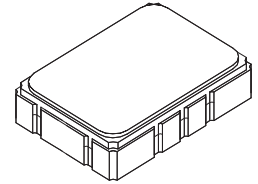


SF2332B

**183.6 MHz
SAW Filter**



SMP-03

- SAW Filter, 183.6 MHz
- 7.0 x 5.0 x 2.0 mm Surface-mount Case
- Input/Output Impedance 200Ω/200Ω
- Complies with Directive 2002/95/EC (RoHS)
- Moisture Sensitivity Level: 1

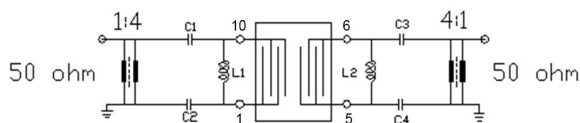
Absolute Maximum Ratings	Value	Units
Incident Power in Passband	+10	dBm
DC Voltage on any Non-ground Terminal	3	VDC
Operating Temperature Range	-30 to +85	°C
Component Storage Temperature Range	-40 to +85	°C
Maximum Soldering Profile, 5 cycles/10 seconds maximum	+260	°C

Electrical Characteristics

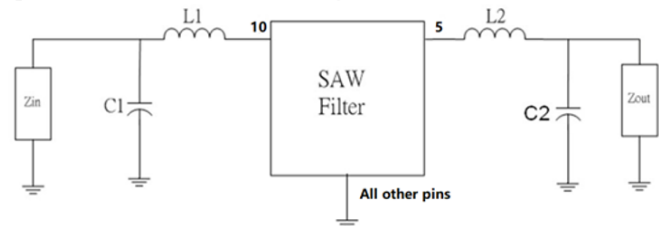
Characteristic	Sym	Note	Min	Typ	Max	Units
Center Frequency	f_c		183.6			MHz
5dB Bandwidth			1.26	1.46		
33dB Bandwidth				1.73	1.8	
Minimum Insertion Loss at f_c	IL			9.5	10.5	dB
Passband Ripple ($f_c-0.3\text{MHz}$ $f_c+0.3\text{MHz}$)				0.6	1.2	
Phase Linearity ($f_c-0.63\text{MHz}$ $f_c+0.63\text{MHz}$)	rms			1.7	2.5	deg
Attenuation						dB
$f_c \pm 0.9$ MHz			28	31		
$f_c \pm 1.25$ MHz			33	36		
$f_c \pm 1.7$ MHz			30	33		
$f_c \pm 2.05$ MHz			33	37		
10 to 168 MHz			50	58		
168.6 to 174.6 MHz			40	48		
174.6 to 182.7 MHz			28	31		
184.5 to 192.6 MHz			30	33		
192.6 to 198.6 MHz			40	48		
198.6 to 283.6 MHz			50	75		
200 Ω balance in and out						
Case Style	SMP03 - 7 X 5 mm					
Lid Symbolization (Y = Year WW = Week S= Shift, ## = Sequence Code)	RFM/SF2332B/YYWWS##					

Measurement Circuit - SF2332B

200 Ω Input/Output



C1=C2=7PF C3=C4=4PF
L1=33NH L2=56NH



L1=100nH, C1=27pF, L2=56nH, C2=36pF



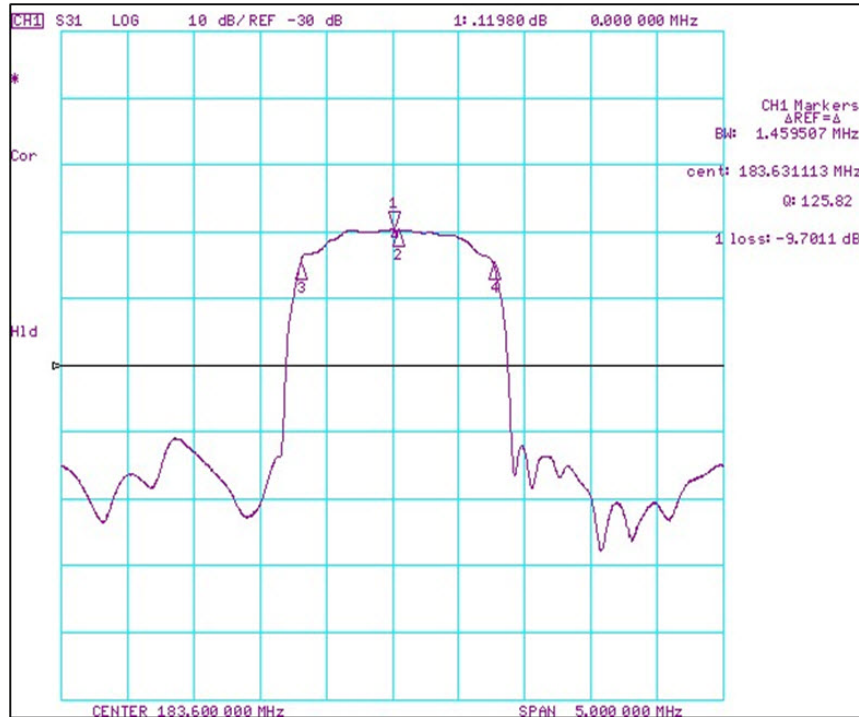
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

