



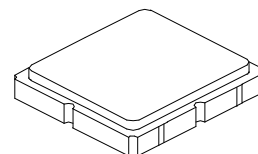
AEC-Q200
This component was always
RoHS compliant from the first
date of manufacture.

- **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)**



SF2368E

831.5 MHz
SAW Filter



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 <u>Y</u> WW <u>S</u>					



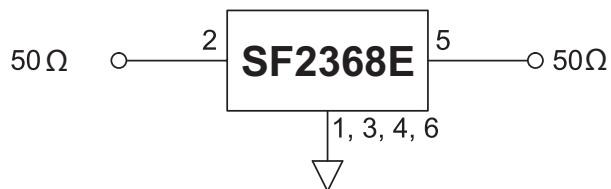
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

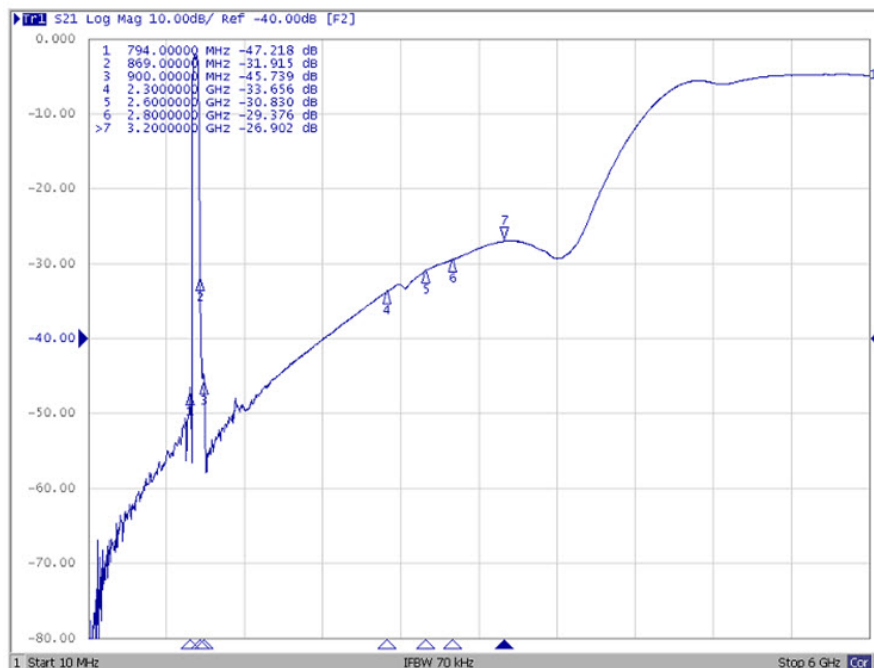
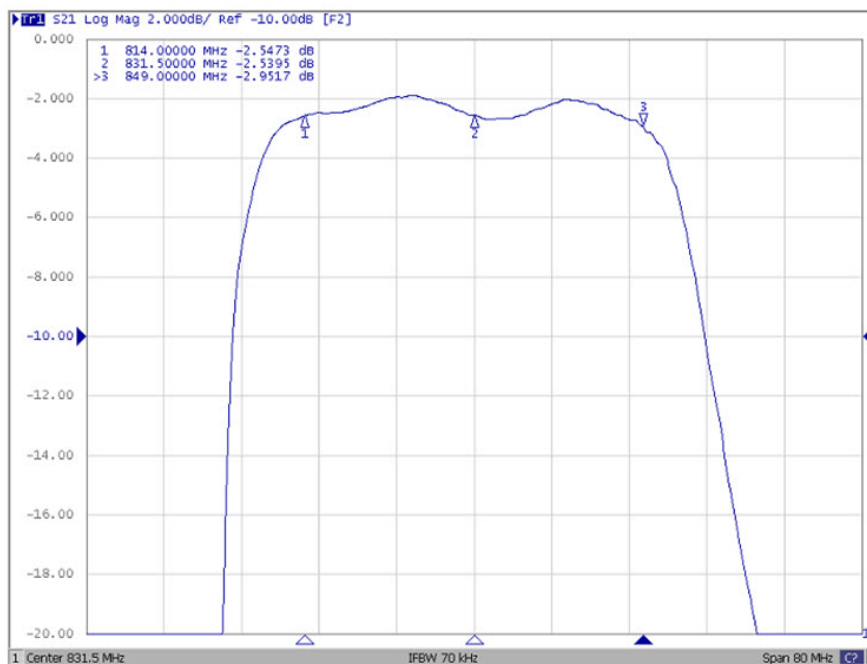
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.

