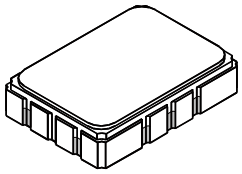
SF2367B

169.4375 MHz SAW Filter

- ***169.4375 MHz Narrow-band SAW Filter***
- ***Steep Transition to Stopband***
- ***Hermetic 5 X 7 mm Surface Mount Case***
- ***Complies with Directive 2002/95/EC (RoHS)***



SMP-03

Absolute Maximum Ratings

Rating	Value	Units
Input Power	+10	dBm
DC Voltage on any Non-ground Terminal	5	VDC
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Soldering profile - 2 cycles maximum	245 to 260°C for 10 s	

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
3 dB Center Frequency	F_C		169.4075	169.4375	169.4675	MHz
Insertion Loss at Center Frequency ILc	ILc			3	4.5	dB
3 dB Bandwidth			80	100		kHz
Rejection: (reference to ILc)						dB
Fc - 5MHz to Fc - 0.9 MHz			40	60		
Fc + 0.9MHz to Fc + 0.92MHz			38	45		
Fc + 0.92MHz to Fc + 4MHz			40	50		
Fc + 4MHz to Fc + 5MHz			50	60		

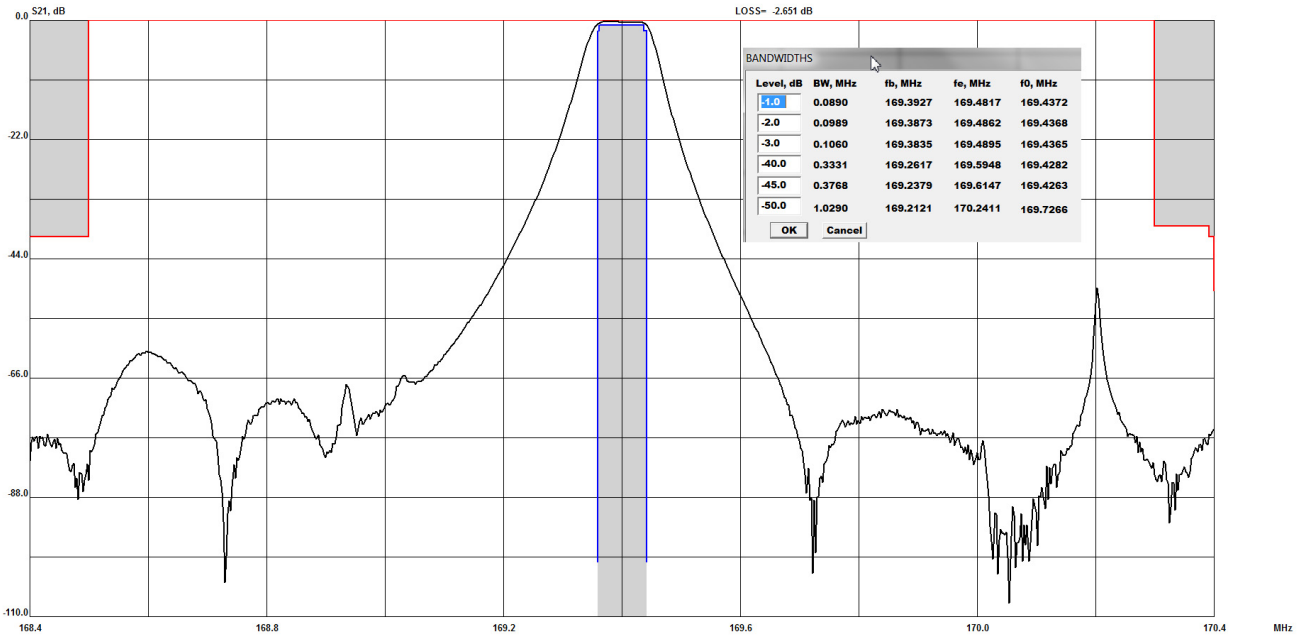
Case Style	SMP-03 5 x 7 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) See note 3	RFM SF2367B YWWS