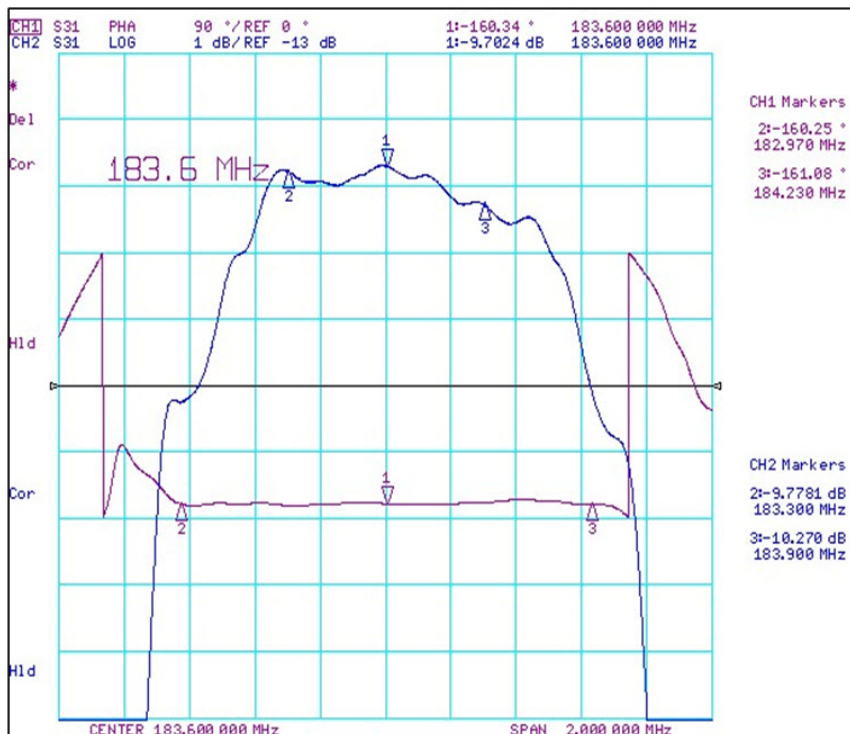
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Filter Response Plots

