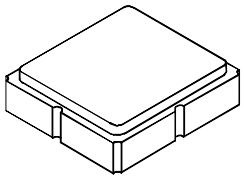
RFMi
A BRAND OF AKOUSTIS

RoHS compliant

SF2485E

868 MHz SAW Filter

- ***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***



SM3030-8

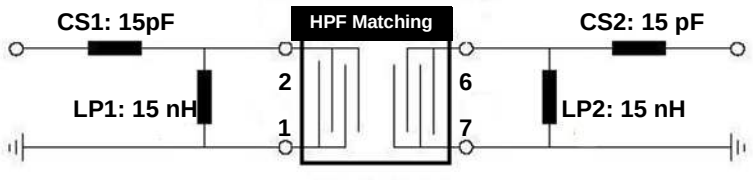
Maximum Rating

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	-10 to +60	°C
Storage Temperature Range	-40 to +85	°C
Moisture Sensitivity Level	1	MSL
Solder Reflow Temperature, 5 Cycle Maximum	260°C for 10 seconds	

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			868		MHz
Maximum Insertion Loss, 698 to 758 MHz	IL_{MAX}			1.0	3.5	dB
758 to 803 MHz				1.9	3.5	
803 to 821 MHz				1.9	3.5	
821 to 862 MHz				4.0	6.0	
880 to 925 MHz				1.1	3.5	
925 to 960 MHz				1.0	3.5	
1710 to 1805 MHz				1.7	3.5	
1805 to 1880 MHz				1.8	3.5	
2110 to 2170 MHz				2.1	3.5	
2620 to 2690 MHz				2.5	3.5	
Attenuation, 0 dB Reference:						dB
867 to 869 MHz			20	24		
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	D6, 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	1, 3, 4, 5, 7, 8

