



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL75.0M-10A	75.0MHz IF SAW Filter 10.5MHz Bandwidth

## Specification Contents

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

## Notes

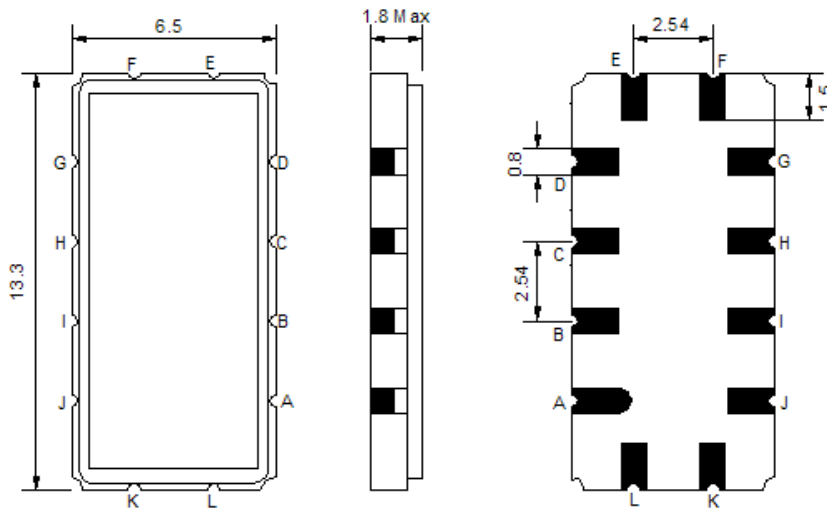
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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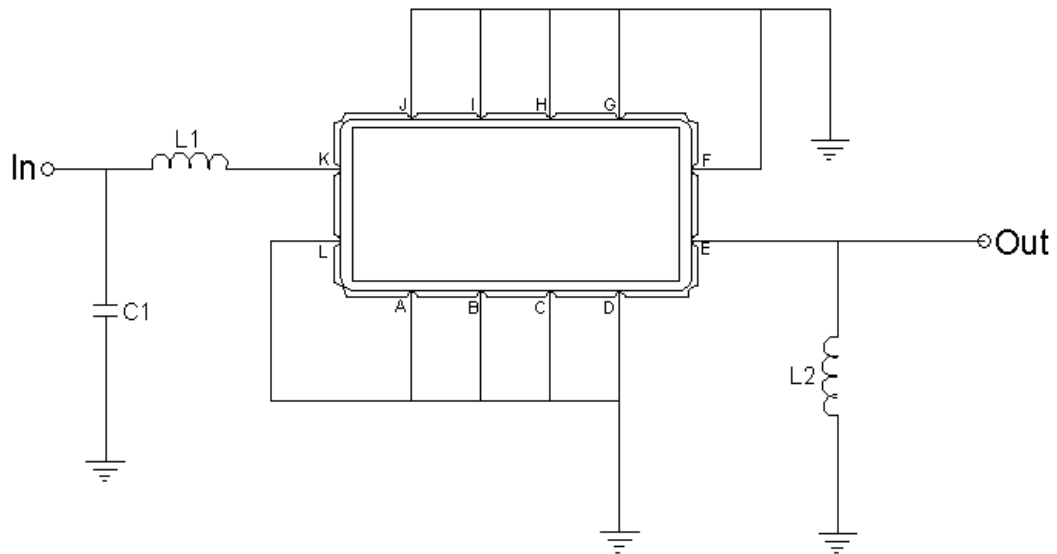


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=68nH, C1=22pF
Output	L2=39nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	85
Storage Temperature Range	°C	-40	-	85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	30
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.

