

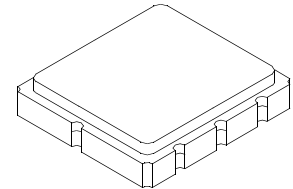


**RF1401D**

- *Designed for 433.92 MHz Applications*
- *Advanced (Lithium Tantalate) LiTaO<sub>3</sub> 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)*



**433.92 MHz  
SAW Filter**



**SM3838-8 Case  
3.8 x 3.8**

**Electrical Characteristics**

Item	Minimum	Typical	Maximum	Units
Center Frequency @ 25°C F <sub>C</sub> (MHz)	-	433.920	-	MHz
Minimum I.L. (433.0~434.71 MHz) (dB) I <sub>L_min</sub>	-	2.8	3.8	dB
Pass band (relative to I <sub>L_min</sub> ) 433.0~434.71 MHz (dB)	-	0.5	1.0	dB
Pass bandwidth (relative to I <sub>L_min</sub> ) BW <sub>3</sub> (KHz)	1000		-	kHz
Attenuation: (relative to I <sub>L_min</sub> ) (dB)				
10~350 MHz (dB)	52	57	-	dB
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 Reel Size 13 Inch	Note 7	500 Pieces/Reel 3000 Pieces/Reel	



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

**Notes:**

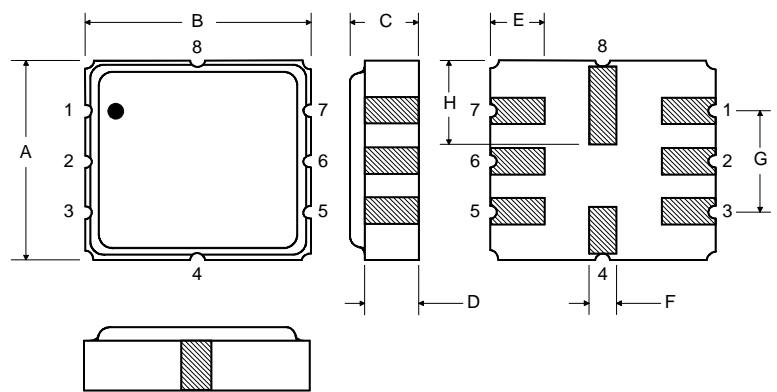
1. All specifications apply over the operating temperature range with filter soldered to the specified demonstration board unless noted otherwise.
2. Ultimate rejection is dependent on PCB layout.
3. Specifications subject to change without notice.
4. Electrostatic Sensitive Device. Observe precautions for handling.
5. US and international patents may apply.
6. RFM, RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
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.

## Absolute Maximum Ratings

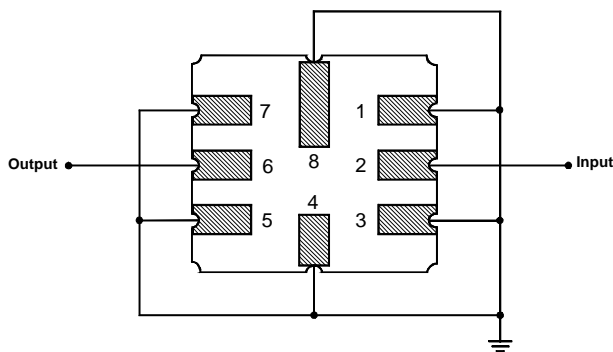
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature <sup>5</sup>	-45 to +90	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	°C

## 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