



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
807-SL138.24M-20B	38.24MHz IF SAW Filter 22.46MHz Bandwidth

Specification Contents

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

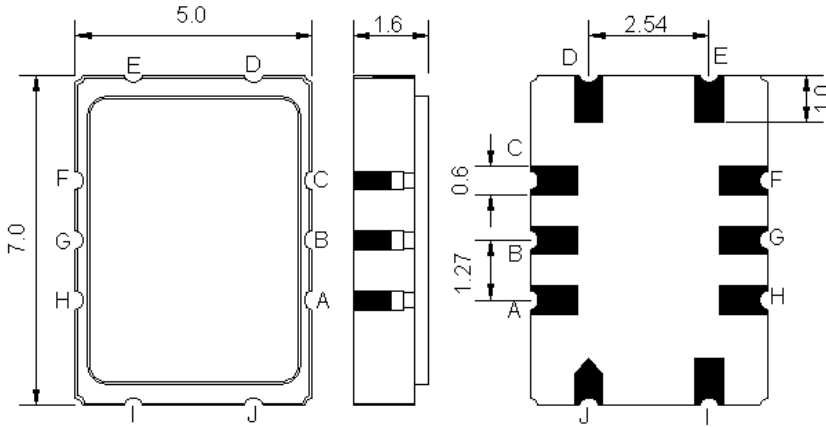
Notes

- 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)



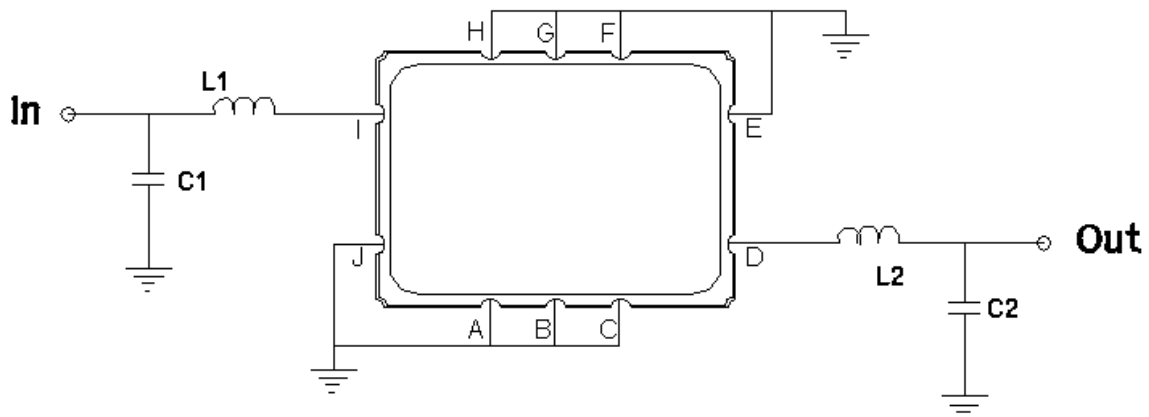


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 47 nH, C1 = 20pF
Output	L3 = 68 nH, C1 = 36 pF
Source/Load Impedance	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	-	-	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.

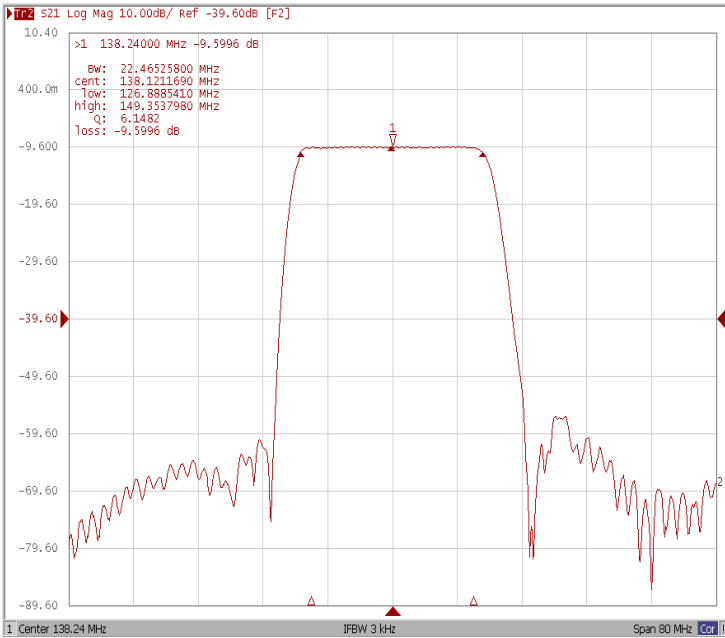
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	138.24	-
Insertion Loss at Fo	dB	-	9.6	11.5
Temperature Coefficient	ppm/°C	-	-86	-
Passband Ripple Variation (128.24MHz~148.24MHz)	dB _{pp}	-	0.3	1.0
Group Delay Variation (128.24MHz~48.24MHz)	nsec	-	25	50
Absolute Delay at Fo	µsec	-	0.72	-
Bandwidth at -1.0 dB	MHz	-	22.4	-
Bandwidth at -3.0 dB	MHz	-	23.7	-
Bandwidth at -40.0 dB	MHz	-	30.0	-
Relative Attenuation				
10 MHz ~ 108.24 MHz	dB	54	58	-
108.24MHz ~ 117.52MHz	dB	50	53	-
122.88MHz	dB	45	53	-
220.4MHz ~ 271.12MHz	dB	58	75	-
271.12MHz ~ 1000MHz	dB	40	70	-