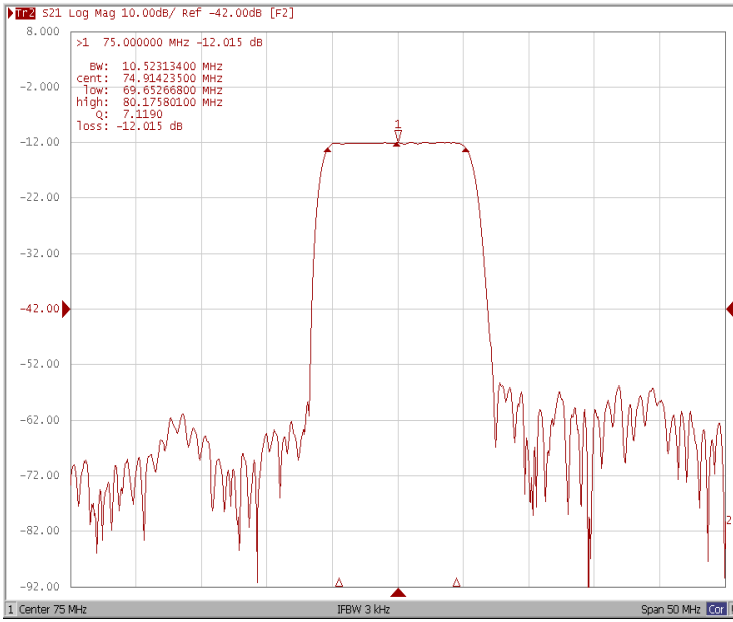
**Electrical Specification**

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	75.0	-
Insertion Loss at Fo	dB	-	12.0	14.0
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±4.5 MHz	dB <sub>p-p</sub>	-	0.4	0.65
Group Delay Variation within fo ±4.5 MHz	nsec	-	45	80
Absolute Delay at Fo	µsec	-	1.16	-
Bandwidth at -1.0 dB	MHz	-	10.50	-
Bandwidth at -3.0 dB	MHz	-	11.20	-
Bandwidth at -40.0 dB	MHz	-	13.90	14.20
Input VSWR at Fo	dB	-	5.8	-
Output VSWR at Fo	dB	-	1.5	-
Relative Attenuation:				
Lower Sidelobe	dB	40	48	-
Upper Sidelobe	dB	40	45	-

