



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
813-SL100.0M-28	Low-Loss 100MHz IF SAW Filter 28MHz 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)





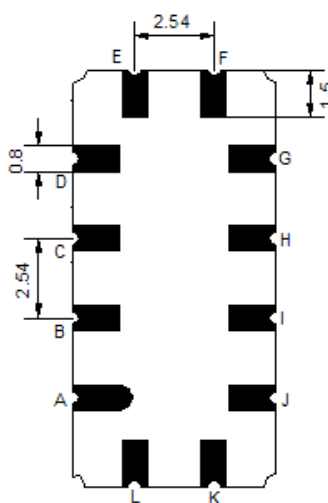
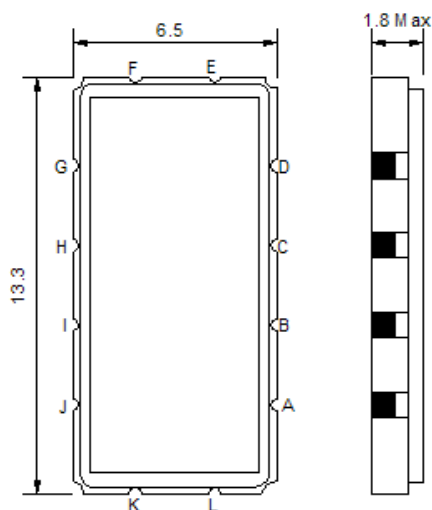
Oscilent Part Number

813-SL100.0M-28

January 2011 Rev A

Low-Loss 100MHz IF SAW Filter 28MHz Bandwidth

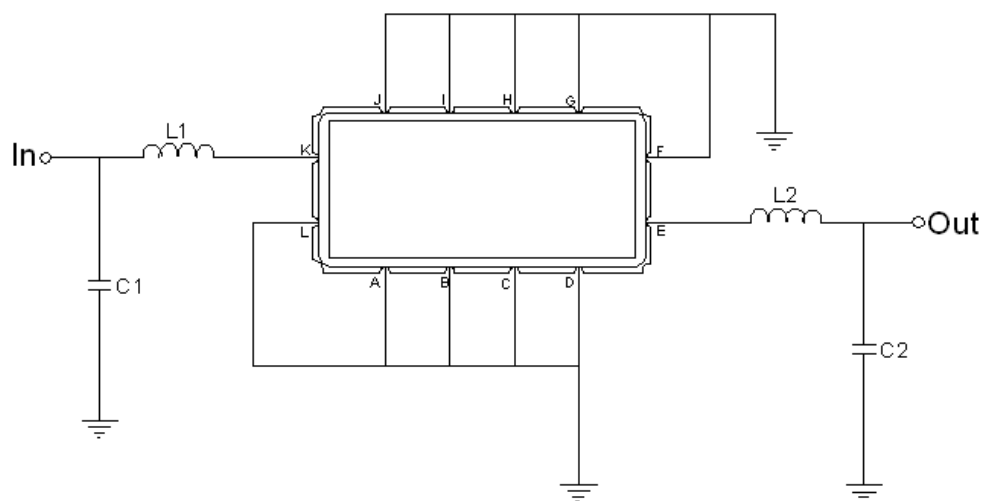
Mechanical Dimensions (mm)



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 Q > 40
Output	L2 = 68 nH Q > 40, C2 = 15 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	-	100.0	-
Insertion Loss at Fo	dB	-	17.5	19.5
Temperature Coefficient	ppm/°C	-	-86	-
Amplitude Ripple within fo ±13.0 MHz	dB _{p-p}	-	0.5	1.0
Group Delay Variation within fo ±13.0 MHz	nsec	-	50	80
Absolute Delay at Fo	µsec	-	0.88	0.92
Bandwidth at -1.0 dB	MHz	27.0	28.1	-
Bandwidth at -3.0 dB	MHz	28.0	29.0	-
Bandwidth at -40.0 dB	MHz	-	33.3	35
Relative Attenuation:				
Lower sidelobe	dB	40	47	-
Upper sidelobe	dB	40	47	-



Frequency Response

