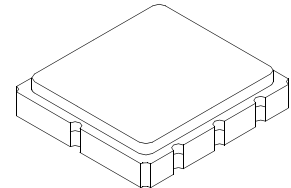


RF1401D

**433.92 MHz
SAW Filter**



**SM3838-8 Case
3.8 x 3.8**

- **Designed for 433.92 MHz Applications**
- **Advanced (Lithium Tantalate) LiTaO₃ design for Low Insertion Loss**
- **Designed for Match to 50Ω, No External LC Required**
- **Hermetically Sealed Surface Mount Package**
- **Complies with Directive 2002/95/EC (RoHS)**



| Item | Minimum | Typical | Maximum | Units |
|--|-------------------|---------|------------------|-------|
| Center Frequency @ 25°C F_C (MHz) | - | 433.920 | - | MHz |
| Minimum I.L. (433.0~434.71 MHz) (dB) IL_{min} | - | 2.8 | 3.8 | dB |
| Pass band (relative to IL_{min}) 433.0~434.71 MHz (dB) | - | 0.5 | 1.0 | dB |
| Pass bandwidth (relative to IL_{min}) BW_3 (KHz) | 1000 | | - | kHz |
| Attenuation: (relative to IL_{min}) (dB) | | | | dB |
| 10~350 MHz (dB) | 52 | 57 | - | |
| 350~393 MHz (dB) | 47 | 52 | - | |
| 393~415 MHz (dB) | 42 | 47 | - | |
| 415~425.5 MHz (dB) | 37 | 45 | - | |
| 443.5~454 MHz (dB) | 12 | 16 | - | |
| 454~475 MHz (dB) | 34 | 39 | - | |
| 475~650 MHz (dB) | 50 | 55 | - | |
| 650~800 MHz (dB) | 45 | 49 | - | |
| Temperature Coeff | -30 | | | ppm/k |
| Operating Temperature Range | -40 | | +85 | °C |
| Lid Symbolization (in addition to Lot and/or Date Codes) | 495 // YWWS | | | |
| Standard Reel Quantity | Reel Size 7 Inch | Note 7 | 500 Pieces/Reel | |
| | Reel Size 13 Inch | | 3000 Pieces/Reel | |



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

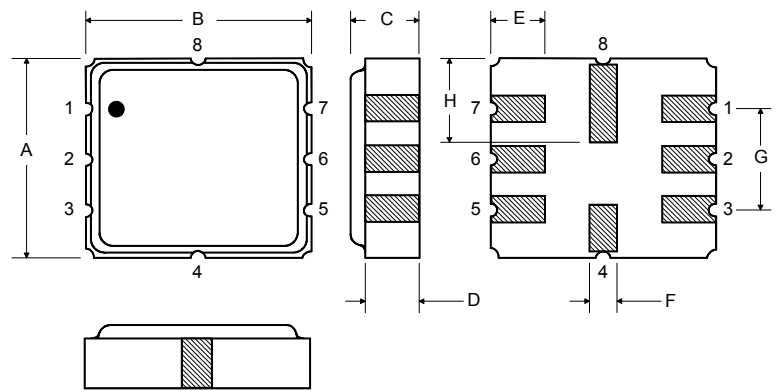
NOTES:

1. All specifications apply over the operating temperature range with filter soldered to the specified demonstration board unless noted otherwise.
2. Ultimate rejection is dependent on PCB layout.
3. Specifications subject to change without notice.
4. Electrostatic Sensitive Device. Observe precautions for handling.
5. US and international patents may apply.
6. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
7. Tape and Reel Standard Per Ansi/EIA 481.
8. This product complies with directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

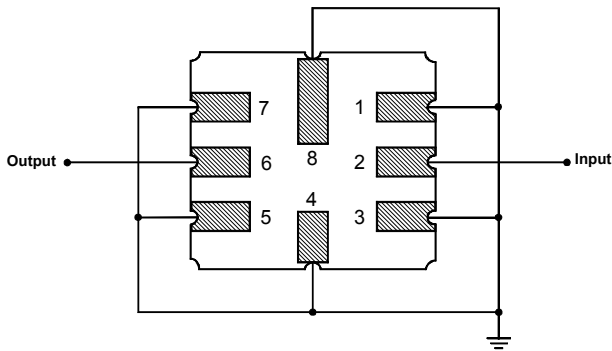
| Rating | Value | Units |
|----------------------------------|------------------------------|-------|
| Input Power Level | 10 | dBm |
| DC Voltage | 12 | VDC |
| Storage Temperature ⁵ | -45 to +90 | °C |
| Soldering Temperature | (10 seconds / 5 cycles max.) | 260 |
| | | °C |

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



Case Dimensions

| Dimension | mm | | | Inches | | |
|-----------|------|------|------|--------|-------|-------|
| | Min | Nom | Max | Min | Nom | Max |
| A | 3.6 | 3.8 | 4.0 | 0.14 | 0.15 | 0.16 |
| B | 3.6 | 3.8 | 4.0 | 0.14 | 0.15 | 0.16 |
| C | 1.00 | 1.20 | 1.40 | 0.04 | 0.05 | 0.055 |
| D | 0.95 | 1.10 | 1.25 | 0.033 | 0.043 | 0.05 |
| E | 0.90 | 1.0 | 1.10 | 0.035 | 0.04 | 0.043 |
| F | 0.50 | 0.6 | 0.70 | 0.020 | 0.024 | 0.028 |
| G | 2.39 | 2.54 | 2.69 | 0.090 | 0.100 | 0.110 |
| H | 1.40 | 1.75 | 2.05 | 0.055 | 0.069 | 0.080 |