



REV A January 2011


Oscilent Controlled Document

Ordering Code / Part Number	Product Description
807-SL96.0M-22A	96.0MHz IF SAW Bandpass Filter 22.0MHz Bandwidth

Specification Contents

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

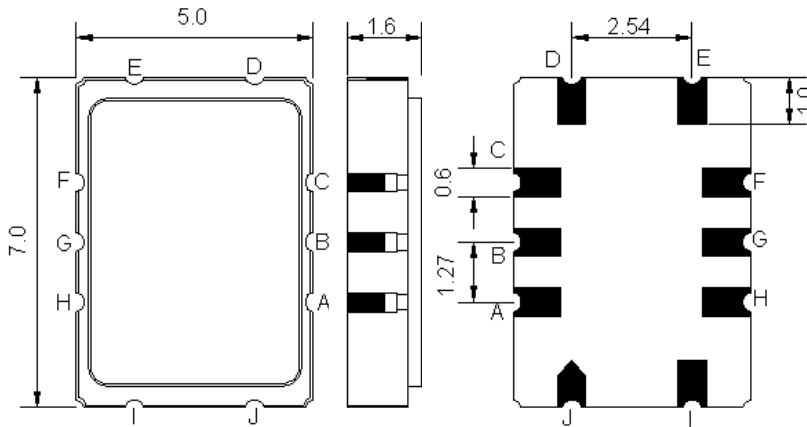
Notes

- 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)





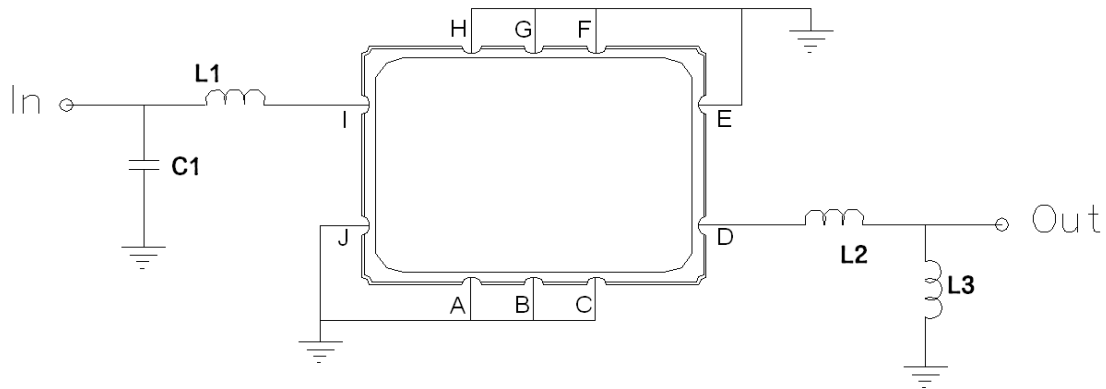
Mechanical Dimensions (mm)



Pin Description	
A, B, C, F, G, H	Ground
I	Input or Return
J	Return or Input
D	Output or Return
E	Return or Output
Single Ended Operation	Return is ground
Differential Operation	Return is hot

Test Circuit

Matching Network for 50Ω/50Ω Balanced Configuration



Test Fixture & Values	
Input	L1=82 nH, C1=51 pF, Q > 35
Output	L2=27 nH, L3=56 nH, Q > 35
Source/Load Impedance	50/50 Ω



Maximum Ratings

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

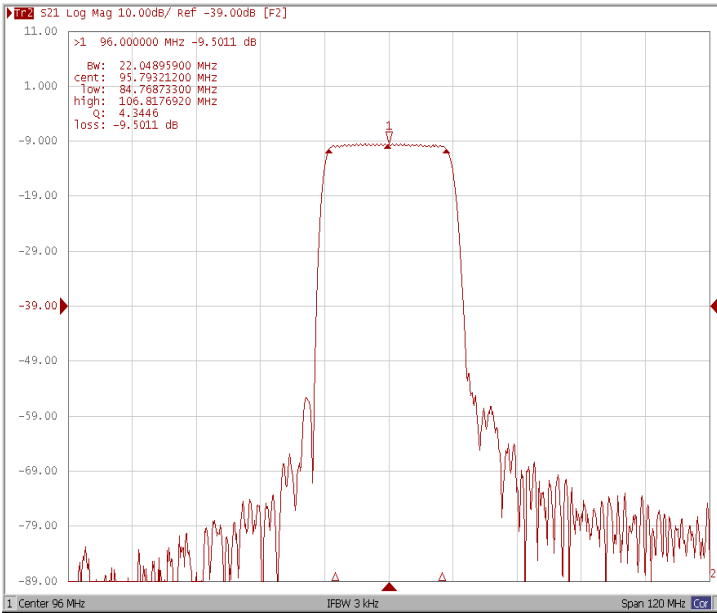
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	96.0	-
Insertion Loss at Fo (86.0~106.0MHz)	dB	-	9.5	12.0
Amplitude Ripple (86.0~106.0MHz)	dB _{p-p}	-	0.65	1.2
Group Delay Ripple (86.0~106.0MHz)	nsec	-	60	100
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	-	22.0	-
Bandwidth at -40.0 dB	MHz	-	28.3	-
Relative attenuation to I.L. @out of pass band (Rejection)				
0 ~ 68.4MHz	dB	51	60	-
76.8MHz	dB	40	50	-
123.6 ~ 162.8MHz	dB	56	63	-
162.8 ~ 1000MHz	dB	35	45	-
Input IP3	dBm	35	45	-
VSWR	-	-	3	-

