



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
807-SL110.0M-A	110.0MHz IF SAW Bandpass Filter

### Specification Contents

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

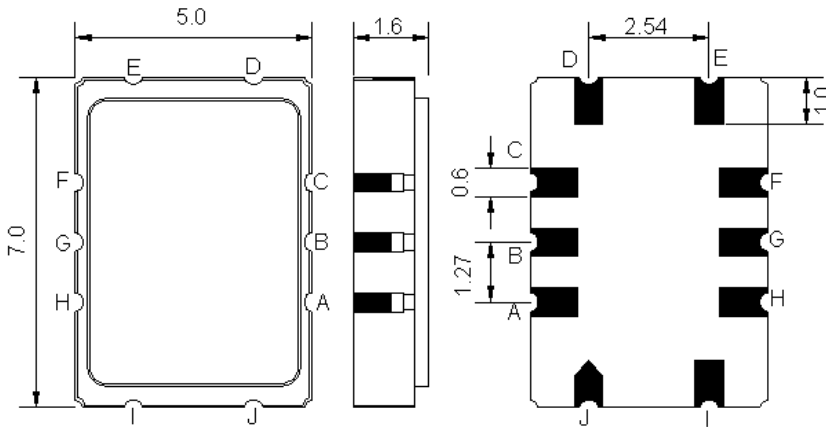
### Notes

- 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)





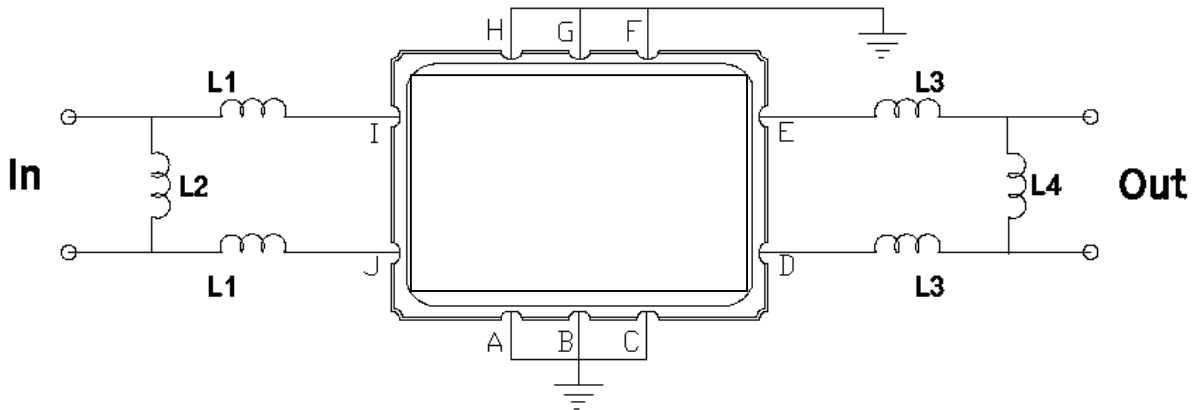
## Mechanical Dimensions (mm)



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

## Test Circuit

Matching Network for 1000Ω/500Ω Balanced Configuration



Test Fixture & Values	
Input	L1=27 nH, L2=180 nH, Q > 35
Output	L3=33 nH, L4=150 nH, Q > 35
Source/Load Impedance	1000/500 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-20	-	85
Storage Temperature Range	°C	-40	-	105
Maximum DC Voltage	V	-	-	3
Maximum Input Power	dBm	-	-	20
Source Impedance (balanced ended) <sup>(1)</sup>	Ω	-	1000	-
Load Impedance (balanced ended) <sup>(1)</sup>	Ω	-	500	-

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.

