



Oscilent Corporation

# PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL70.0M-03	70.0MHz IF SAW Filter 2.85MHz 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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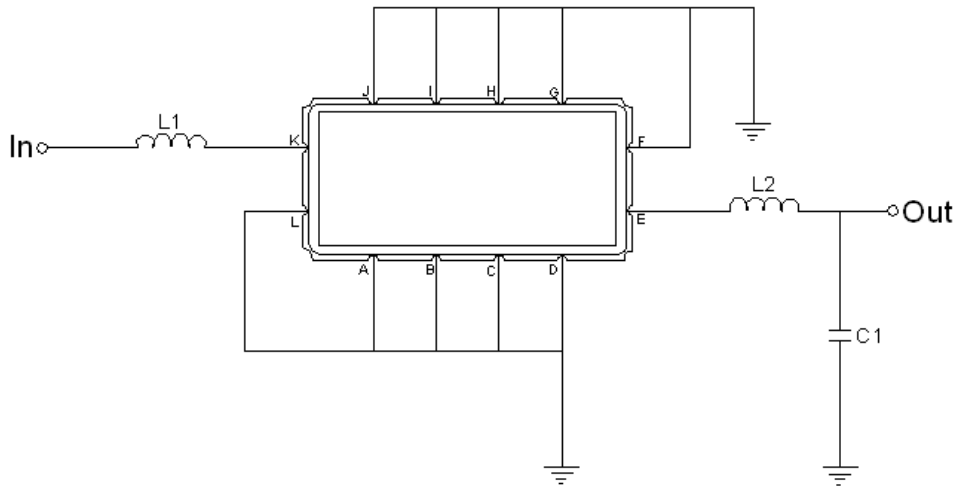


## Mechanical Dimensions (mm)



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

## Test Circuit



Test Fixture & Values	
Input	L1=270 nH, Q>40
Output	L2=56 nH, Q>40 C = 22pF
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).

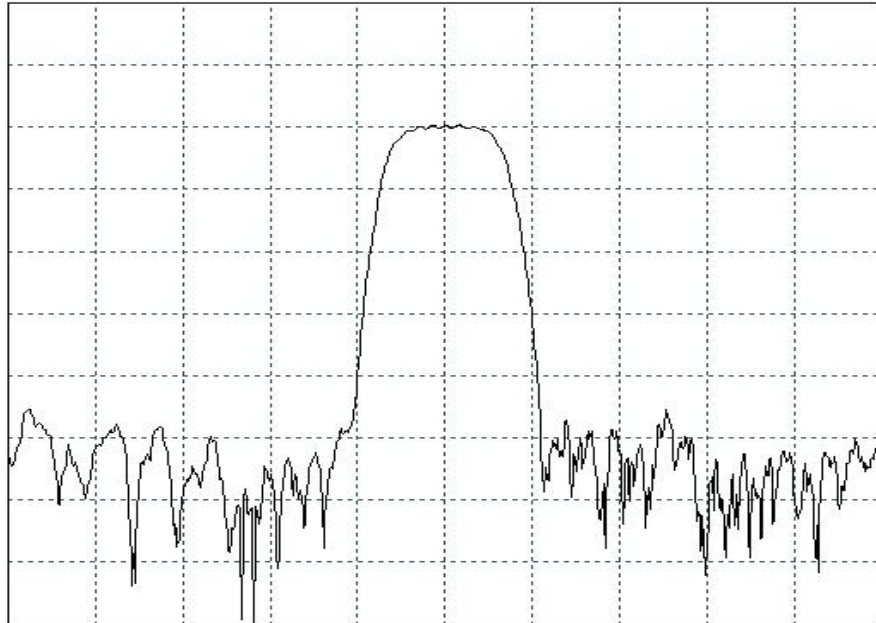
Those impedances could be modified with different impedance values and/or structures, if necessary.

## Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.85	70.0	70.15
Insertion Loss at Fo	dB	-	7.7	8.2
Amplitude Ripple Variation	dB <sub>p-p</sub>	-	0.65	1.0
Group Delay Variation	nsec	-	145	190
Absolute Delay at Fo	μsec	-	1.07	-
Temperature Coefficient	ppm/°C	-	-84	-
Bandwidth at -1.0 dB	MHz	2.4	2.85	-
Bandwidth at -3.0 dB	MHz	3.0	3.55	-
Bandwidth at -40.0 dB	MHz	-	6.18	6.8
Ultimate Rejection	dB	40	45	-

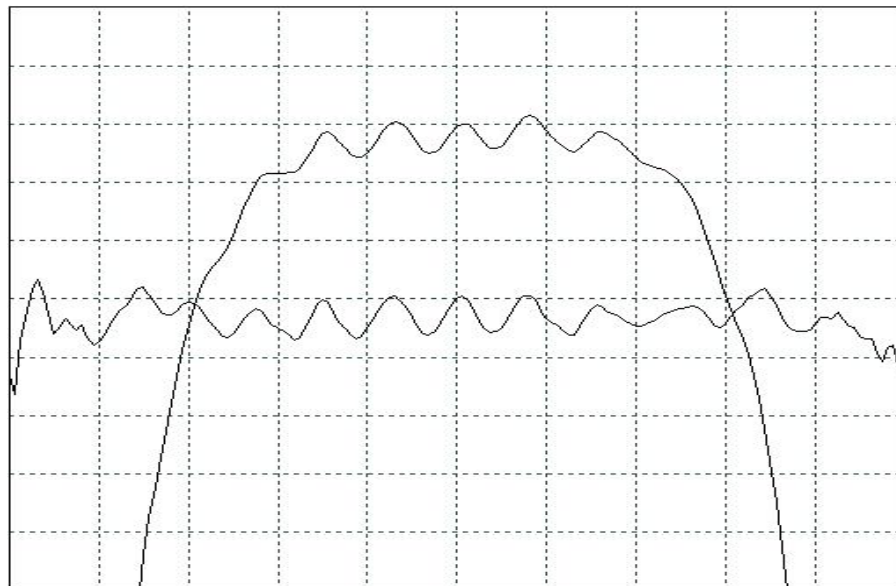


## Frequency Response



Horizontal: 3.0 MHz/Div

Vertical: 10 dB/Div



Horizontal: 0.6 MHz/Div

Vertical: 1.0 dB/Div

Vertical: 200 ns/Div