



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF136.25M-02A	136.25MHz IF SAW Filter 2.05MHz 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)



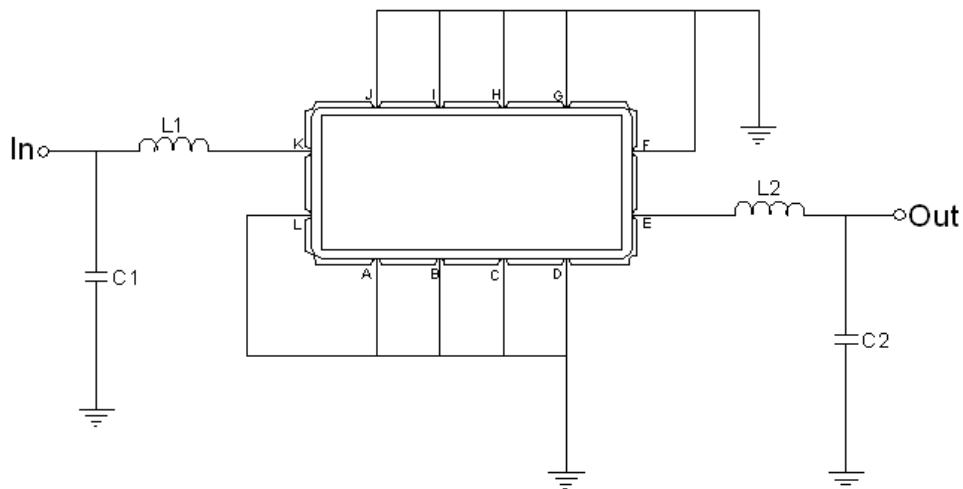


Mechanical Dimensions (mm)



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, C1=36pF
Output	L2=68nH, C1=47pF
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	0	-	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.

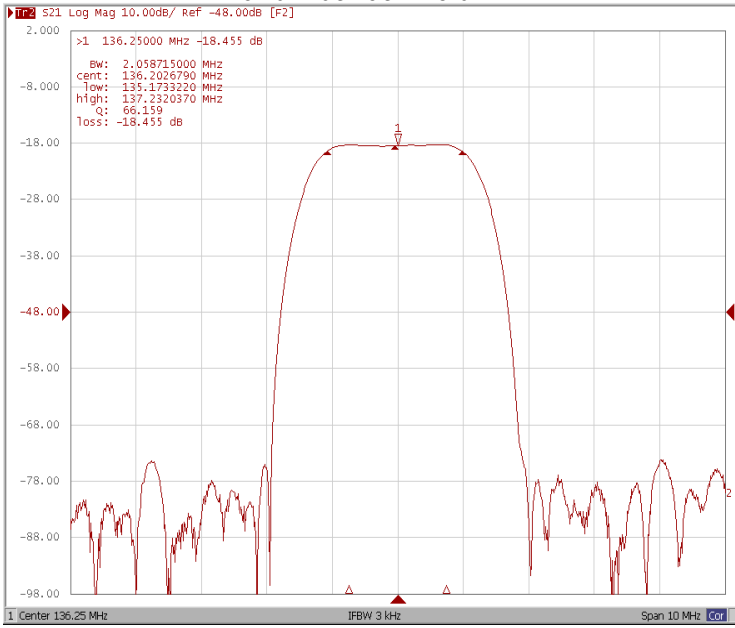
Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	136.25	-
Insertion Loss at Fo	dB	-	18.5	21.0
Temperature Coefficient	ppm/°C	-	-0.03	-
Amplitude Ripple within fo ±0.75 MHz	dB _{p-p}	-	0.4	1.0
Group Delay Variation within fo ±0.75 MHz	nsec	-	90	150
Absolute Delay at Fo	µsec	-	1.70	-
Bandwidth at -1.0 dB	MHz	1.50	2.05	-
Bandwidth at -3.0 dB	MHz	-	2.35	-
Bandwidth at -40.0 dB	MHz	-	3.65	4.20
Relative Attenuation:				
Fo ±2.75 MHz	dB	55	60	-
Lower Sidelobe	dB	50	55	-
Upper Sidelobe	dB	50	55	-

