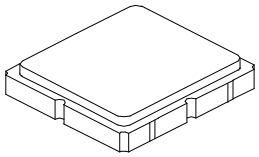
RFMi
A BRAND OF AKOUSTIS

RoHS compliant

SF2368E

831.5 MHz SAW Filter

- ***RF Filter for Mobile Communication Applications***
- ***Low Insertion Loss***
- ***3.0 x 3.0 x 1.3 mm Surface-Mount Case***
- ***No Matching Circuit Required***
- ***Complies with Directive 2002/95/EC (RoHS)***
- ***Moisture Sensitivity Level: 1***



SM3030-6

Absolute Maximum Ratings

Rating	Value	Units
Input Power	+15, 100000 h, 85°C	dBm
	+20, 1000 h, 85°C	
Maximum DC Voltage Between any 2 Terminals	5	VDC
Operable Temperature Range	-45 to +125	°C
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile	265 °C for 10 s	

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_C			831.5		MHz
Insertion Loss, 814-849 MHz	IL			3.0	4.2	dB
Amplitude Ripple, p-p, 814-849 MHz				1.1	2.6	
Attenuation Referenced to 0 dB:						dB
DC to 794 MHz			30	46		
859 to 860 MHz			6	16		
869 to 900 MHz			20	31		
900 to 2300 MHz			25	33		
2300 to 2600 MHz			25	30		
2600 to 2800 MHz			20	29		
2800 to 3200 MHz			5	26		
3200 to 6000 MHz			2	4		
VSWR, 814-849 MHz				1.5	2.6	

Single Ended Input / Output, Impedance match	No matching network required for operation at 50 ohms
Case Style	SM3030-6 3 x 3 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week, S=shift)	5R YWWS

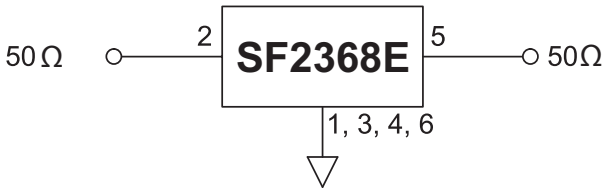
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

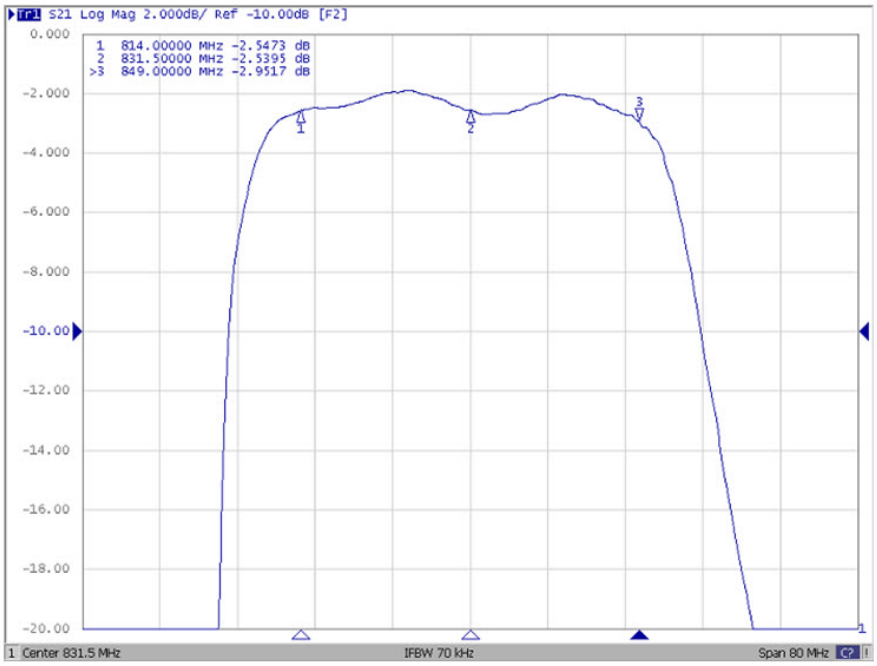
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