Electrical Connections

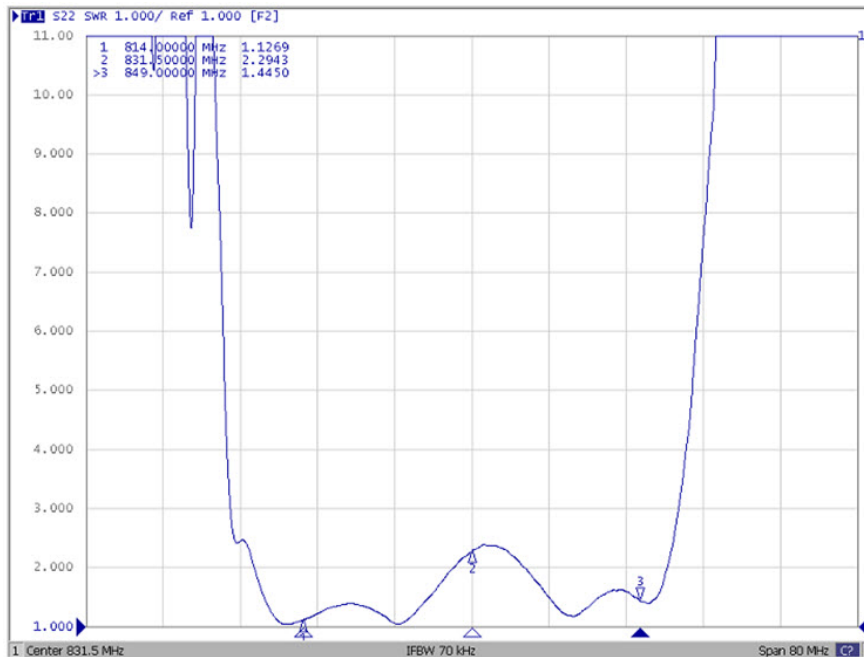
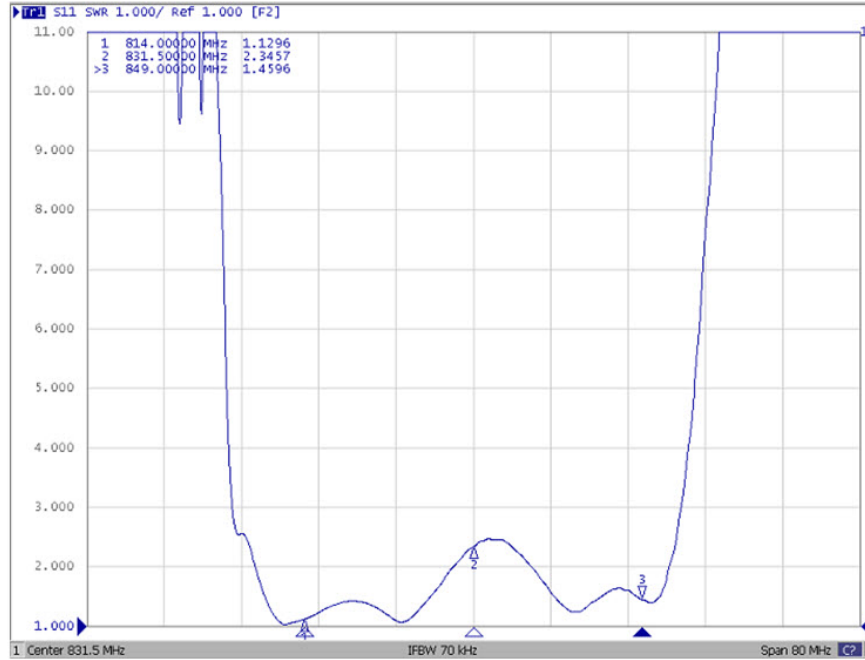
Connection	Terminals
Input	2
Output	5
Ground	All others



Frequency Characteristics

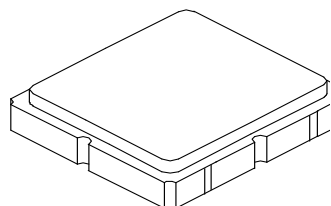


Frequency Characteristics

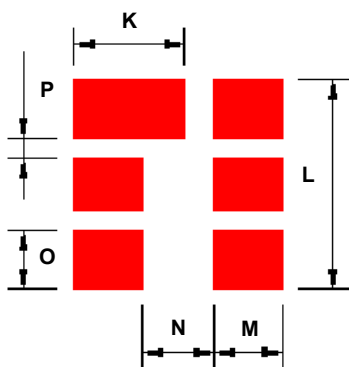


SM3030-6 Case

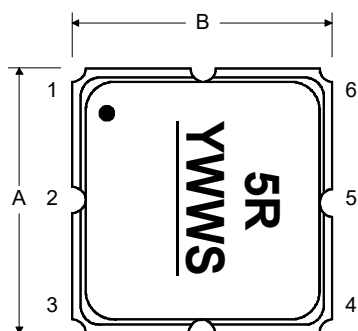
6-Terminal Ceramic Surface-Mount Case 3.0 X 3.0 mm Nominal Footprint



