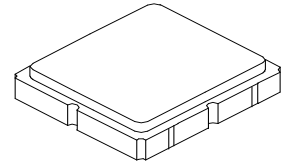


**SF2470E**

**1412.5 MHz  
SAW Filter**



**SM3030-6**

- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

**Maximum Rating**

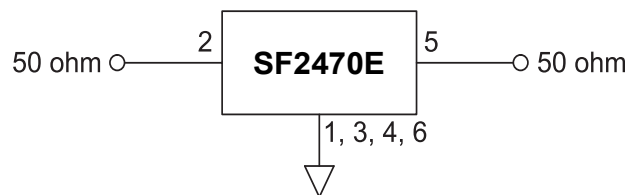
Rating	Value	Units
Input Power Level	20	dB <sub>m</sub>
DC Voltage	3	V
Specification Temperature Range	5 to +40	°C
Storage Temperature in Tape and Reel	-40 to +85	°C

**Electrical Characteristics**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f <sub>C</sub>			1412.5		MHz
Insertion Loss, 1390 to 1435 MHz	IL			2.0	3.5	dB
Amplitude Ripple, 1390 to 1435 MHz				0.8	2.0	dB
Attenuation Referenced to 0 dB						dB
DC to 960 MHz			50			
960 to 1000 MHz			43			
1000 to 1320 MHz			40			
1500 to 3000 MHz			30			
3000 to 5000 MHz			20			
Temperature Coefficient of Frequency				-36		ppm/°C

Case Style	SM3030-6 3.0 x 3.0 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator	B8, <u>YWWS</u>

**Measurement Circuit**



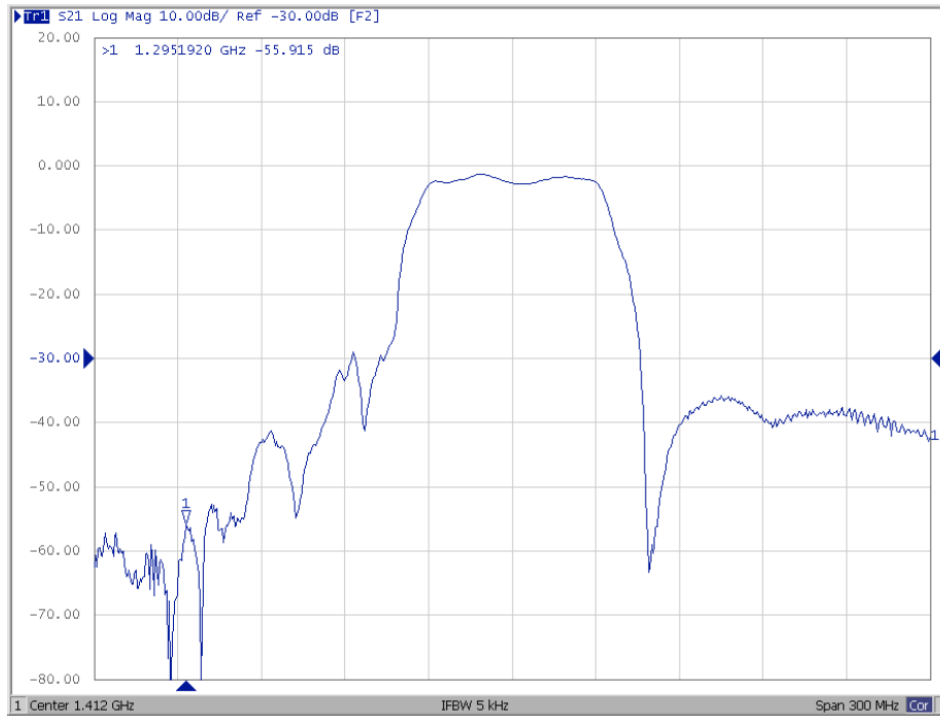
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