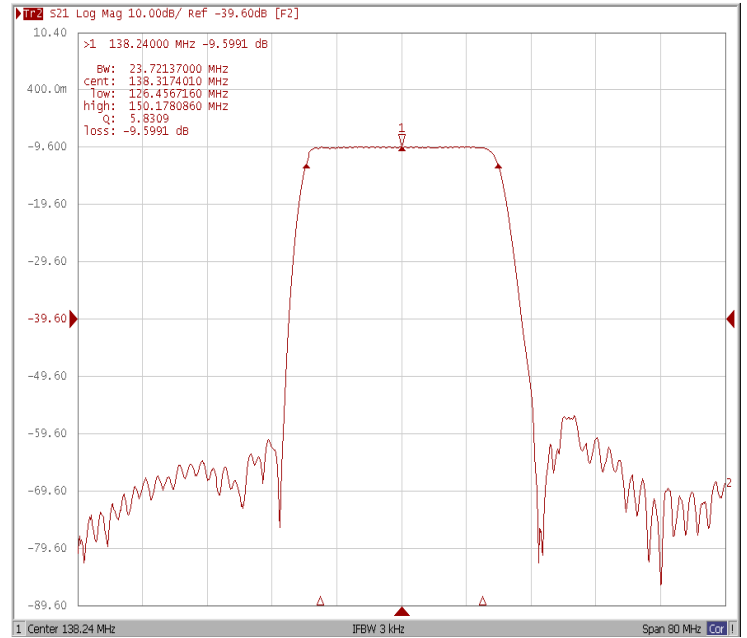


Frequency Response

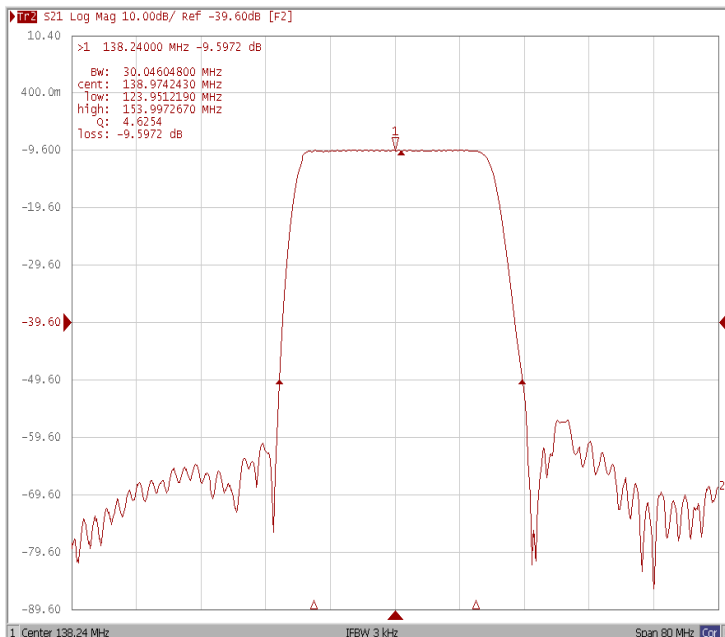
Bandwidth at -1.0 dB



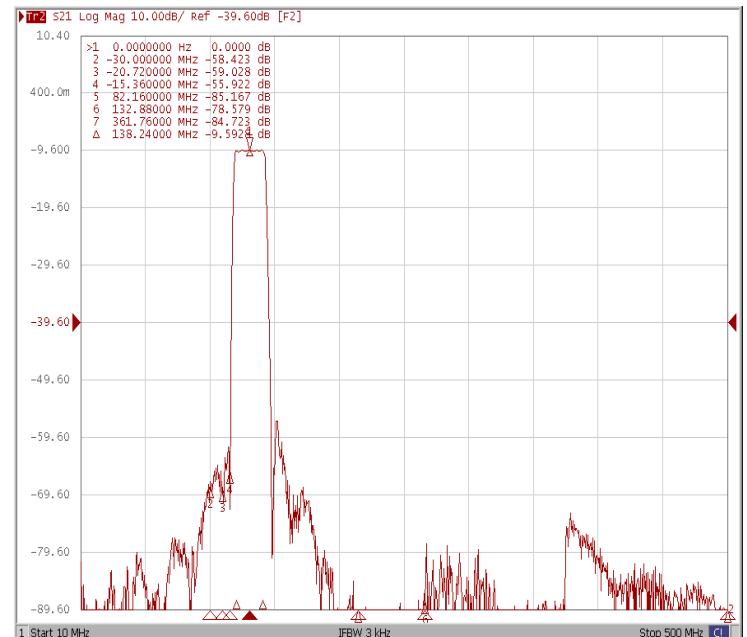
Bandwidth at -3.0 dB



Bandwidth at -40 dB

