

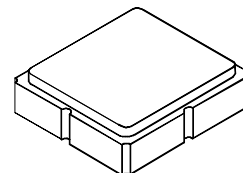
- **Low-loss UHF SAW Filter**
- **3.0 x 3.0 mm Surface-mount Package**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**
- **AEC-Q200 Qualified**

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	-45 to +125	°C
Specification Temperature Range	0 to +50	°C
Storage Temperature Range	-40 to +85	°C

SF2471E

**915 MHz
SAW Filter**

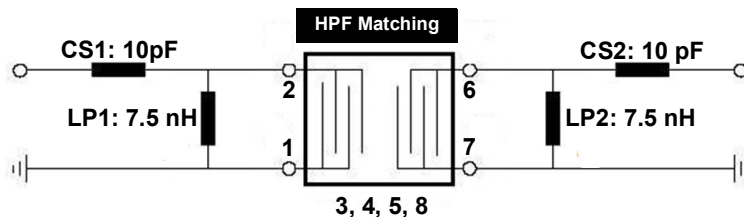


SM3030-8

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			915		MHz
Maximum Insertion Loss, 824 to 894 MHz	IL_{MAX}			1.8	2.5	dB
1850 to 1990 MHz				2.7	3.1	
Attenuation, 0 dB Reference:						dB
902.0 to 908.5 MHz (0 to +25°C)			1.0	4.0		
(+25 to +50°C)			1.5	4.0		
908.5 to 910.5 MHz			14	30		
910.5 to 920.5 MHz			14	19		
920.5 to 928.5 MHz			1.5	3.0		
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	B6, <u>Y</u> WWS
Standard Reel Quantity	500 Pieces/Reel
Reel Size 7 inch	
Reel Size 13 inch	3000 Pieces/Reel

Electrical Connections	
Input	2
Output	6
All Others - Ground	1, 3, 4, 5, 7, 8



CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

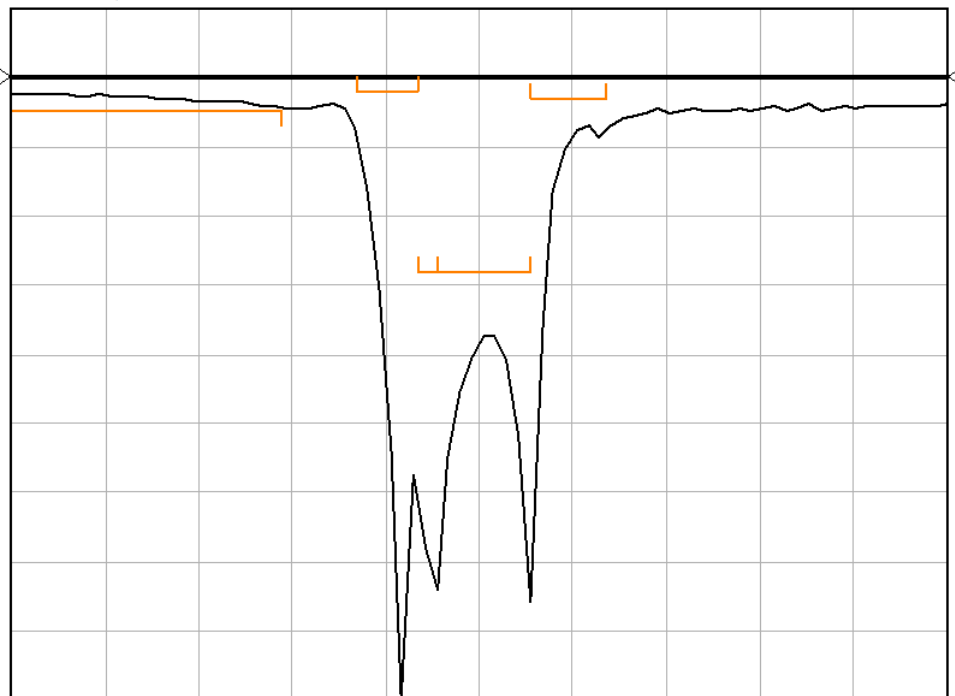
NOTES:

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.