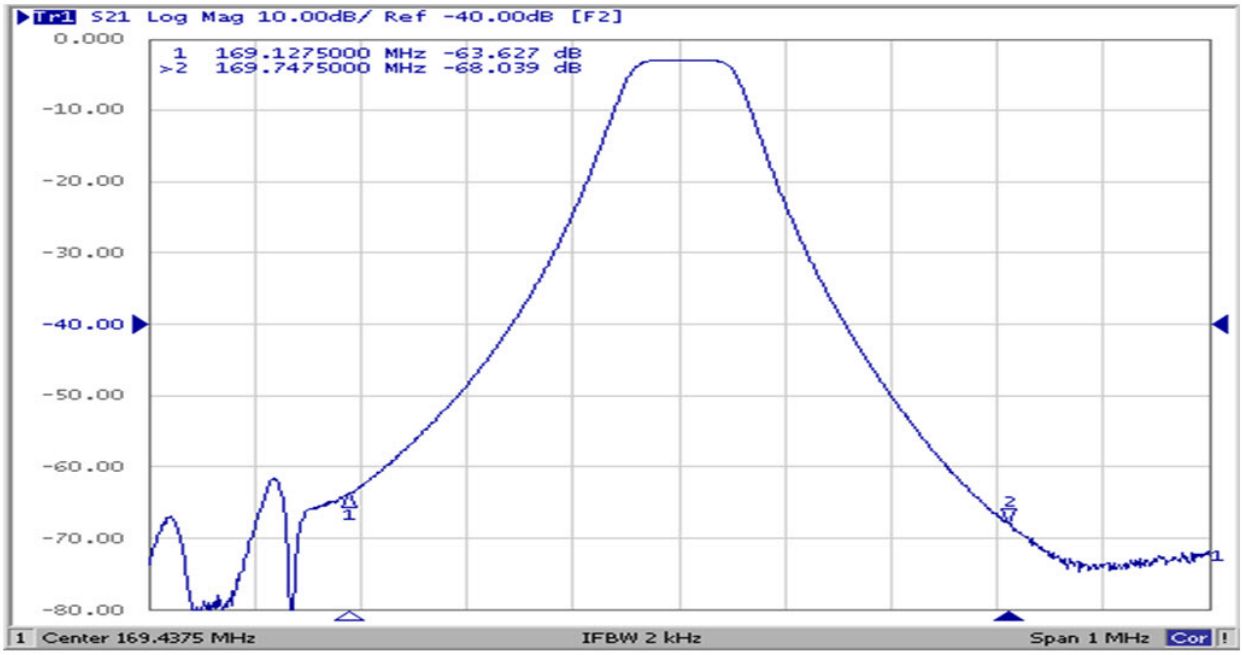
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

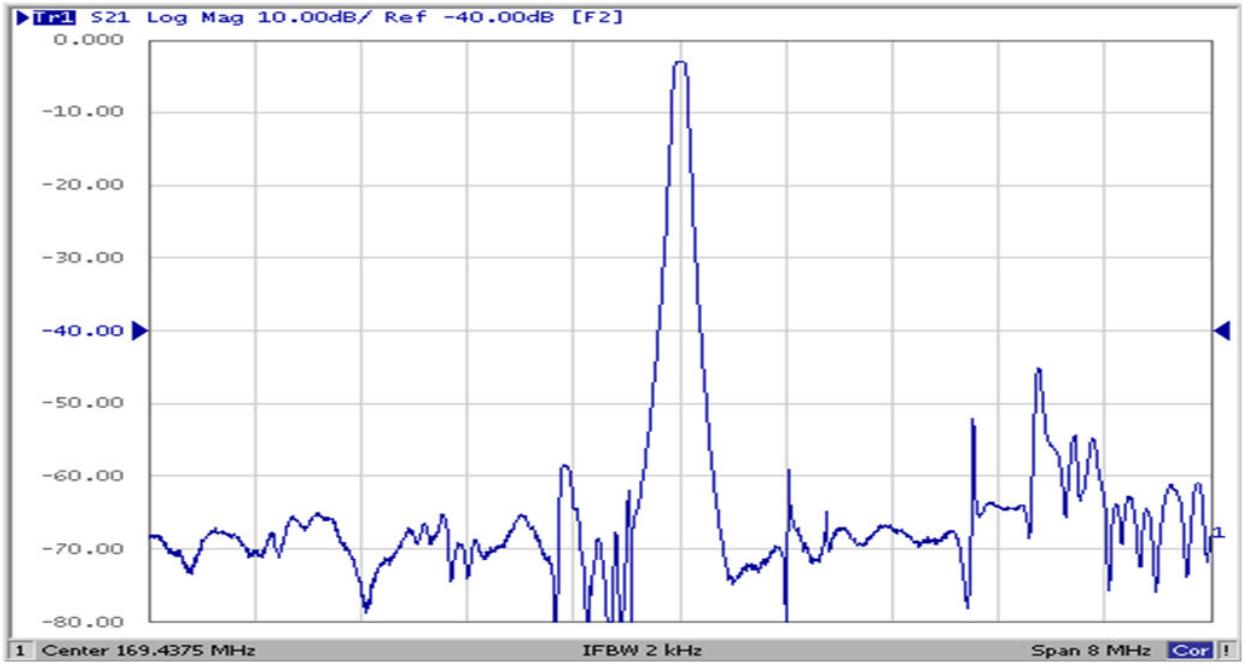
NOTES:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer. A dB offset exists for RFM because of the loss introduced by using transformers on the Input and Output.
2. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
3. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
6. US and international patents may apply.
7. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd