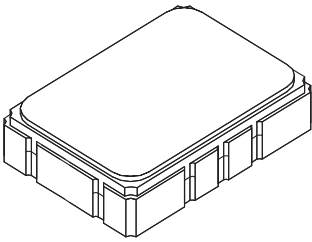
Wide Band Response



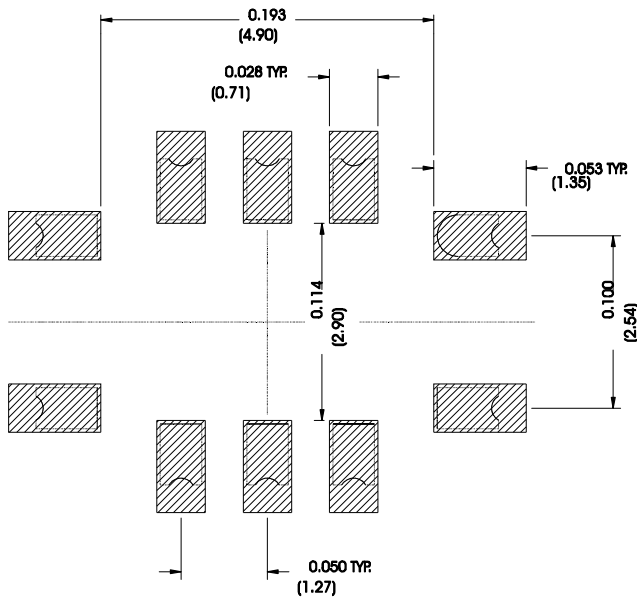
Pass Band Response



SMP-03 10-Terminal Ceramic Surface-mount Case 5.0 X 7.0 mm Nominal Footprint



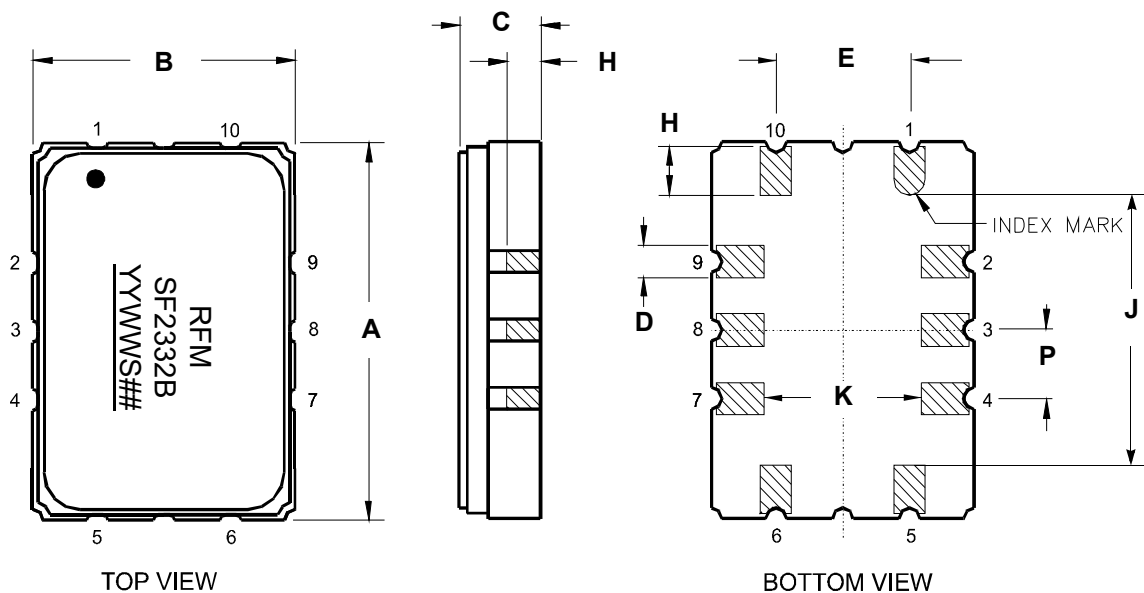
Recommended PCB Footprint



Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	6.80	7.00	7.20	0.268	0.276	0.283
B	4.80	5.00	5.20	0.189	0.197	0.205
C	-	1.65	2.00	-	0.065	0.079
D	0.47	0.60	0.73	0.019	0.024	0.029
E	2.41	2.54	2.67	0.095	0.100	0.105
H	0.87	1.0	1.13	0.034	0.039	0.044
J	4.87	5.00	5.13	0.192	0.197	0.202
K	2.87	3.00	3.13	0.113	0.118	0.123
P	1.14	1.27	1.40	0.045	0.050	0.055

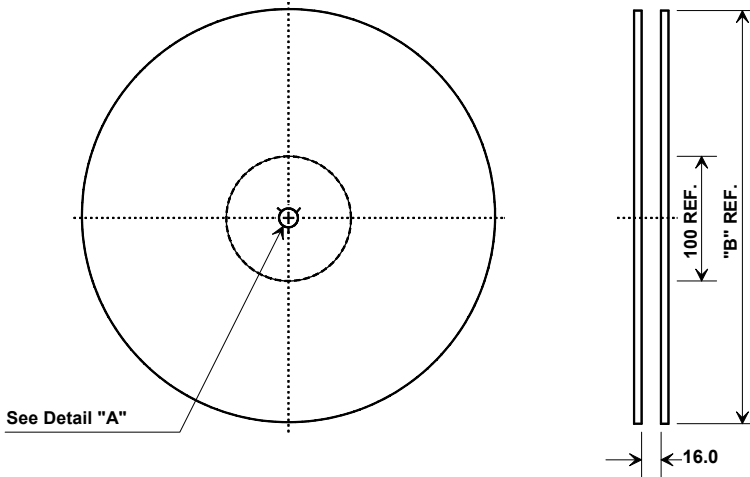
Electrical Connections		
Connection		Terminals
Port 1	Differential Input	10, 1
Port 2	Differential Output	5, 6
Ground		All others

Case 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

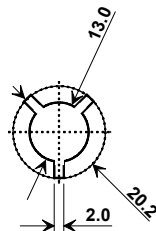


Tape and Reel Specifications

Tape and Reel Standard per ANSI/EIA-481

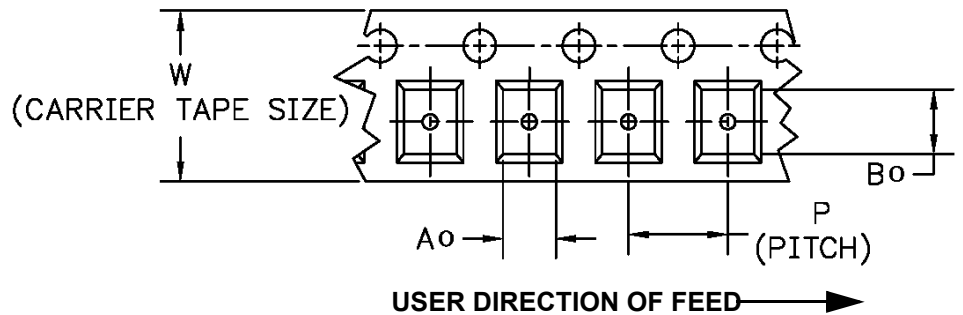
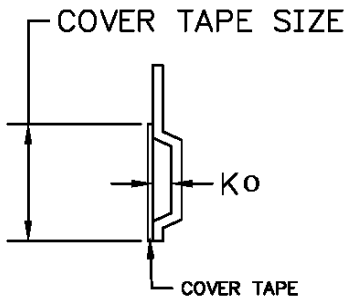


"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000



COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
Ao	5.6 mm
Bo	7.6 mm
Ko	2.0 mm
Pitch	8.0 mm
W	16.0 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.