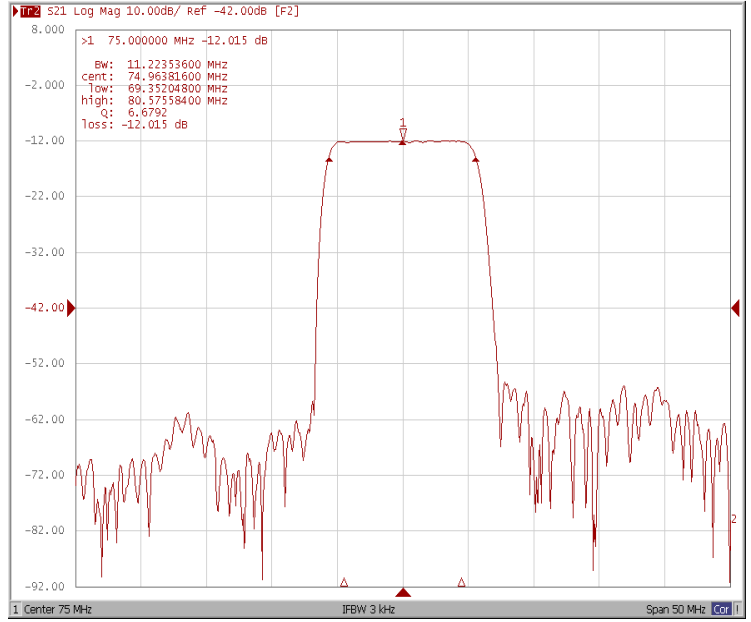


## Frequency Response

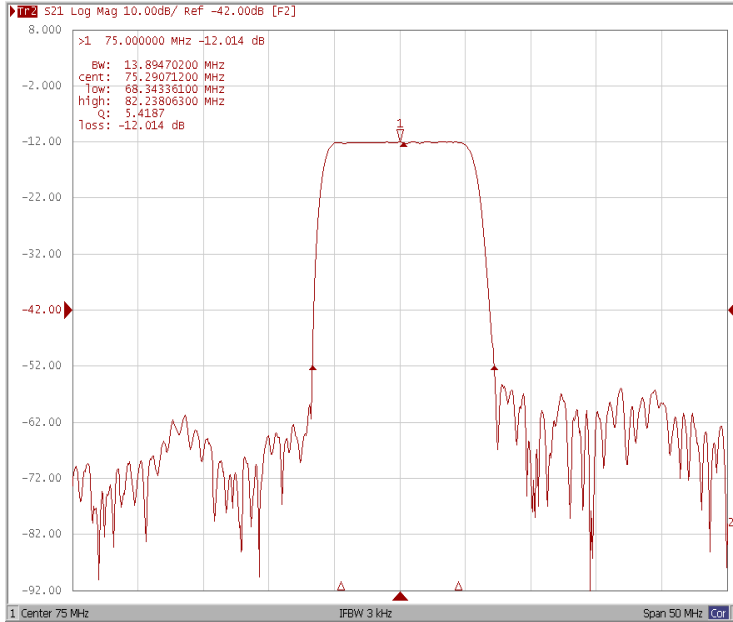
### Bandwidth at -1.0 dB



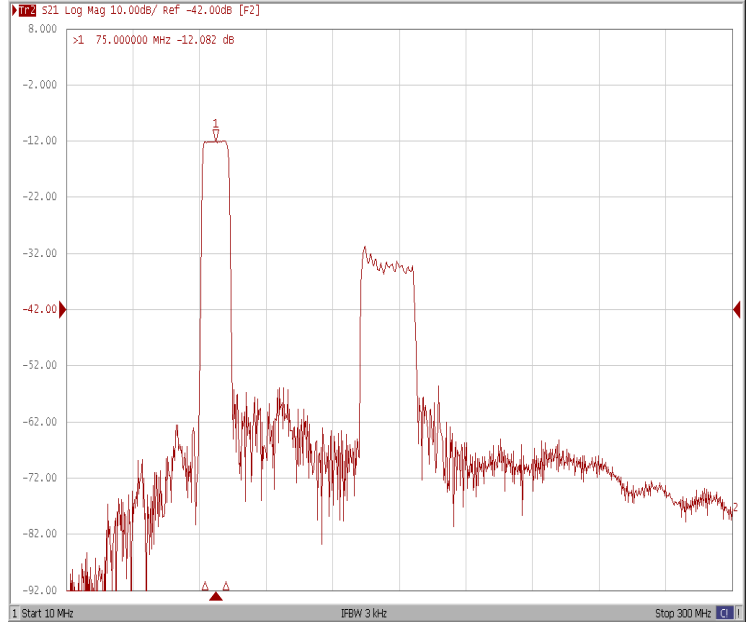
### Bandwidth at -3.0 dB



### Bandwidth at -40.0 dB

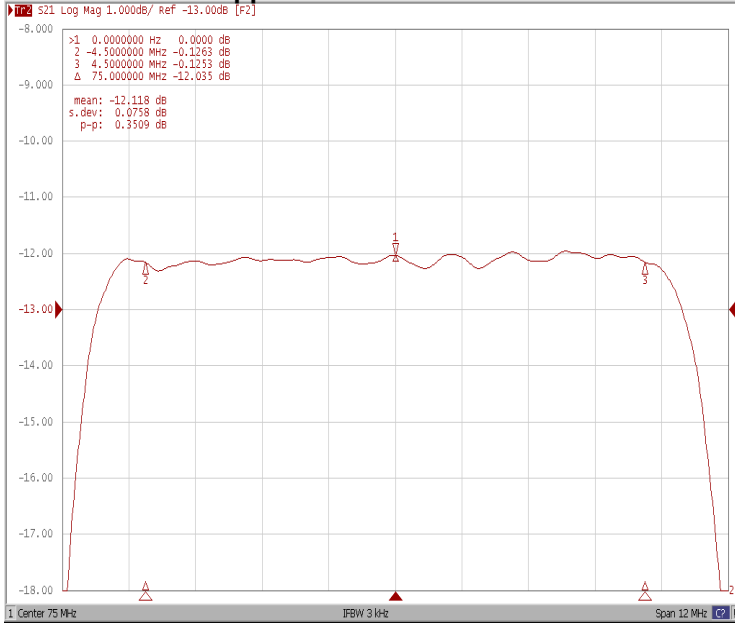