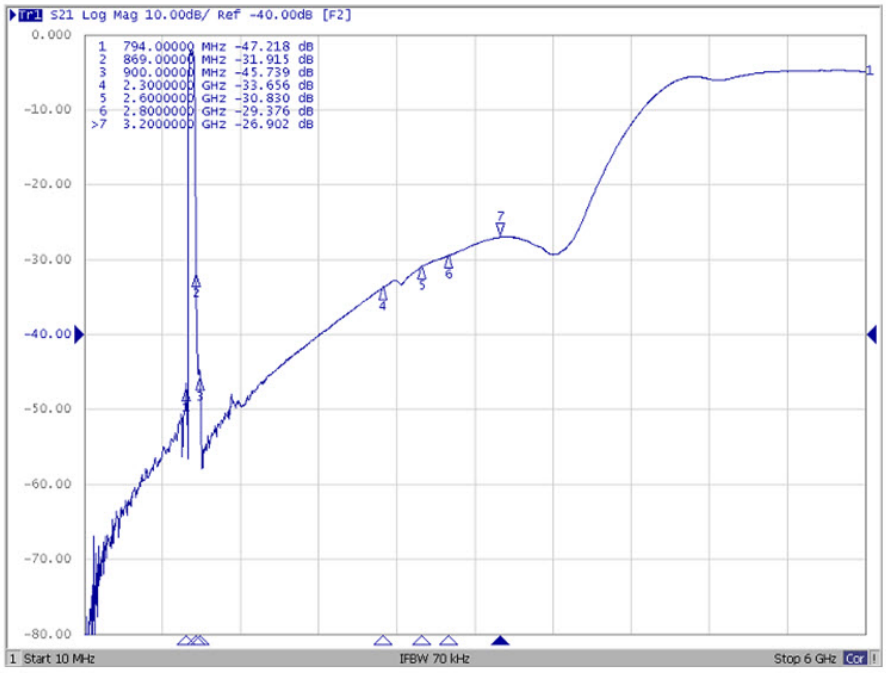
Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others