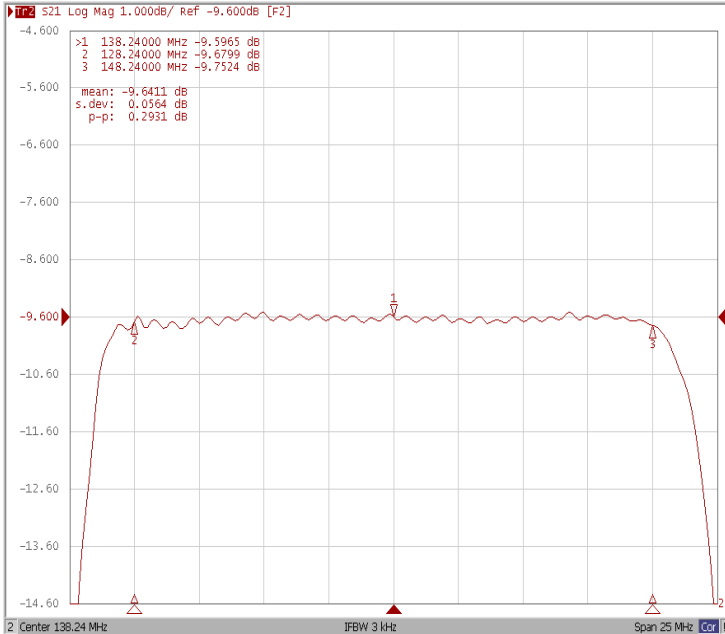


WIDE

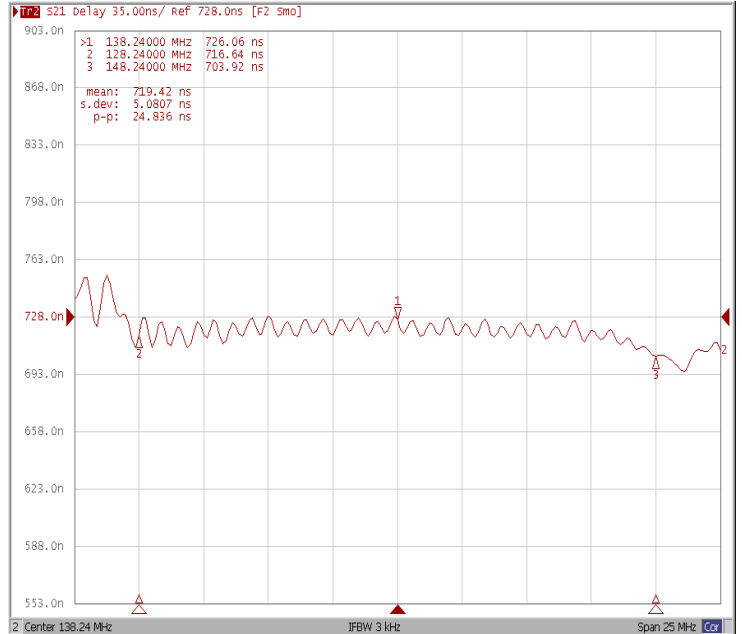




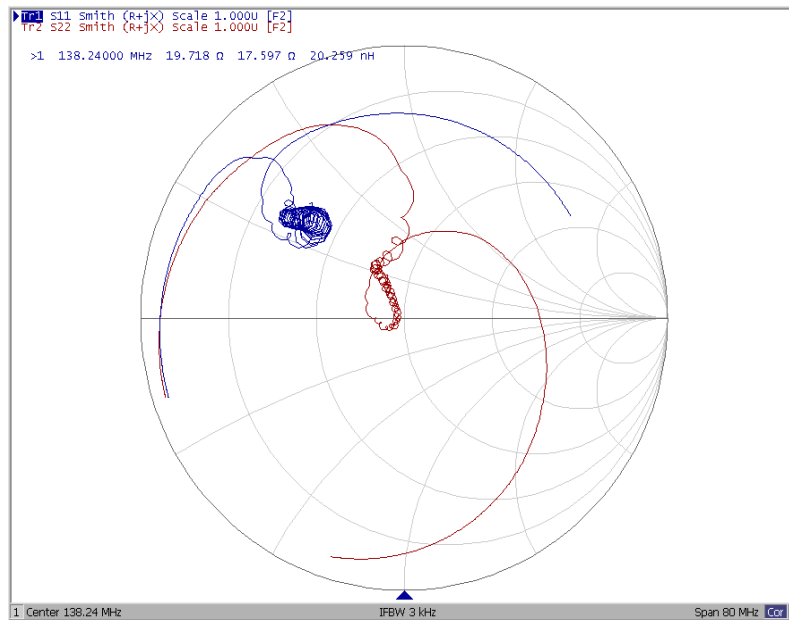
Ripple Variation (128.24MHz ~ 148.24MHz)



Group Delay Variation F(128.24MHz ~ 148.24MHz)



Smith Chart





VSWR

