

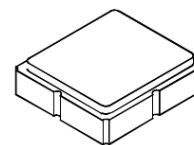
- **Complies with Directive 2002/95/EC (RoHS)**
- **Notch filter 1583 MHz BW 48 MHz**
- **Moisture Sensitivity Level: 1**
- **AEC-Q200 Qualified**

**Maximum Rating**

Rating	Value	Units
Input Power Level	+10	dBm
DC Voltage on any Non-ground Terminal	3	V
Operating Temperature Range	-30 to +70	°C
Tape and Reel Storage Temperature Range	-40 to +85	°C
Component Storage Temperature Range	-50 to +125	°C
Solder Reflow Temperature, 10 seconds/5 cycles maximum	260	°C

**SF2481E**

**1583 MHz  
SAW Filter**



**SM3030-8**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_c$			1583		MHz
<b>Maximum Insertion Loss</b>	IL					dB
689 MHz~960 MHz				1.0	2.0	
1710 MHz~1805 MHz				1.2	2.5	
1805 MHz~2170 MHz				2.5	3.0	
2300 MHz~2690 MHz				3.5	4.0	
Attenuation, 0 dB Reference:						
1559 MHz~1607 MHz			14	15		dB
Single-ended source impedance:	$Z_S = 50 \Omega$					
Balanced load impedance:	$Z_L = 50 \Omega$					

Case Style	SM3030-8 3.0 x 3.0 mm Nominal Footprint					
Lid Symbolization, Y=year, WW=week, S=shift, dot=pin 1 indicator	D2, <u>YWWS</u>					
Standard Reel Quantity	Reel Size 7 inch					500 Pieces/Reel
	Reel Size 13 inch					3000 Pieces/Reel

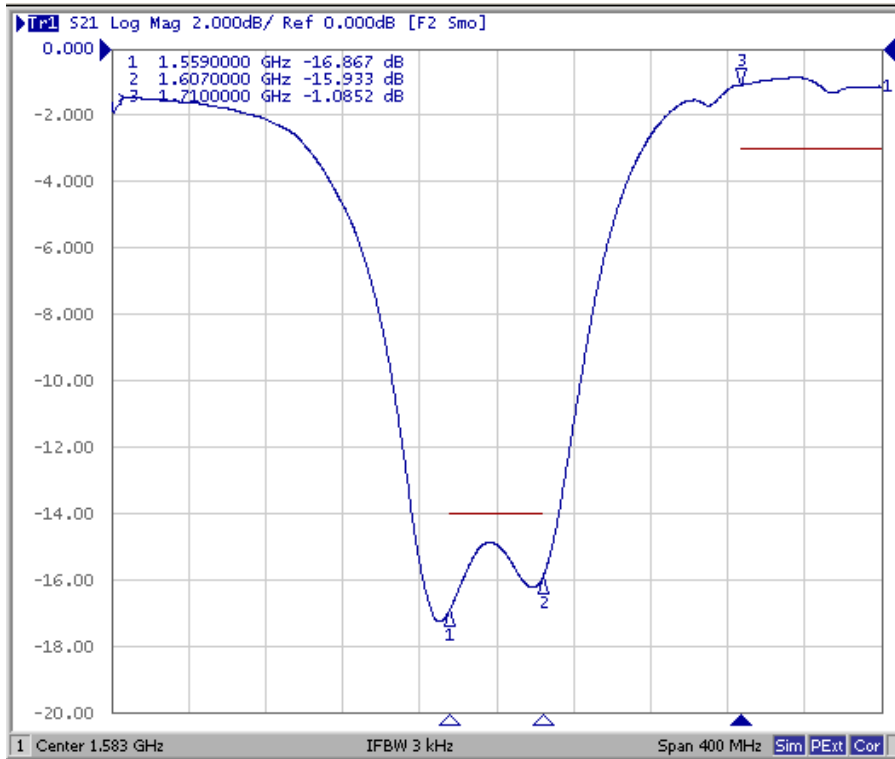
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**NOTES:**

