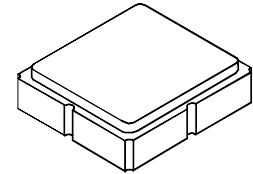


SF2472E

869 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**
- **AEC-Q200 Qualified**

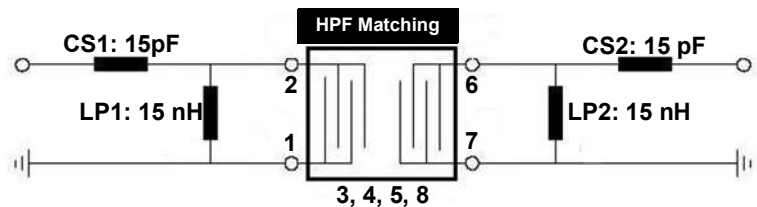
Maximum Rating

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

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			869		MHz
Maximum Insertion Loss, 698 to 862 MHz (0 to +25°C) (+25 to +50°C) 880 to 960 MHz 1710 to 1880 MHz 2110 to 2690 MHz	IL_{MAX}			1.9	2.5	dB
				1.9	2.9	
				1.0	2.5	
				1.7	2.5	
Attenuation, 0 dB Reference: 868 to 870 MHz			20	24		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	B7_YWWS	
Standard Reel Quantity	Reel Size 7 inch	500 Pieces/Reel
	Reel Size 13 inch	3000 Pieces/Reel

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



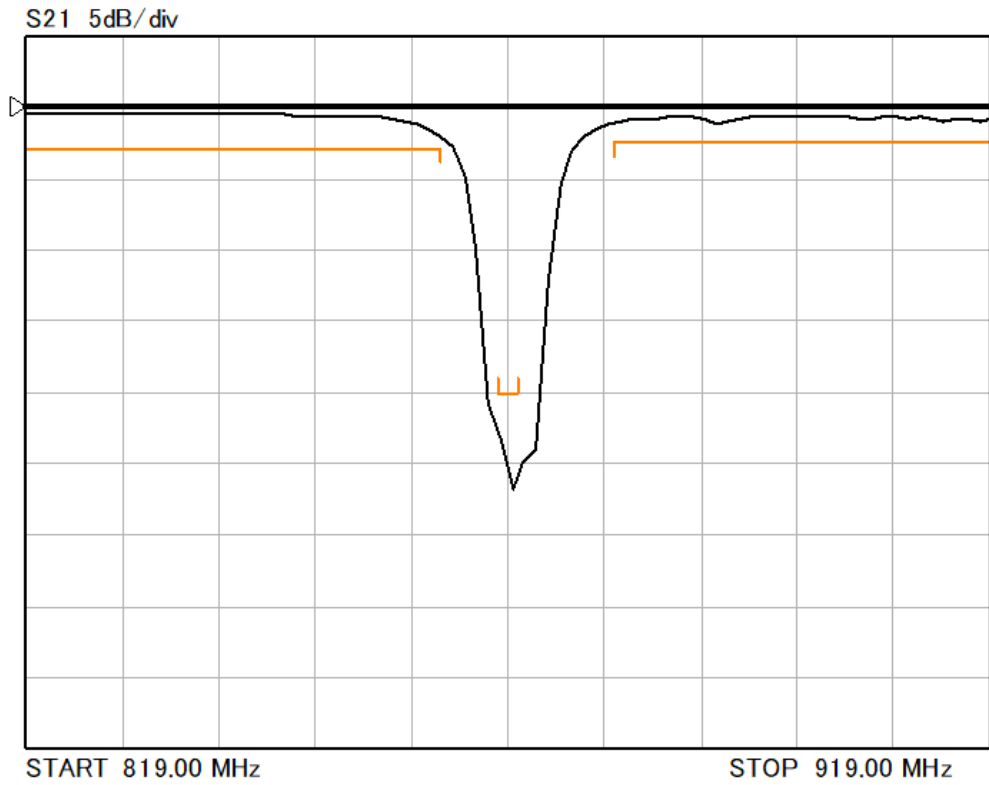
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

NOTES:

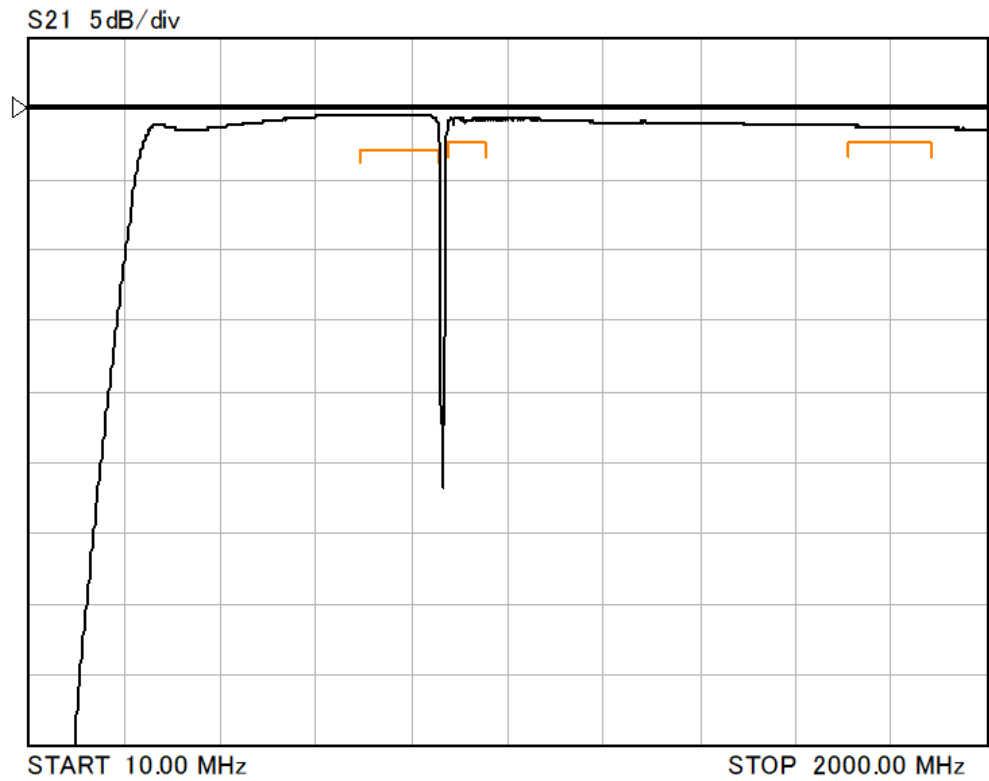
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Transfer Function