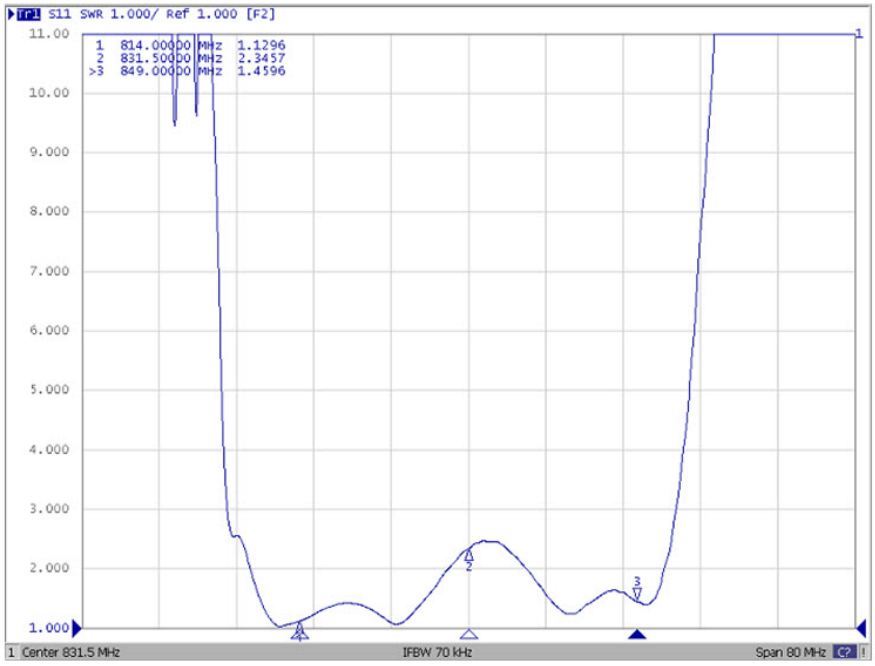


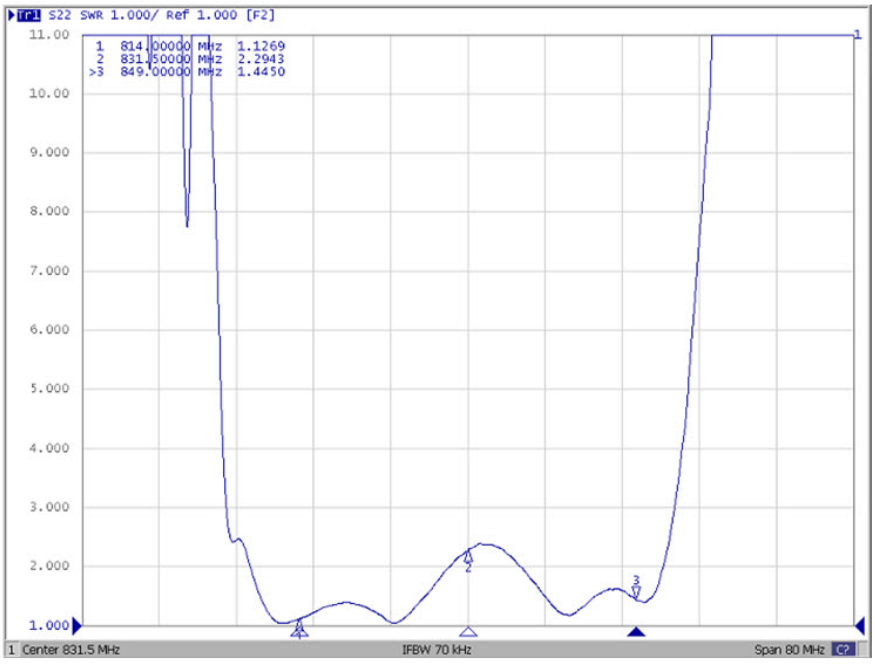
Frequency Characteristics





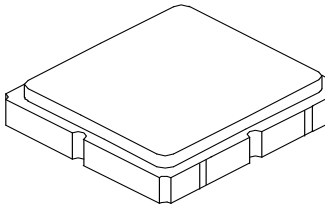
Frequency Characteristics





SM3030-6 Case

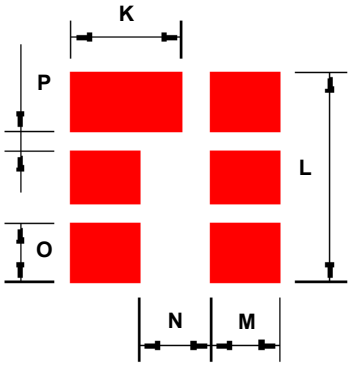
6-Terminal Ceramic Surface-Mount Case
3.0 X 3.0 mm Nominal Footprint



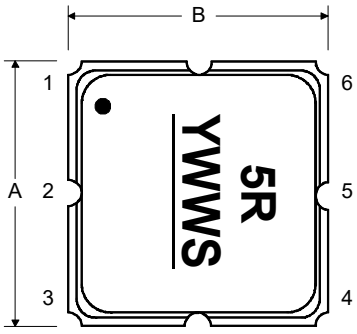
Case Dimensions

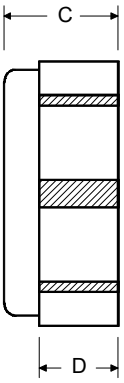
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		3.0			0.118	
B		3.0			0.118	
C			1.4			0.055
D			1.0			0.039
E		2.80			0.110	
F		1.6			0.063	
G		0.85			0.033	
H		1.5			0.059	
I		0.6			0.024	
J		1.3			0.051	
K		1.70			0.066	
L		3.20			0.125	
M		1.05			0.041	
N		1.10			0.043	
O		0.90			0.035	
P		0.30			0.011	

