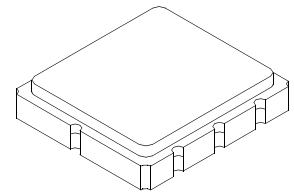


RF1402D

**315.0 MHz
SAW Filter**



**SM3838-8 Case
3.8 x 3.8**

- *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*
- *Moisture Sensitivity Level: 1*
- *AEC-Q200 Qualified*

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, <u>YWWS</u>		
Standard Reel Quantity	Reel Size 7 Inch Reel Size 13 Inch		500 Pieces/Reel 3000 Pieces/Reel	

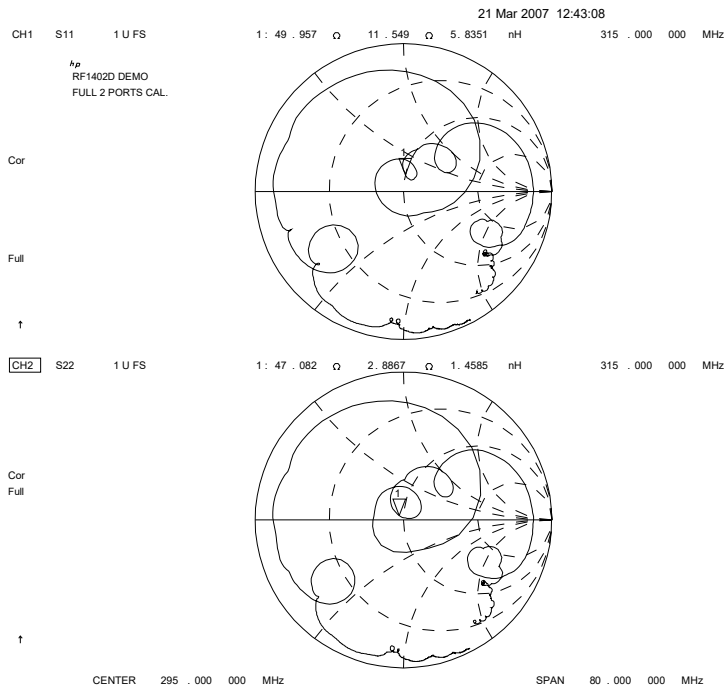
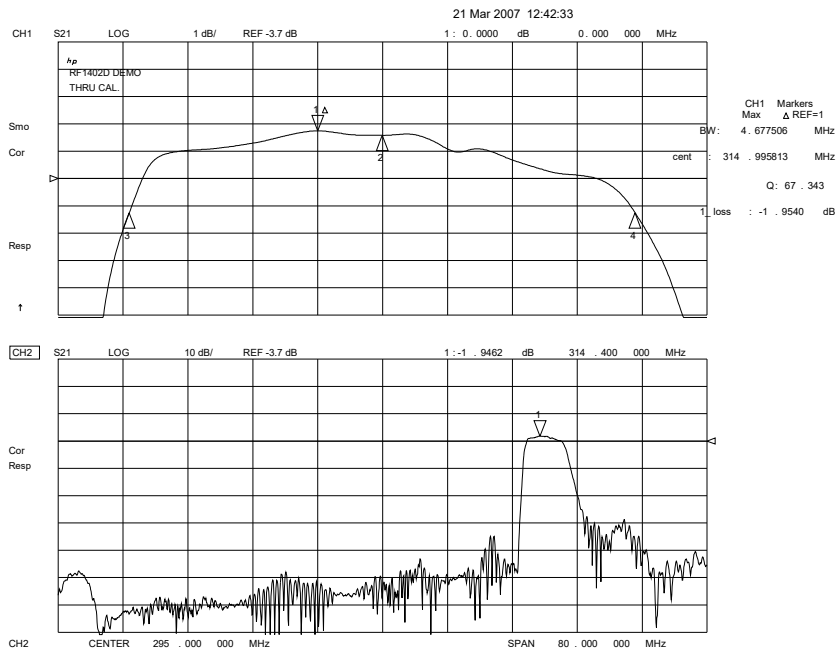


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

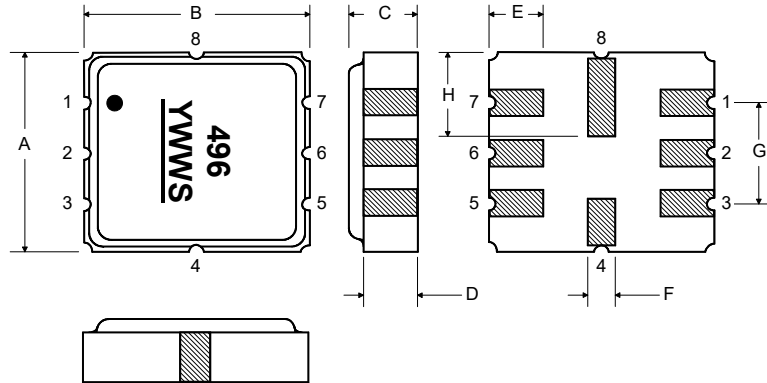
Filter Response and Impedance Plots



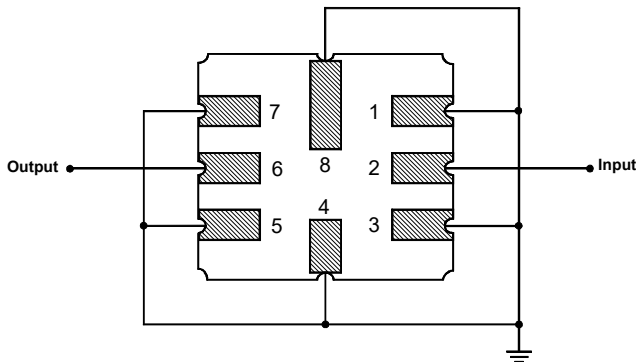
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature ⁵	-45 to +90	°C
Soldering Temperature, 10 seconds / 5 cycles maximum	260	°C

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.