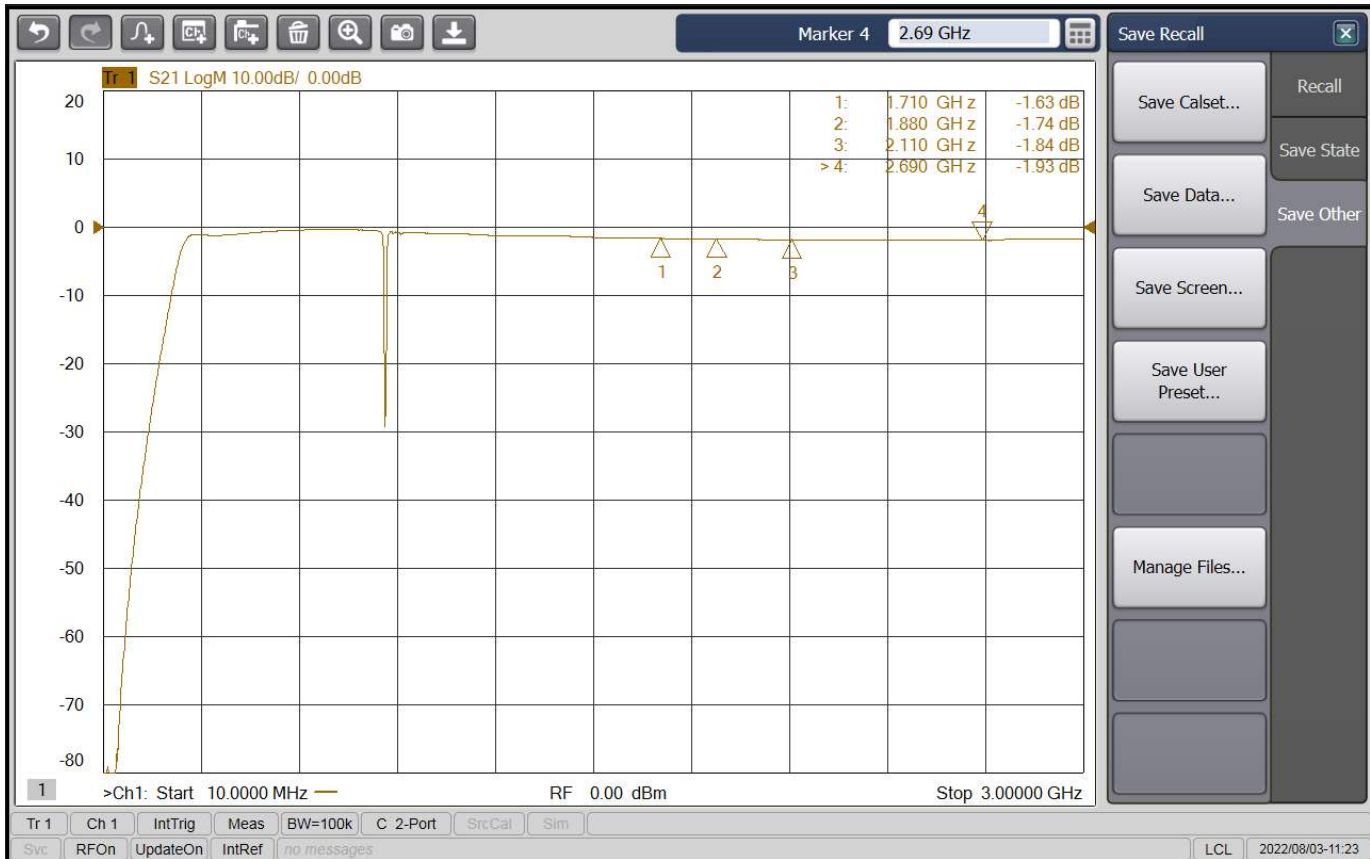
Span: 100 MHz



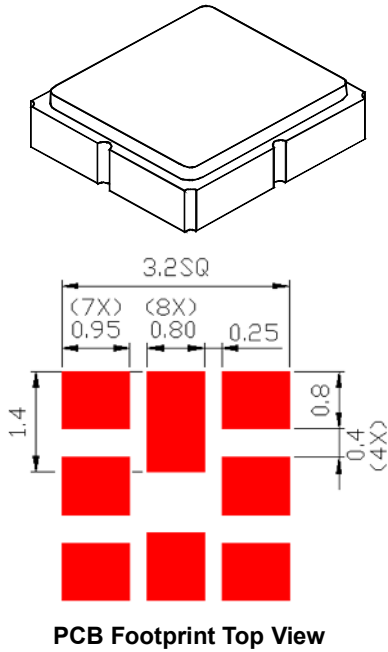
Span: 2000 MHz



Frequency Response Plot



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



Case and PCB Footprint Dimensions

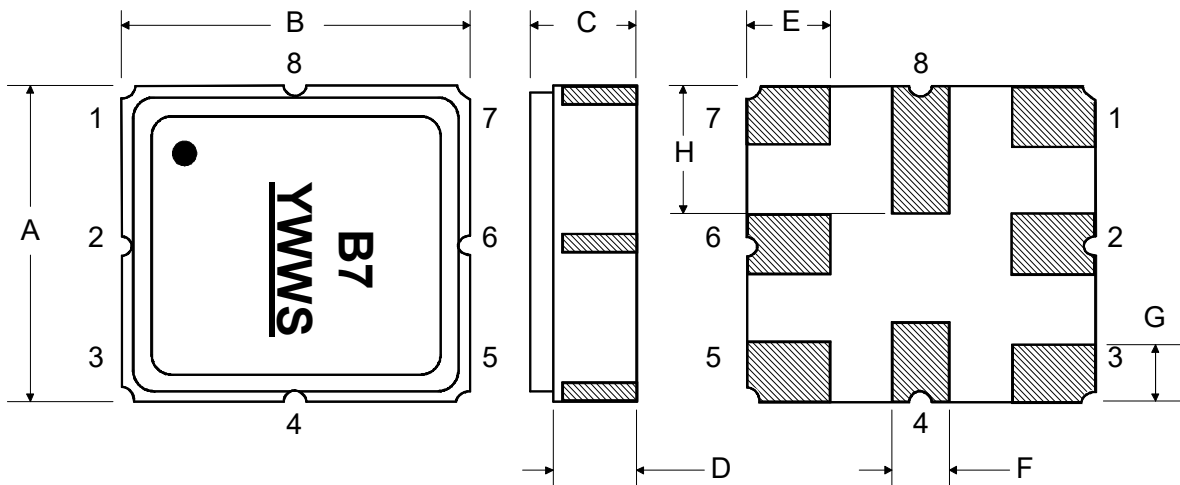
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.90	3.00	3.10	0.114	0.118	0.122
B	2.90	3.00	3.10	0.114	0.118	0.122
C	0.90	1.00	1.10	0.035	0.039	0.043
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.023	0.028
G	0.50	0.60	0.70	0.019	0.023	0.027
H	1.10	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_2O_3 Ceramic

