



# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
827-IF140.0M-143A	140HMz IF SAW Filter 14.5 MHz Bandwidth

## Specification Contents

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

## Notes

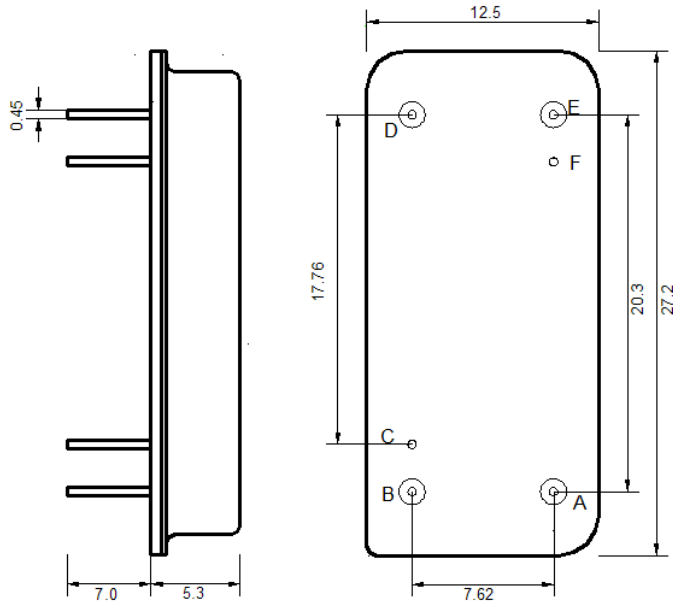
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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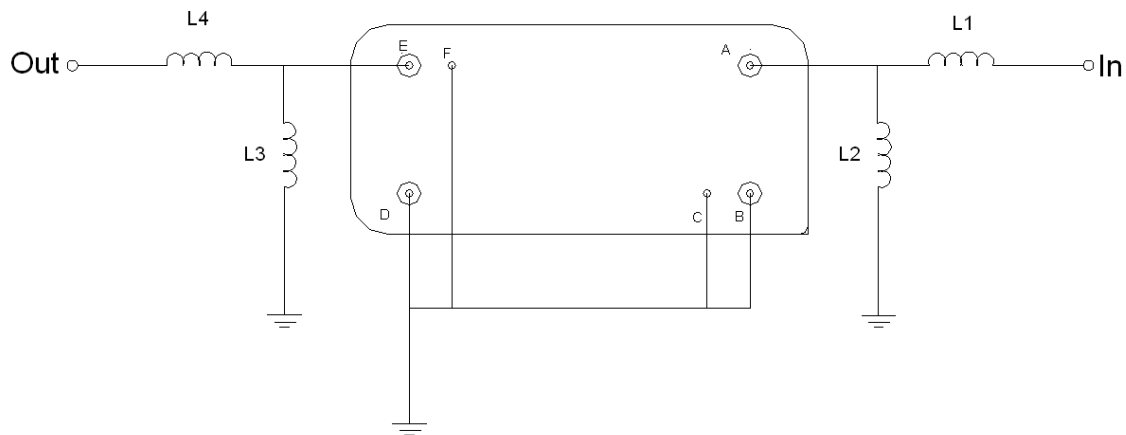


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=56 nH, L2=56 nH
Output	L3=39 nH, L4=56 nH
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).

