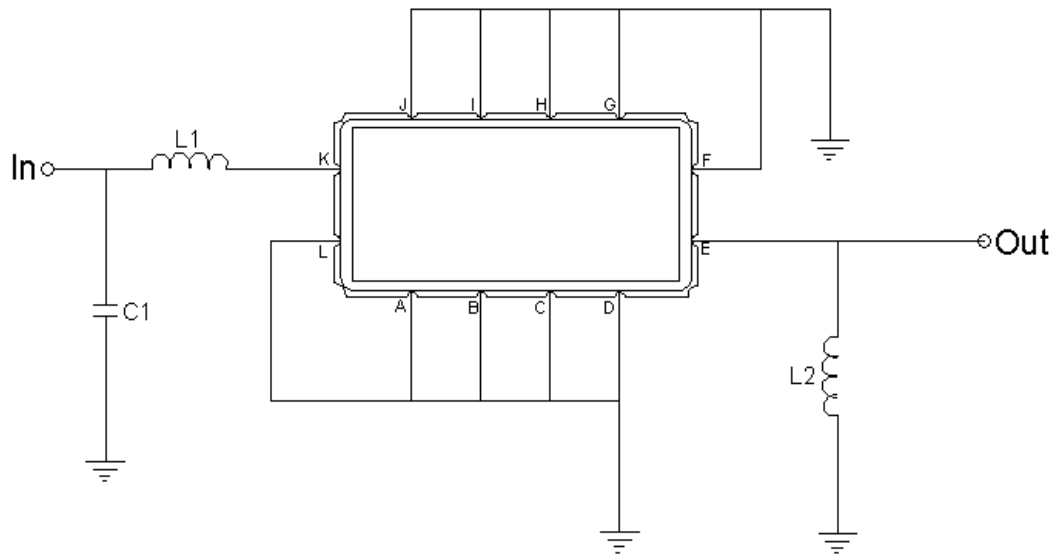


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=56nH, C1=30pF
Output	L2=39nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	70
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	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	124.85	125.0	125.15
Insertion Loss at Fo	dB	-	12.0	13.50
Amplitude Ripple within fo ±13.5 MHz	dB <sub>p-p</sub>	-	0.35	0.80
Group Delay Variation within fo ±13.5 MHz	nsec	-	20	50
Absolute Delay at Fo	μsec	-	0.68	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	29.0	29.9	-
Bandwidth at -3.0 dB	MHz	30.0	31.1	-
Bandwidth at -40.0 dB	MHz	-	36.9	37.5
Relative Attenuation:				
Lower sidelobe	dB	40	48	-
Upper sidelobe	dB	40	45	-



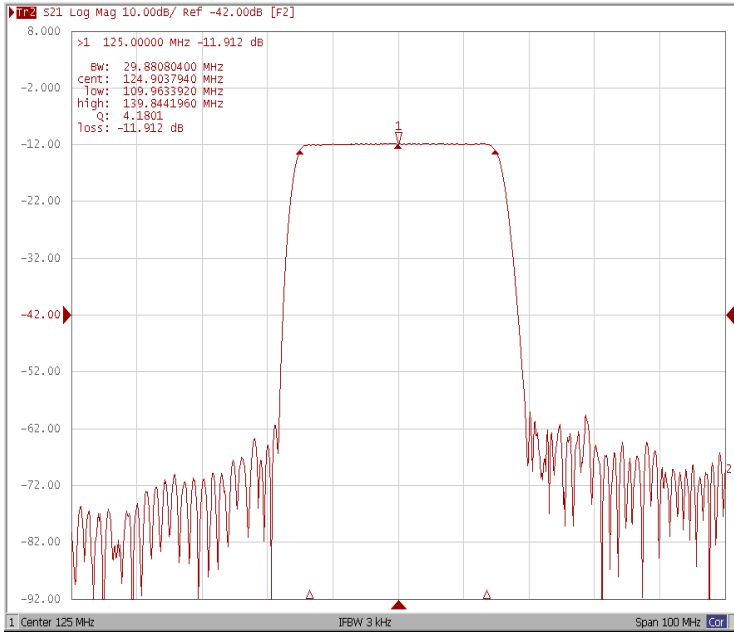
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# Oscilent Part Number 813-SL125.0M-29A

