



PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-IF140.0M-141A	140MHz IF SAW Filter 15.0MHz 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)



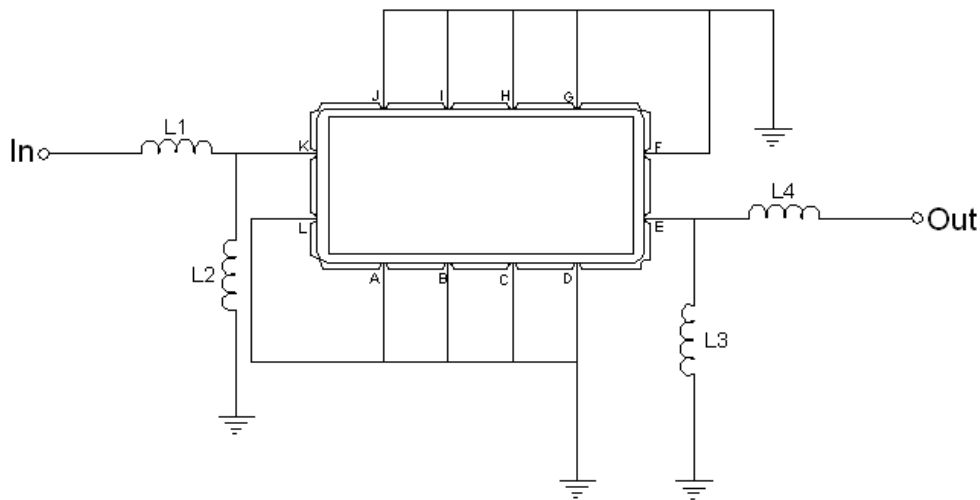


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1=68 nH, L2=47 nH
Output	L3=82 nH, L4=47 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) ⁽¹⁾	Ω	-	50	-
Load Impedance (single ended) ⁽¹⁾	Ω	-	50	-

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

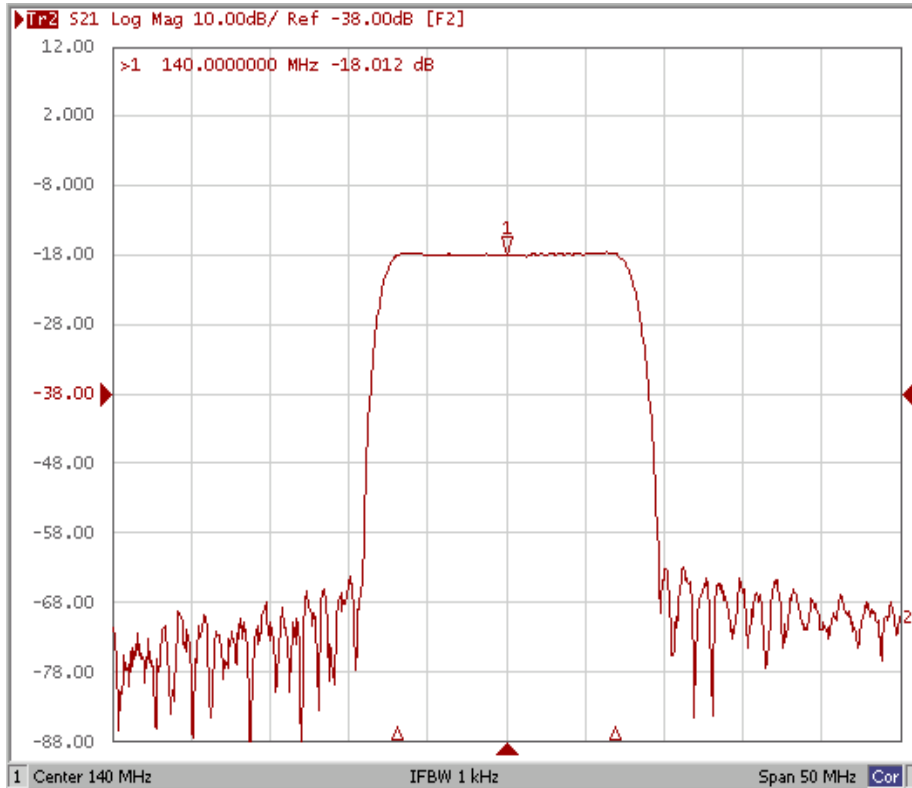
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

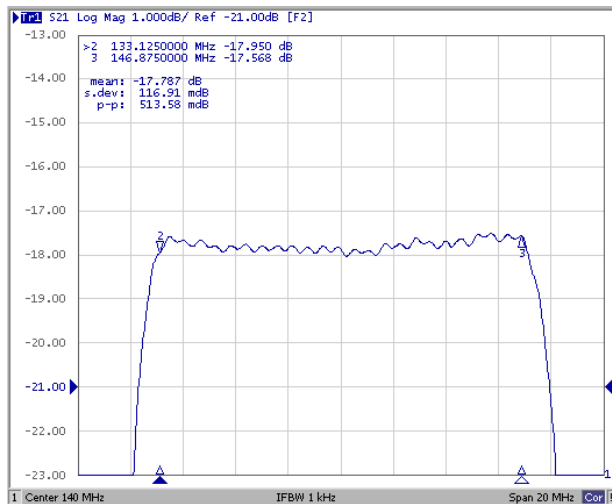
Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	-	140.0	-
Insertion Loss at Fo	dB	-	18.0	21.0
Amplitude Ripple Variation (Fo ± 6.875 MHz)	dB _{p-p}	-	0.6	1.0
Group Delay Variation (Fo ± 6.875 MHz)	nsec	-	50	100
Absolute Delay at Fo	µsec	-	0.88	-
Temperature Coefficient	ppm/°C	-	-23	-
Bandwidth at -1.0 dB	MHz	-	14.8	-
Bandwidth at -3.0 dB	MHz	15.0	15.5	-
Bandwidth at -40.0 dB	MHz	-	18.5	19.0
Relative Attenuation				
Lower Sidelobe	dB	42	48	-
Upper Sidelobe	dB	40	45	-
Fc-8.5MHz	dB	-	15	-
Fc+8.5MHz	dB	-	9	-



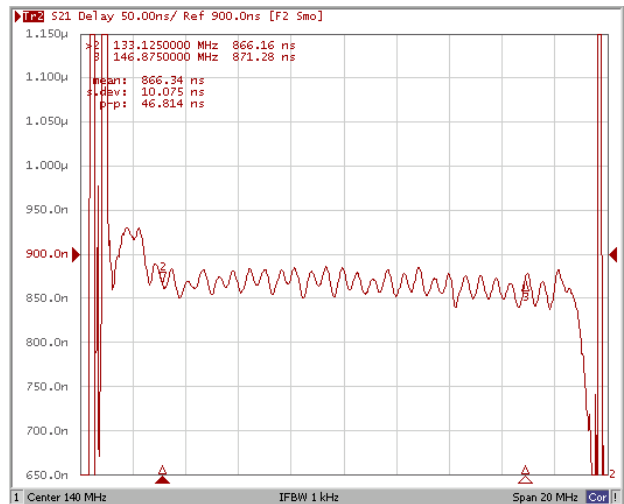
Frequency Response



Ripple (Fo±6.875MHz)



Group Delay (Fo±6.875MHz)





Relative Attenuation ($F_o \pm 8.5\text{MHz}$)