Transfer Function

Span: 100 MHz

S21 5dB/div



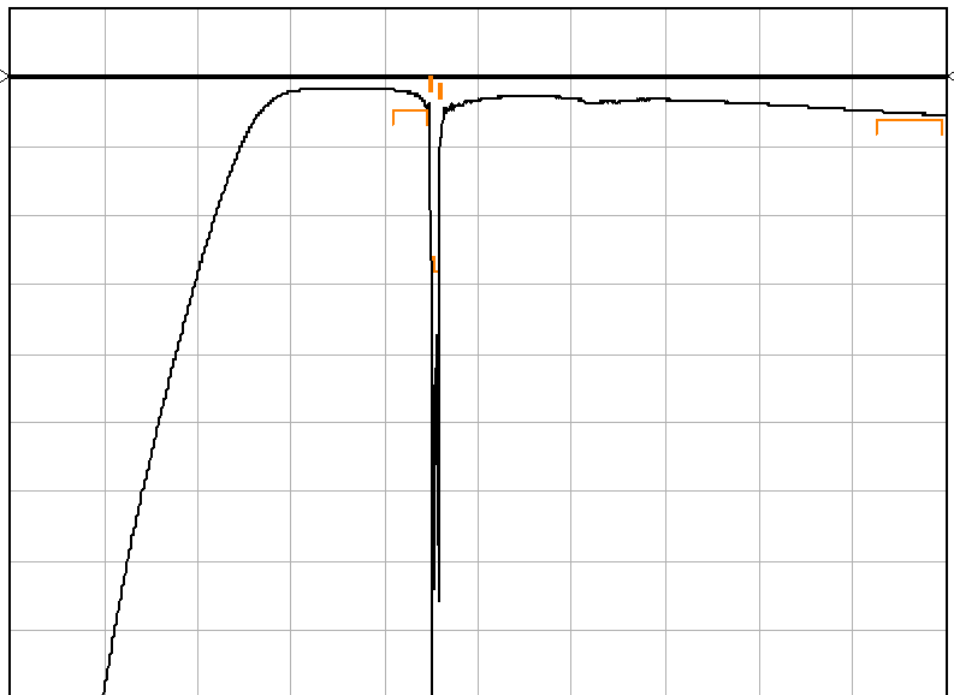
START 865.00 MHz

STOP 965.00 MHz

2019/03/01

Span: 2000 MHz

S21 5dB/div



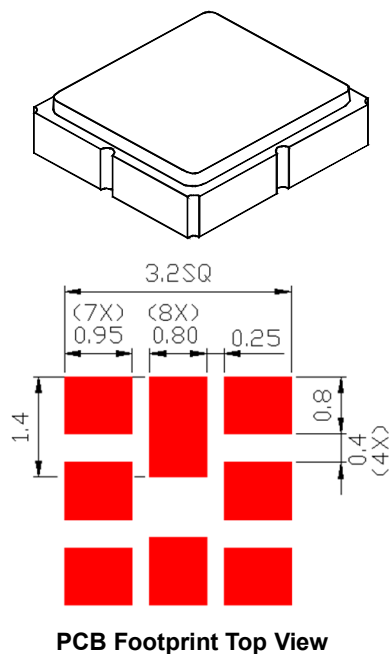
START 10.00 MHz

STOP 2000.00 MHz

2019/03/01

8-Terminal Ceramic Surface-Mount Case

3.0 x 3.0 mm Nominal Footprint



Case and PCB Footprint Dimensions

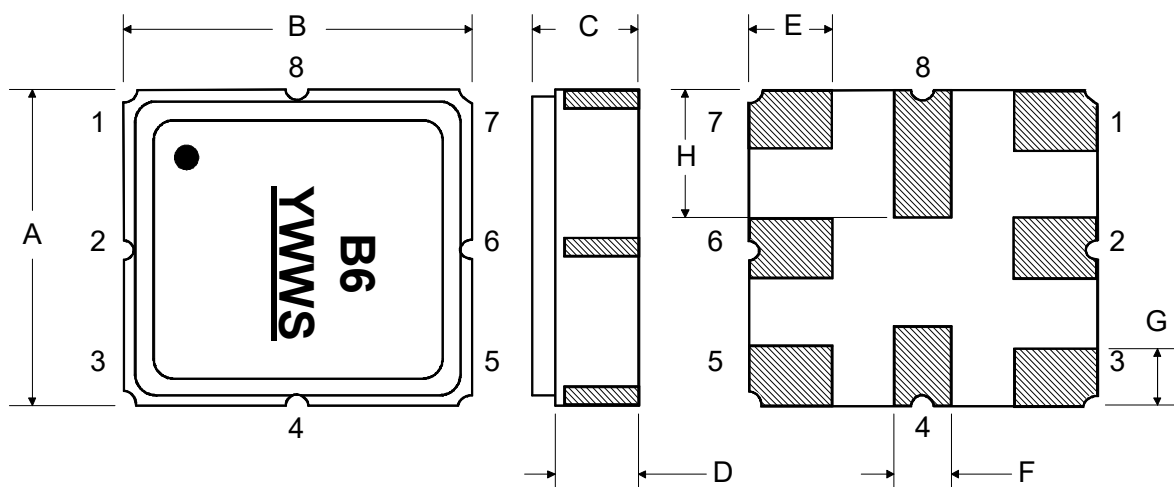
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.90	3.00	3.10	0.114	0.118	0.122
B	2.90	3.00	3.10	0.114	0.118	0.122
C	0.90	1.00	1.10	0.035	0.039	0.043
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.023	0.028
G	0.50	0.60	0.70	0.019	0.023	0.027
H	1.10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

