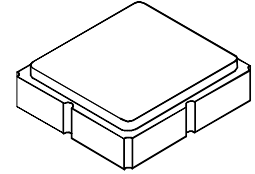


**SF2489E**

**916.5 MHz  
SAW Filter**



**SM3030-8**

- **Low-loss UHF SAW Filter**
- **3.0 x 3.0 mm Surface-mount Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

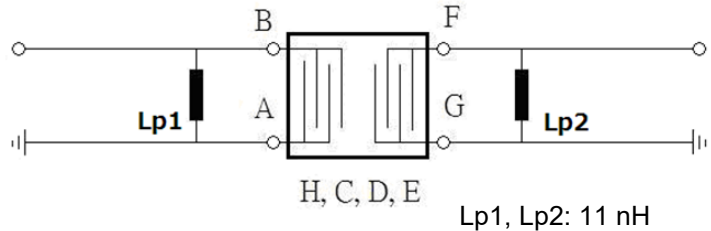
**Maximum Rating**

Rating	Value	Units
DC Voltage on any Non-ground Terminal	3	V
Input Power Level: Pass Band	33	dBm
Stop Band:	15	dBm
Operable Temperature Range	+40 to +85	°C
Specification Temperature Range	0 to +50	°C
Storage Temperature Range	-40 to +85	°C

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_C$			916.5		MHz
Maximum Insertion Loss, 699 to 886.5 MHz 886.5 to 870 MHz 870 to 894 MHz 1710 to 1880 MHz 1880 to 2170 MHz	$IL_{MAX}$			0.8	2.5	dB
				1.0	2.5	
				1.2	2.5	
				3.0	3.5	
				4.0	4.5	
Attenuation, 0 dB Reference: 915.5 to 917.5 MHz			25	36		dB
Temperature Coefficient of Frequency				-36		ppm/k
Source Impedance $Z_S$				50		ohm
Load Impedance $Z_L$				50		

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint		
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	E2, YWWS		
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel	
	Reel Size 13 inch	3000 Pieces/Reel	

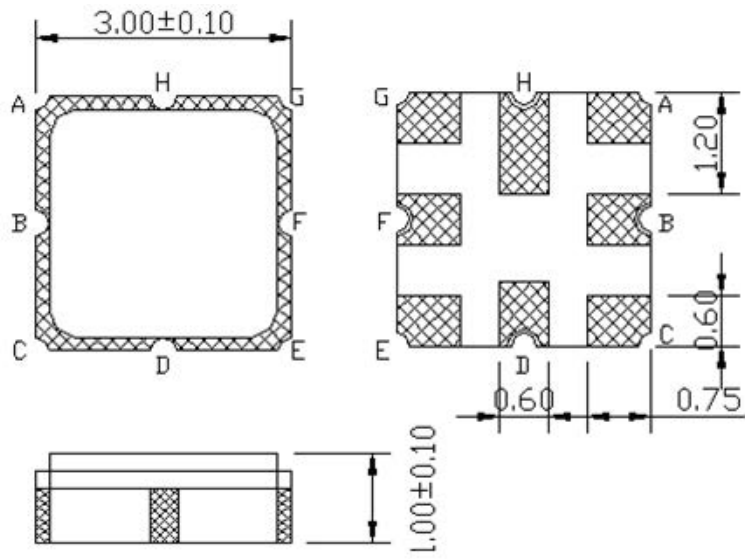
Electrical Connections	
Input	B
Output	F
All Others	A,C,D,E,G,H