PCB Footprint, Top View

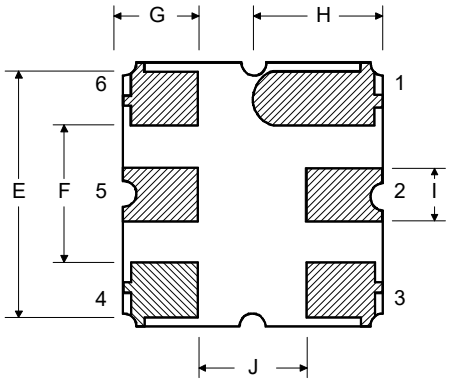


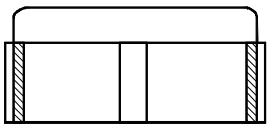
TOP VIEW





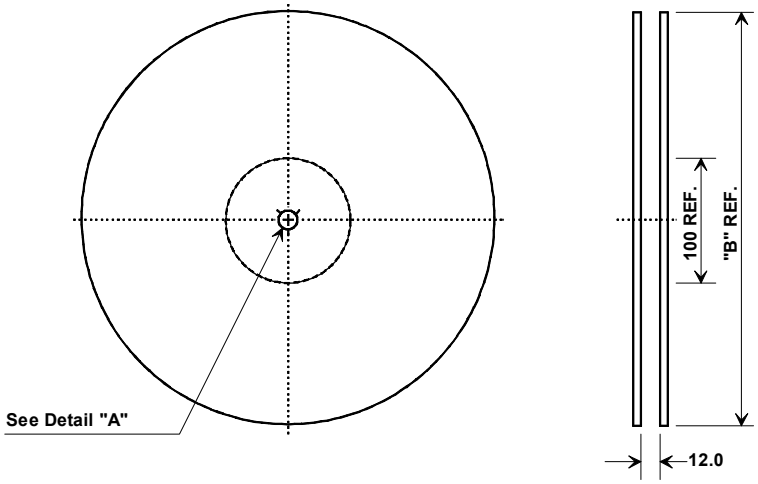
BOTTOM VIEW



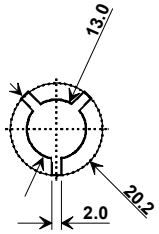


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

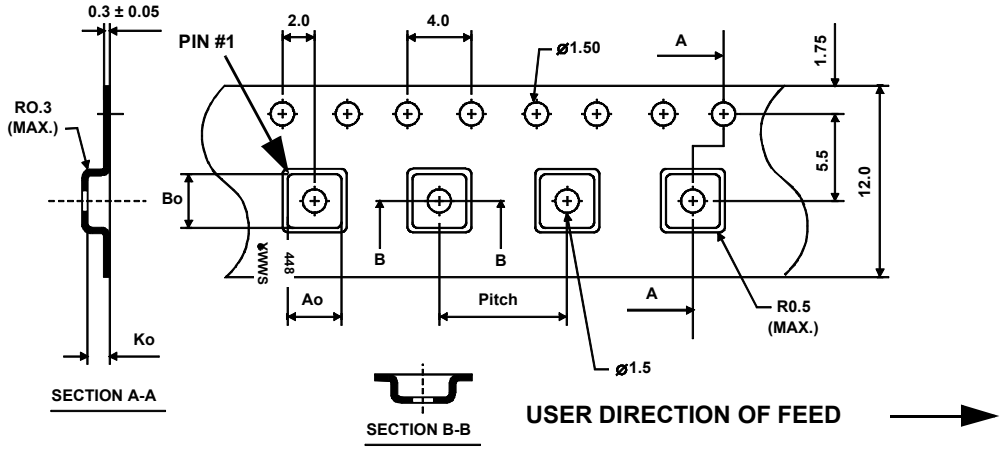


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	3000



COMPONENT ORIENTATION and DIMENSIONS

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



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180ºC for 60~90 seconds.
2. Ascending time to preheating temperature 150ºC shall be 30 seconds min.
3. Heating shall be fixed at 220ºC for 50~80 seconds and at 260ºC +0/-5ºC peak (10 seconds).
4. Time: 5 times maximum.