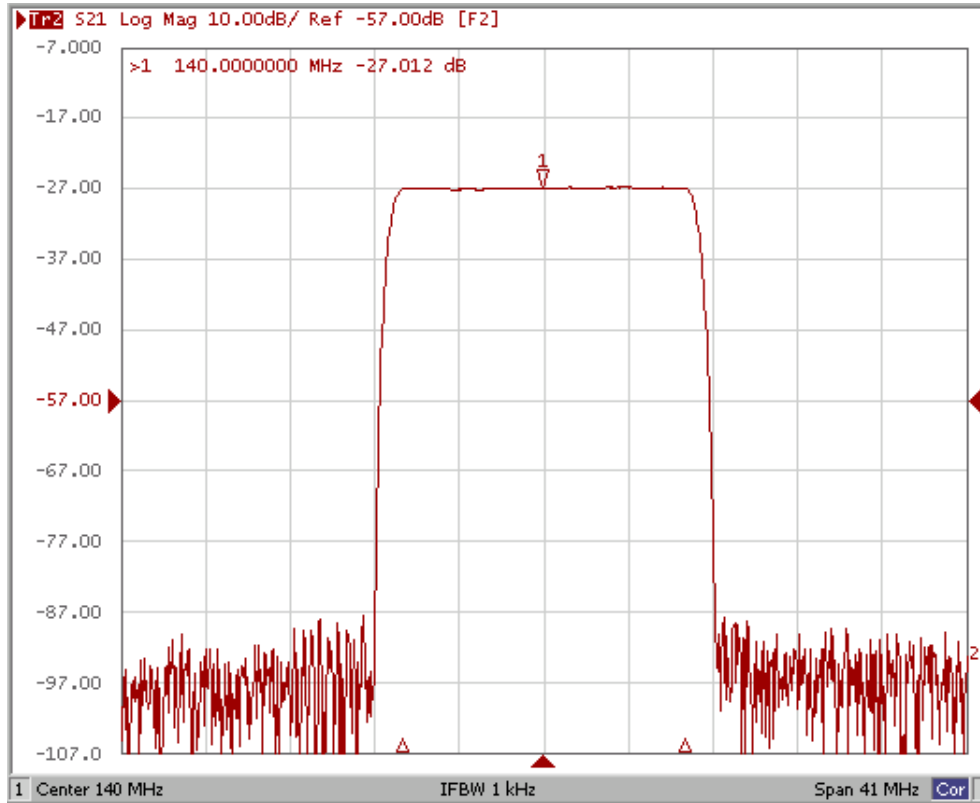
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Electrical Specification

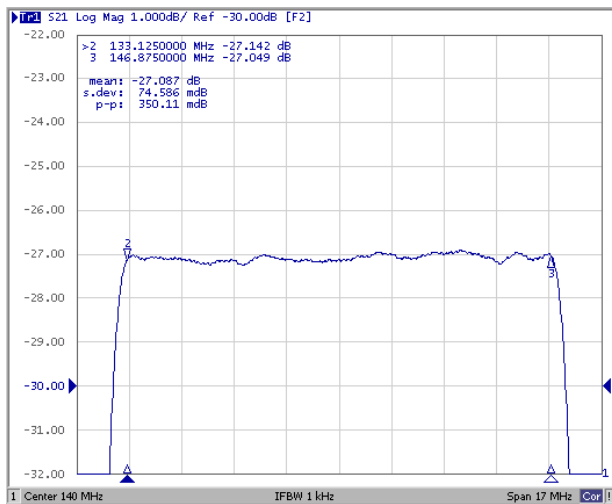
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	140.0	-
Insertion Loss at Fo	dB	-	27.0	28.0
Amplitude Ripple Variation (Fo ± 6.875 MHz)	dB <sub>p-p</sub>	-	0.4	1.0
Group Delay Variation (Fo ± 6.875 MHz)	nsec	-	40	100
Absolute Delay at Fo	µsec	-	3.30	-
Temperature Coefficient	ppm/°C	-	-23	-
Bandwidth at -1.0 dB	MHz	-	14.30	-
Bandwidth at -3.0 dB	MHz	14.55	14.67	-
Bandwidth at -40.0 dB	MHz	-	16.20	16.30
Relative Attenuation				
Lower Sidelobe	dB	55	60	-
Upper Sidelobe	dB	55	60	-
Fc-8.5MHz	dB	60	65	-
Fc+8.5MHz	dB	60	65	-



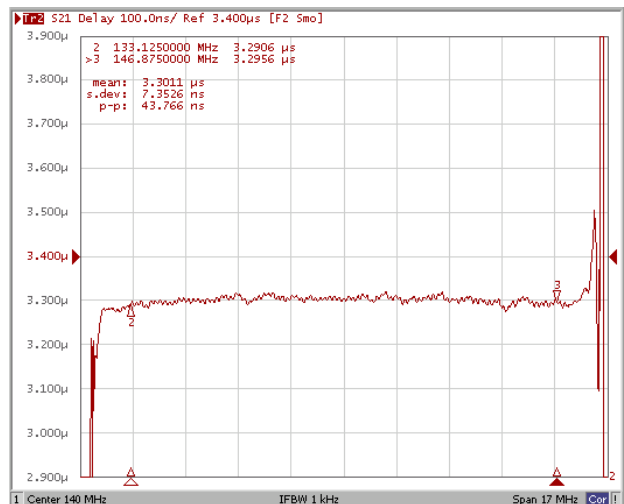
### Frequency Response



### Ripple (Fo±6.875MHz)



### Group Delay (Fo±6.875MHz)





### Out of Band-Gain ( $F_o \pm 8.5\text{MHz}$ )