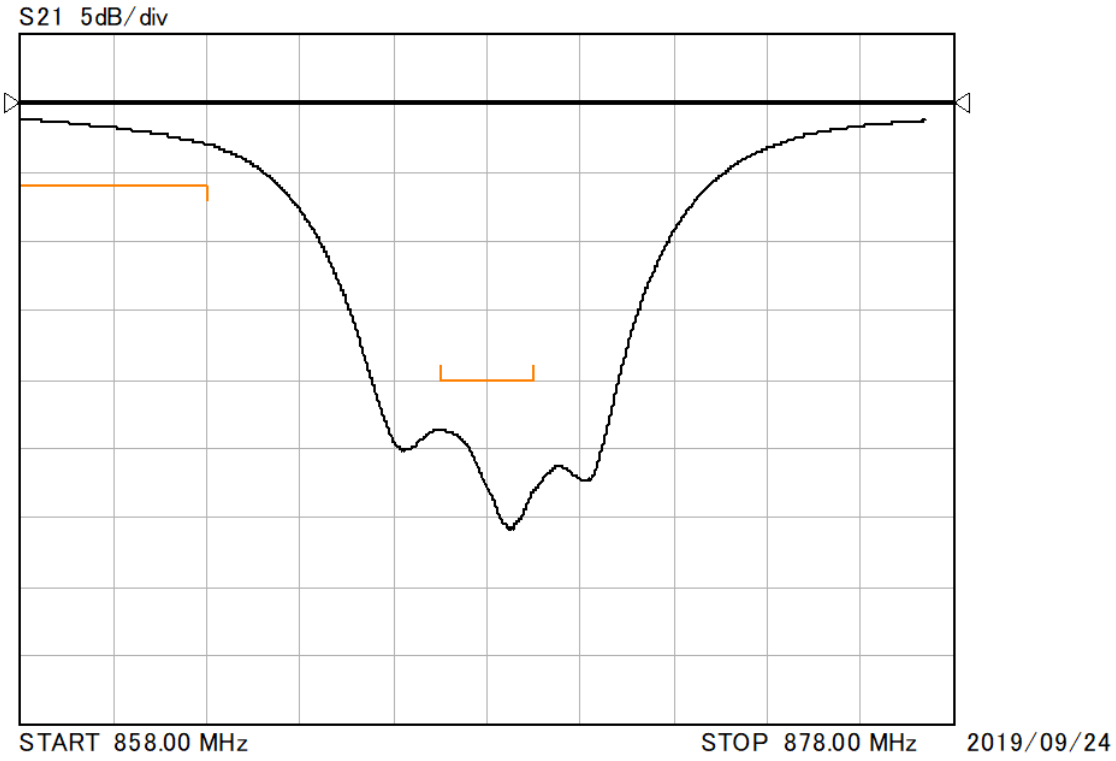


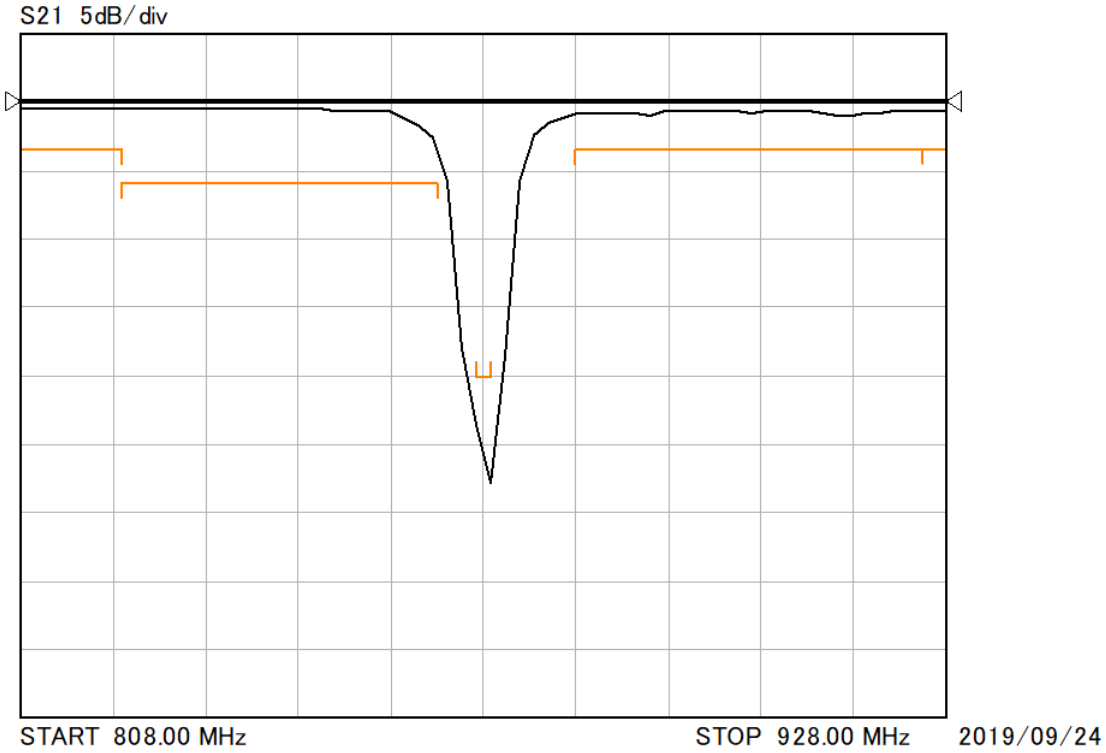
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

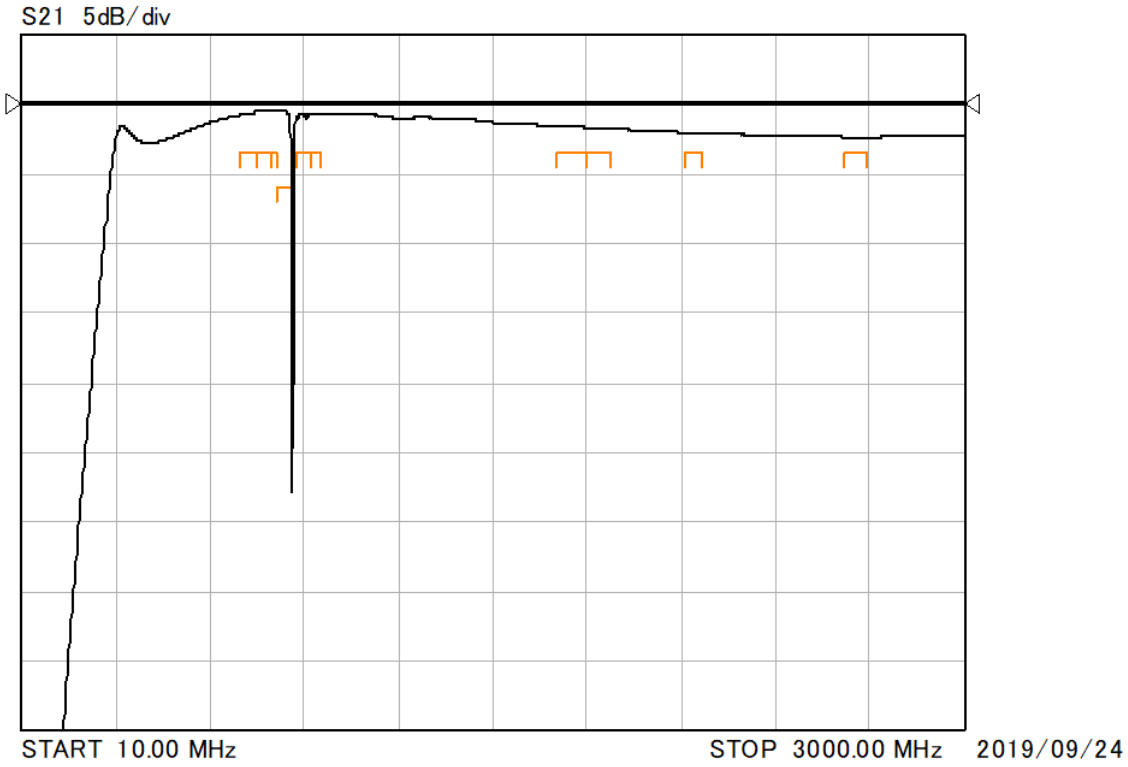
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

