



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
867-SL153.6M-20A	153.6 MHz IF SAW Filter 23.5 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

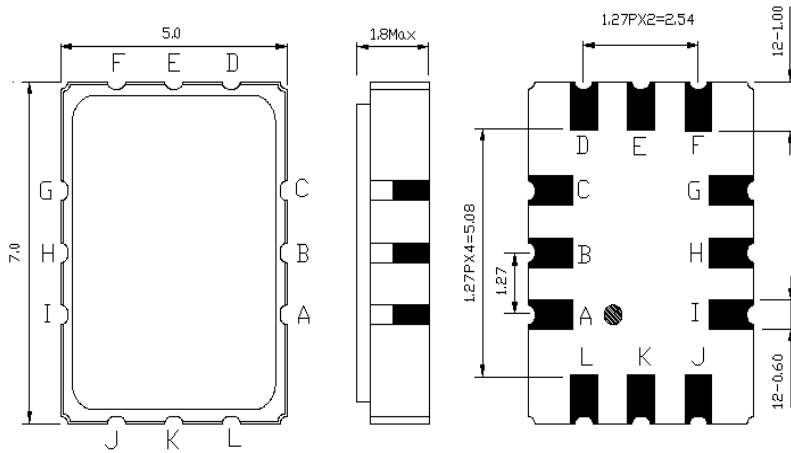
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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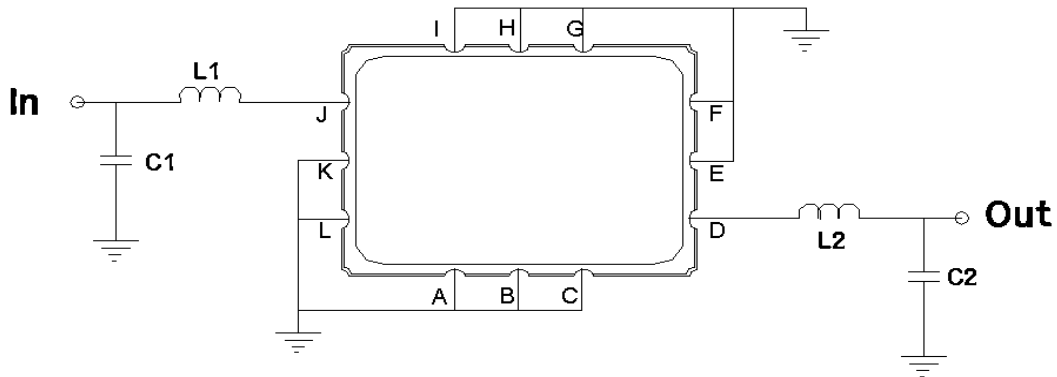


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=39 nH, C1=36 pF
Output	L2=47 nH, C2=33 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.

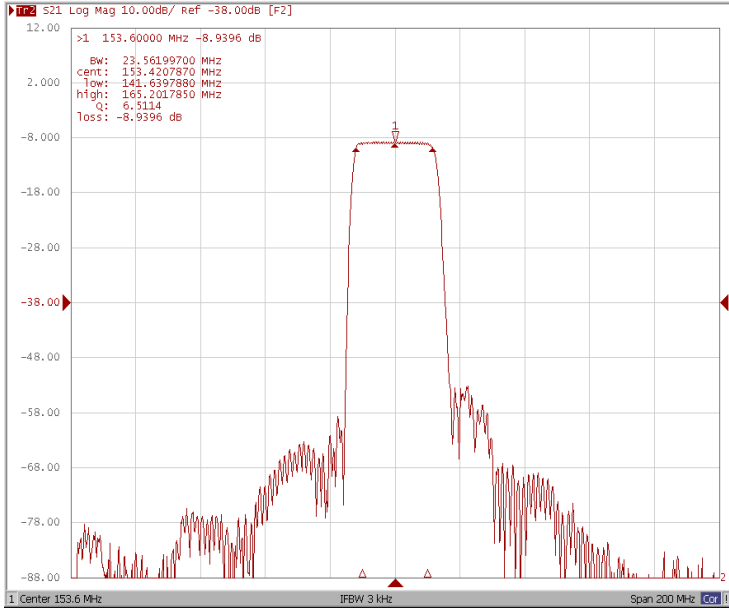
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	153.4	153.6	153.8
Insertion Loss at Fo	dB	-	9.0	11.0
Amplitude Ripple Variation at Fo ± 10.0 MHz	dB _{p-p}	-	0.65	1.0
Group Delay Variation at Fo ± 10.0 MHz	nsec	-	70	100
Phase Linearity at Fo ± 10.0 MHz	rms	-	3.0	5.0
Absolute Delay at Fo	µsec	-	0.65	-
Temperature Coefficient	ppm/°C	-	-86	-
Bandwidth at -1.0 dB	MHz	20.0	23.5	-
Bandwidth at -3.0 dB	MHz	-	24.9	-
Bandwidth at -40.0 dB	MHz	-	31.7	33.0
VSWR	-	-	-	2.0 : 1
Relative Attenuation				
1.0MHz ~ 80.0MHz	dB	50	70	-
80.0MHz ~ 105.0MHz	dB	56	63	-
200.0MHz ~ 230.0MHz	dB	56	63	-
230.0MHz ~ 1000.0MHz	dB	40	70	-

