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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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- **Ideal Front-End Filter for European Wireless Receivers**
- **Low-Loss, Coupled-Resonator Quartz Design**
- **Simple External Impedance Matching**
- **Complies with Directive 2002/95/EC (RoHS)**

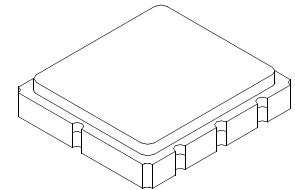


The RF1432C is a low-loss, compact and economical surface-acoustic-wave (SAW) filter designed to provide front-end selectivity in 319.500 MHz receivers. Receiver designs using this filter include superhet with 10.7 MHz or 500 kHz IF, direct conversion and superregen.

This coupled-resonator filter (CRF) uses selective null placement to provide suppression, typically greater than 40 dB, of the LO and image spurious responses of superhet receivers with 10.7 MHz IF. Murata's advanced SAW design and fabrication technology is utilized to achieve high performance and very low loss with simple external impedance matching (not included). Quartz construction provides excellent frequency stability over a wide temperature range.

**RF1432C**

**319.500 MHz  
SAW Filter**



**SM5050-8 Case  
5 x 5**

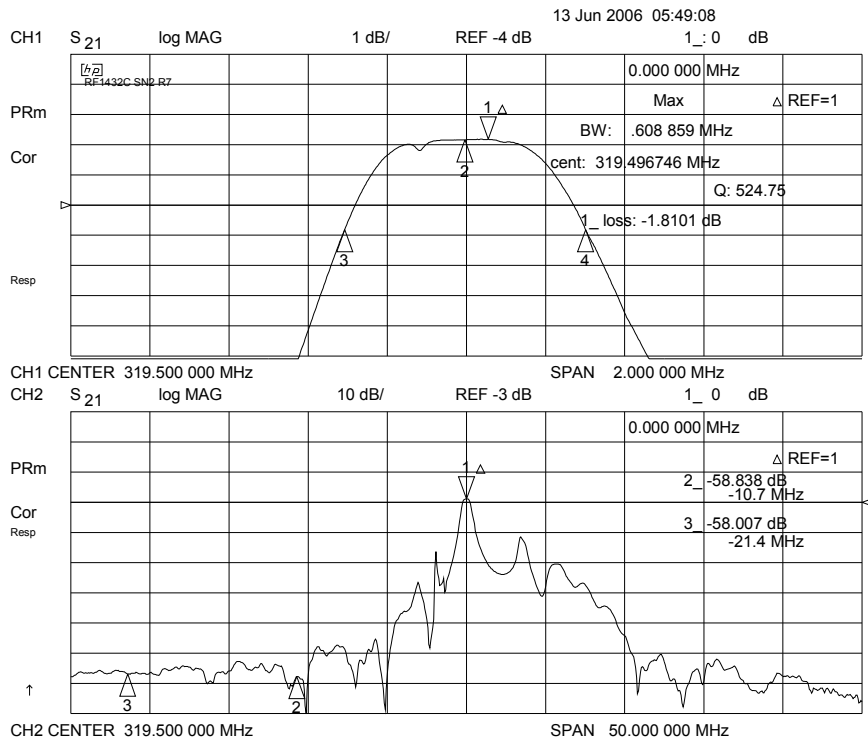
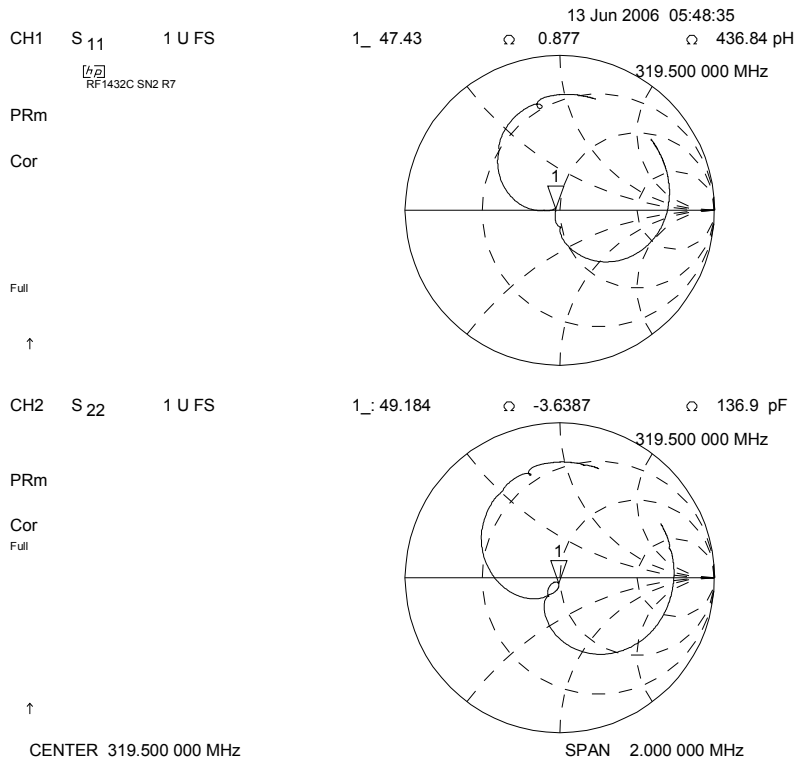
| Characteristic   | Sym                                   | Notes     | Minimum         | Typical          | Maximum | Units               |
|--|---------------------------------------|-----------|-----------------|------------------|---------|---------------------|
| Center Frequency at 25°C<br>Absolute Frequency<br>Tolerance from 319.500 MHz   | $f_c$                                 | 1, 2      | 319.420         |                  | 319.580 | MHz                 |
|  | $\Delta f_c$                          |           |                 |                  | ±80     | kHz                 |
