



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
827-IF140.0M-48A	140HMz IF SAW Filter 5.0 MHz Bandwidth

## Specification Contents

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

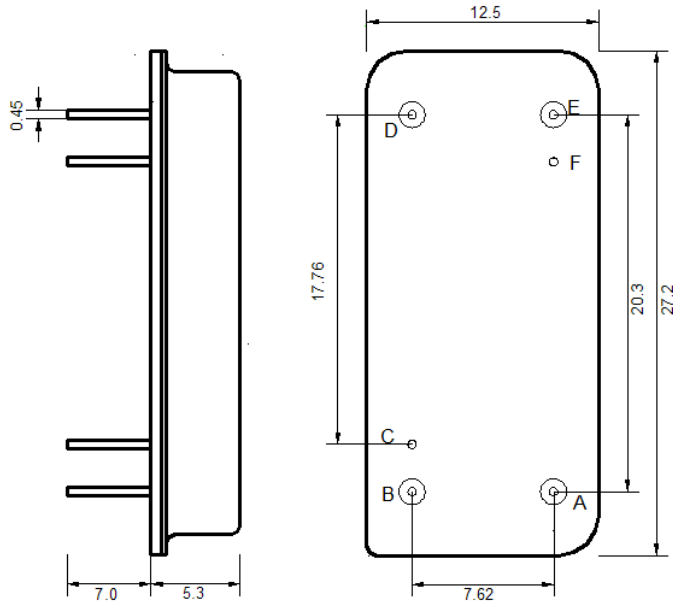
## Notes

- 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)



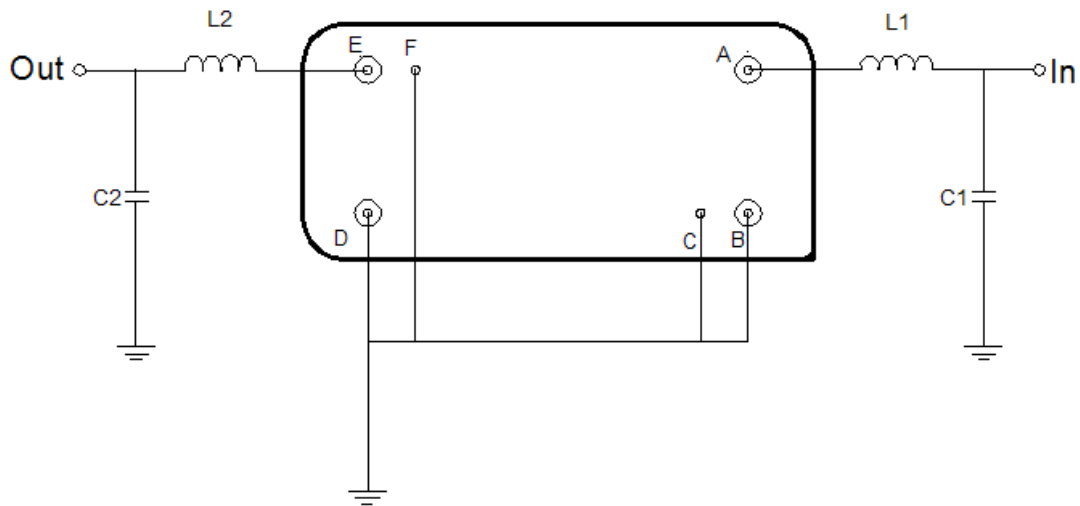


## Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

## Test Circuit



Test Fixture & Values	
Input	L1=33nH, C1=33pF
Output	L2=33nH, C2=33pF
Source/Load Impedance	50 Ω



## Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-30	-	+80
Storage Temperature Range	°C	-40	-	+85
Maximum DC Voltage	V	-	-	10
Maximum Input Power	dBm	-	-	10
Source Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-
Load Impedance (single ended) <sup>(1)</sup>	Ω	-	50	-

Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).