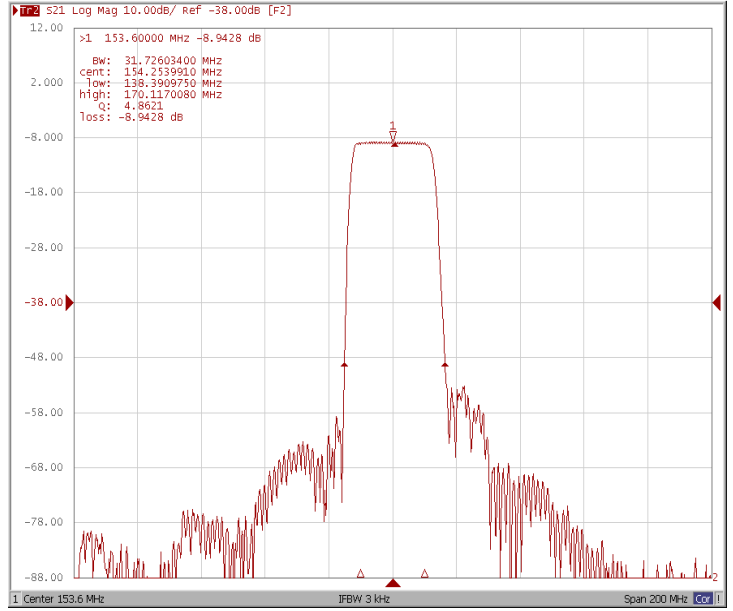


Frequency Response

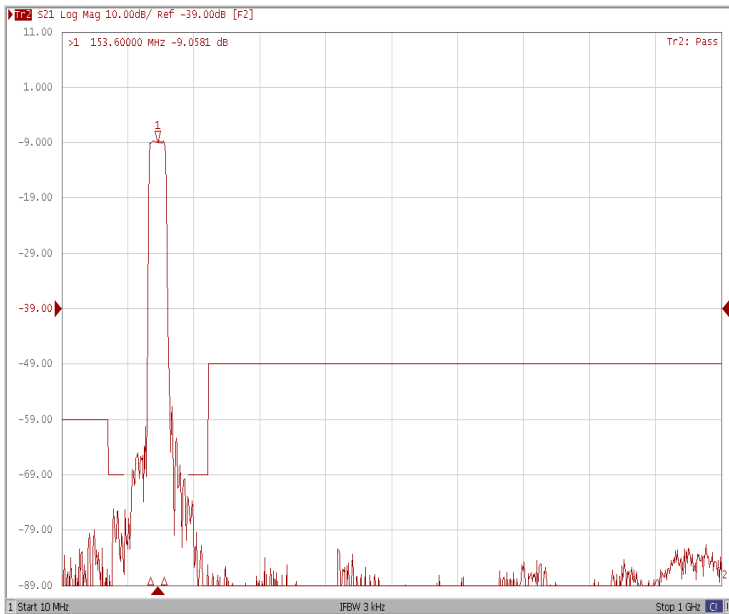
Bandwidth at -1.0 dB



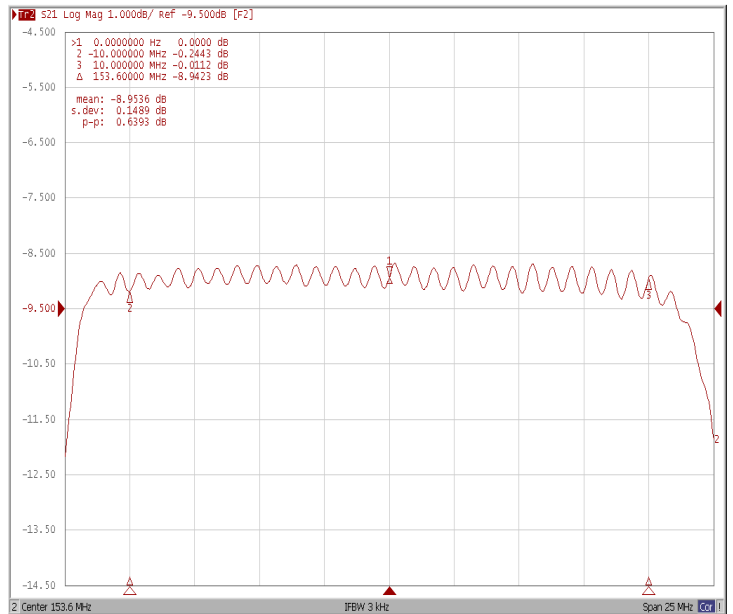
Bandwidth at -40.0 dB



Wide-Band

