



Oscilent Corporation

# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL140.0M-10	Low-Loss 140MHz IF SAW Filter 9.4MHz Bandwidth

## Specification Contents

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

## Notes

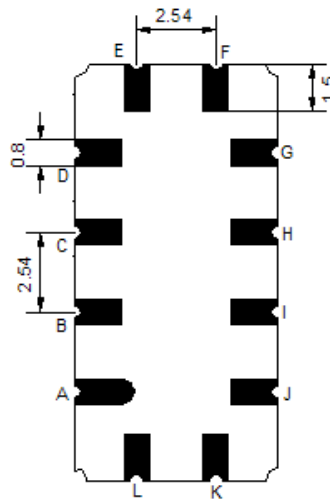
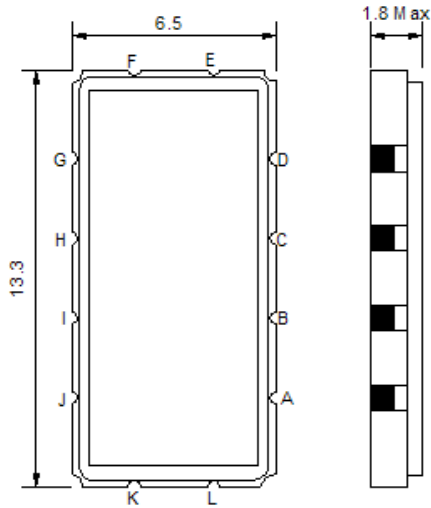
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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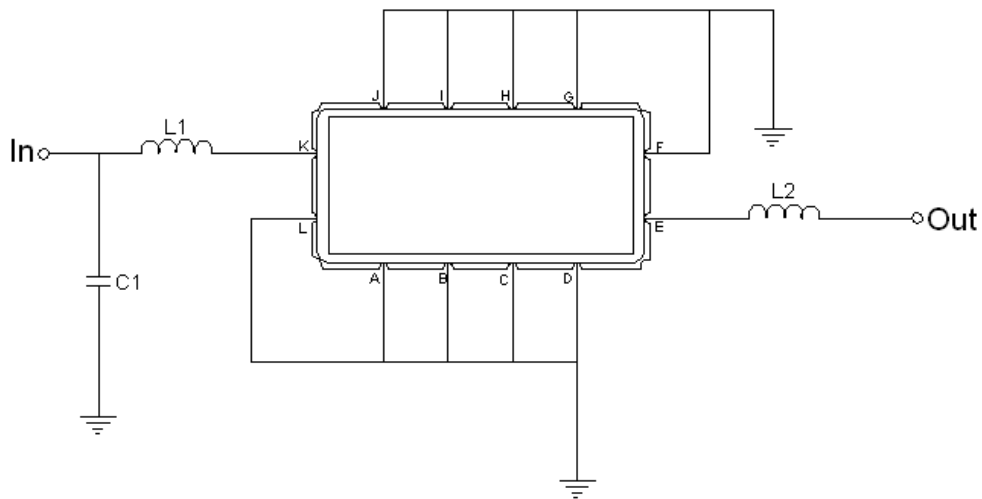


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=82nH Q > 40, C1=30pF
Output	L2=56nH Q > 40
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	139.6	140.0	140.4
Insertion Loss at Fo	dB	-	10.5	11.5
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±3.6 MHz	dB <sub>p-p</sub>	-	0.7	1.0
Group Delay Variation within fo ±3.6 MHz	nsec	-	100	150
Absolute Delay at Fo	µsec	-	1.03	-
Bandwidth at -1.5 dB	MHz	8.9	9.3	-
Bandwidth at -3.0 dB	MHz	9.4	9.9	-
Bandwidth at -35.0 dB	MHz	-	13.5	14.5
Relative Attenuation:				
from 10 to 132 MHz	dB	40	48	-
from 149 to 260 MHz	dB	40	45	-



### Frequency Response

