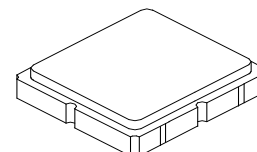


SF2369E

876.5 MHz
SAW Filter



SM3030-6

- **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**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any 2 Terminals	3	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			876.5		MHz
Insertion Loss, 859-894 MHz	IL			2.5	4.0	dB
Amplitude Ripple, p-p, 859-894 MHz				0.8	2.0	
Attenuation Referenced to 0 dB:						dB
10 to 840 MHz			40	44		
920 to 1000 MHz			30	36		
1000 to 2600 MHz			25	34		
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)	5T <u>Y</u> <u>WW</u> <u>S</u>					

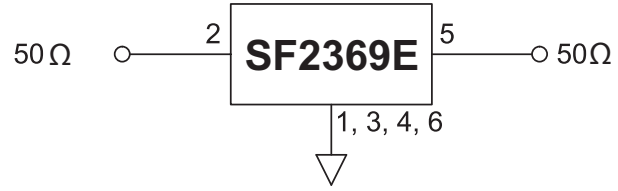
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

NOTES:

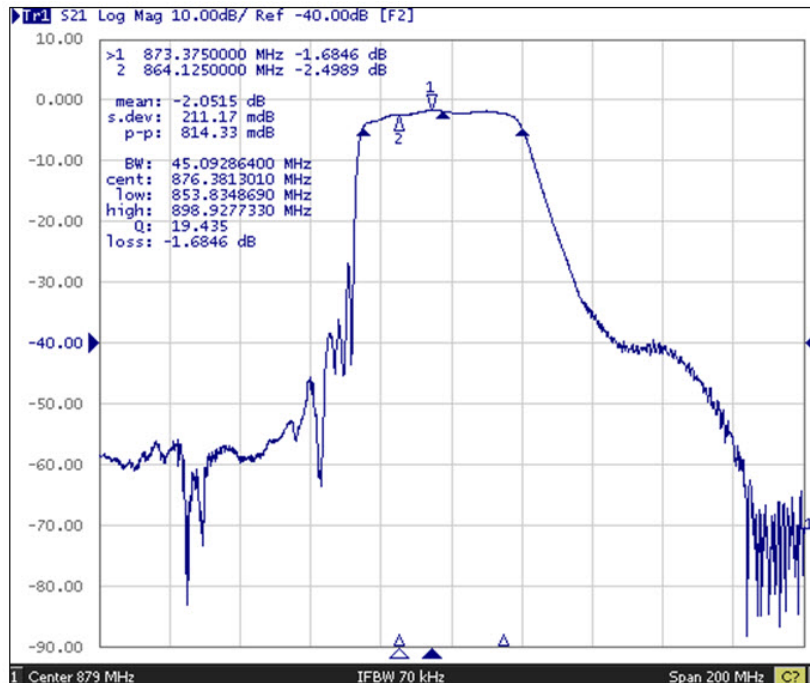
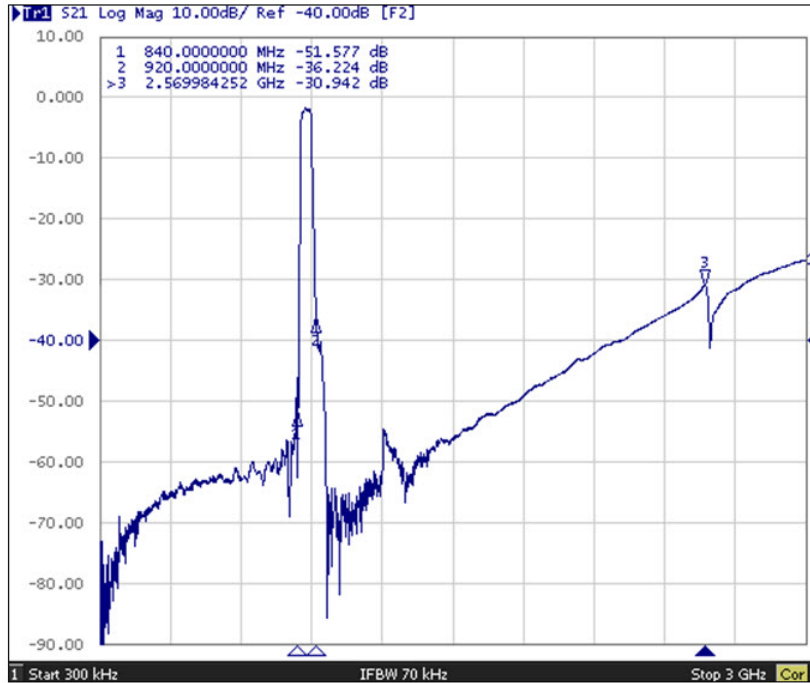
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Electrical Connections