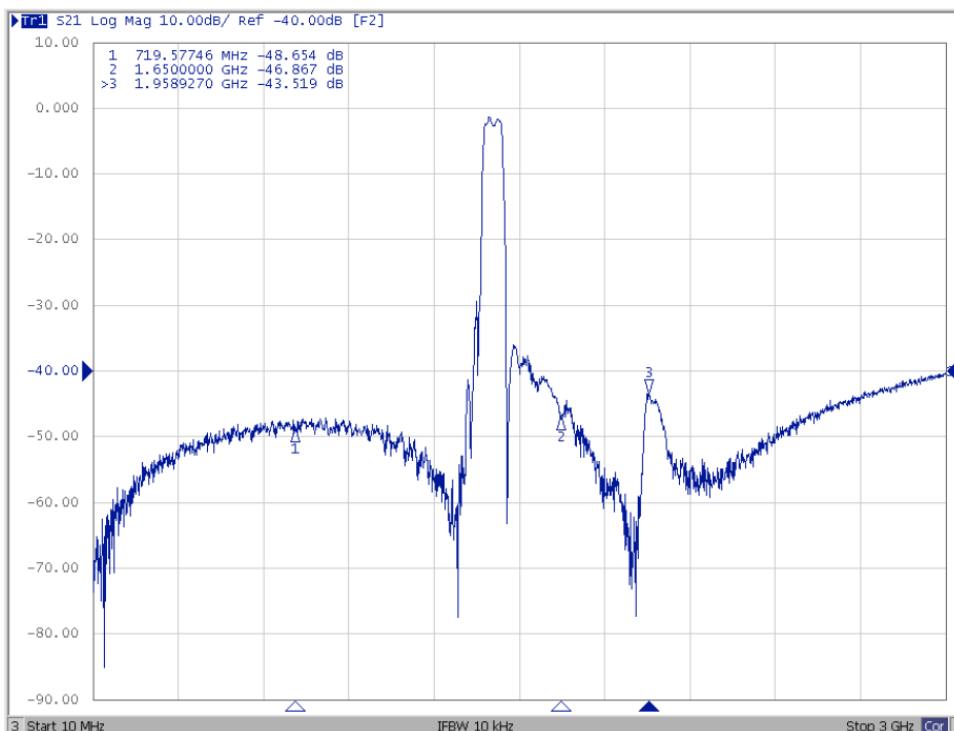
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