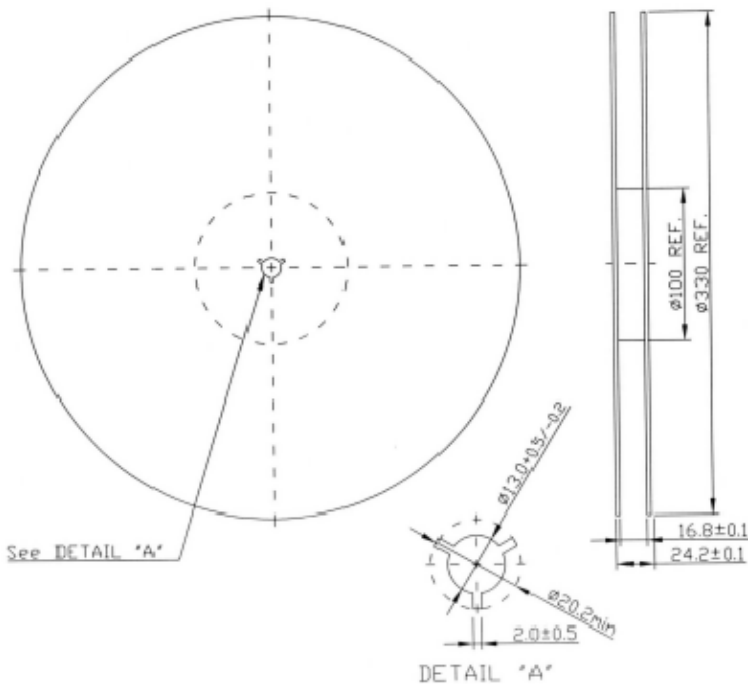
TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications

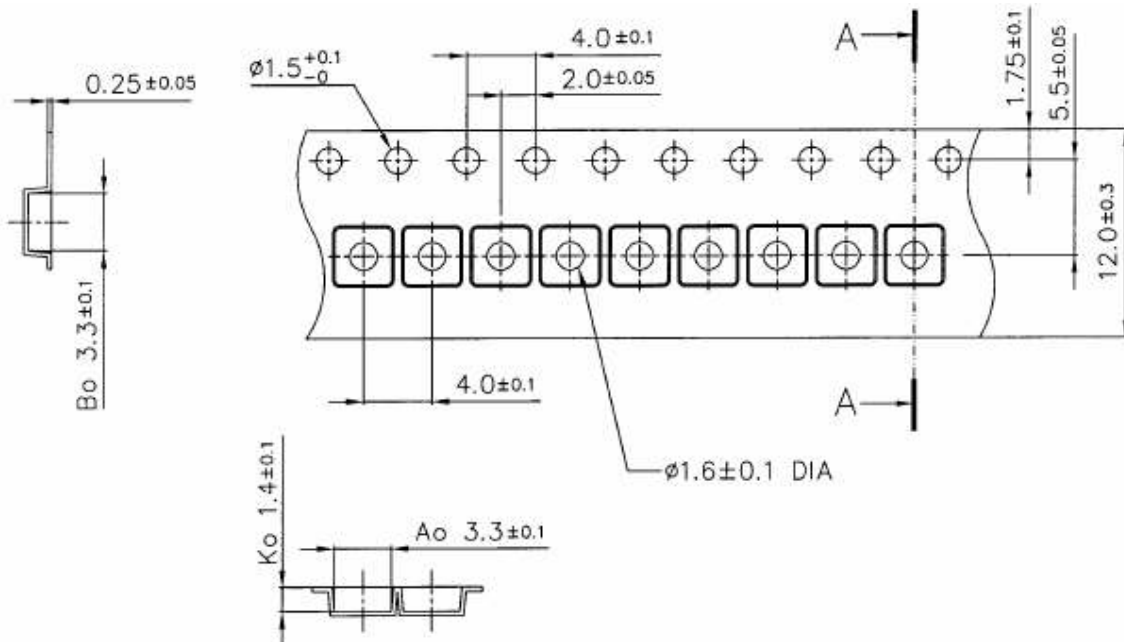
Tape and Reel Standard per ANSI/EIA481



"B"		Quantity Per Reel
Nominal Size		
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 (20~40sec).
4. Time: 2 times.

