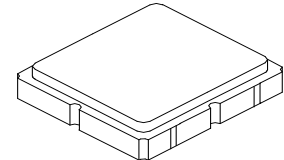


- Low Insertion Loss
- 3.0 X 3.0 X 1.2 mm Surface-Mount Case
- Single Ended Input and Output
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1
- AEC-Q200 Qualified

RoHS  
Compliant

SF2401E-1

2000 MHz  
SAW Filter



SM3030-8

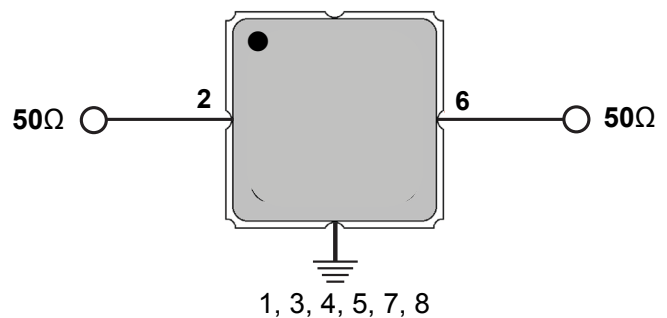
**Absolute Maximum Ratings**

Rating	Value	Units
Maximum Input Power	15	dBm
DC Voltage	3	V
Storage Temperature Range	-20 to +85	°C
Operating Temperature Range	25	°C

**Electrical Characteristics**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_c$			2000		MHz
2 dB Bandwidth			20	37		MHz
Insertion Loss (1990 - 2010 MHz)	IL			2.75	5	dB
Amplitude Ripple (1990 - 2010 MHz)				1.0	1.3	
Attenuation (Reference level from $f_c$ , dB)						dB
10 to 1940 MHz			35	41		
1940 to 1950 MHz			30	35		
2050 to 3420 MHz			32	36		
3420 to 3700 MHz			26	32		
3700 to 4300 MHz			12	16		
4300 to 4500 MHz			9	14		
Input/Output Impedance				50		$\Omega$
Case Style				3.0 X 3.0 - 8 pin		
Lid Symbolization (Y=year, WW=week, S=shift)				H1, <u>YWWS</u>		