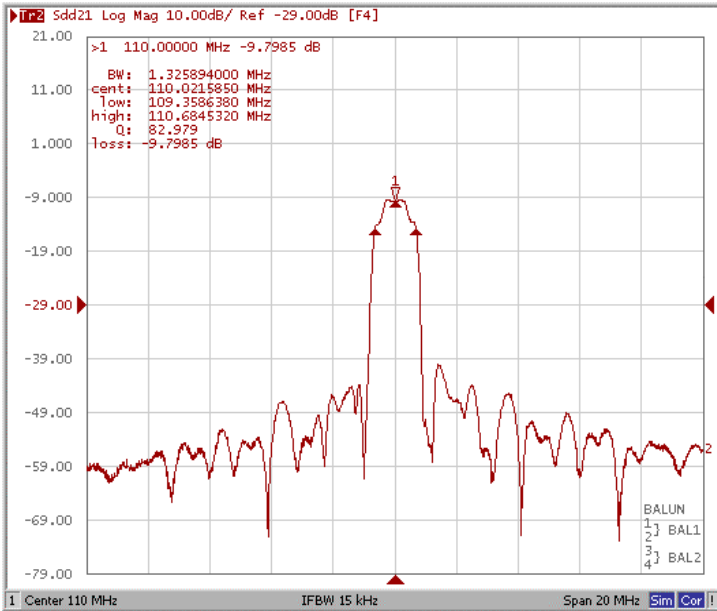
## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	110.0	-
Insertion Loss at Fo	dB	-	10.0	11.5
Amplitude Ripple (Fo ± 0.3 MHz)	dB <sub>p-p</sub>	-	0.55	1.0
Phase Linearity (Fo±0.615MHz)	deg RMS	-	3.5	4.5
Phase Linearity (Fo±0.620MHz)	deg RMS	-	3.5	4.5
Temperature Coefficient	ppm/°C	-	-0.03	-
Bandwidth at -5.0 dB	MHz	±0.630	±0.660	-
Bandwidth at -33.0 dB	MHz	-	±0.890	-
Template on the amplitude, reference is loss at Fc				
Attenuation at Fc ± 0.63MHz	dB	-	4.5	5.0
Attenuation at Fc ± 0.9MHz	dB	32	35	-
Attenuation at Fc ± 1.7MHz	dB	33	36	-
Attenuation at Fc ± 2MHz	dB	35	37	-
Attenuation at Fc ± 9MHz	dB	45	48	-