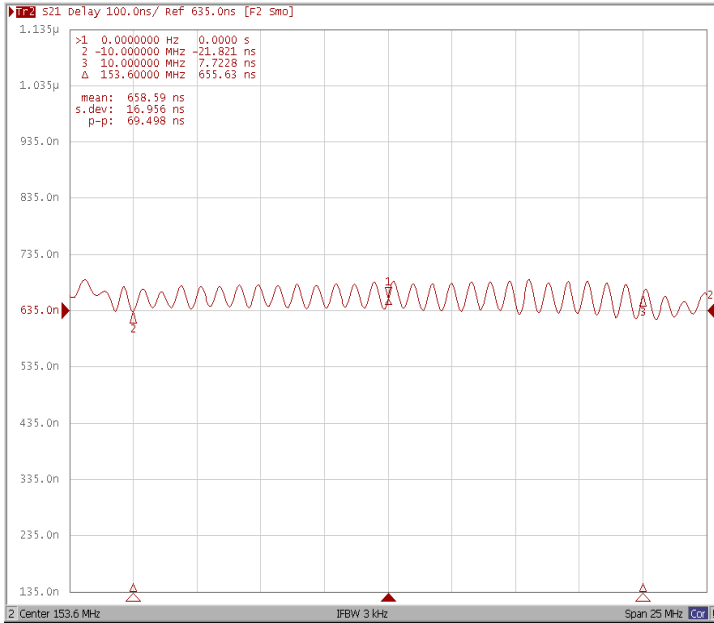


Ripple Variation Fo±10.0MHz

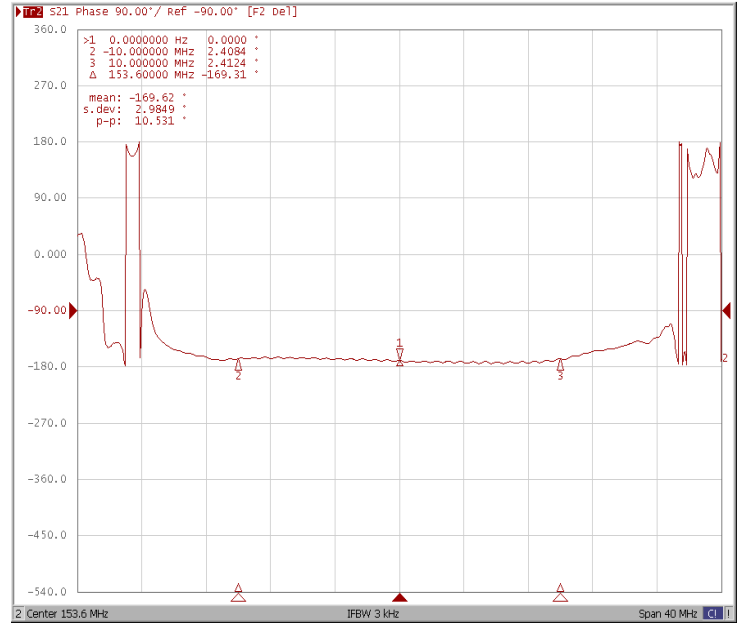




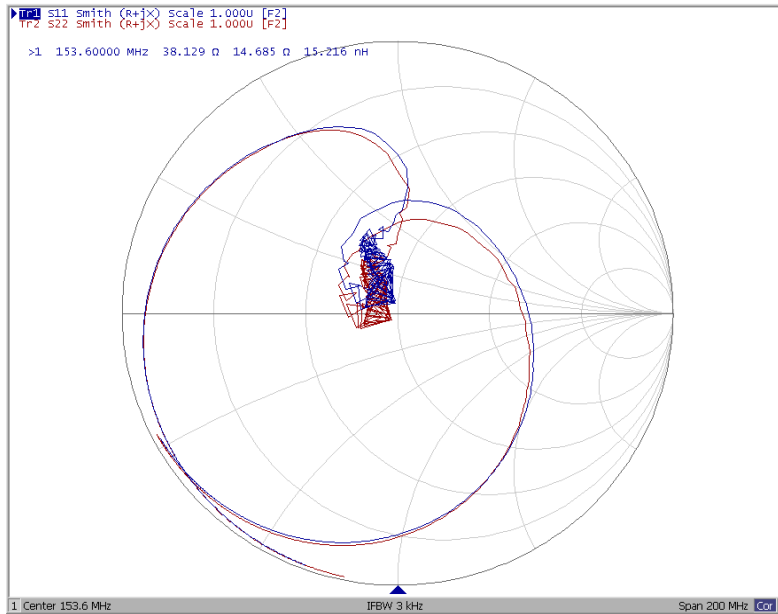
Group Delay Variation Fo±10.0MHz



Phase Linearity Fo±10.0MHz



Smith Chart





VSWR