Connection	Terminals
Input	2
Output	6
Case Ground	All others

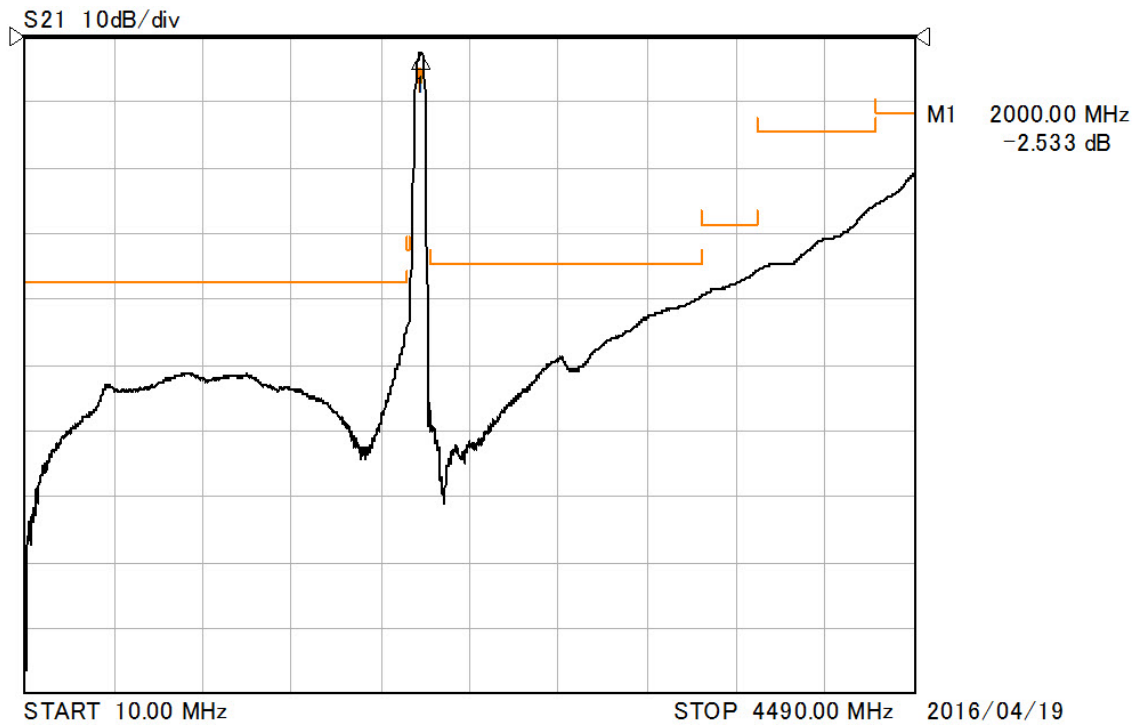
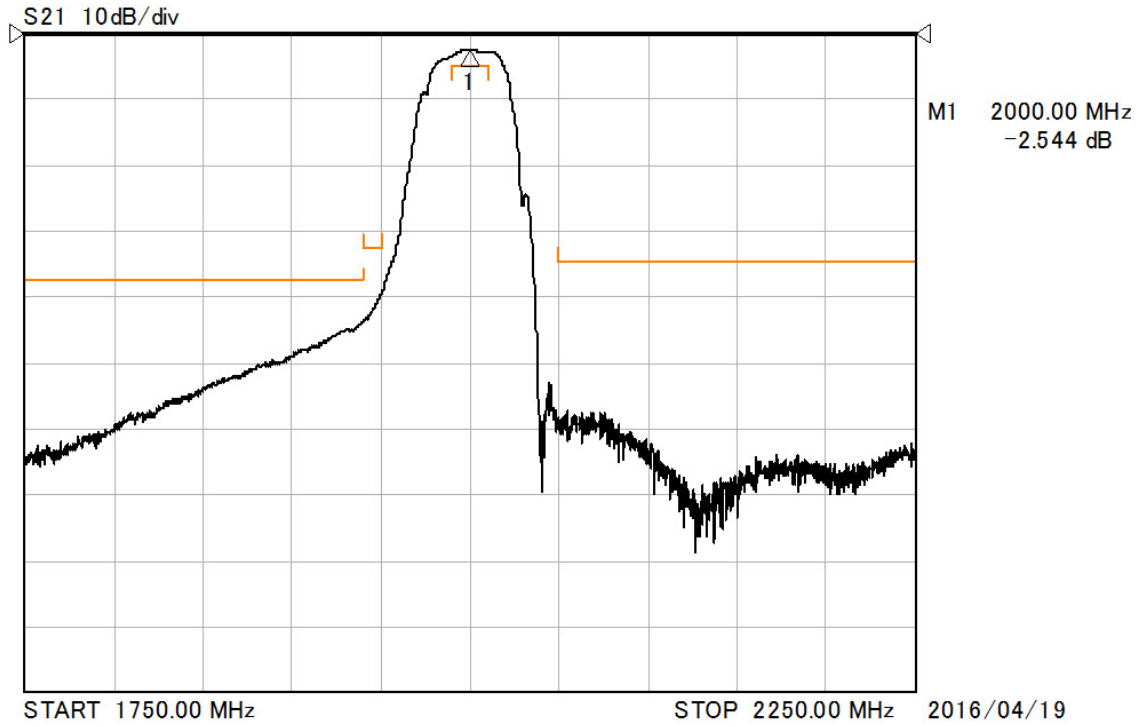


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

**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.

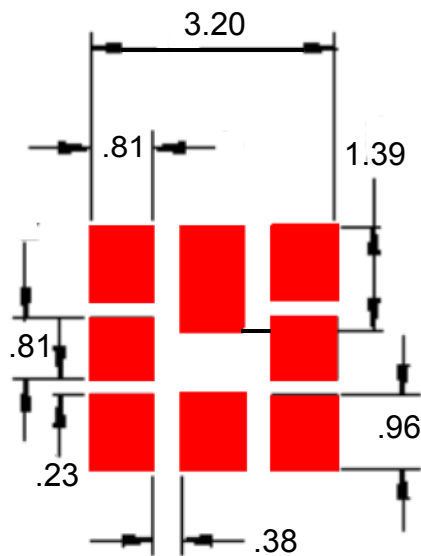
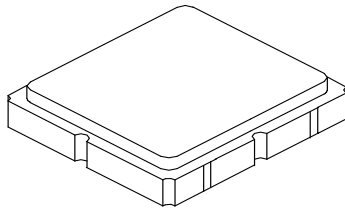
# FREQUENCY CHARACTERISTICS