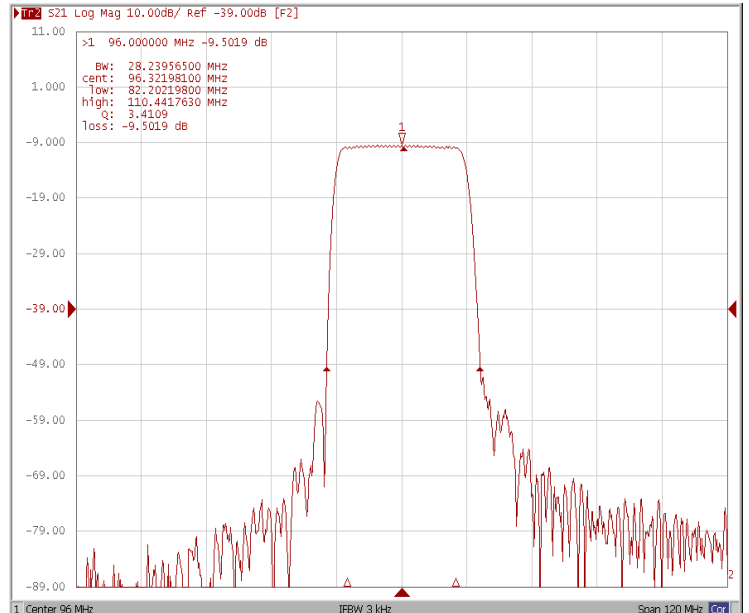


Frequency Response

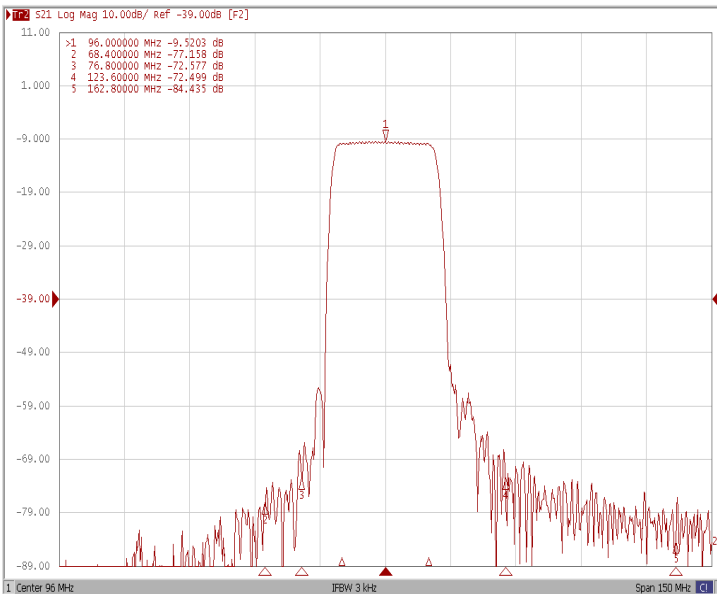
Bandwidth at -1.0 dB



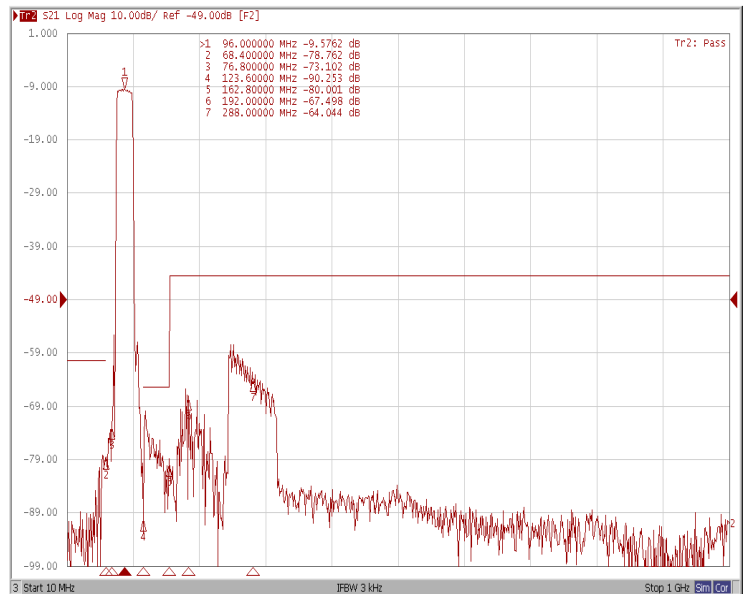
Bandwidth at -40.0 dB



Relative Attenuation

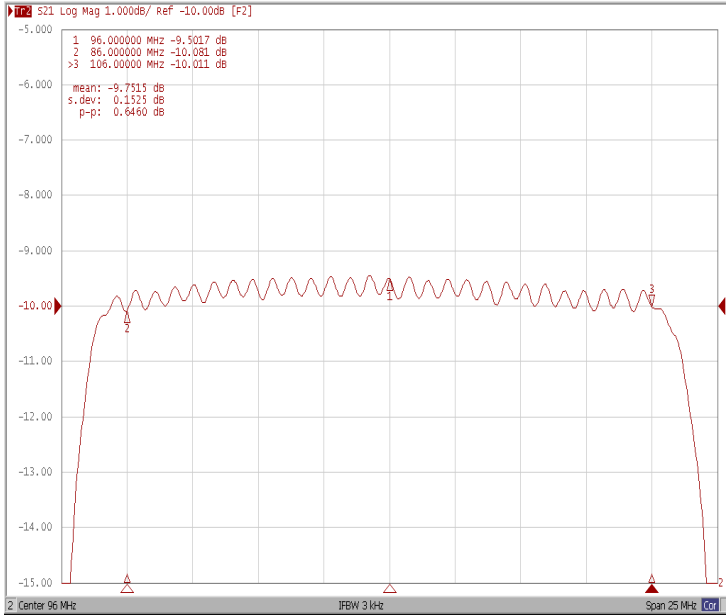