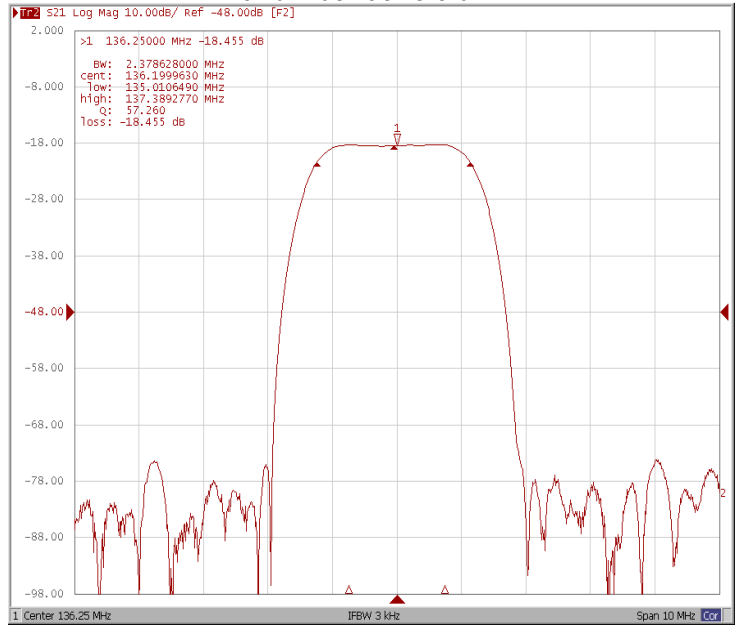


Frequency Response

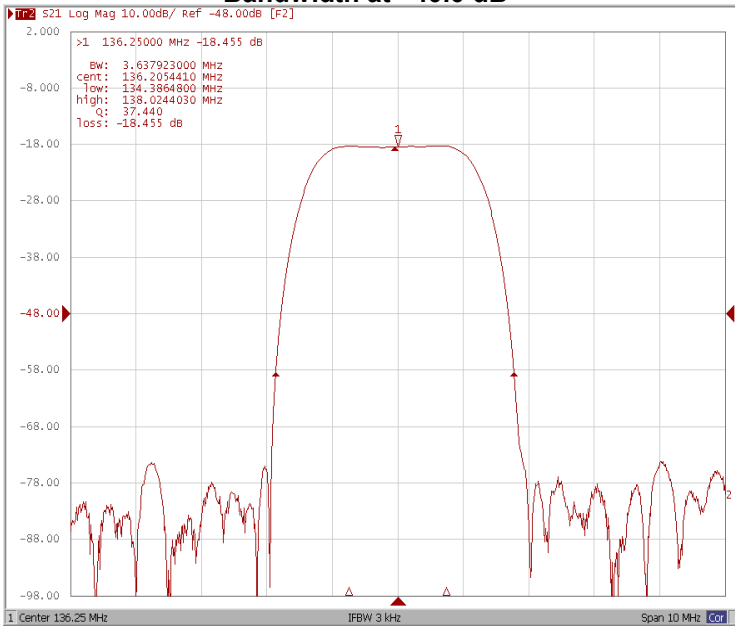
Bandwidth at -1.0 dB



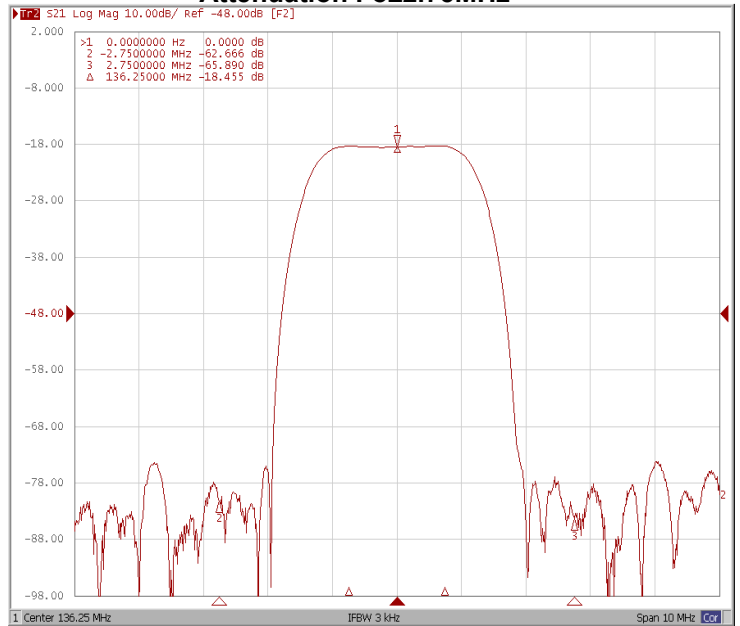
Bandwidth at -3.0 dB



Bandwidth at -40.0 dB

