PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF82.5M-BA	82.5MHz IF SAW Filter 17.9MHz Bandwidth

Specification Contents

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

Notes

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

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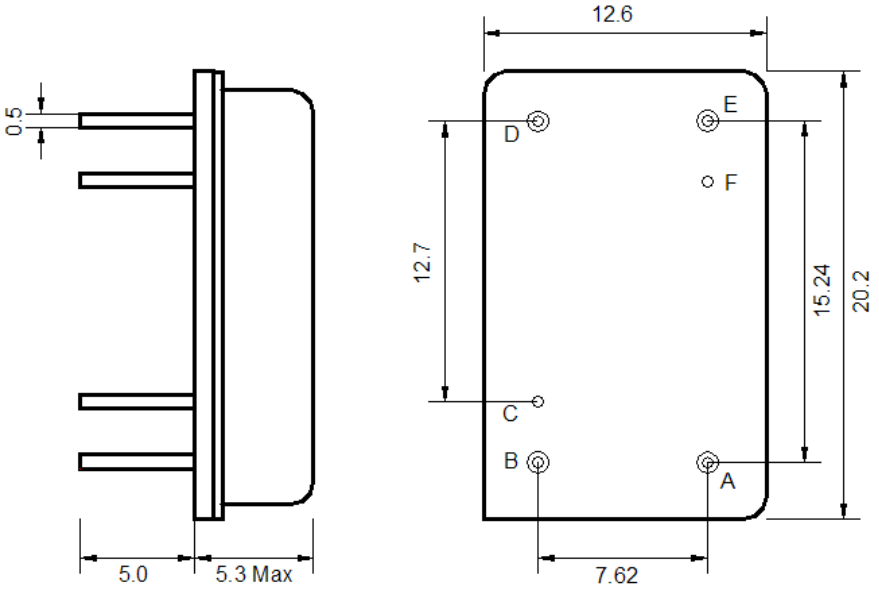
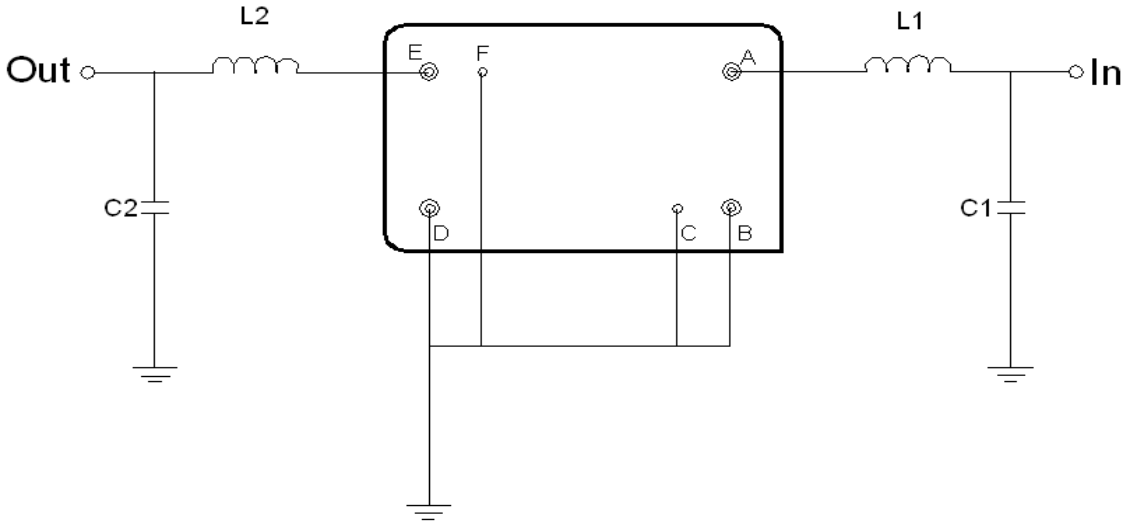
Mechanical Dimensions (mm)



Pin Description	
B, C, D, F	Ground
A	Input
E	Output

Test Circuit



Test Fixture & Values	
Input	L1=22 nH Q > 40
Output	L2=33 nH 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)(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	-	82.5	-
Insertion Loss at Fo	dB	-	24.2	26.0
Group Delay Variation	nsec	-	30	60
Absolute Delay at Fo	μsec	-	2.2	-
Temperature Coefficient	ppm/°C	-	-72	-
Amplitude Ripple Variation	dB_{p-p}	-	0.5	1.0
Bandwidth at –1.0 dB	MHz	17.9	18.0	-
Bandwidth at –3.0 dB	MHz	18.3	18.4	-
Bandwidth at –35.0 dB	MHz	-	19.8	19.9
Bandwidth at –40.0 dB	MHz	-	19.9	20.0
Ultimate Rejection	dB	50	55	-

Frequency Response