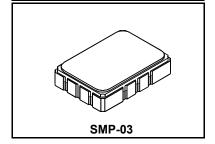




SF2367B

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)



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 | Тур | 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) | | | | | | |
| Fc - 5MHz to Fc - 0.9 MHz | | | 40 | 60 | | |
| Fc + 0.9MHz to Fc + 0.92MHz | | | 38 | 45 | | dB |
| 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 <u>YWWS</u> |

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

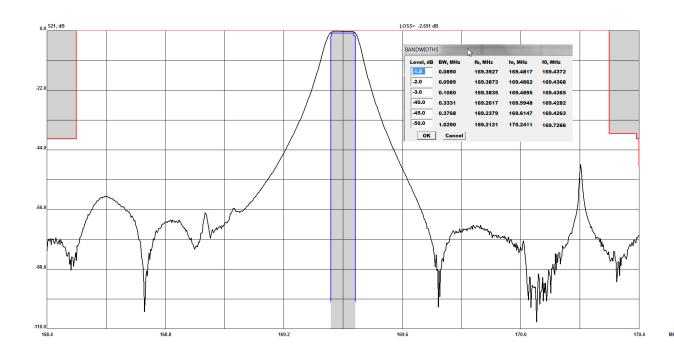
NOTES:

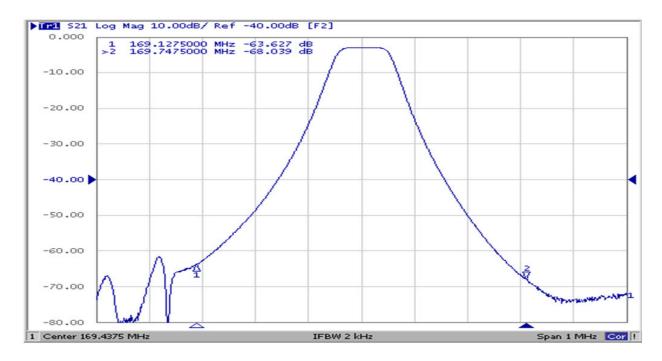
- Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer. A dB offset exists for RFM because of the loss introduced by using transformers on the Input and Output.
- 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
- Indicates "Lord retails." In the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
- The design, manufacturing process, and specifications of this filter are
- subject to change.

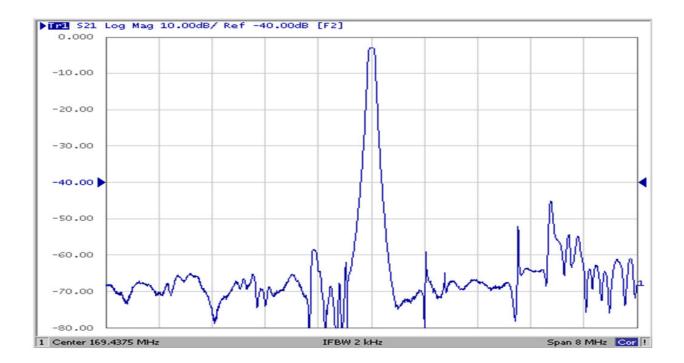
 Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
- US and international patents may apply.

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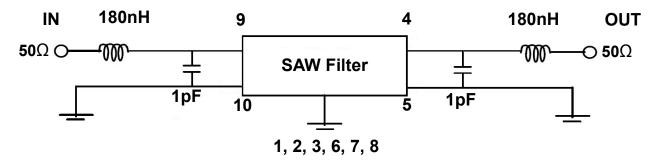
Frequency Characteristics







Measurement Circuit

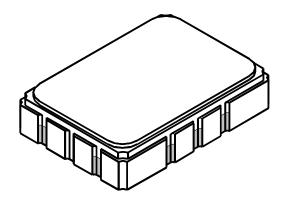


Electrical Connections

| 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

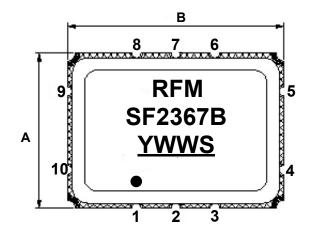


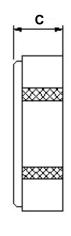
Case Dimensions

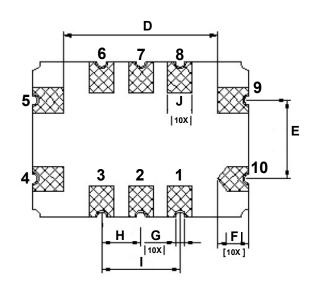
| Dimension | mm | | | Inches | | |
|-------------|-----|------|------|--------|-------|-------|
| Difficusion | Min | Nom | Max | Min | Nom | Max |
| Α | - | 7.00 | - | - | 0.276 | - |
| В | - | 5.00 | - | 1 | 0.197 | - |
| С | - | - | 1.80 | 1 | 1 | 0.070 |
| D | - | 5.00 | - | - | 0.197 | - |
| E | - | 2.54 | - | - | 0.100 | - |
| F | - | 1.00 | - | 1 | 0.039 | - |
| G | - | 0.30 | - | - | 0.011 | - |
| Н | - | 1.27 | - | - | 0.050 | - |
| I | - | 2.54 | - | - | 0.100 | - |
| J | - | 0.60 | 1 | 1 | 0.024 | - |

Case Materials

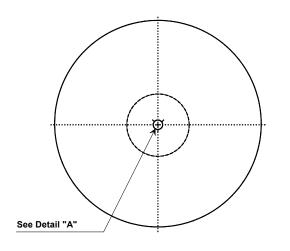
| Materials | | | | |
|-----------------------|--|--|--|--|
| Solder Pad Plating | 0.3 to 1.0 μm Gold over 1.27 to 8.89 μm Nickel | | | |
| Lid Plating | 2.0 to 3.0 µm Nickel | | | |
| Body | Al ₂ O ₃ Ceramic | | | |
| Pb Free | | | | |

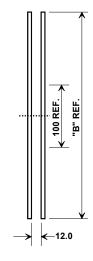




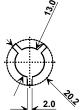


Tape and Reel Specifications



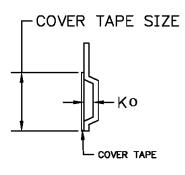


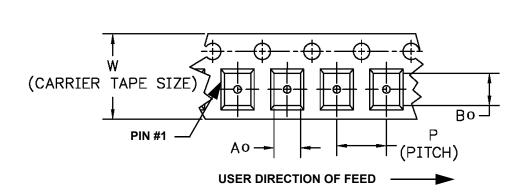
| "B" Nominal Size | | Quantity Per Reel |
|---------------------|-------------|-------------------|
| Inches | millimeters | |
| 7 | 178 | 500 |
| 13 | 330 | 2000 |



COMPONENT ORIENTATION and DIMENSIONS

| Carrier Tape Dimensions | | | |
|-------------------------|---------------|--|--|
| Ao | 5.6 ± 0.1 mm | | |
| Во | 7.6 mm | | |
| Ко | 1.9 ± 0.1 mm | | |
| Pitch | 8.0 ± 0.1 mm | | |
| W | 16.0 ± 0.3 mm | | |





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