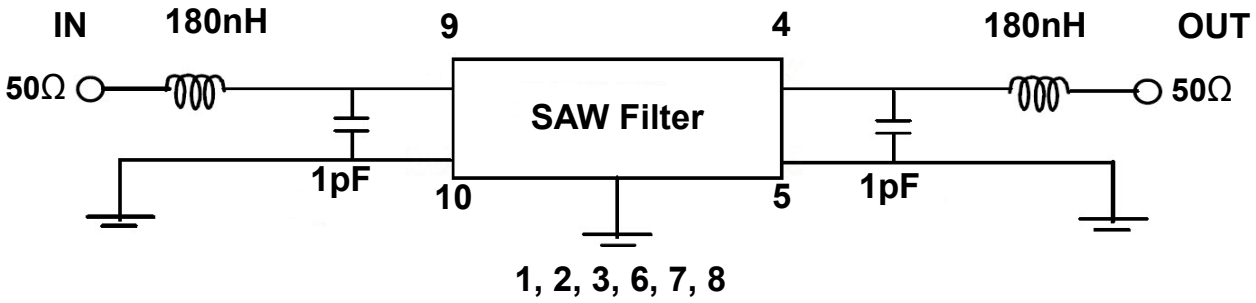
Frequency Characteristics







Measurement Circuit



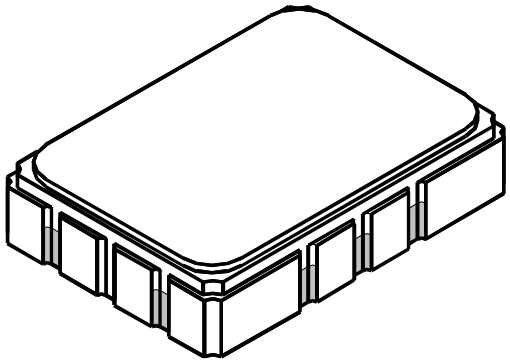
Electrical Connections

Connection	Terminals
Input	9
Output	4
Balanced Input or Input Ground	10
Balanced Output or Output Ground	5
Ground	1, 2, 3, 6, 7, 8

