



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL59.7M-05A	59.7MHz IF SAW Filter 5.2MHz 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)



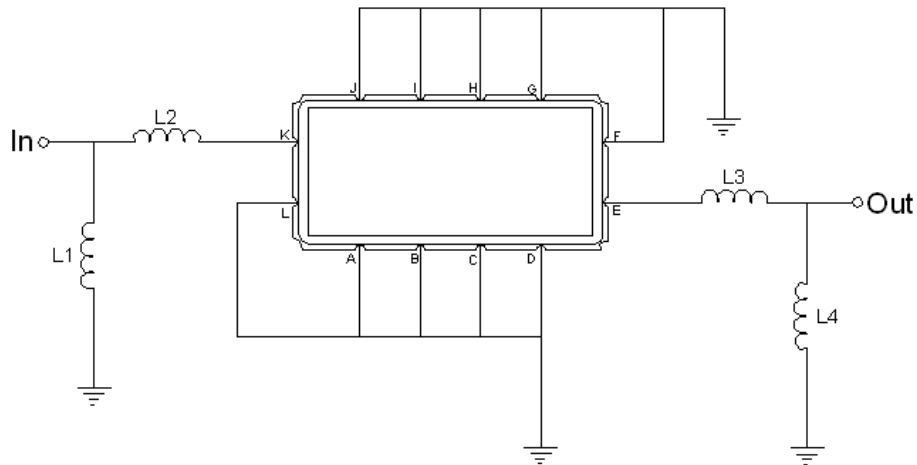


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=82nH, L2=8.2nH
Output	L3=33nH, L4=100nH
Source/Load Impedance	50 Ω

**Maximum Ratings**

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-5	-	70
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.

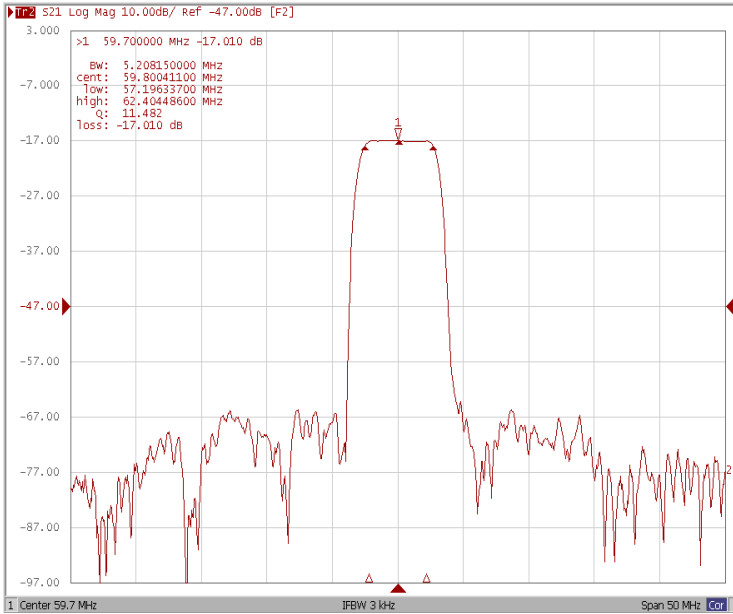
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	59.6	59.7	59.8
Insertion Loss at Fo	dB	-	17.0	19.0
Temperature Coefficient	ppm/°C	-	-20	-
Amplitude Ripple within fo ±2.2 MHz	dB _{p-p}	-	0.25	0.6
Group Delay Variation within fo ±2.2 MHz	nsec	-	32	60
Absolute Delay at Fo	µsec	-	1.4	-
Bandwidth at -1.0 dB	MHz	4.40	5.20	-
Bandwidth at -3.0 dB	MHz	-	5.76	-
Bandwidth at -40.0 dB	MHz	-	7.92	8.20
Ultimate Attenuation	-	40	48	-