# SM3030-8 Case

## 8-Terminal Ceramic Surface-Mount Case

### 3.0 X 3.0 mm Nominal Footprint



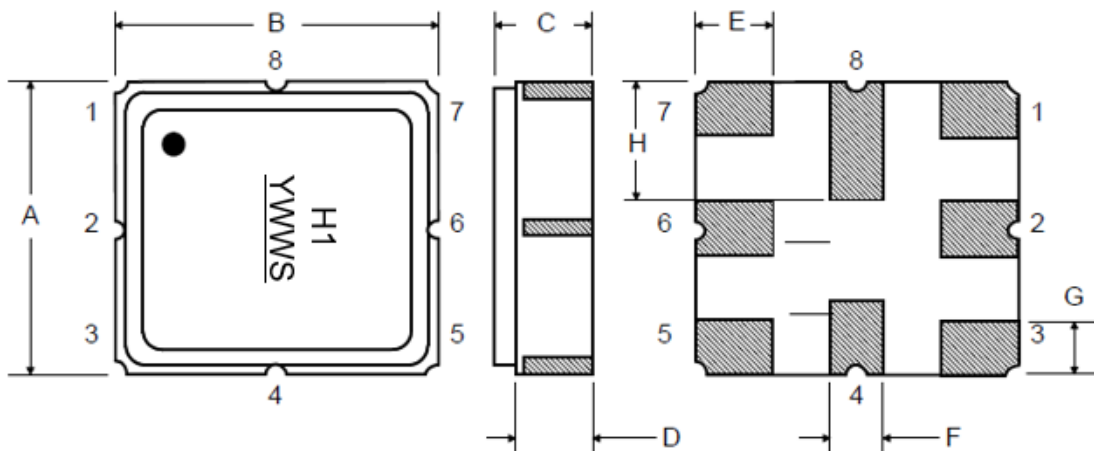
PCB Footprint

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.87	3.0	3.13	0.113	0.118	0.123
B	2.87	3.0	3.13	0.113	0.118	0.123
C	1.14	1.27	1.40	0.045	0.050	0.055
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

Materials	
Solder Pad Termination	Au plating 30 - 60 $\mu$ Inches (76.2-152 $\mu$ M) over 80-200 $\mu$ Inches (203-508 $\mu$ M) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 $\mu$ Inches Thick
Body	Al <sub>2</sub> O <sub>3</sub> Ceramic

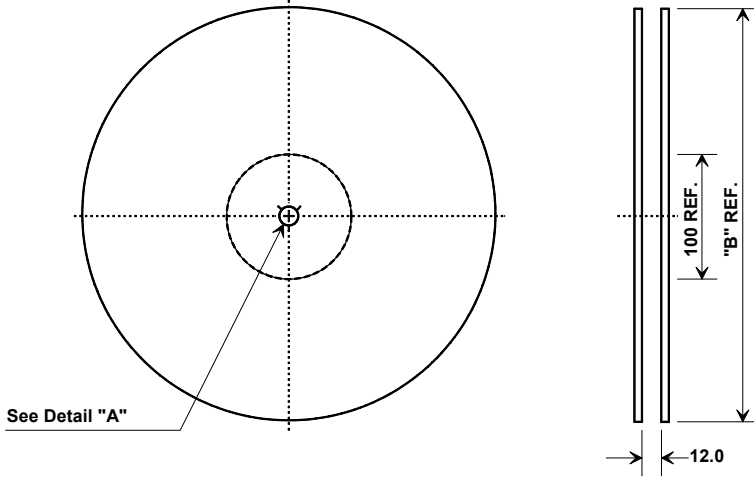
TOP VIEW

BOTTOM VIEW

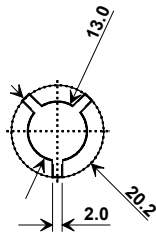


# Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

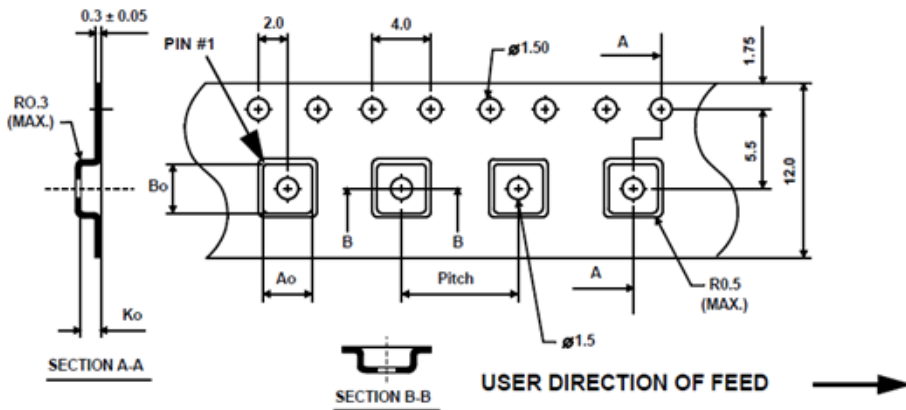


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



## COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
<b>Ao</b>	3.3 mm
<b>Bo</b>	3.3 mm
<b>Ko</b>	1.4 mm
<b>Pitch</b>	8.0 mm
<b>W</b>	12.0, ±0.3 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.