## Frequency Characteristics

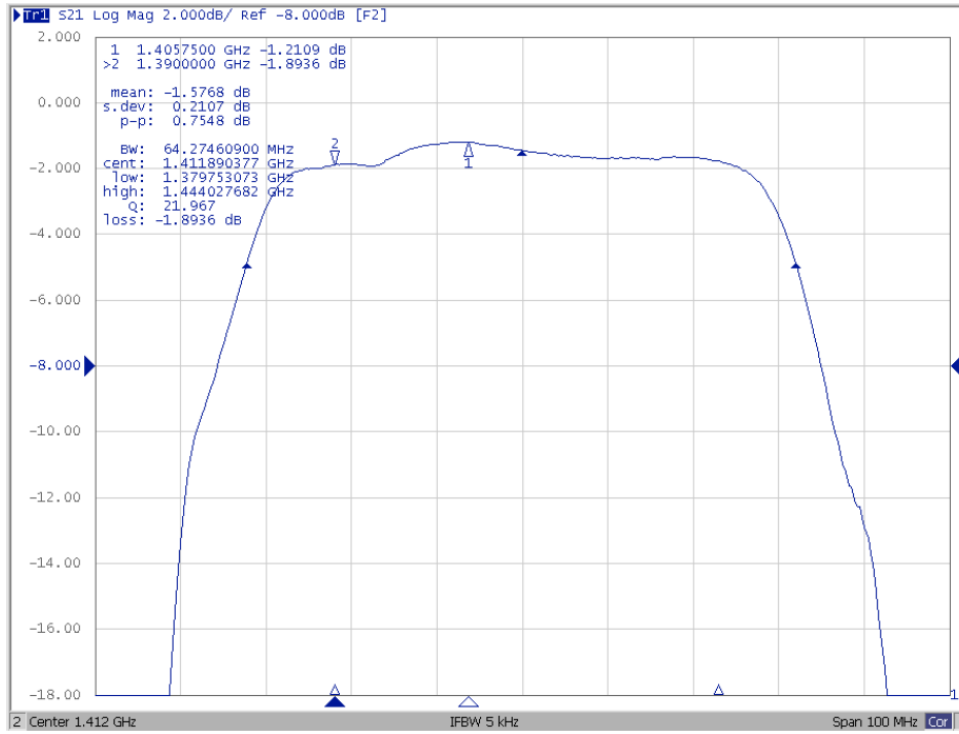
### Span 300 MHz



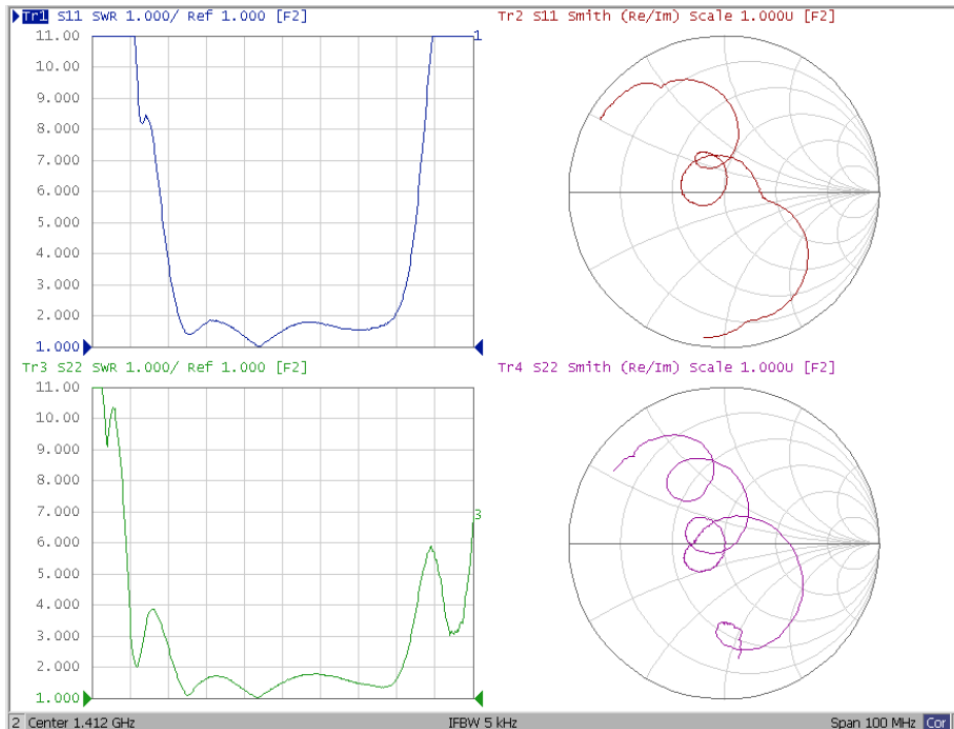
### Span 3000 MHz



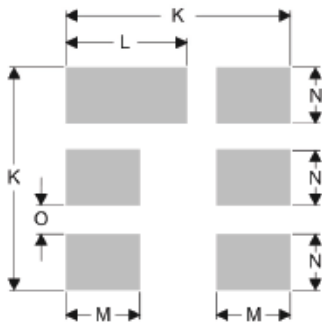
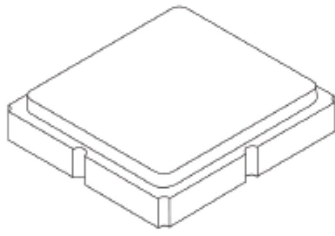
# Span 80 MHz



## Reflective Functions



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



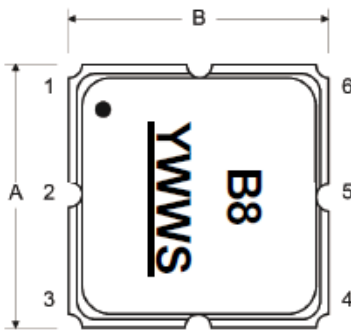
**PCB Footprint Top View**

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.00	3.13	0.113	0.118	0.123
B	2.87	3.00	3.13	0.113	0.118	0.123
C	1.12	1.25	1.38	0.044	0.049	0.054
D	0.77	0.90	1.03	0.030	0.035	0.040
E	2.67	2.80	2.93	0.105	0.110	0.115
F	1.47	1.60	1.73	0.058	0.063	0.068
G	0.72	0.85	0.98	0.028	0.033	0.038
H	1.37	1.50	1.63	0.054	0.059	0.064
I	0.47	0.60	0.73	0.019	0.024	0.029
J	1.17	1.30	1.43	0.046	0.051	0.056
K		3.20			0.126	
L		1.70			0.067	
M		1.05			0.041	
N		0.81			0.032	
O		0.38			0.015	