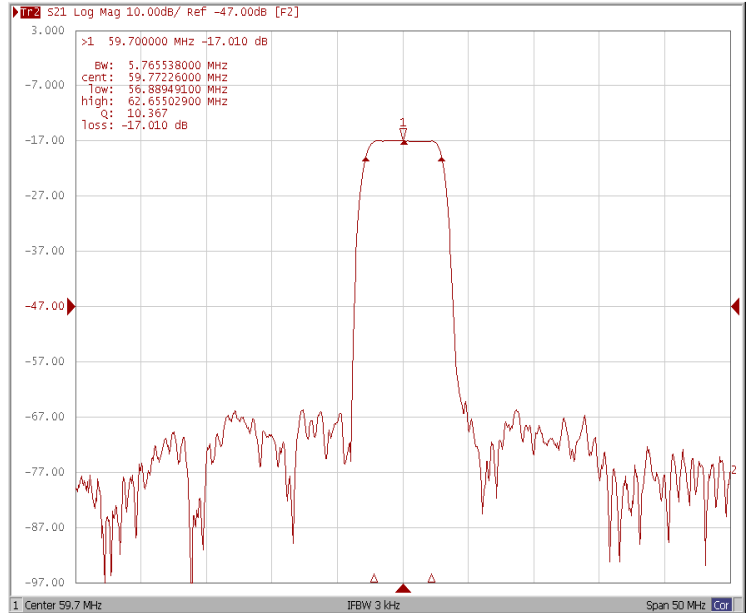


Frequency Response

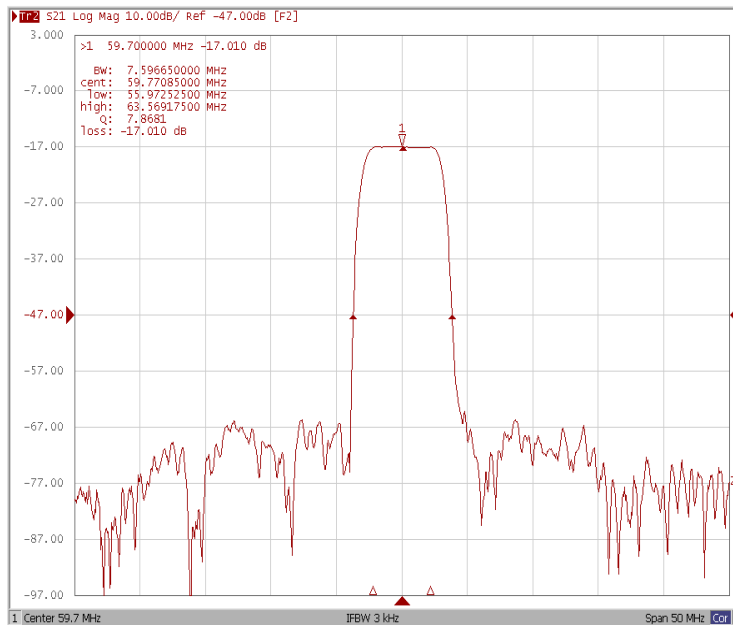
Bandwidth at -1.0 dB



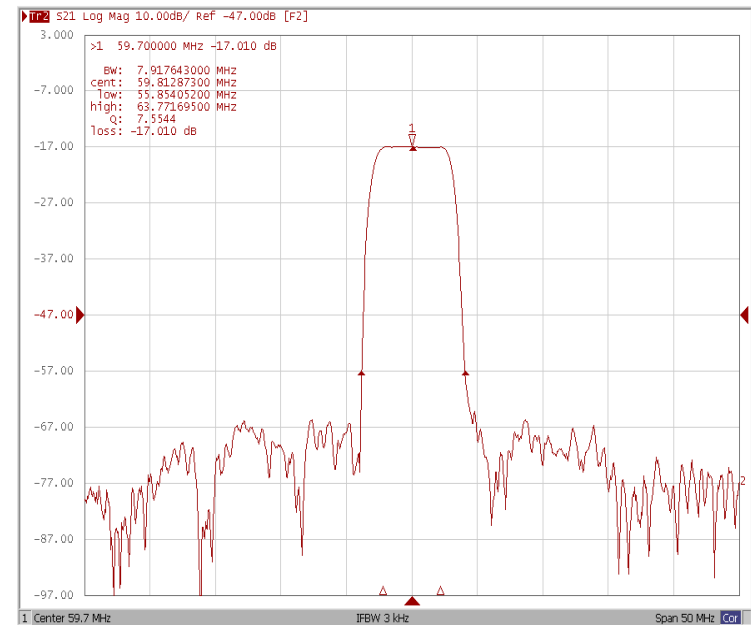
Bandwidth at -3.0 dB



Bandwidth at -30.0 dB

