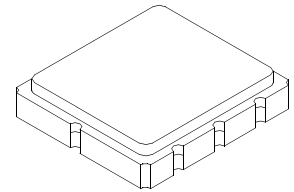


- *Designed for 315.00 MHz Applications*
- *Advanced Lithium Tantalate Design for Low Insertion Loss*
- *Designed for Match to 50Ω, No External LC Required*
- *Hermetically Sealed Surface Mount Package*
- *Complies with Directive 2002/95/EC (RoHS)*



**RF1402D**

**315.0 MHz  
SAW Filter**



**SM3838-8 Case  
3.8 x 3.8**

Item	Minimum	Typical	Maximum	Units
Center Frequency @ 25 °C, $f_C$	-	315	-	MHz
Minimum Insertion Loss ,314.50 to 315.50 MHz , $IL_{min}$	-	2.7	3.7	dB
Pass band relative to $IL_{min}$				
314.80 to 315.2 MHz	-	.4	1.0	dB
314.50 to 315.50 MHz	-	.8	2.0	
3 dB Bandwidth (relative to $IL_{min}$ ), $BW_3$	1000		-	kHz
Attenuation relative to $IL_{min}$				
10 to 250 MHz	55	60	-	dB
250 to 295 MHz	47	53	-	
295 to 307 MHz	36	41	-	
307 to 310 MHz	30	35	-	
320 to 328 MHz	16	20	-	
328 to 335 MHz	39	44	-	
480 to 680 MHz	44	49	-	
Temperature Coeff		-30		ppm/k
Operating Temperature Range	-40		+85	°C
Lid Symbolization		496    YWWS		
Standard Reel Quantity	Reel Size 7 Inch Reel Size 13 Inch	Note 7	500 Pieces/Reel 3000 Pieces/Reel	

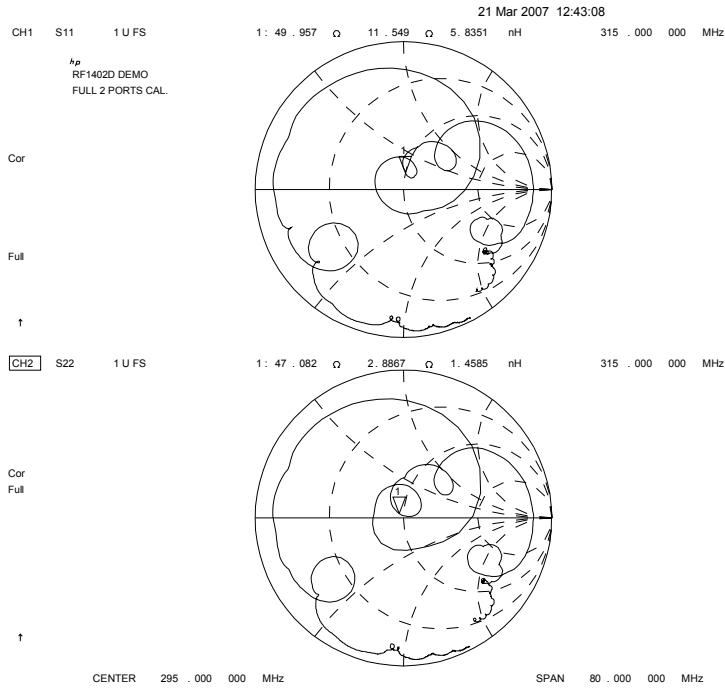
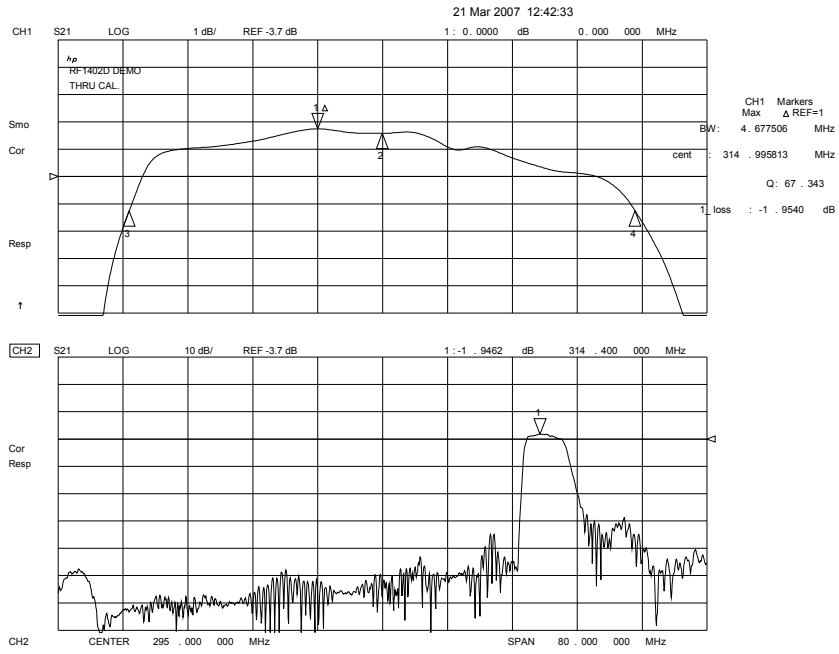


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**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.
4. Electrostatic Sensitive Device. Observe precautions for handling.
5. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.
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.

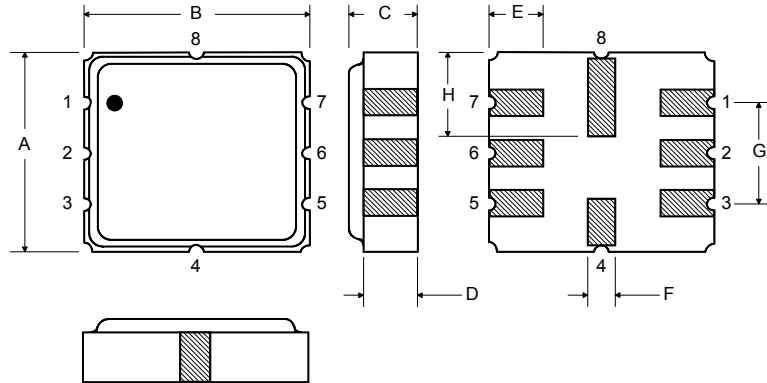
# Filter Response and Impedance Plots



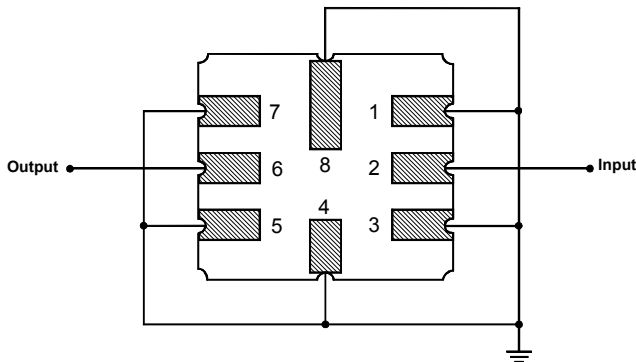
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature <sup>5</sup>	-45 to +90	°C
Soldering Temperature, 10 seconds / 5 cycles maximum	260	°C

### 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