Case Materials

Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al ₂ O ₃ Ceramic

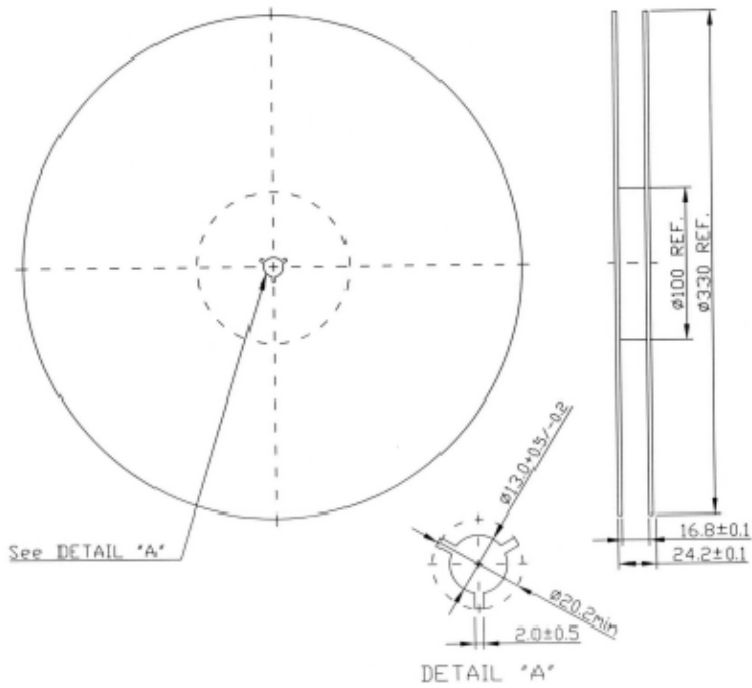
TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications

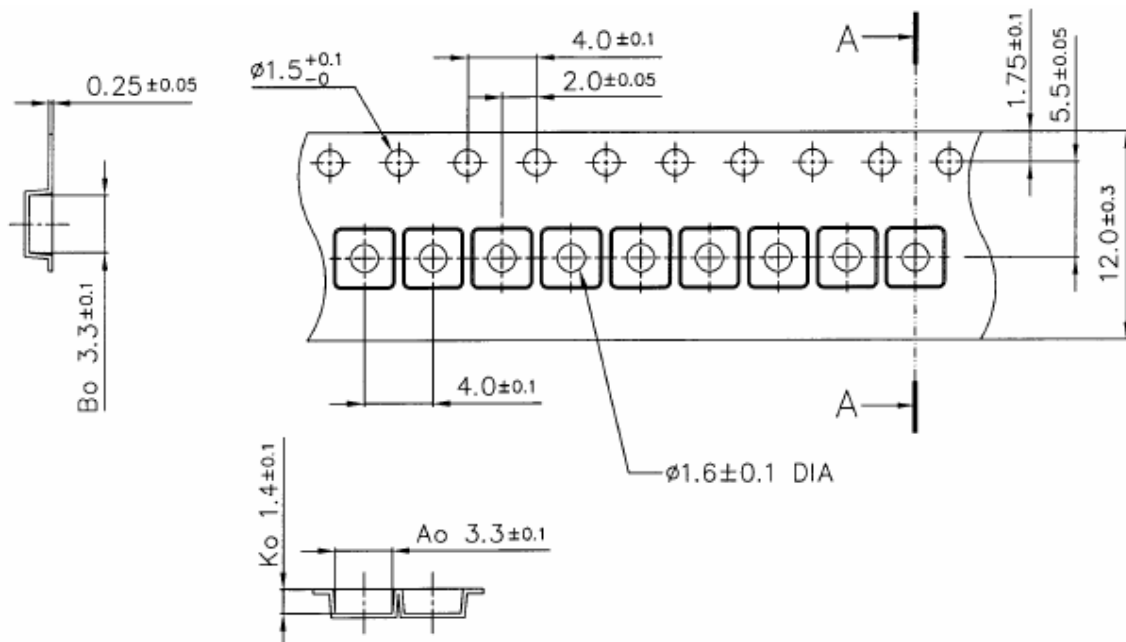
Tape and Reel Standard per ANSI/EIA481



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

Carrier Tape Dimensions	
Ao	3.30 mm
Bo	3.30 mm
Ko	1.4 mm
Pitch	4.0 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.