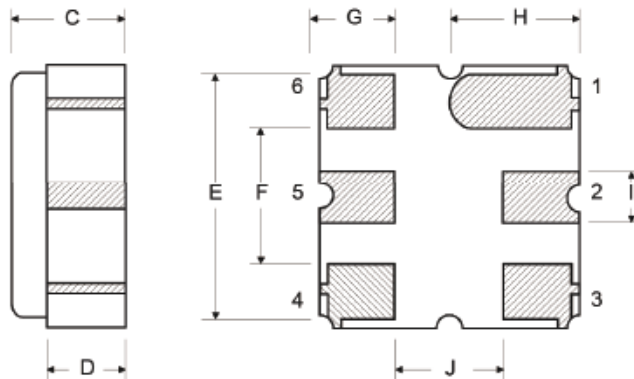
### Case Materials

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

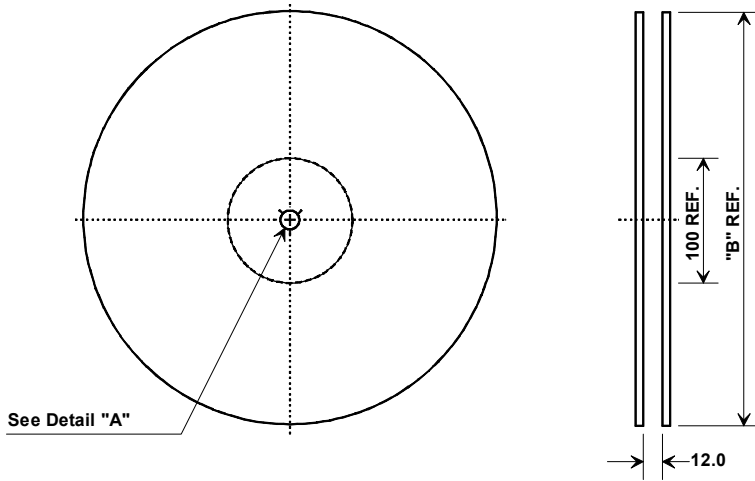
**Top View**



**Bottom View**

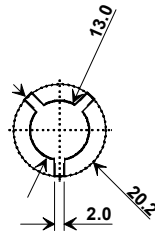


## Tape and Reel Specifications



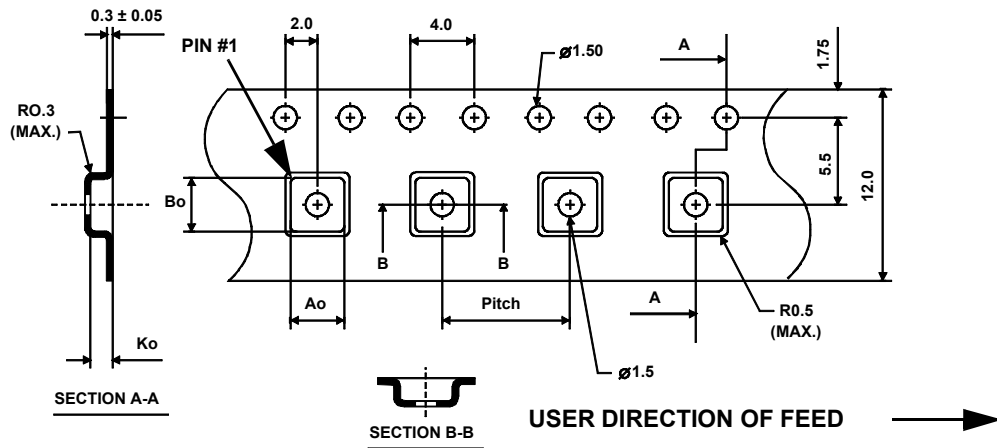
Tape and Reel Standard per ANSI/EIA-481

"B "		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



### COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
<b>Ao</b>	4.25 mm
<b>Bo</b>	4.25 mm
<b>Ko</b>	1.30 mm
<b>Pitch</b>	8.0 mm
<b>W</b>	12.0 mm



# 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.

