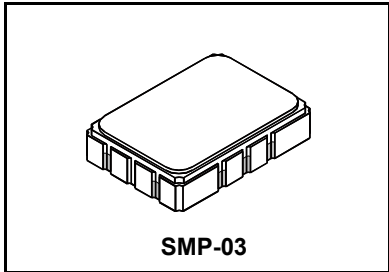


SF2377B

**137.5 MHz
SAW Filter**



- **Designed for SDARS IF Receiver**
- **Low Insertion Loss**
- **5.0 X 7.0 mm Surface-Mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**
- **Moisture Sensitivity Level: 1**

Absolute Maximum Ratings

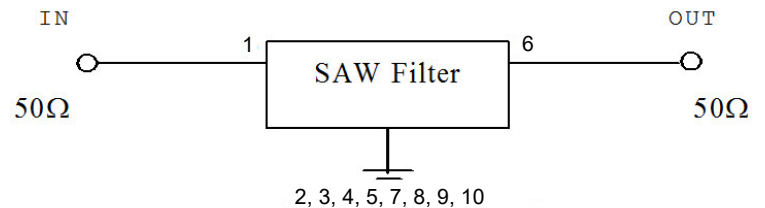
Rating	Value	Units
Incident Power Level	10	dBm
DC Voltage	10	VDC
Storage Temperature Range	-40 to +85	°C
Operating Temperature Range	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_c			137.5		MHz
Insertion Loss (@137.5 MHz)				1.5	3.5	dB
Passband Ripple (137 to 138 MHz)				0.4	1.5	dB
2dB Bandwidth	BW ₂		1.4	2.5		MHz
3dB Bandwidth	BW ₃		1.8	2.6		
20dB Bandwidth	BW ₂₀			4.5	6.0	
Attenuation (reference level from 0 dB)						dB
129 MHz			42	70		
134 MHz			30	34		
141 MHz			20	23		
146 MHz			30	40		
Temperature Coefficient of Frequency				-36		ppm/°C
Case Style SMP-03, 5.0 x 7.0 mm Nominal Footprint	SMP-03, 5.0 x 7.0 mm Nominal Footprint					
Symbolization: YY = year, WW = Week, S = shift, ## = lot)	RFM, SF2377B, <u>YYWWS##</u>					

Electrical Connections

Connection	Terminals
1	Input
6	Output
10	Input Ground
5	Output Ground
Case Ground	All Others