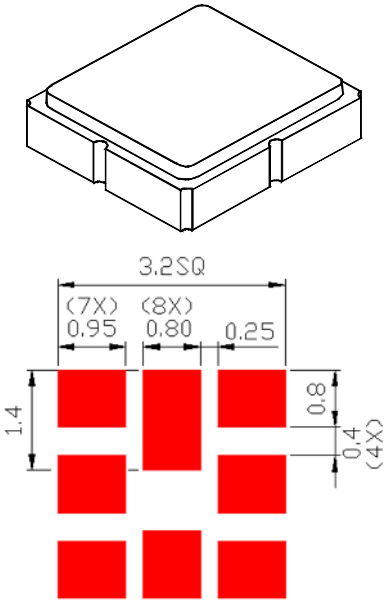




Frequency Characteristics (cont.)



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



PCB Footprint Top View

Case and PCB Footprint Dimensions

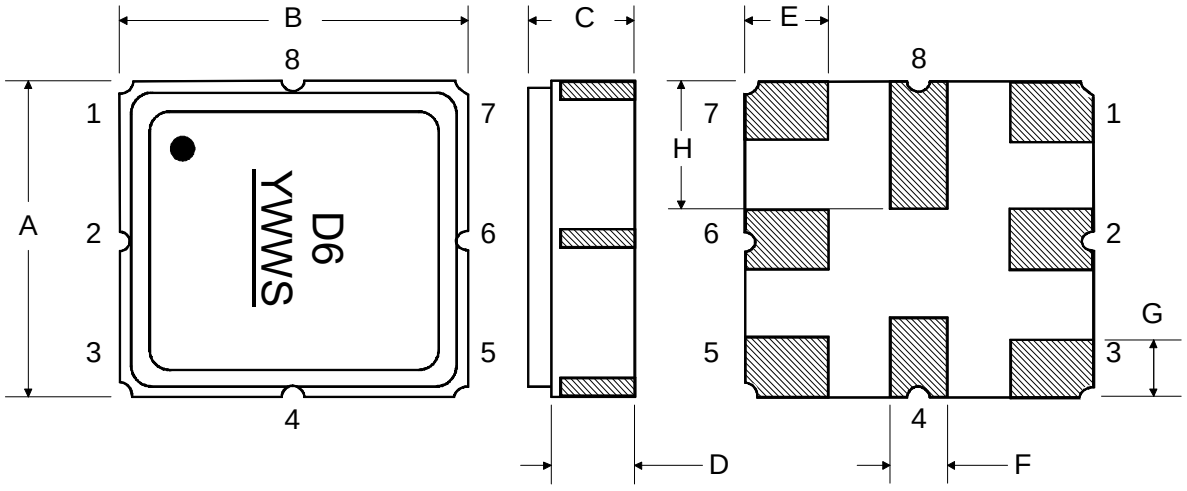
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	2.90	3.00	3.10	0.114	0.118	0.122
B	2.90	3.00	3.10	0.114	0.118	0.122
C	0.90	1.00	1.10	0.035	0.039	0.043
D	0.79	0.92	1.05	0.031	0.036	0.041
E	0.62	0.75	0.88	0.024	0.029	0.034
F	0.47	0.60	0.73	0.018	0.023	0.028
G	0.50	0.60	0.70	0.019	0.023	0.027
H	1.10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