Connection	Terminals
Input	2
Output	5
Ground	All others



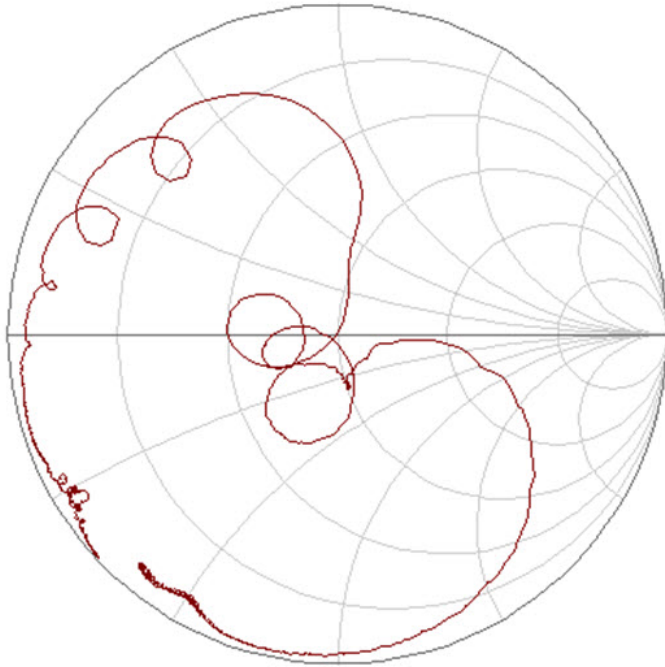
Frequency Characteristics



Frequency Characteristics

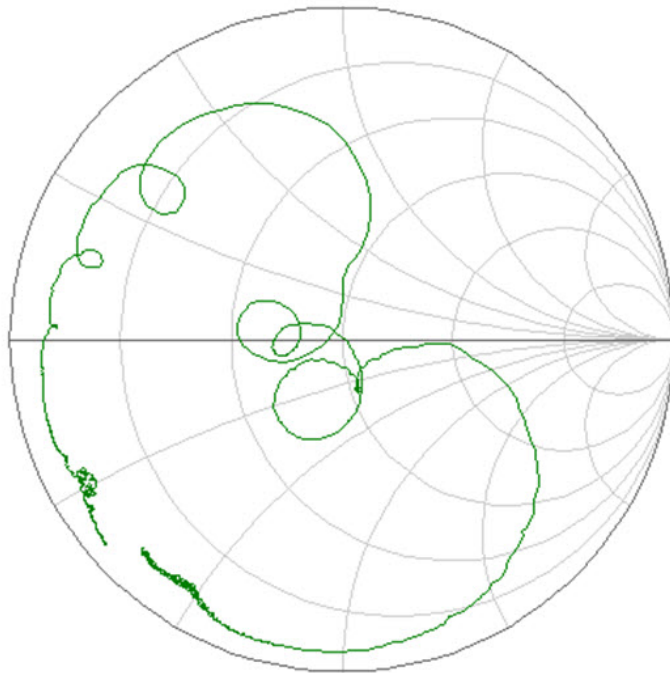
S11 Smith Chart

▶ **F2** S11 Smith (R+jX) Scale 1.000U [F2]



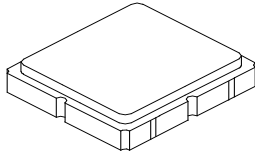
S22 Smith Chart

▶ **F2** S22 Smith (R+jX) Scale 1.000U [F2]

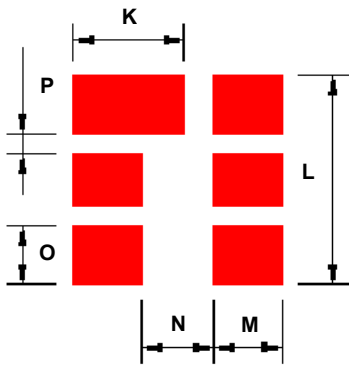


SM3030-6 Case

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



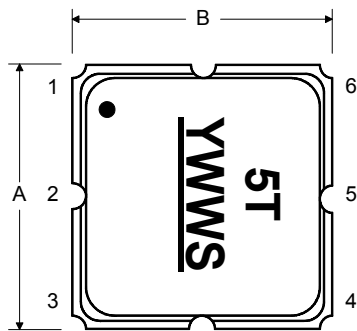
PCB Footprint, Top View



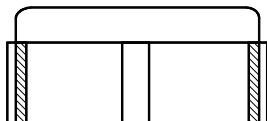
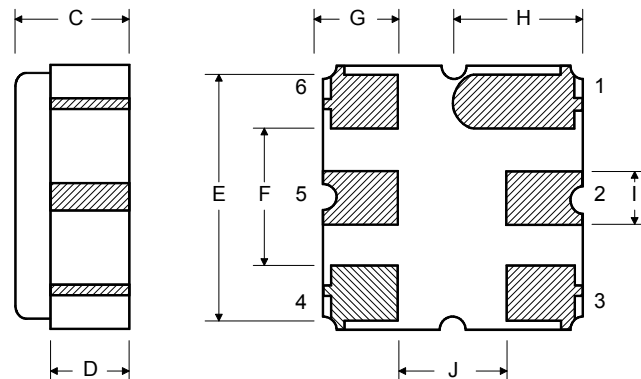
Case Dimensions

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	

TOP VIEW



BOTTOM VIEW



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.