| Insertion Loss   | IL                                    | 1         |                 | 1.8              | 2.8     | dB                  |
| 3 dB Bandwidth   | $BW_3$                                | 1, 2      | 500             | 600              | 800     | kHz                 |
| Rejection<br>at $f_c - 21.4$ MHz (Image)<br>at $f_c - 10.7$ MHz (LO)<br>Ultimate   |                                       | 1         | 40              | 50               |         | dB                  |
|  |                                       |           | 40              | 50               |         |                     |
|  |                                       |           |                 | 80               |         |                     |
| Temperature<br>Operating Case Temperature<br>Turnover Temperature<br>Turnover Frequency<br>Frequency Temperature Coefficient | $T_C$                                 | 3, 4      | -40             |                  | +85     | °C                  |
|  | $T_O$                                 |           | 25              | 40               | 55      | °C                  |
|  | $f_O$                                 |           |                 | $f_c$            |         | MHz                 |
|  | FTC                                   |           |                 | 0.032            |         | ppm/°C <sup>2</sup> |
| Frequency Aging  | Absolute Value during the First Year  | fAl       |                 | ≤10              |         | ppm/yr              |
| Impedance @ FC   | INPUT $Z_{IN} = R_{IN} // C_{IN}$     | $Z_{IN}$  |                 | 3.97kΩ // 4.37pF |         |                     |
|  | OUTPUT $Z_{OUT} = R_{OUT} // C_{OUT}$ | $Z_{OUT}$ |                 | 2.56kΩ // 4.27pF |         |                     |
| Lid Symbolization (in addition to Lot and/or Date Codes)   |                                       |           | 621 // DATECODE |                  |         |                     |



