



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF140.0M-C	140.0 MHz IF SAW Filter 25.0 MHz Bandwidth

Specification Contents

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

Notes

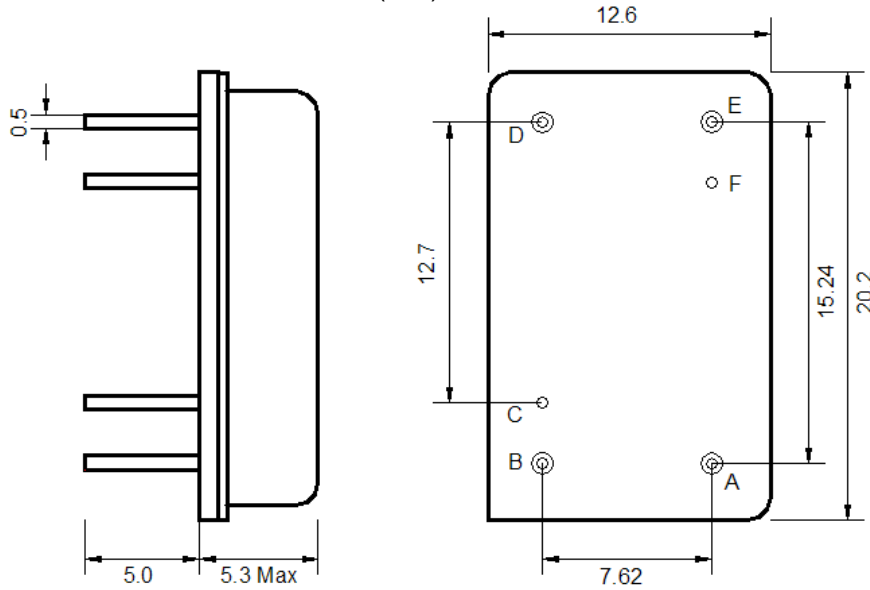
- o Electrostatic Sensitive Device (ESD) 
- o Avoid excessive ultrasonic exposure
- o Solderability compatible with JEDEC J-STD-020C Pb-free process, 260°C peak reflow temperature
- o This product complies with EU directive 2002/95/EC (RoHS compliance)



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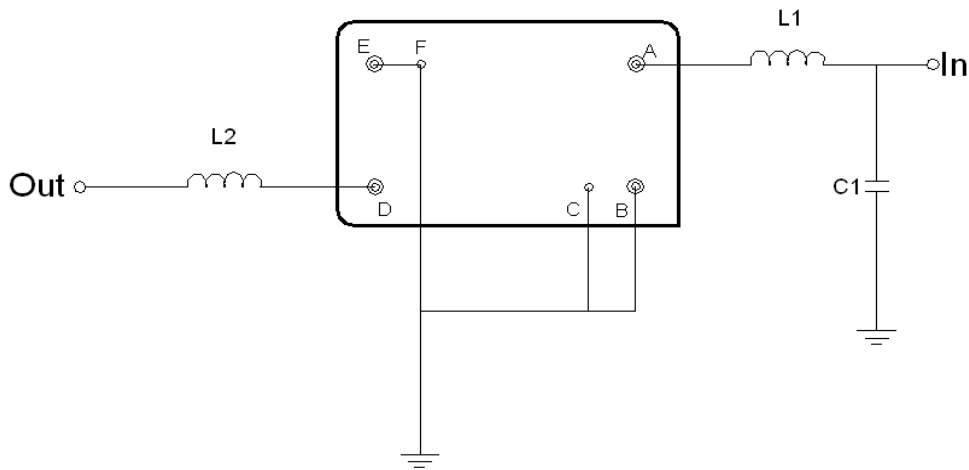


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 56nH, C1=18pF
Output	L2 = 56nH
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	-

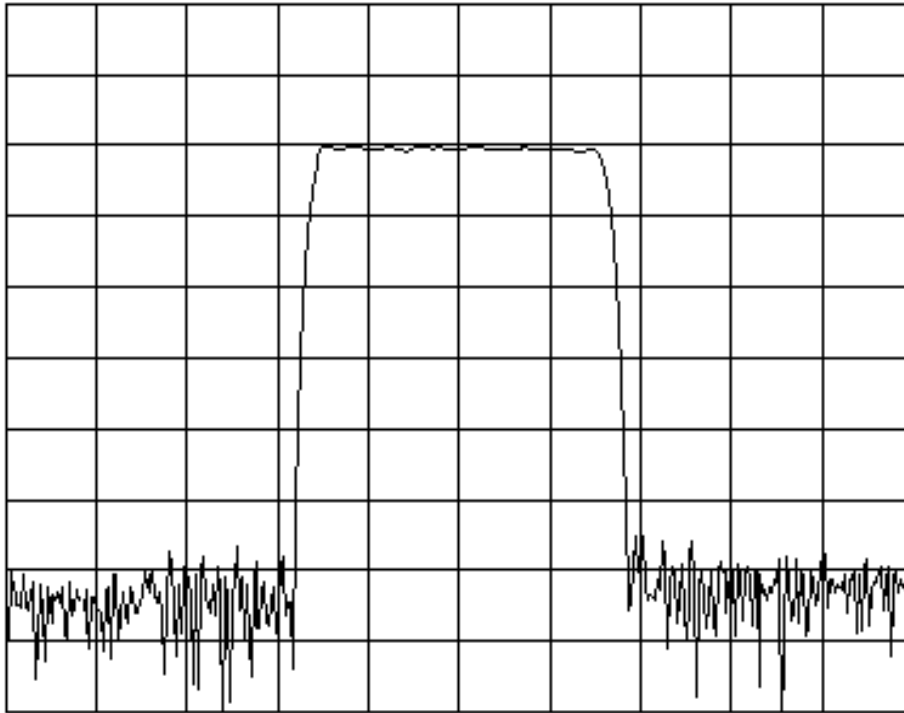
Notes: With Matching Network (Ref. Testing Environment Circuit as shown above).
Those impedances could be modified with different impedance values and/or structures, if necessary.

Electrical Specification

Parameters Description	Unit	Minimum	Typical	Maximum
Center Frequency (Fo)	MHz	139.90	140.0	140.10
Insertion Loss at Fo	dB	-	21.5	24.0
Group Delay Variation	nsec	-	30	100
Absolute Delay at Fo	usec	-	1.20	-
Passband Ripple Variation	dB	-	0.70	1.0
Bandwidth at -1.0dB	MHz	24.3	24.8	-
Bandwidth at -3dB	MHz	25.0	25.5	-
Bandwidth at -40dB	MHz	-	28.6	30.0
Ultimate Rejection	dB	50	55	-
Substrate Material	-	-	LN	-
Ambient Temperature	°C	-	25	-



Frequency Response



Horizontal: 8.0MHz/Div.
Vertical: 10dB/Div.