



REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
820-IF160.0M-F	60.0 MHz Bandpass Filter 1.26 MHz Bandwidth

Specification Contents

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

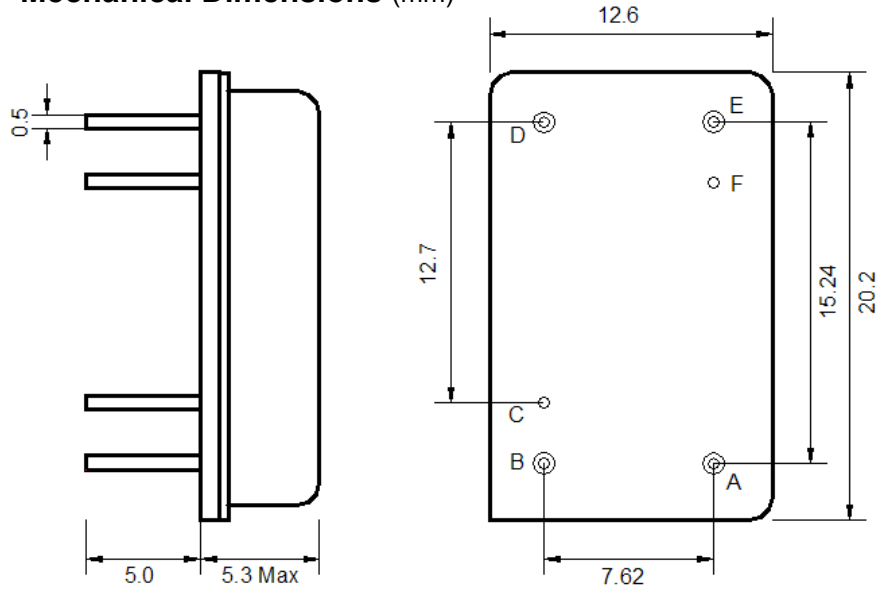
Notes

- 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)



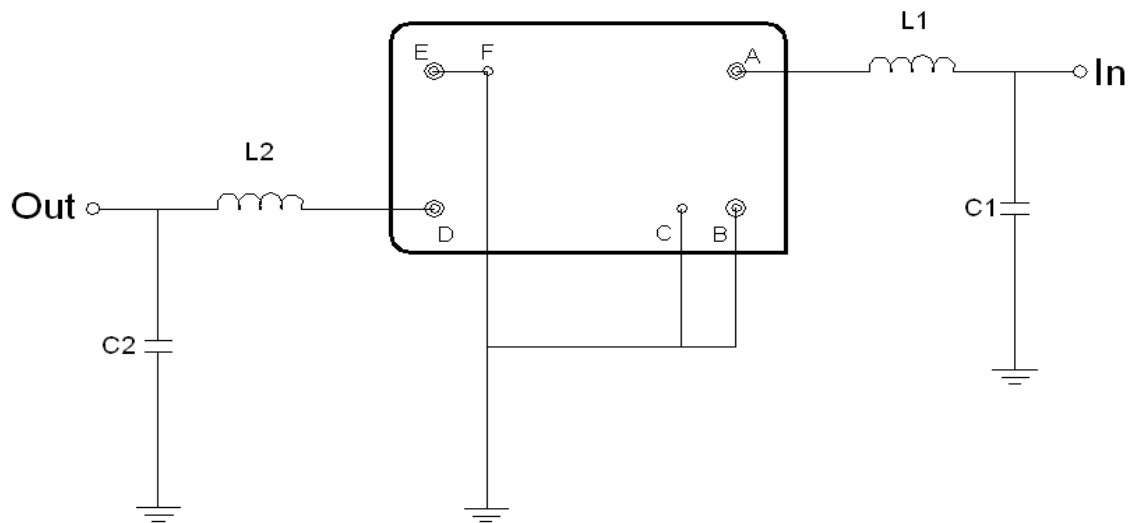


Mechanical Dimensions (mm)



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

Test Circuit



Test Fixture & Values	
Input	L1 = 56 nH, C1 = 30 pF
Output	L2 = 56 nH, C2 = 15 pF
Source/Load Impedance	50 Ω



Maximum Ratings

Parameters Description	Unit	Minimum	Typical	Maximum
Operating Temperature Range	°C	-40	-	85
Storage Temperature Range	°C	-60	-	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	159.90	160.0	160.10
Insertion Loss at Fo	dB	-	19.0	22.0
Group Delay Variation (Fo±0.63MHz)	nsec	-	180	300
Absolute Delay at Fo	usec	-	2.5	-
Passband Ripple Variation (Fo±0.5MHz)	dB	-	0.6	1.0
Bandwidth at -1.5dB	MHz	1.26	1.35	-
Bandwidth at -3dB	MHz	1.40	1.50	-
Bandwidth at -35dB	MHz	-	2.25	2.40
Bandwidth at -50dB	MHz	-	2.38	2.50
Rejection (162~167MHz)	dB	50	55	-
Ultimate Rejection (Fo-9MHz~Fo-2MHz, Fo+2MHz~Fo+9MHz)	dB	50	55	-
Substrate Material	-	-	LN	-
Ambient Temperature	°C	-	25	-



Frequency Response