Wide-Band

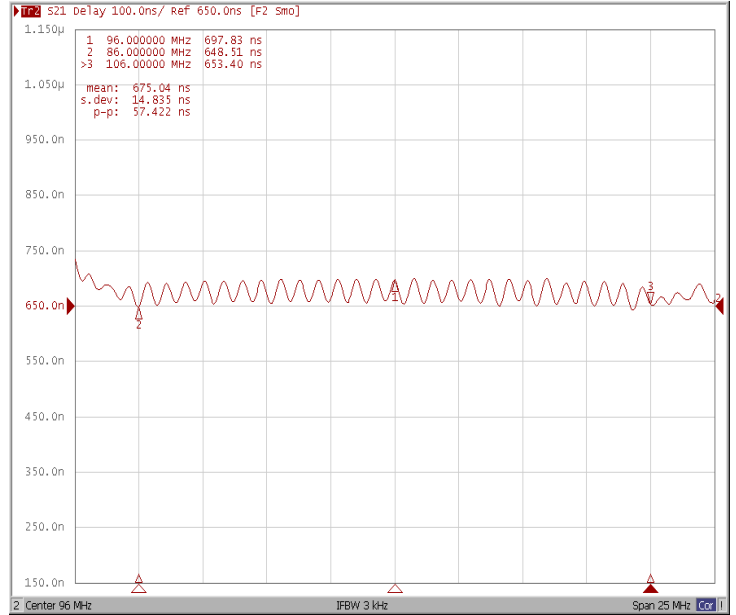




Ripple Variation (86.0~106MHz)

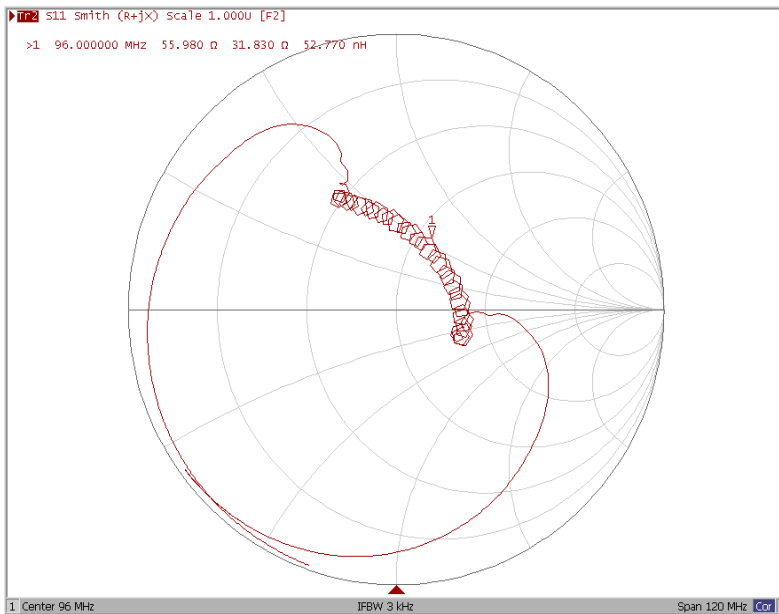


Group Delay Variation (86.0~106MHz)



Smith Chart

Smith Chart S11



Smith Chart S22

