

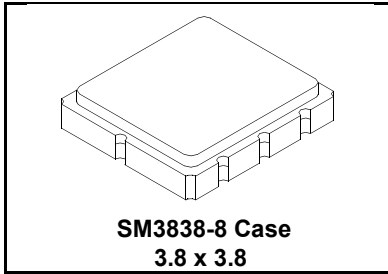


AEC-Q200

This component was always RoHS compliant from the first date of manufacture.

**RF1402D**

**315.0 MHz  
SAW Filter**



- *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)*
- *Tape and Reel Standard per ANSI/EIA-481*



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		500 Pieces/Reel	
	Reel Size 13 Inch		3000 Pieces/Reel	

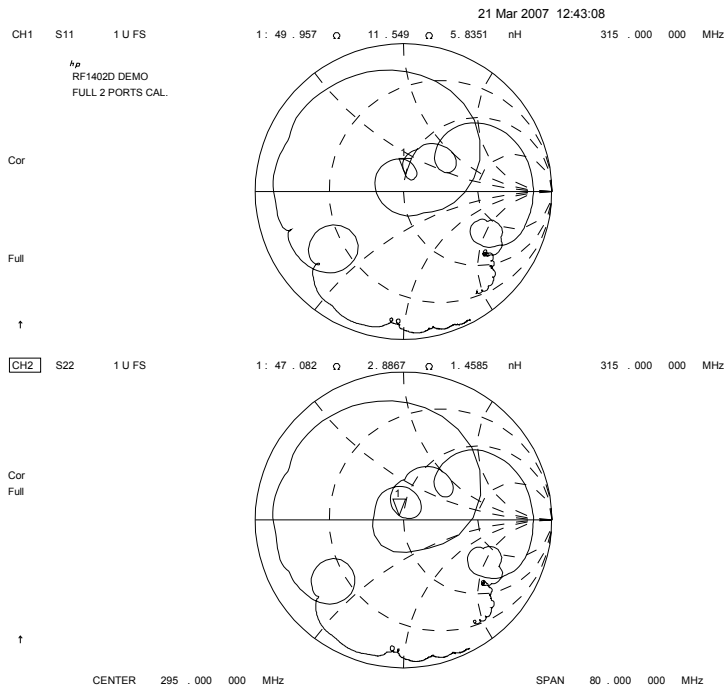
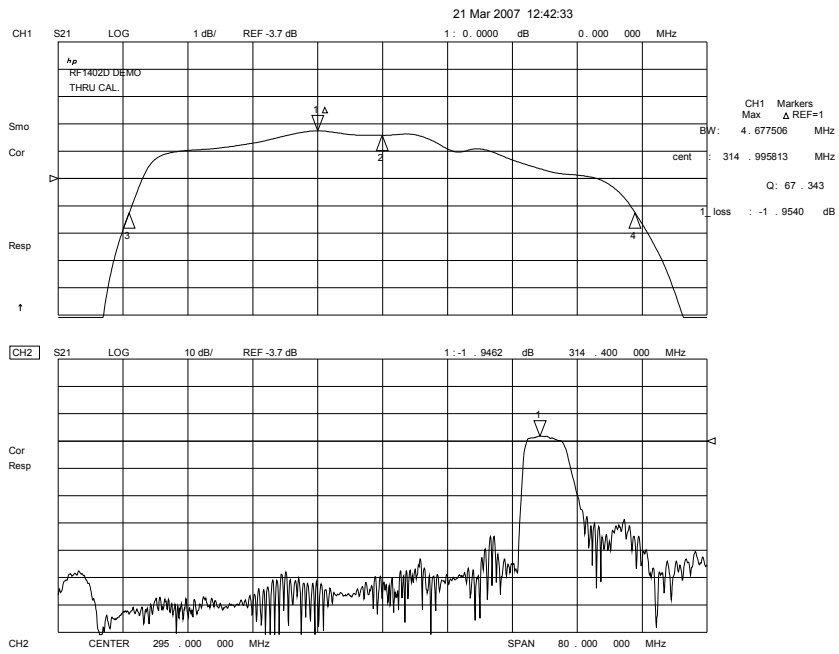


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

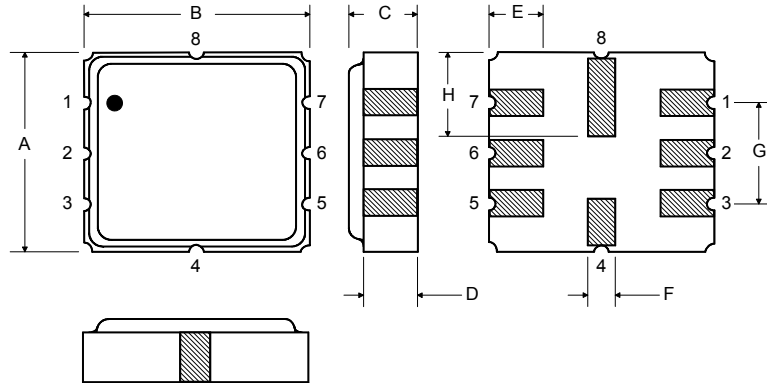
# Filter Response and Impedance Plots



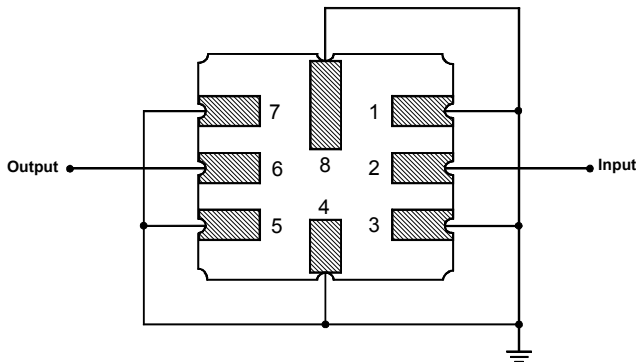
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature <sup>5</sup>	-45 to +90	°C
Soldering Temperature, 10 seconds / 5 cycles maximum	260	°C

### 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

## Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
4. Time: 5 times maximum.