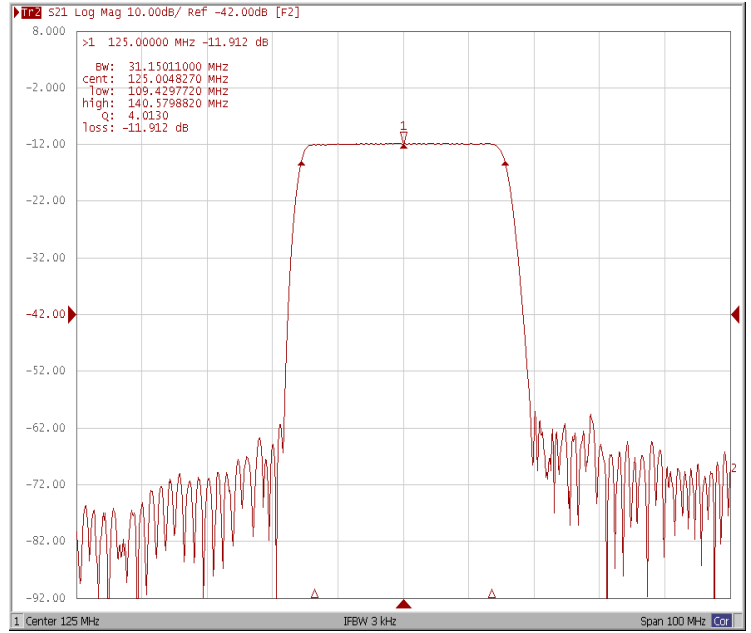
125.0 MHz IF SAW Filter 29.9 MHz Bandwidth

## Frequency Response

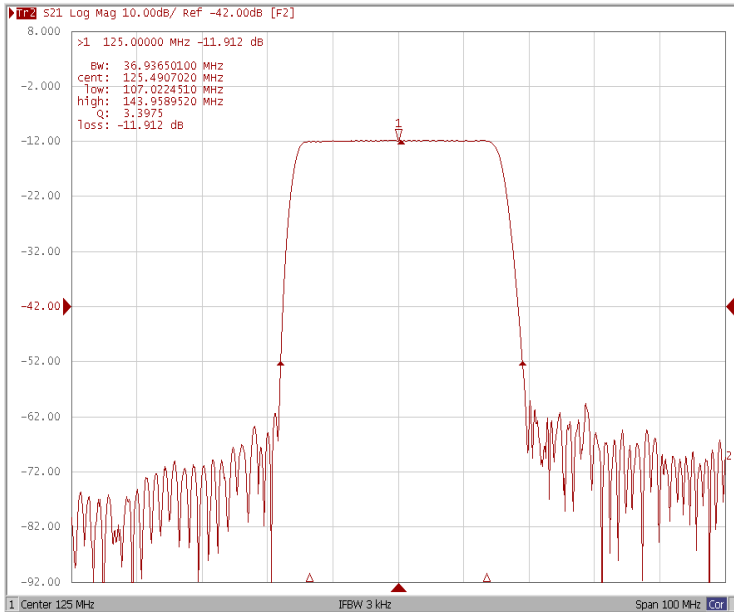
### Bandwidth at -1.0 dB



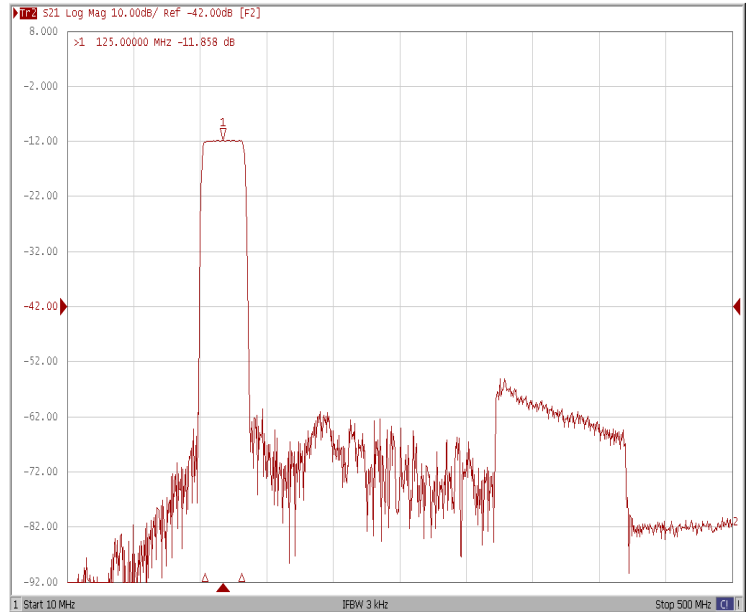
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