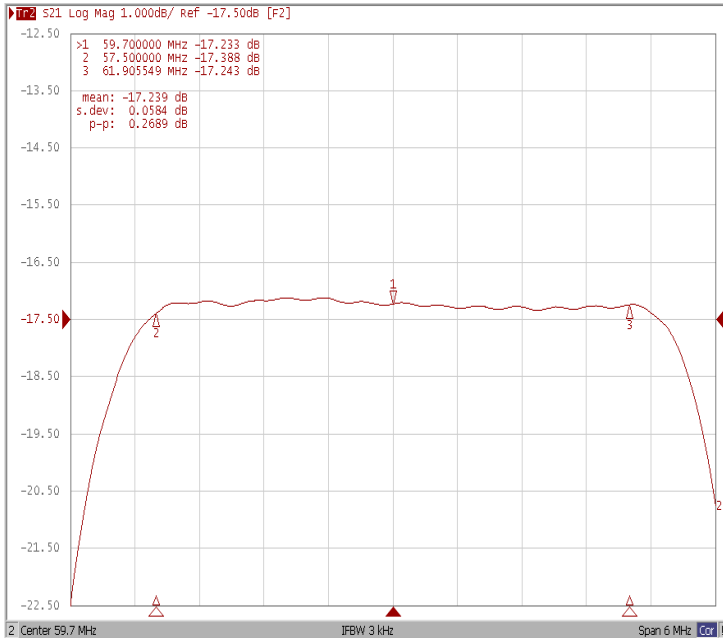


Bandwidth at -40.0 dB

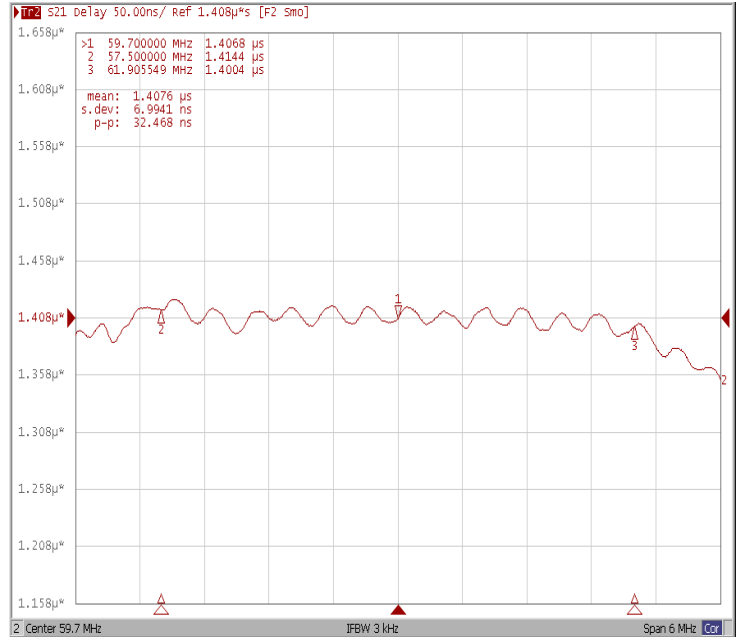




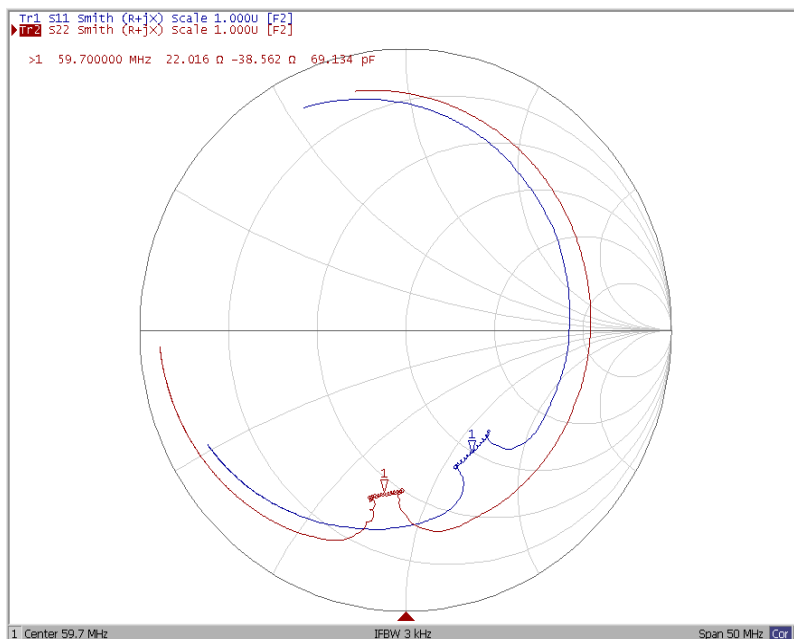
Ripple Variation Fo±2.2MHz



Group Delay Variation Fo±2.2MHz



Smith Chart





VSWR