**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

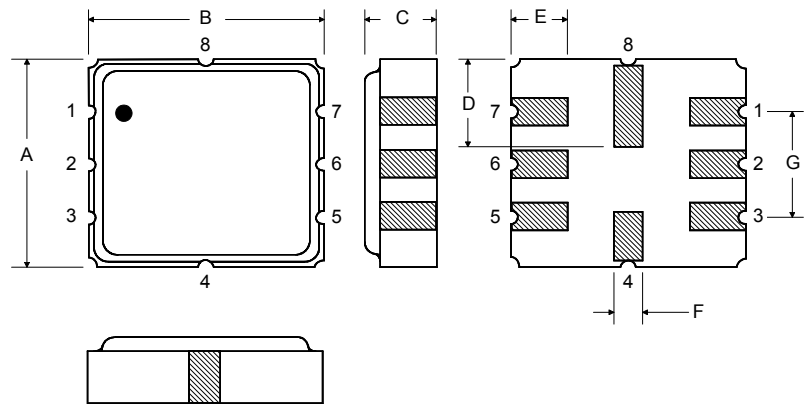
1. Unless noted otherwise, all measurements are made with the filter installed in the specified test fixture which is connected to a 50 Ω test system with VSWR ≤ 1.2:1. The test fixture L and C are adjusted for minimum insertion loss at the filter center frequency,  $f_c$ . Note that insertion loss, bandwidth, and passband shape are dependent on the impedance matching component values and quality.
2. The frequency  $f_c$  is defined as the midpoint between the 3dB frequencies.
3. Where noted, specifications apply over the entire specified operating temperature range.
4. The turnover temperature,  $T_O$ , is the temperature of maximum (or turnover) frequency,  $f_O$ . The nominal frequency at any case temperature,  $T_C$ , may be calculated from:  $f = f_O [1 - FTC (T_O - T_C)^2]$ .
5. Frequency aging is the change in  $f_c$  with time and is specified at +65°C or less. Aging may exceed the specification for prolonged temperatures above +65°C. Typically, aging is greatest the first year after manufacture, decreasing significantly in subsequent years.
6. The design, manufacturing process, and specifications of this device are subject to change without notice.
7. One or more of the following U.S. Patents apply: 4,54,488, 4,616,197, and others pending.
8. All equipment designs utilizing this product must be approved by the appropriate government agency prior to manufacture or sale.



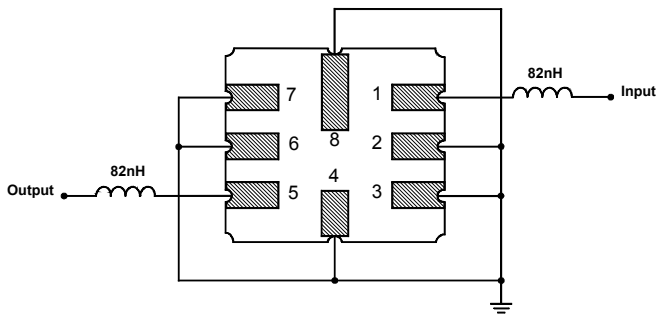
| Rating                           | Value                        | Units |
|----------------------------------|------------------------------|-------|
| Input Power Level                | 10                           | dBm   |
| DC Voltage                       | 12                           | VDC   |
| Storage Temperature <sup>5</sup> | -40 to +85                   | °C    |
| Soldering Temperature            | (10 seconds / 5 cycles max.) | °C    |

### Electrical Connections

| Pin | Connection    |
|-----|---------------|
| 1   | Input         |
| 2   | Input Ground  |
| 3   | Ground        |
| 4   | Case Ground   |
| 5   | Output        |
| 6   | Output Ground |
| 7   | Ground        |
| 8   | Case Ground   |



### Matching Circuit to 50Ω



### Case Dimensions

| Dimension | mm   |      |      | Inches |       |       |
|-----------|------|------|------|--------|-------|-------|
|           | Min  | Nom  | Max  | Min    | Nom   | Max   |
| A         | 4.8  | 5.0  | 5.2  | 0.189  | 0.197 | 0.205 |
| B         | 4.8  | 5.0  | 5.2  | 0.189  | 0.197 | 0.205 |
| C         | 1.30 | 1.50 | 1.7  | 0.050  | 0.060 | 0.067 |
| D         | 1.98 | 2.08 | 2.18 | 0.078  | 0.082 | 0.086 |
| E         | 1.07 | 1.17 | 1.27 | 0.042  | 0.046 | 0.05  |
| F         | 0.50 | 0.64 | 0.70 | 0.020  | 0.025 | 0.028 |
| G         | 2.39 | 2.54 | 2.69 | 0.094  | 0.100 | 0.106 |

### Optional Electrical Connections

| Pin | Connection    |
|-----|---------------|
| 1   | Input Ground  |
| 2   | Input         |
| 3   | Ground        |
| 4   | Case Ground   |
| 5   | Output Ground |
| 6   | Output        |
| 7   | Ground        |
| 8   | Case Ground   |

### Matching Circuit to 50Ω

