



Oscilent Corporation

PRODUCT SPECIFICATION

REV A January 2011

Oscilent Controlled Document

Ordering Code / Part Number	Product Description
819-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)





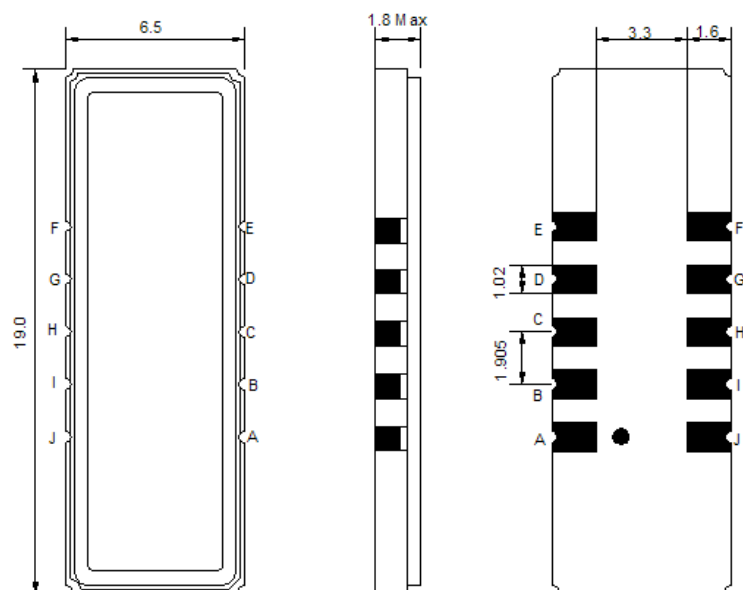
Oscilent Part Number

819-IF160.0M-F

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160.0 MHz Bandpass Filter 1.26 MHz Bandwidth

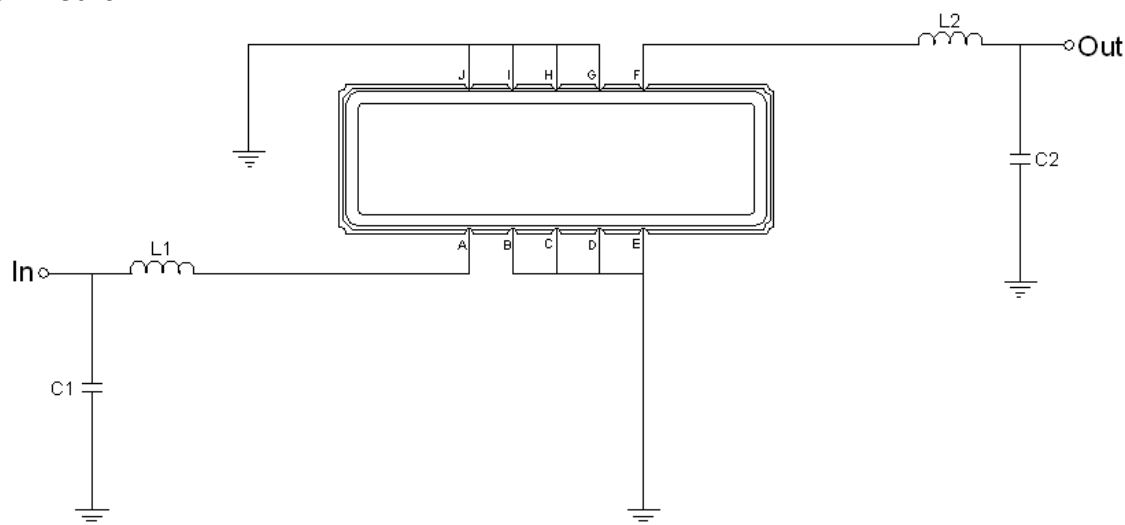
Mechanical Dimensions (mm)



Pin Description

B, C, D, E, G, H, I, J	Ground
A	Input
F	Output

Test Circuit



Test Fixture & Values

Input	L1 = 68 nH, C1 = 39 pF
Output	L2 = 47 nH, C2 = 27 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	159.90	160.00	160.10
Insertion Loss at Fo	dB	-	17.0	21.0
Group Delay Variation	nsec	-	180	220
Absolute Delay at Fo	usec	-	2.5	-
Phase Linearity	deg	-	2.7	3.0
Passband Ripple Variation	dB	-	0.53	0.75
Bandwidth at -1.5dB	MHz	1.26	1.37	-
Bandwidth at -35dB	MHz	-	2.25	2.40
Bandwidth at -40dB	MHz	-	2.38	2.50
Ultimate Rejection	dB	-	52	-
Substrate Material	-	-	Qz	-
Ambient Temperature	°C	-	25	-

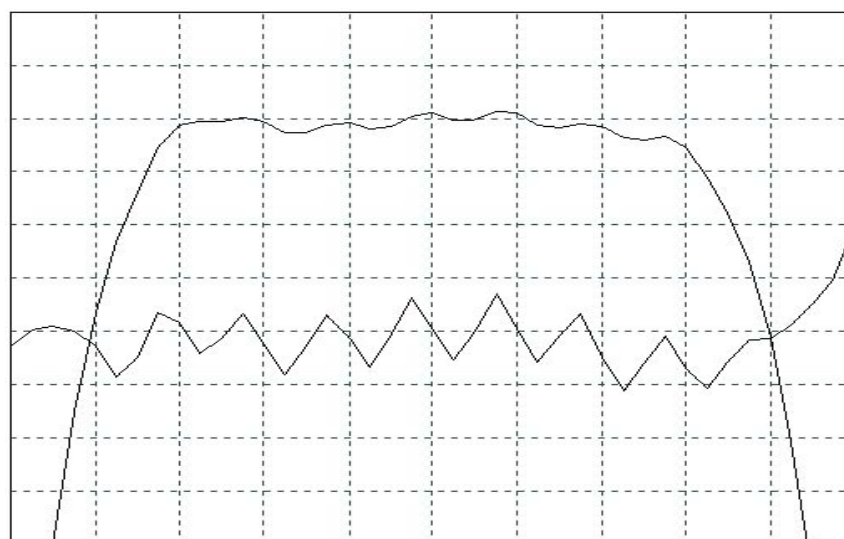


Frequency Response



Horizontal: 1.0 MHz/Div

Vertical: 10 dB/Div



Horizontal: 0.2MHz/Div

Vertical: 1 dB/Div

Vertical: 100 ns/Div