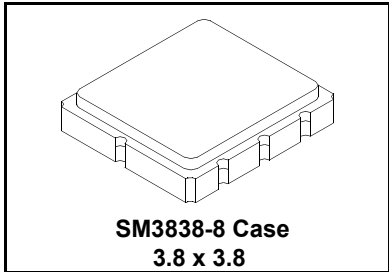


- *Designed for 433.92 MHz Applications*
- *Advanced (Lithium Tantalate) LiTaO3 design for Low Insertion Loss*
- *Designed for Match to 50Ω, No External LC Required*
- *Hermetically Sealed Surface Mount Package*
- *Complies with Directive 2002/95/EC (RoHS)*
- *Tape and Reel Standard per ANSI/EIA-481*
- *Moisture Sensitivity Level: 1*
- *AEC-Q200 Qualified*

RoHS  
Compliant

**RF1401D**

**433.92 MHz  
SAW Filter**



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, <u>YWWS</u>			
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.**

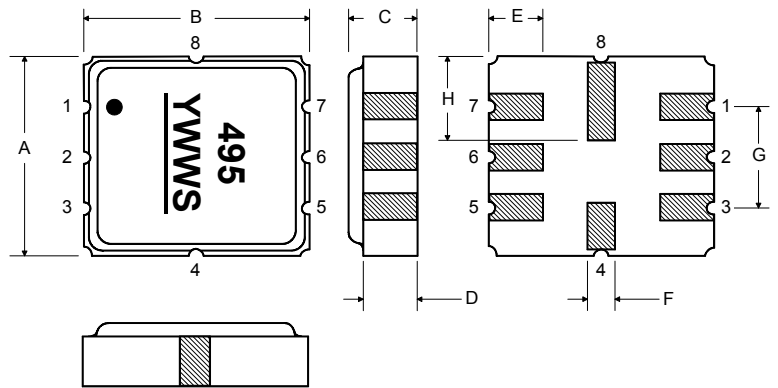
**NOTES:**

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

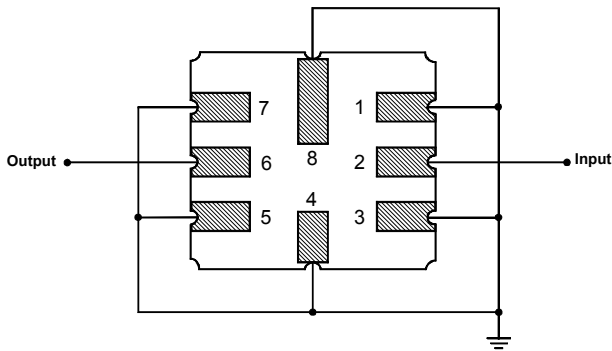
Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	12	VDC
Storage Temperature <sup>5</sup>	-45 to +90	°C
Soldering Temperature	(10 seconds / 5 cycles max.)	260
		°C

### 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.