PCB Footprint, Top View



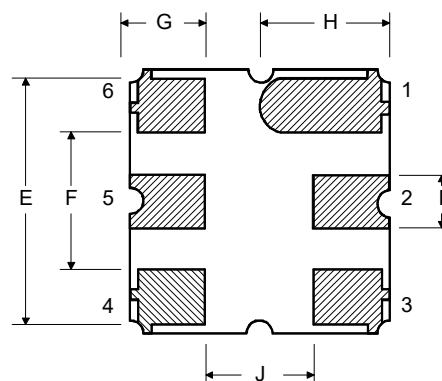
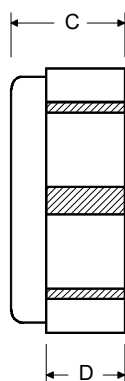
TOP VIEW



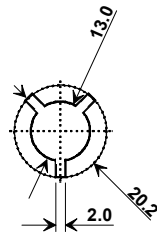
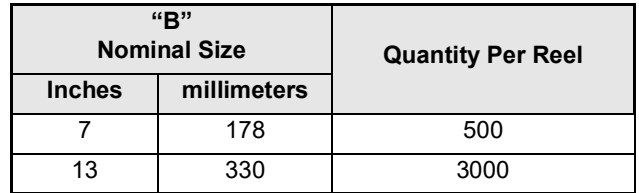
Case Dimensions

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	

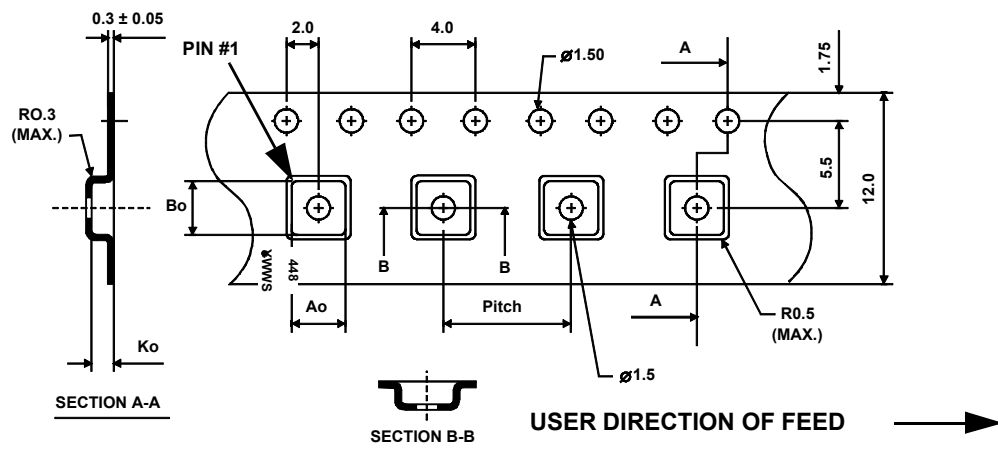
BOTTOM VIEW



Tape and Reel Standard per ANSI/EIA-481

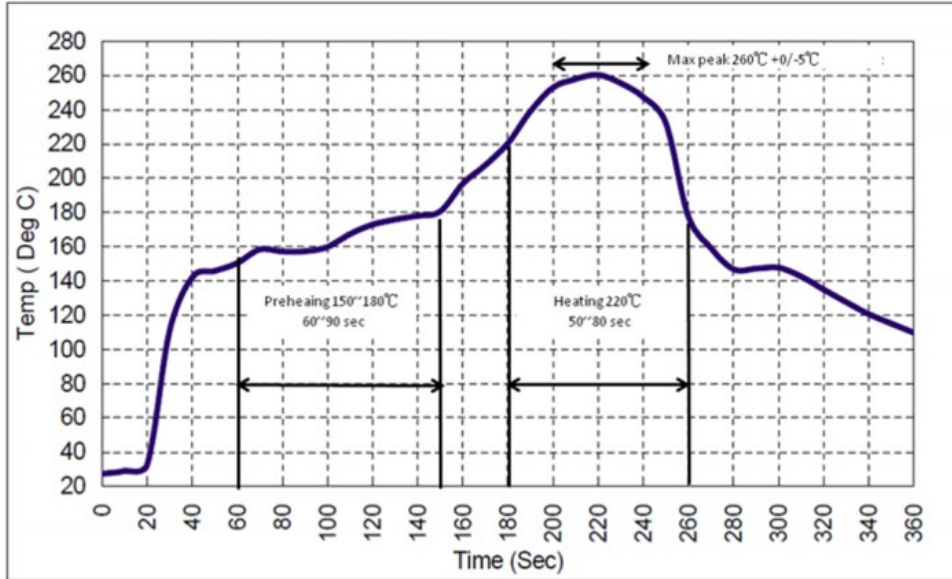


Carrier Tape Dimensions	
Ao	3.35 mm
Bo	3.35 mm
Ko	1.4 mm
Pitch	8.0 mm
W	12.0 mm



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°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.



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