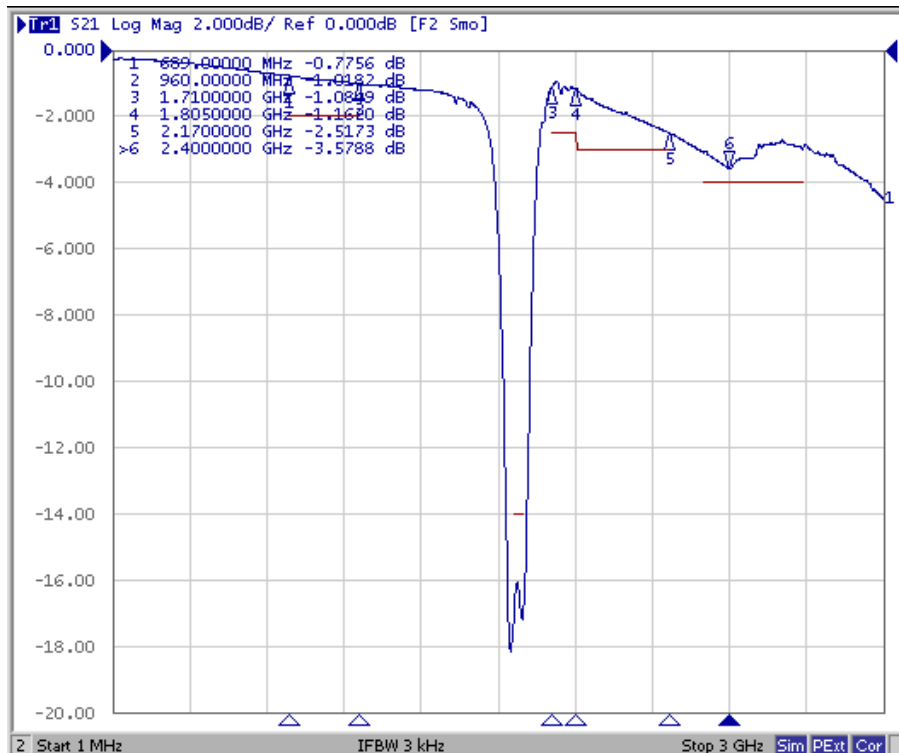
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

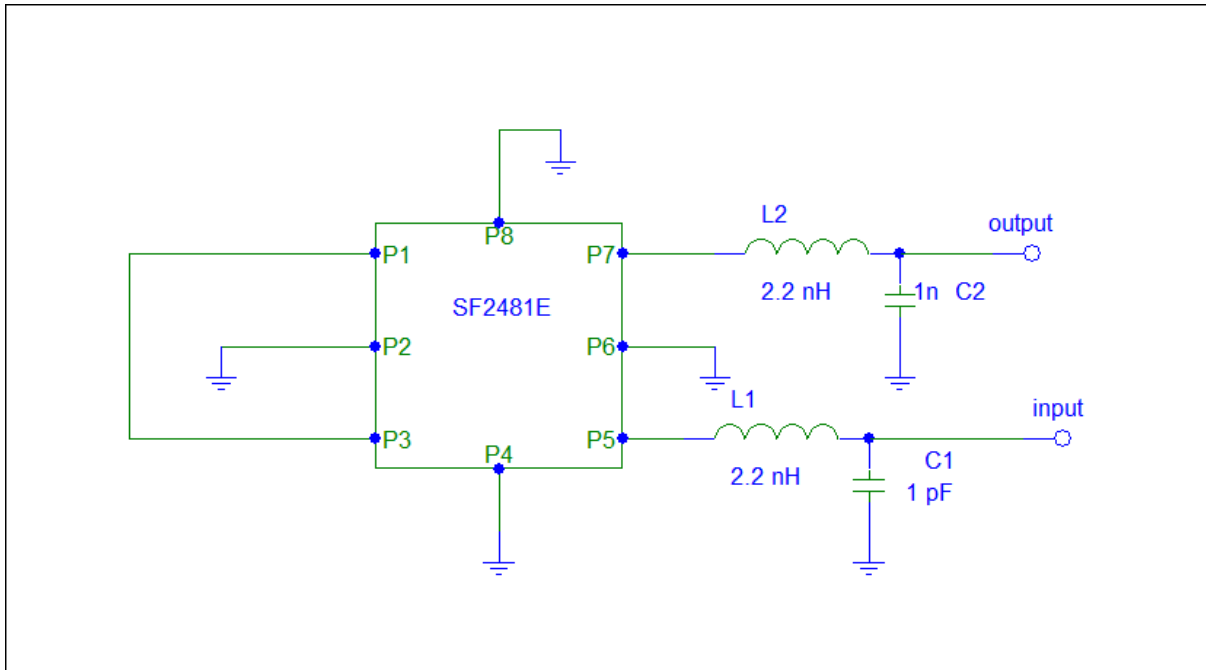
# Frequency Characteristics:

## Span 400 MHz

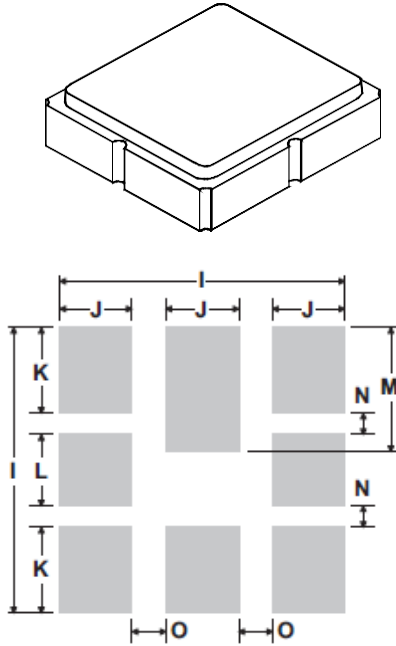


## Span 3 GHz





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



PCB Footprint Top View

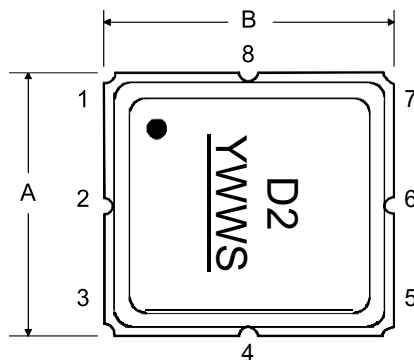
Case and PCB Footprint Dimensions

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	-	-	1.10	-	-	0.043
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.024	0.029
G	0.47	0.60	0.73	0.018	0.024	0.029
H	1.07	1.20	1.33	0.042	0.047	0.052
I		3.19			0.126	
J		0.81			0.032	
K		0.96			0.038	
L		0.81			0.032	
M		1.39			0.055	
N		0.23			0.009	
O		0.38			0.015	

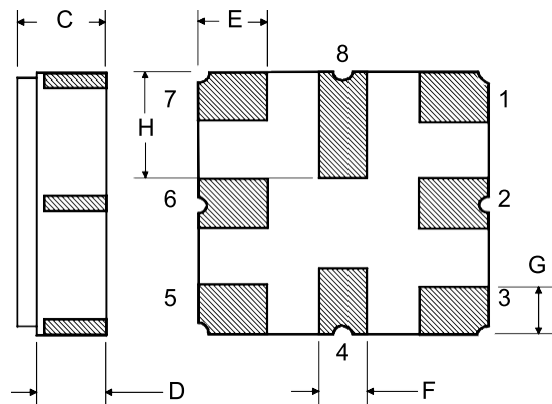
Case Materials

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

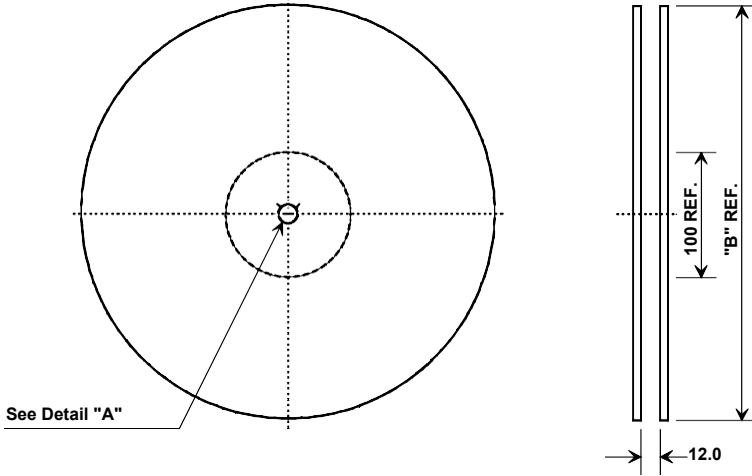


BOTTOM VIEW

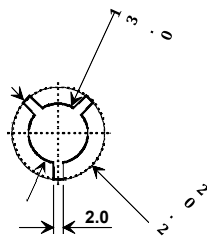


# Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

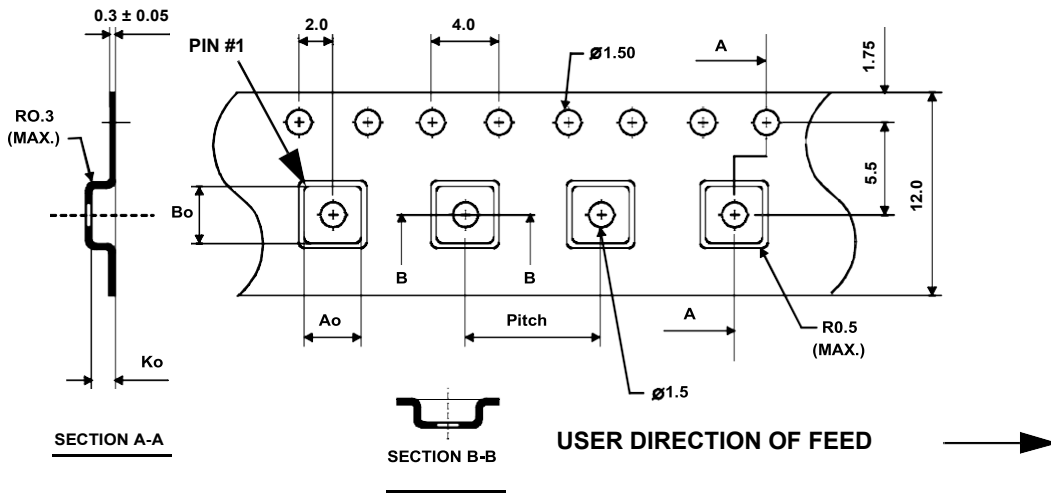


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.4 mm
Pitch	8.0 mm
W	12.0 mm

## COMPONENT ORIENTATION and DIMENSIONS



## 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.