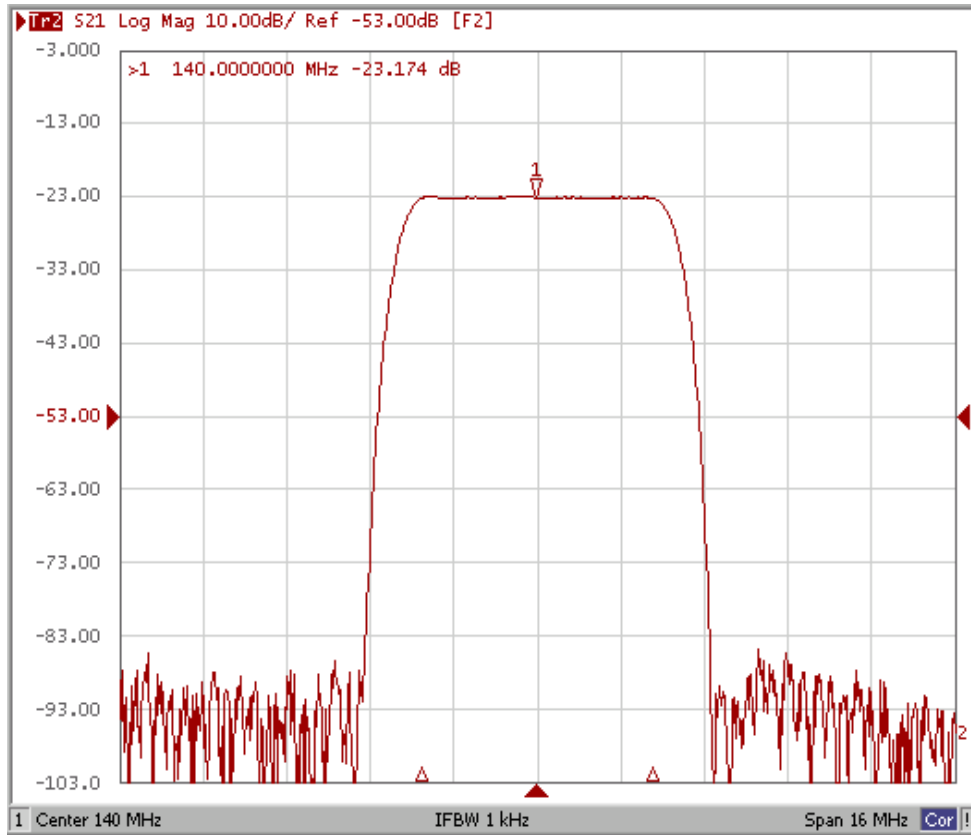
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Electrical Specification

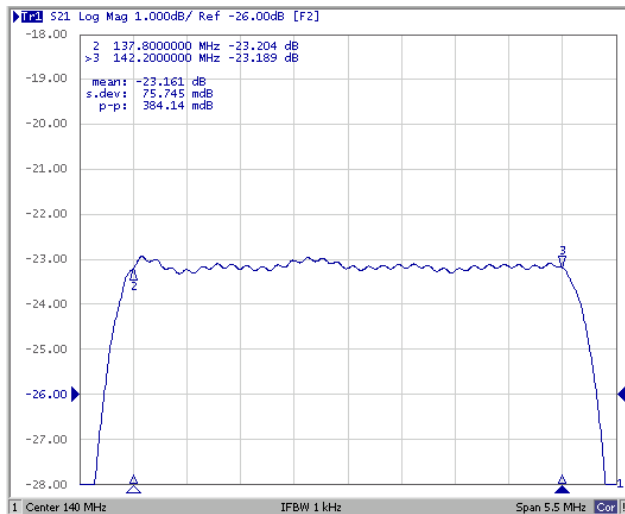
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	140.0	-
Insertion Loss at Fo	dB	-	23.0	25.0
Amplitude Ripple Variation (Fo ± 2.2 MHz)	dB <sub>p-p</sub>	-	0.4	1.0
Group Delay Variation (Fo ± 2.2 MHz)	nsec	-	100	150
Absolute Delay at Fo	µsec	-	3.2	-
Temperature Coefficient	ppm/°C	-	-23	-
Bandwidth at -1.0 dB	MHz	-	4.8	-
Bandwidth at -3.0 dB	MHz	5.0	5.07	-
Bandwidth at -40.0 dB	MHz	-	6.32	6.38
Relative Attenuation				
Lower Sidelobe	dB	60	65	-
Upper Sidelobe	dB	60	65	-
138.125MHz-1.625MHz	dB	65	70	-
141.875MHz+1.625MHz	dB	65	70	-



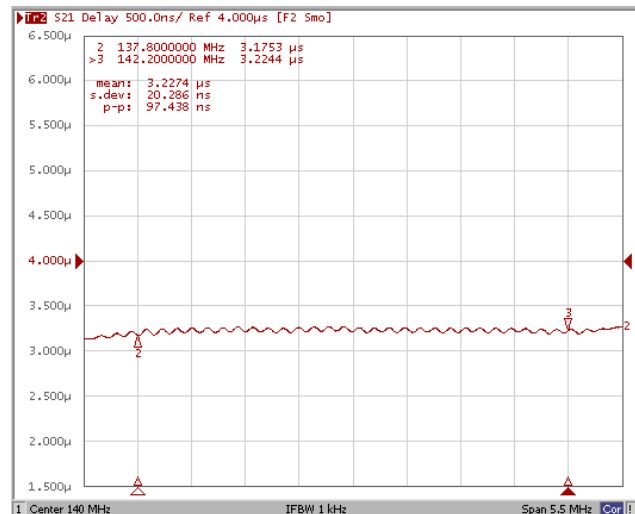
### Frequency Response



### Ripple (Fo±2.2MHz)



### Group Delay (Fo±2.2MHz)





**Relative Attenuation ( $F_o \pm 3.5\text{MHz}$ )**