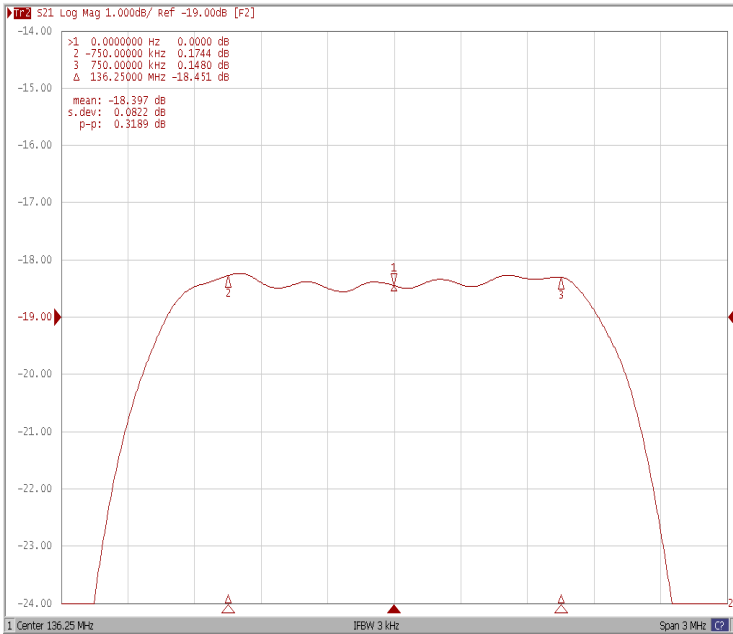


Attenuation Fo±2.75MHz

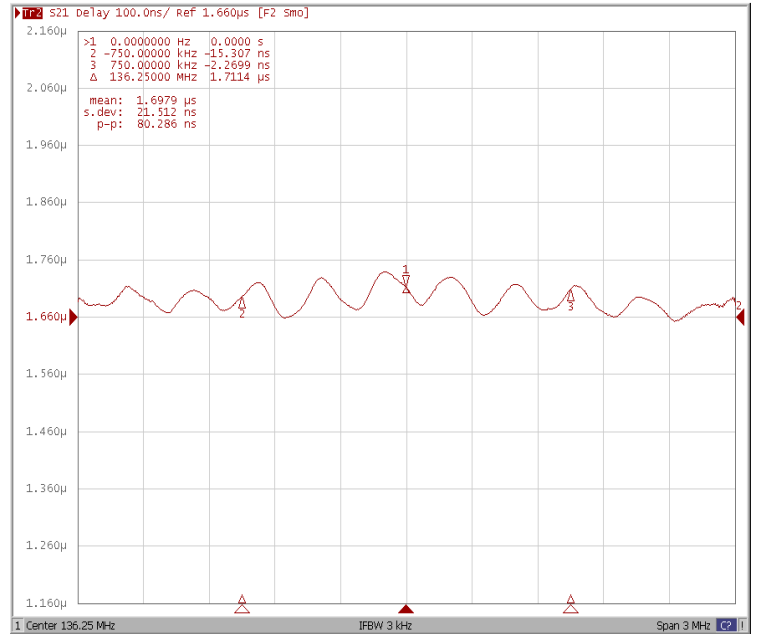




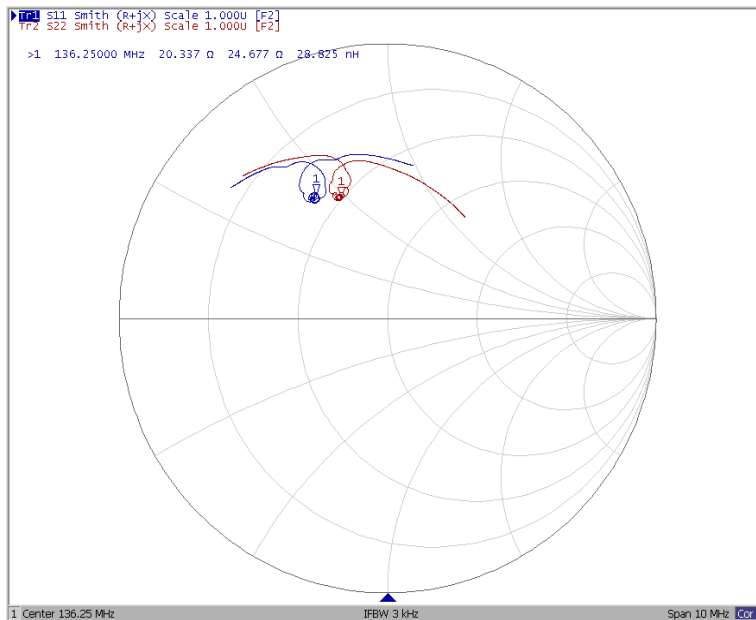
Ripple Variation Fo±0.75MHz



Group Delay Variation Fo±0.75MHz



Smith Chart





VSWR