SMP-03 Case

10-Terminal Ceramic Surface-Mount Case

5 x 7 mm Nominal Footprint

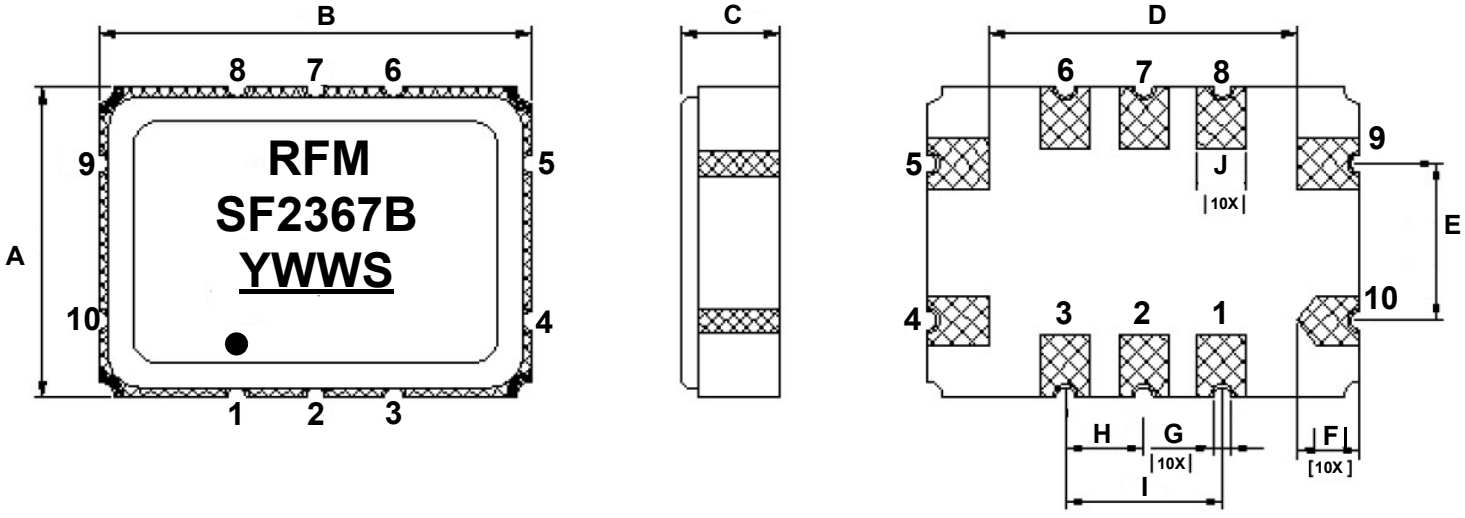


Case Dimensions

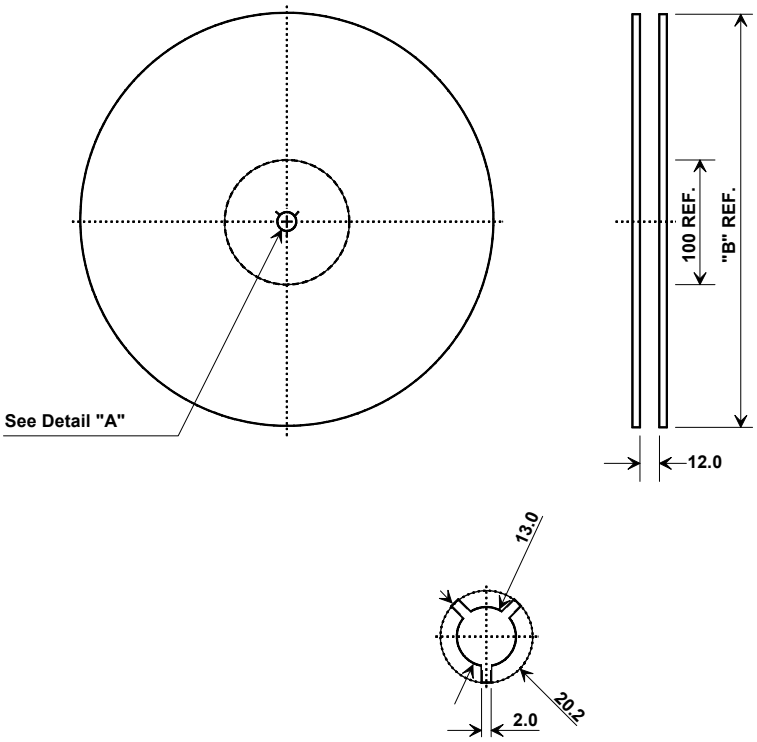
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	7.00	-	-	0.276	-
B	-	5.00	-	-	0.197	-
C	-	-	1.80	-	-	0.070
D	-	5.00	-	-	0.197	-
E	-	2.54	-	-	0.100	-
F	-	1.00	-	-	0.039	-
G	-	0.30	-	-	0.011	-
H	-	1.27	-	-	0.050	-
I	-	2.54	-	-	0.100	-
J	-	0.60	-	-	0.024	-

Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic
Pb Free	



Tape and Reel Specifications



"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000

COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.6 ± 0.1 mm
Bo	7.6 mm
Ko	1.9 ± 0.1 mm
Pitch	8.0 ± 0.1 mm
W	16.0 ± 0.3 mm