Case Materials

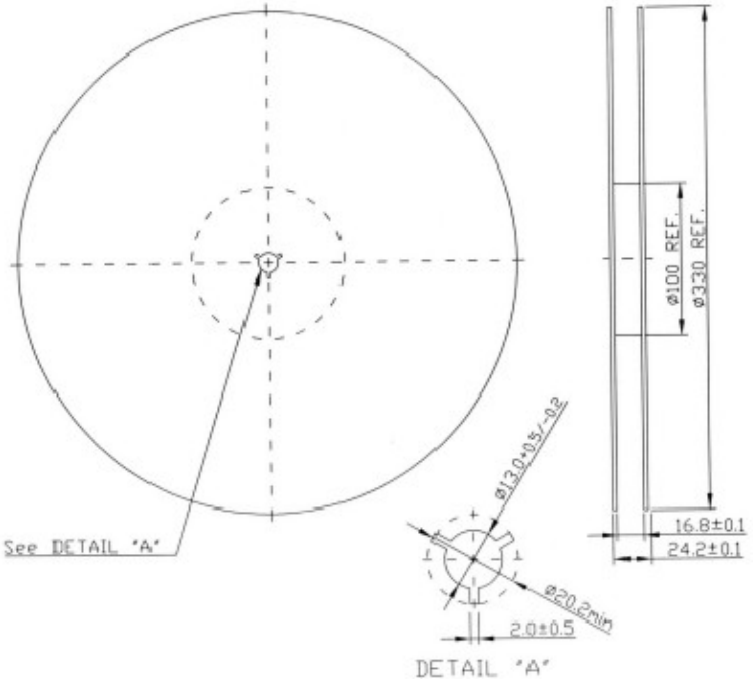
Materials	
Solder Pad Plating	0.3 to 1.0 µm Gold over 1.27 to 8.89 µm Nickel
Lid Plating	2.0 to 3.0 µm Nickel
Body	Al_2O_3 Ceramic

TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications

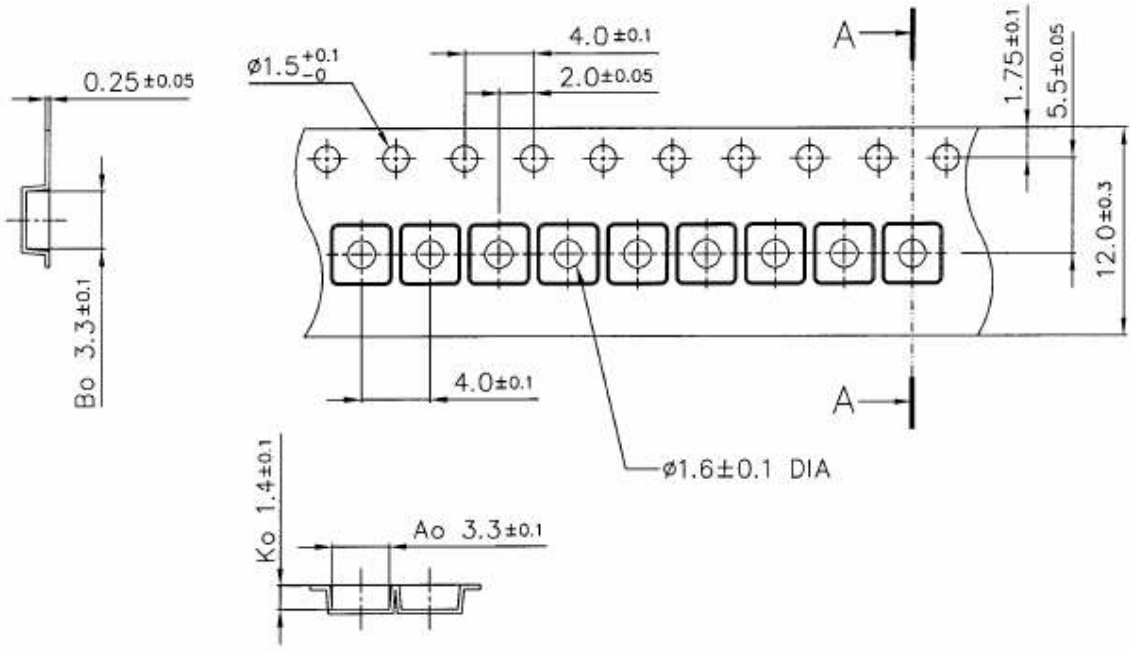


Tape and Reel Standard per ANSI/EIA-481

"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.