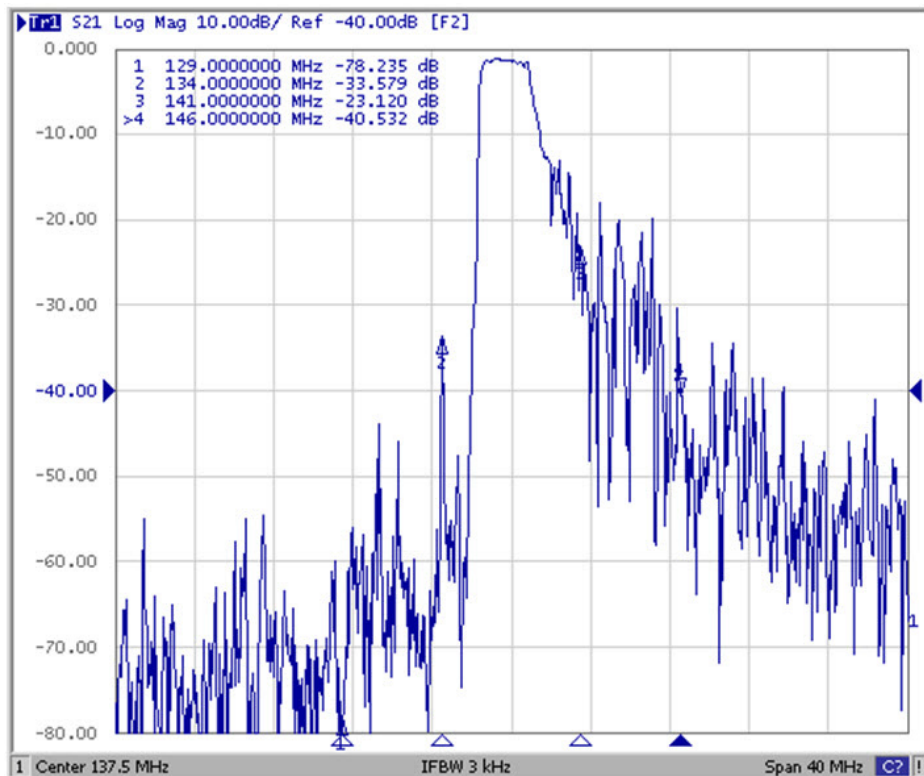
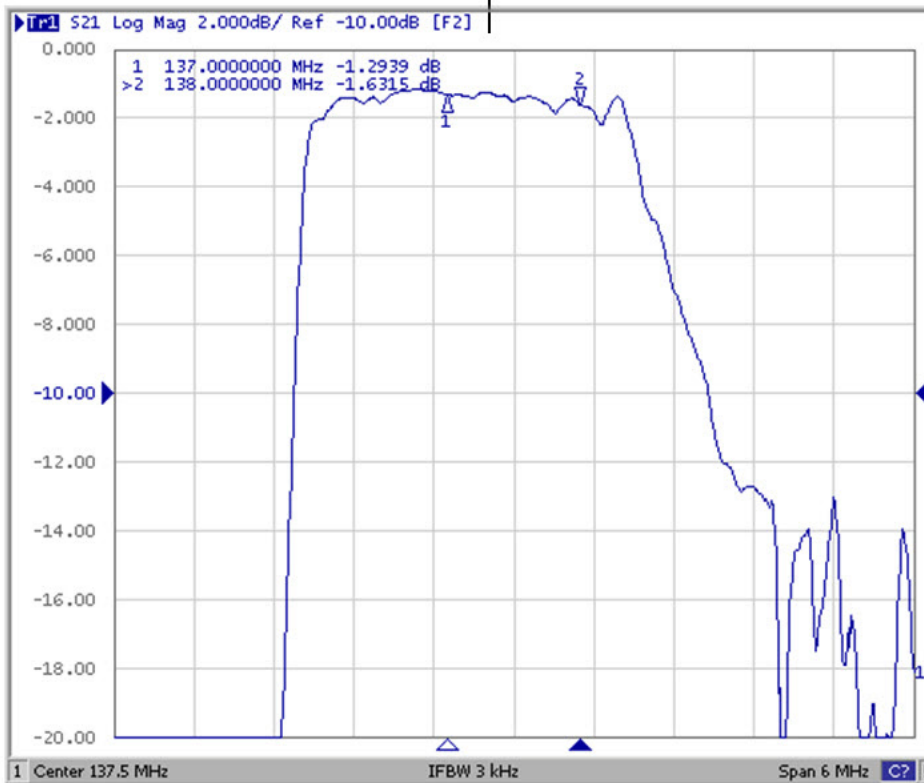


CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

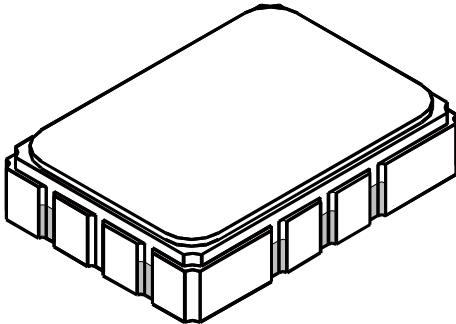
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics

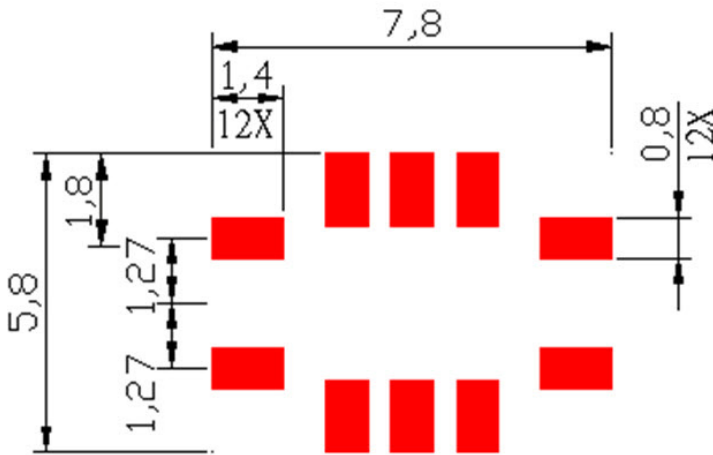


SMP-03 Case

10-Terminal Ceramic Surface-Mount Case 7 x 5 mm Nominal Footprint



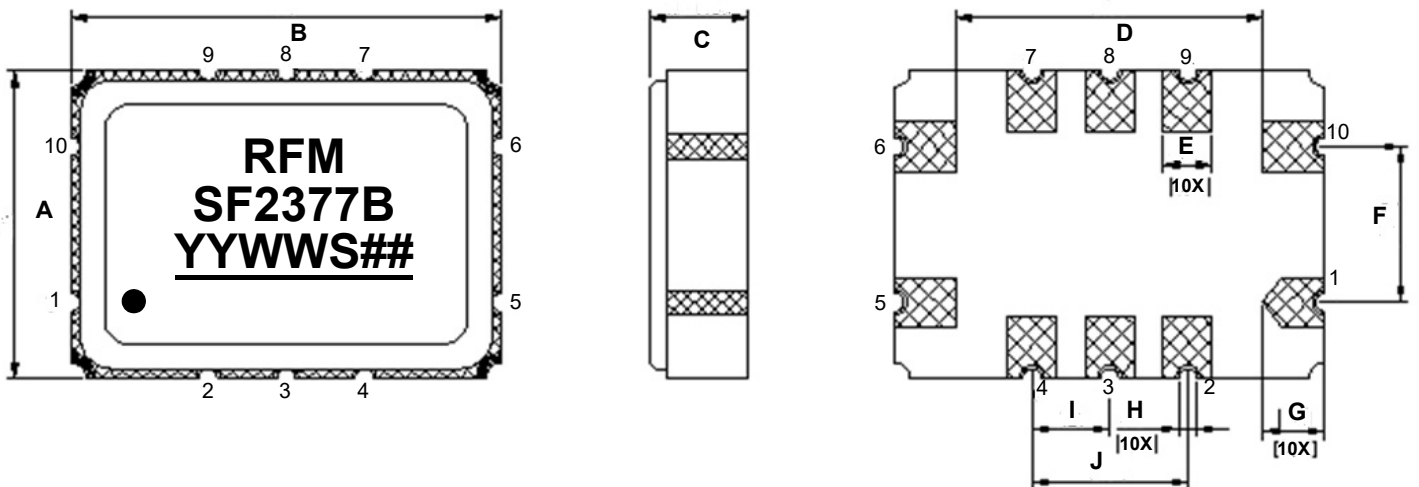
Recommended PCB Footprint



Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	-	5.00	-	-	0.198	-
B	-	7.00	-	-	0.275	-
C	-	-	1.8	-	-	0.070
D	-	5.0	-	-	0.198	-
E	-	0.6	-	-	0.023	-
F	-	2.54	-	-	0.100	-
G	-	1.0	-	-	0.039	-
H	-	0.3	-	-	0.011	-
I	-	1.27	-	-	0.050	-
J	-	2.54	-	-	0.100	-

Materials	
Solder Pad Termination	Au plating 30 - 60 ulnches (76.2-152 uM) over 80-200 ulnches (203-508 uM) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 ulnches Thick
Body	Al ₂ O ₃ Ceramic

Outline Drawing



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.