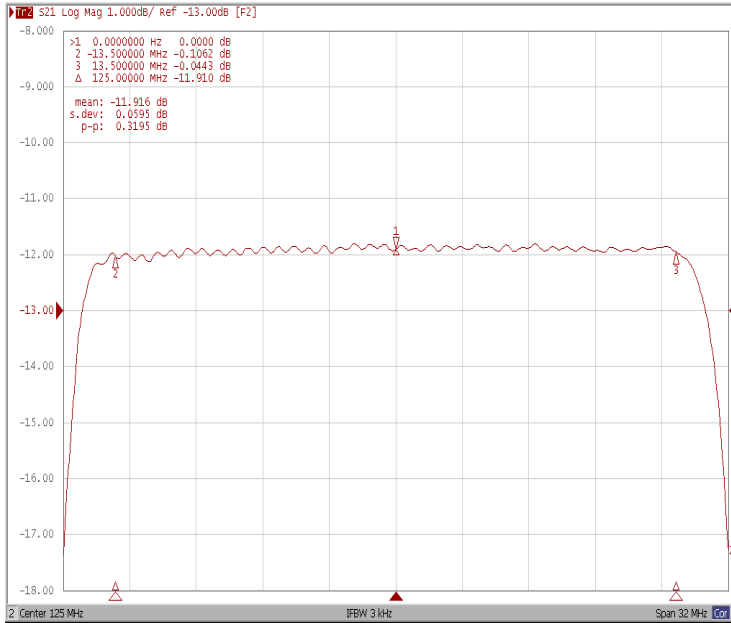


### Wide-Band

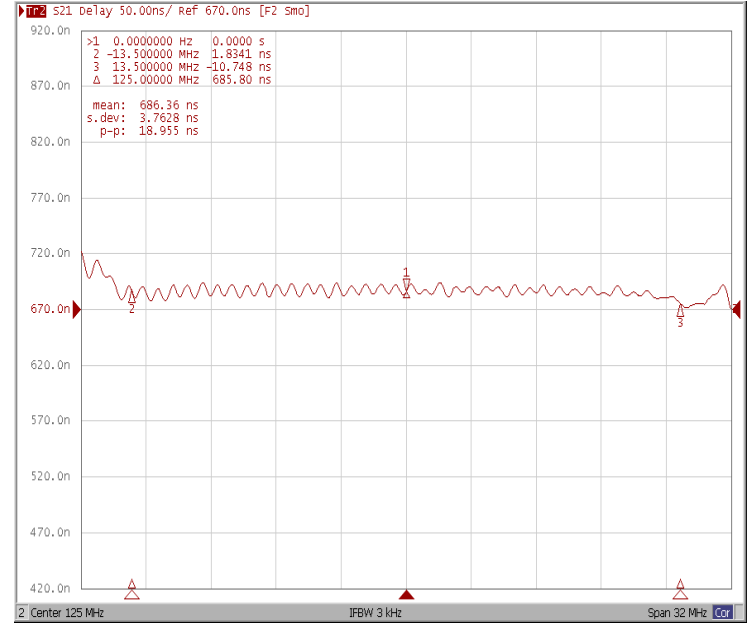




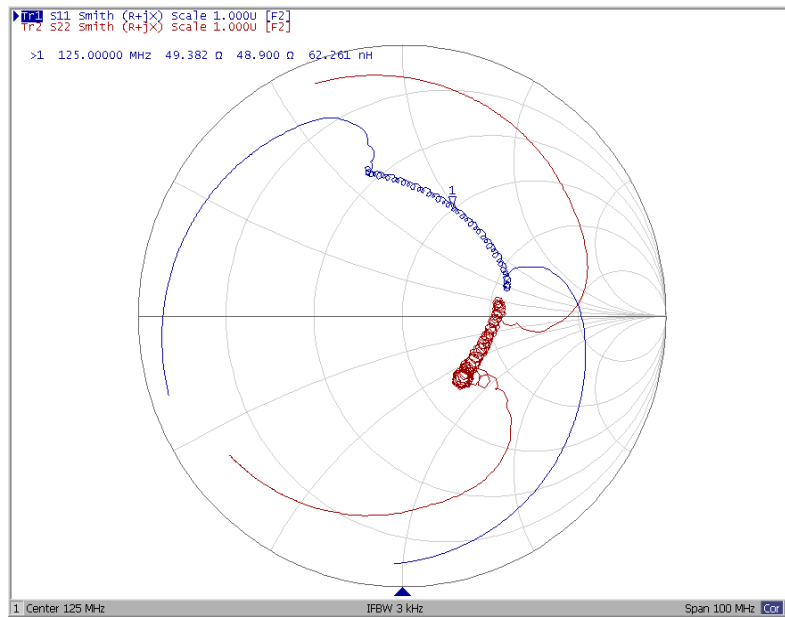
### Ripple Variation $F_0 \pm 13.5\text{MHz}$



### Group Delay Variation $F_0 \pm 13.5\text{MHz}$



### Smith Chart





### VSWR