### Wide-Band

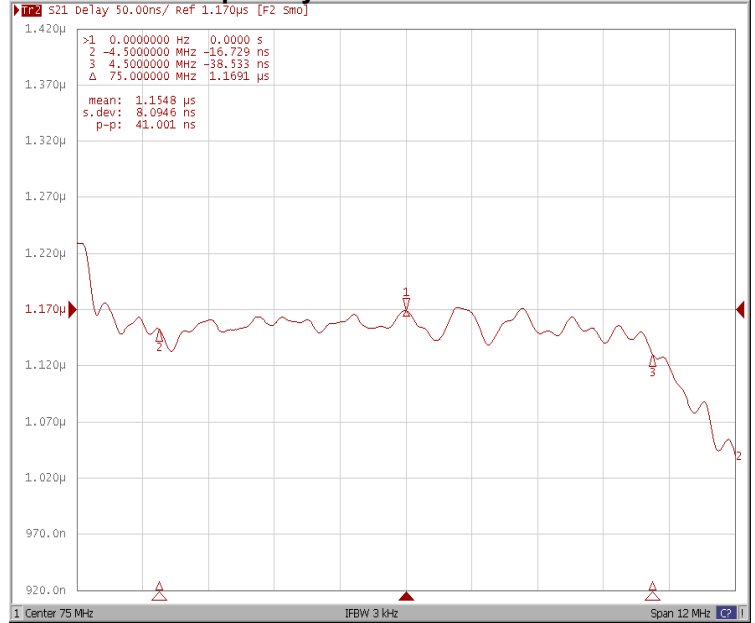




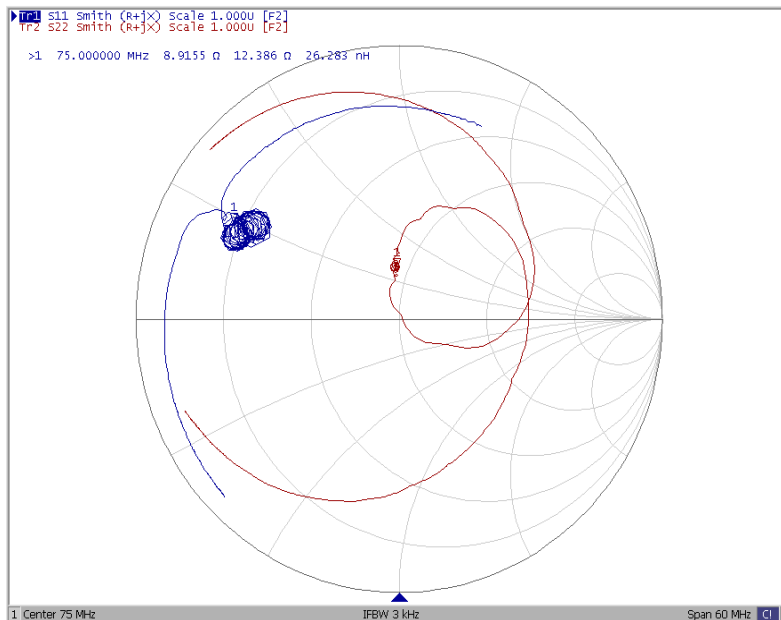
### Ripple Variation Fo±4.5MHz



### Group Delay Variation Fo±4.5MHz



### Smith Chart





### VSWR