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

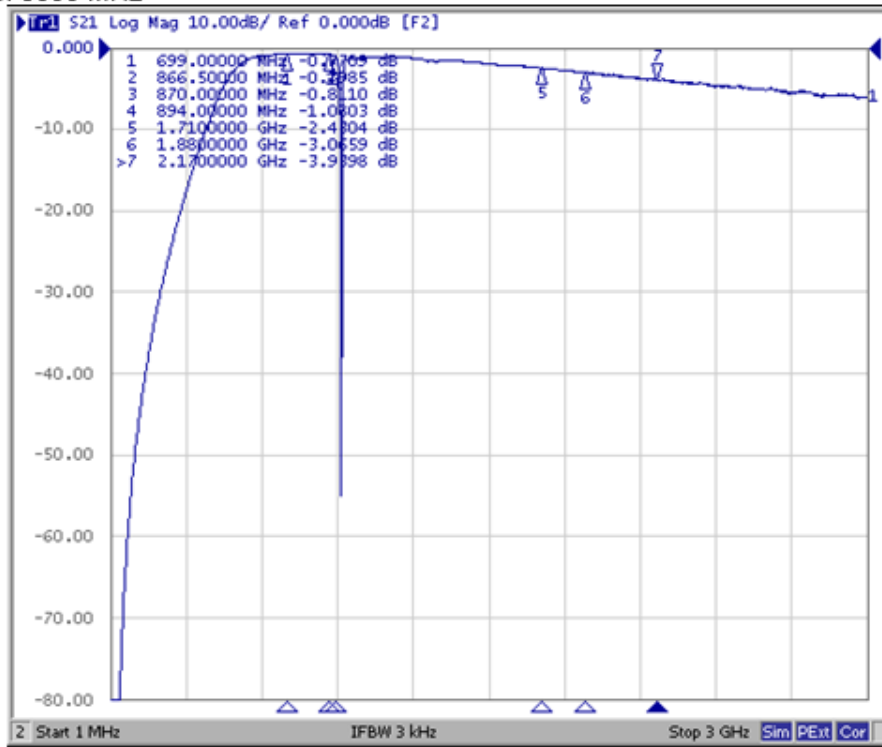
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. This component was always RoHS compliant from the first date of manufacture.

Outline Drawing:

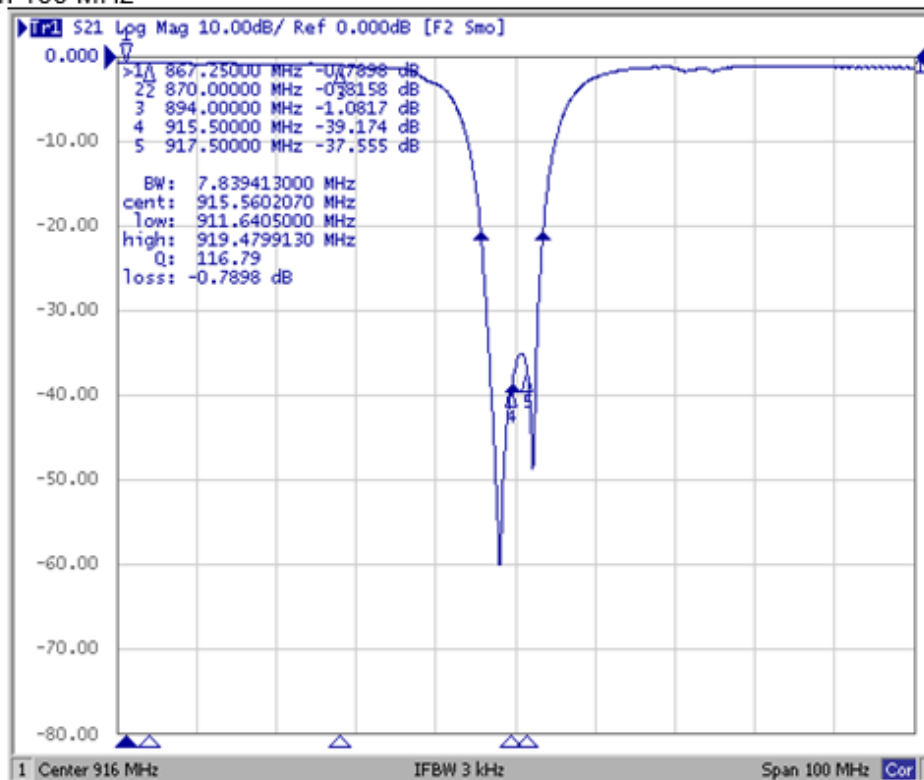


## Frequency Characteristics:

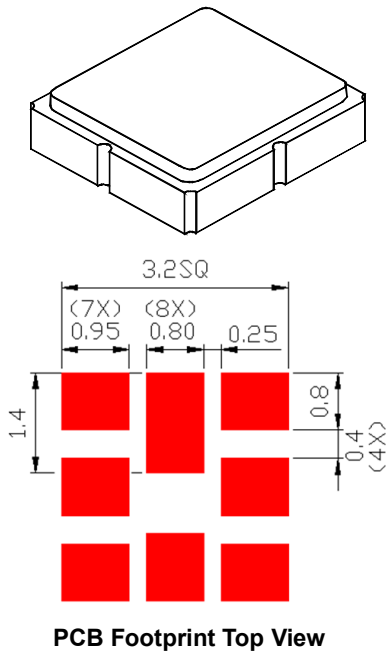
Span 3000 MHz



Span 100 MHz



## 8-Terminal Ceramic Surface-Mount Case 3.0 x 3.0 mm Nominal Footprint



**Case and PCB Footprint Dimensions**

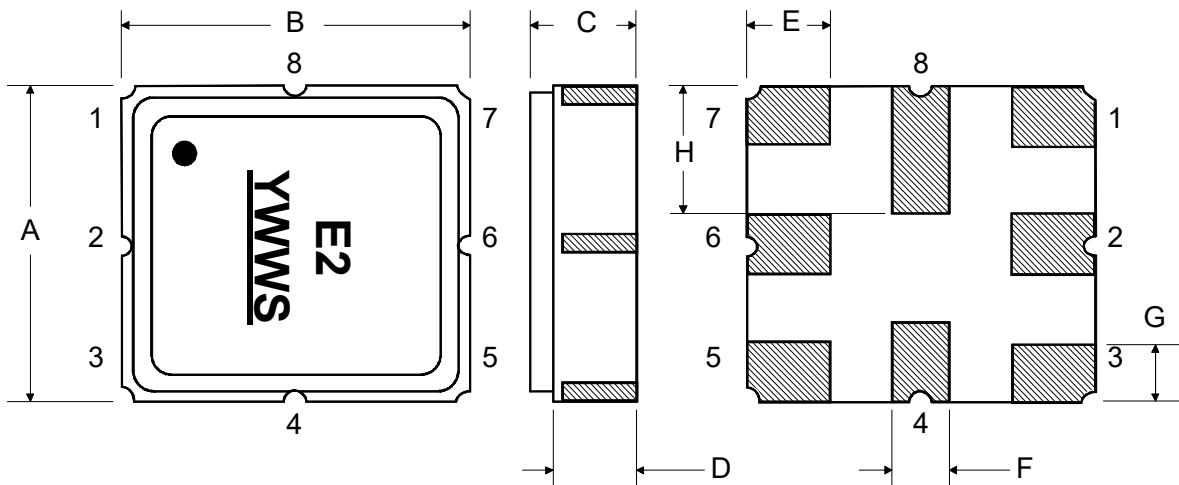
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
<b>A</b>	2.90	3.00	3.10	0.114	0.118	0.122
<b>B</b>	2.90	3.00	3.10	0.114	0.118	0.122
<b>C</b>	0.90	1.00	1.10	0.035	0.039	0.043
<b>D</b>	0.79	0.92	1.05	0.031	0.036	0.041
<b>E</b>	0.62	0.75	0.88	0.024	0.029	0.034
<b>F</b>	0.47	0.60	0.73	0.018	0.023	0.028
<b>G</b>	0.50	0.60	0.70	0.019	0.023	0.027
<b>H</b>	1.10	1.20	1.30	0.043	0.047	0.051

**Case Materials**

Materials	
Solder Pad Plating	0.3 to 1.0 $\mu\text{m}$ Gold over 1.27 to 8.89 $\mu\text{m}$ Nickel
Lid Plating	2.0 to 3.0 $\mu\text{m}$ Nickel
Body	$\text{Al}_2\text{O}_3$ Ceramic

