



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL70.0M-05	70.0 MHz IF SAW Filter 4.8 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)



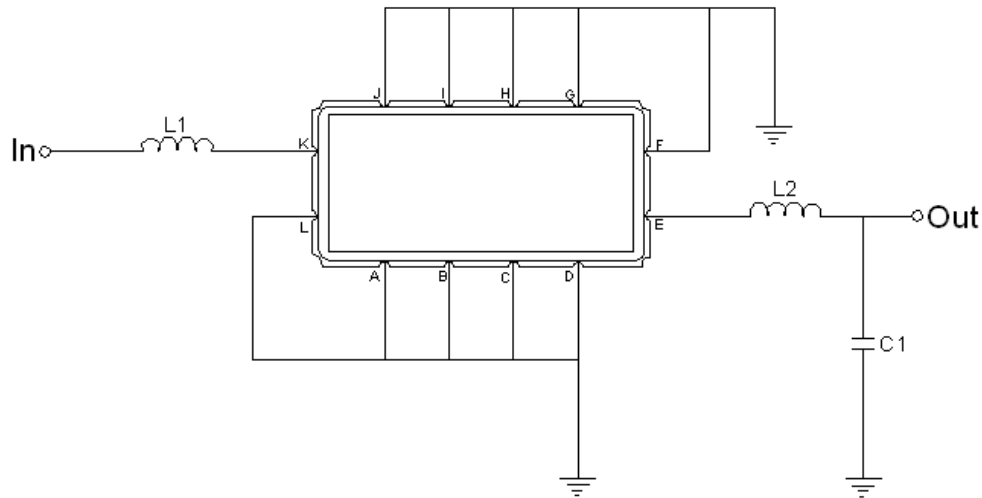


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 220 nH
Output	L2 = 120 nH, C2 = 10 pF
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).

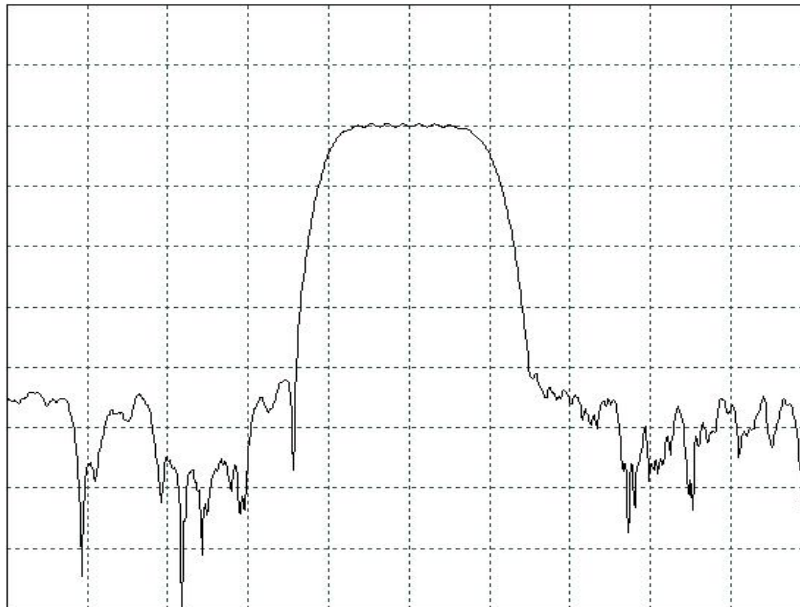
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	69.8	70.00	70.2
Insertion Loss at Fo	dB	-	8.5	9.2
Temperature Coefficient	ppm/°C	-	-84	-
Group Delay Variation	nsec	-	95	150
Absolute Delay at Fo	μsec	-	0.84	-
PassBand Ripple Variation	dB	-	0.6	1.0
Bandwidth at -1.0 dB	MHz	4.4	4.8	-
Bandwidth at -3.0 dB	MHz	5.2	5.6	-
Bandwidth at -35.0 dB	MHz	-	8.5	9.0
Ultimate Rejection	dB	40	42	-

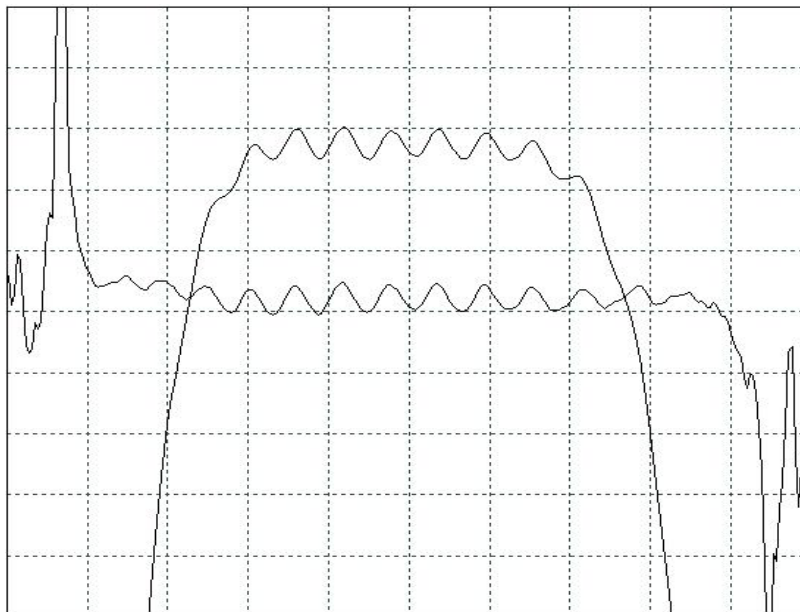


Frequency Response



Horizontal: 3.0 MHz/Div

Vertical: 10 dB/Div



Horizontal: 1.0 MHz/Div

Vertical: 1 dB/Div

Vertical: 200 ns/Div