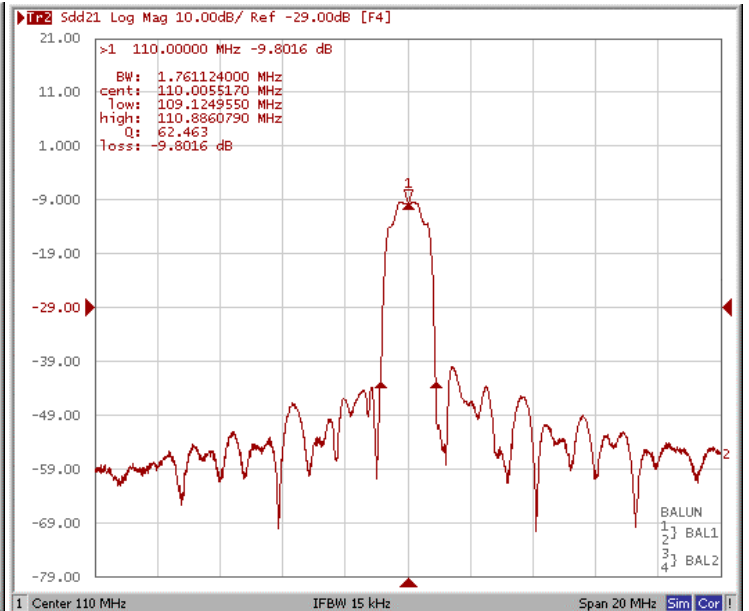


### Frequency Response

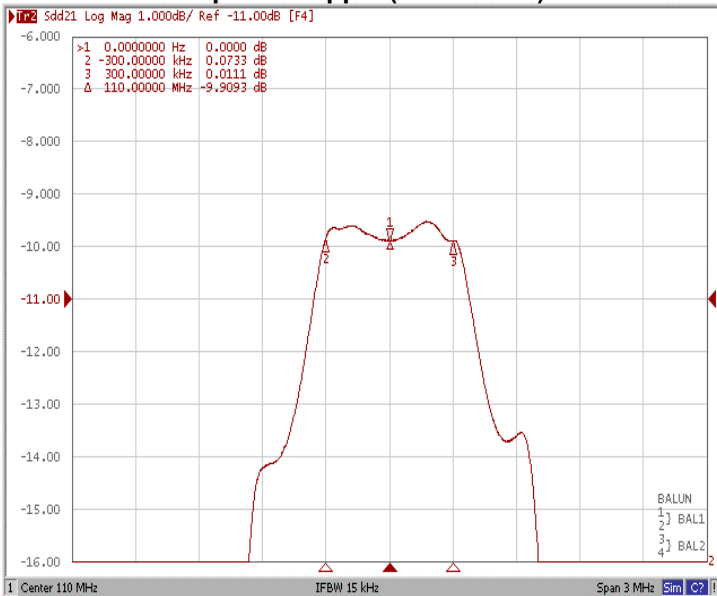
#### Bandwidth at -5.0 dB



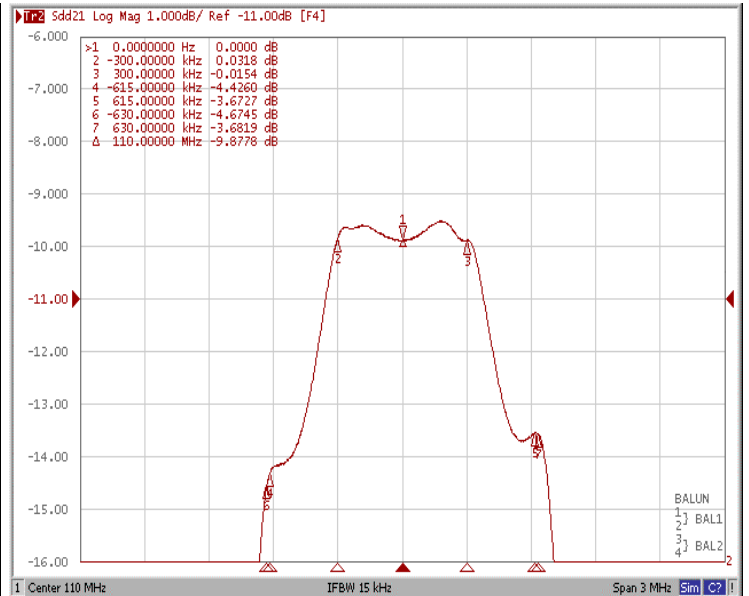
#### Bandwidth at -33.0 dB



#### Amplitude Ripple (Fo±0.3MHz)

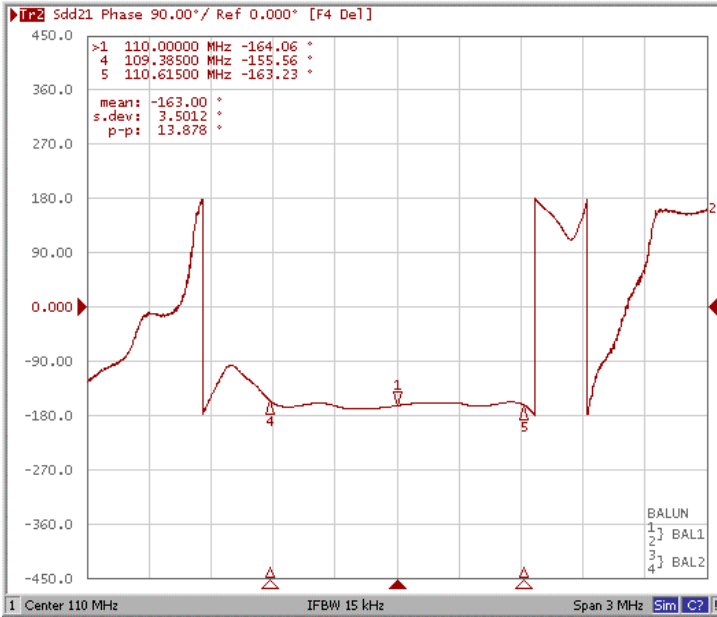


#### Attenuation





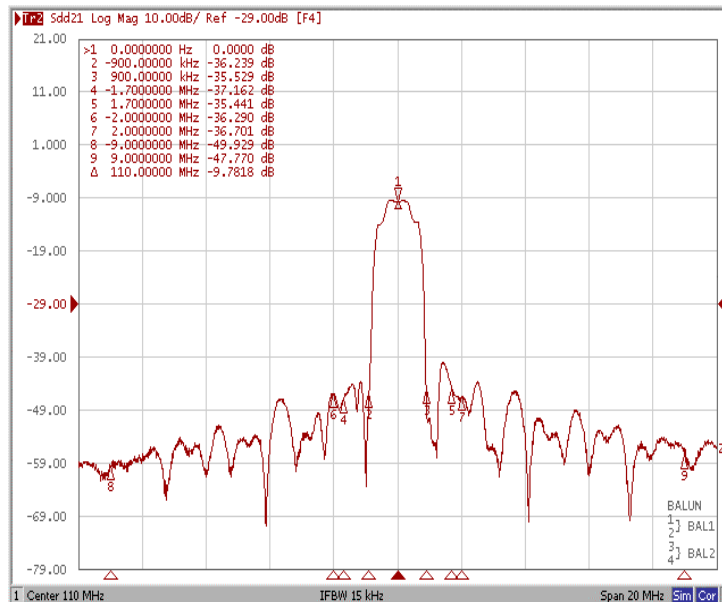
### Phase Linearity (Fo±0.615MHz)



### Phase Linearity (Fo±0.620MHz)



### Attenuation





### Smith Chart