**TOP VIEW**

**BOTTOM VIEW**



## Packaging:

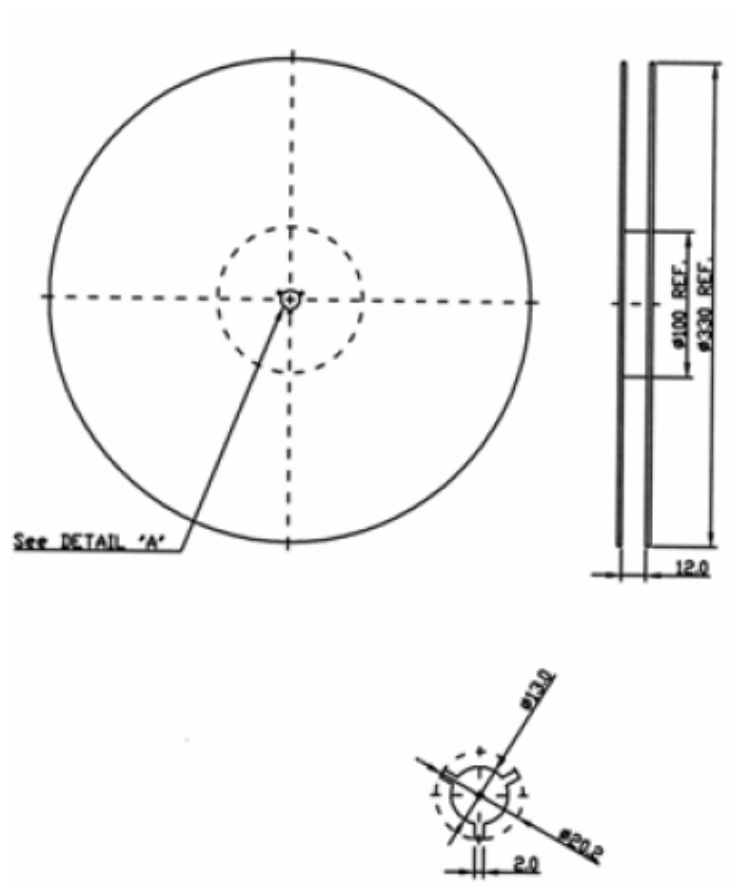
Reel Dimension

Tape and Reel Standard per ANSI/EIA-481

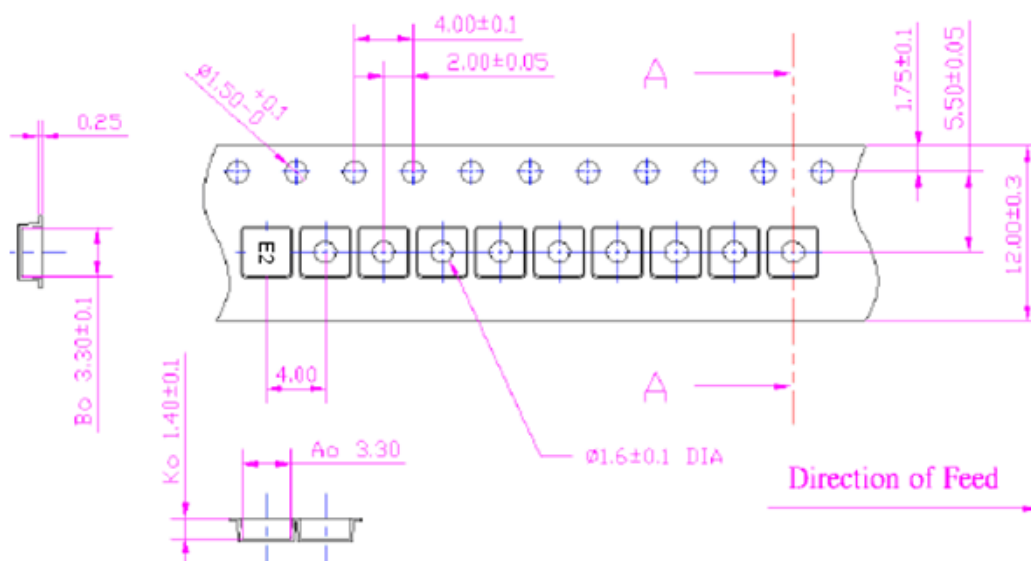
Reel Count:

7" = 500

13" = 3000



## Tape Dimension:



## 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.

