



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL70.0M-20	70.0 MHz IF SAW Filter 18.99 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)





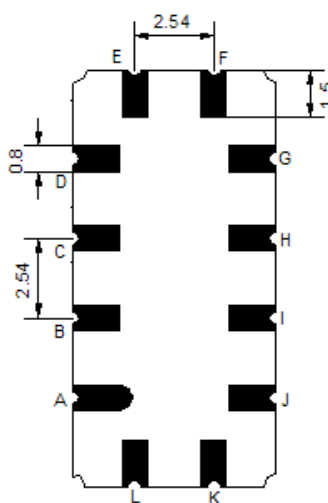
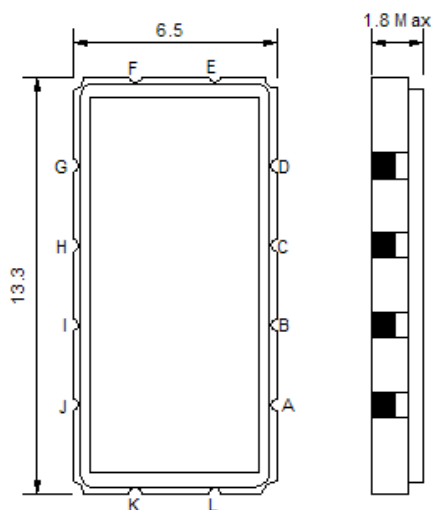
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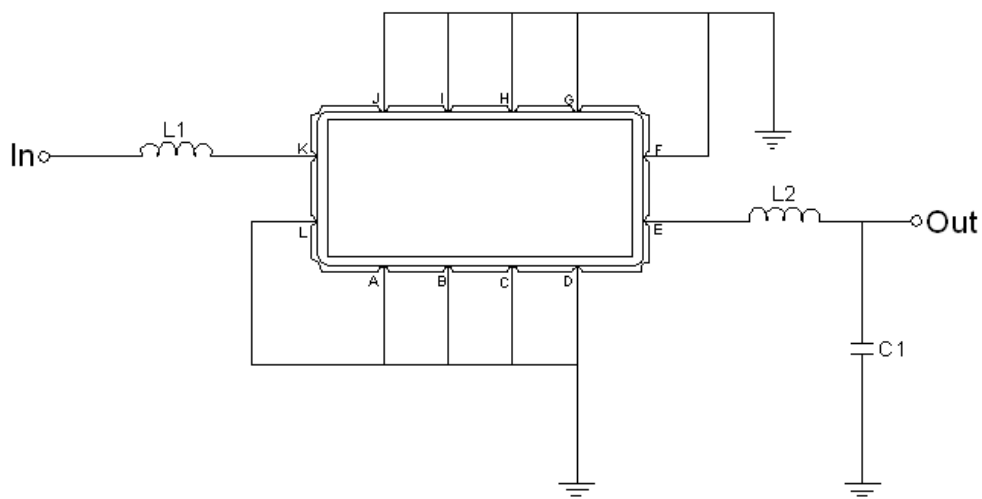
Mechanical Dimensions (mm)



Pin Description

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

Test Circuit



Test Fixture & Values

Input	L1=68nH Q > 40
Output	L2=270nH Q > 40, C2=20pF
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	69.8	70.0	70.2
Insertion Loss at Fo	dB	-	15.5	16.5
Temperature Coefficient	ppm/°C	-	-84	-
Amplitude Ripple Variation at Fo ±8.2 MHz	dB _{p-p}	-	0.5	1.0
Group Delay Variation at Fo ±8.2 MHz	nsec	-	25	50
Absolute Delay at Fo	µsec	-	0.85	-
IN/OUT Return Loss at Fo	dB	-	-	-
Bandwidth at -1.0 dB	MHz	18.7	18.99	-
Bandwidth at -3.0 dB	MHz	19.7	20.05	-
Bandwidth at -40.0 dB	MHz	-	24.08	25.5
Relative Attenuation:				
10 ~ 57 MHz	dB	40	45	-
83 ~ 140 MHz	dB	40	45	-



Frequency Response

