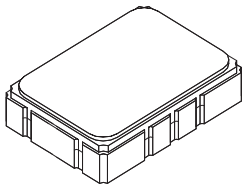
Preliminary

SF2332B

183.6 MHz SAW Filter

- ***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)***
- ***AEC-Q200***



SMP-03

Absolute Maximum Ratings

Rating	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

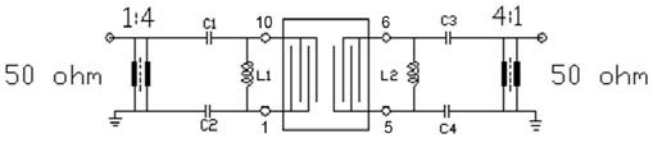
Electrical Characteristics

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 Fc	IL			9.5	10.5	dB
Passband Ripple (Fc-0.3MHz……Fc+0.3MHz)				0.6	1.2	
Phase Linearity (Fc-0.63MHz……Fc+0.63MHz)	rms			1.7	2.5	deg
Attenuation						dB
Fc±0.9 MHz			28	31		
Fc±1.25 MHz			33	36		
Fc±1.7 MHz			30	33		
Fc±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)	RFM/SF2332B/YWWS##

Measurement Circuit - SF2332B

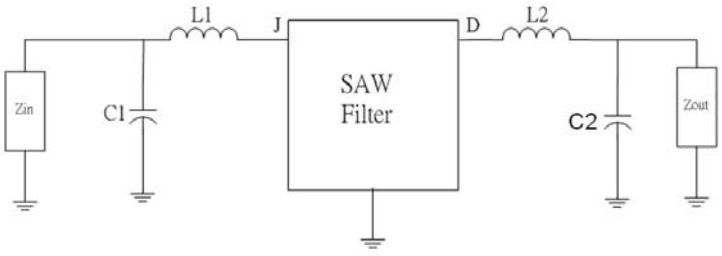
200 Ω Input/Output



C1=C2=7PF C3=C4=4PF

L1=33NH L2=56NH

50 Ω Input/Output



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

CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

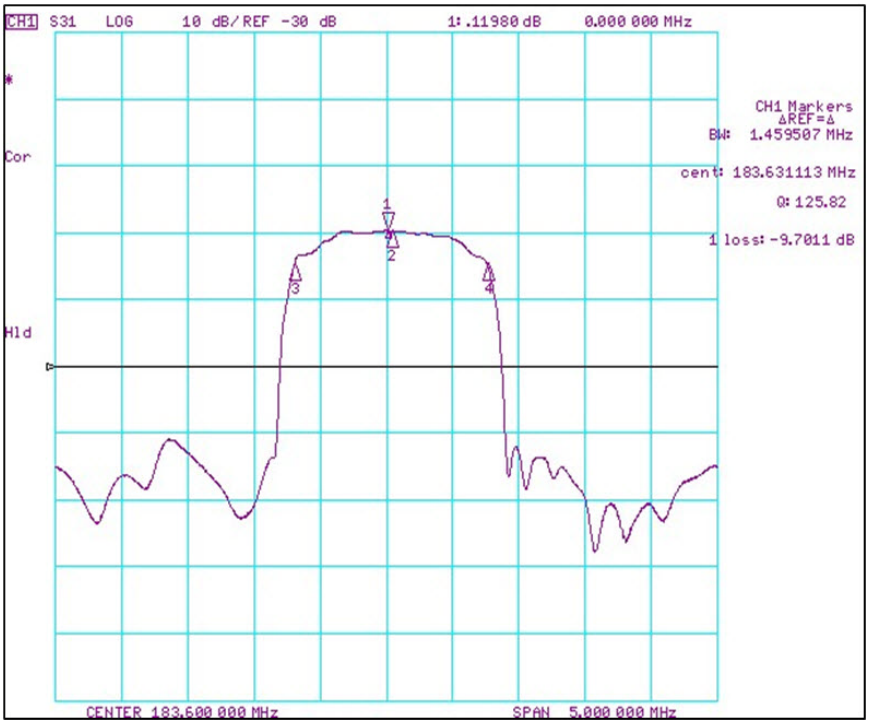
Notes:

1. US and international patents may apply.
2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

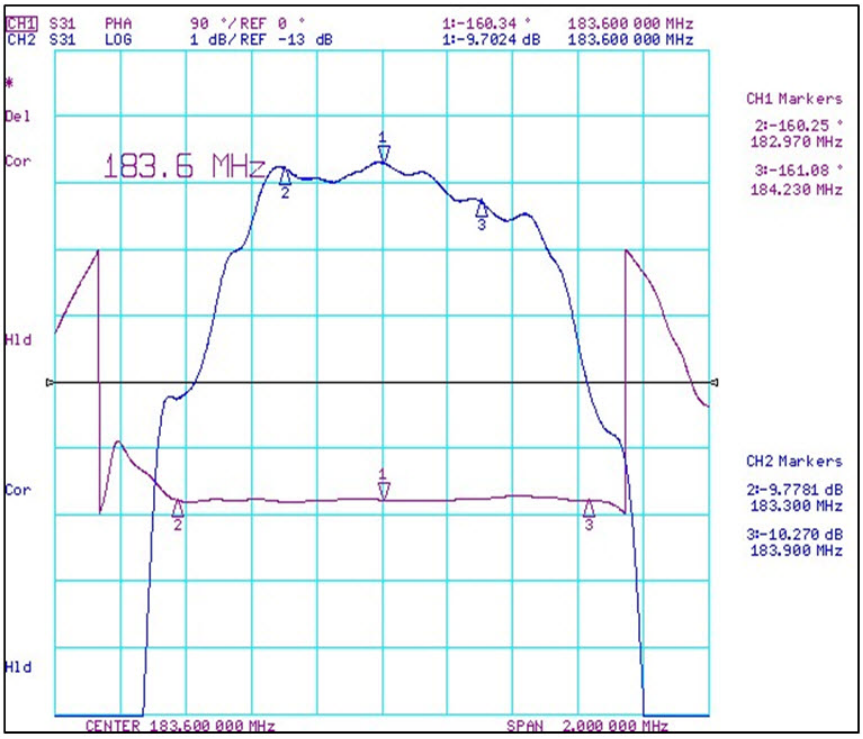
© 2013 by RF Monolithics, Inc.

Filter Response Plots

Wide Band Response

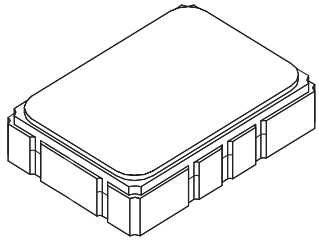


Pass Band Response

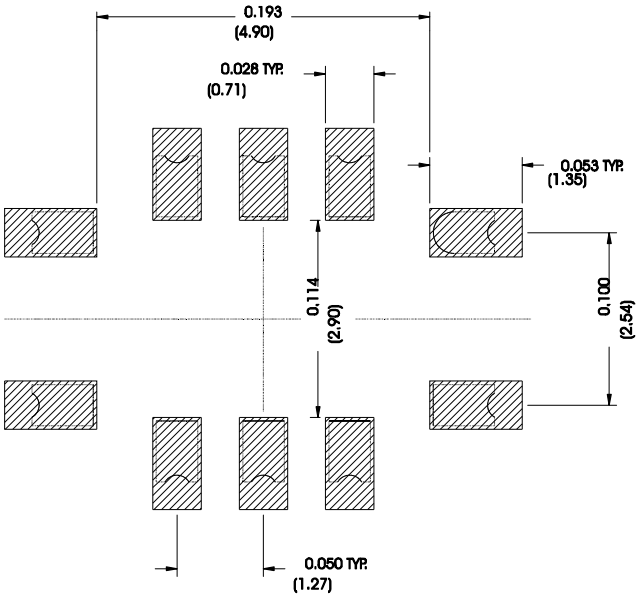


© 2013 by RF Monolithics, Inc.

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



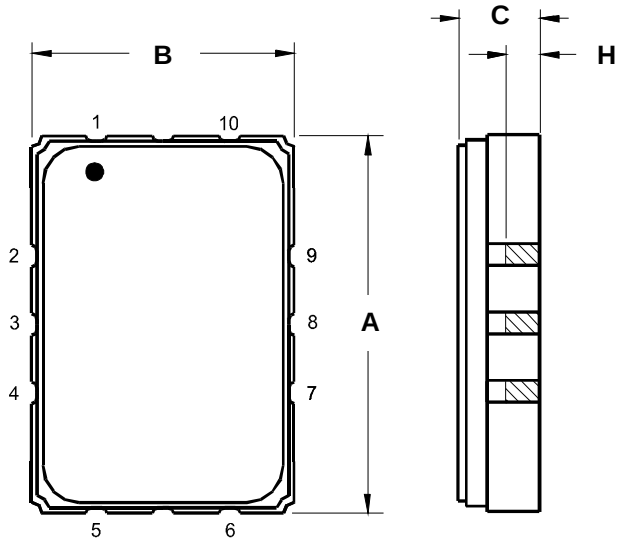
Recommended PCB Footprint



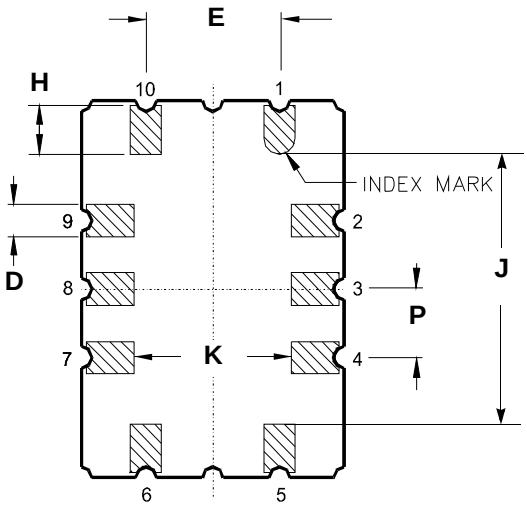
Case Dimensions						
Dimension	**mm**			**Inches**		
	Min	**Nom**	**Max**	**Min**	**Nom**	**Max**
A	6.80	7.00	7.20	0.268	0.276	0.283
B	4.80	5.00	5.20	0.189	0.197	0.205
C	-	1.65	2.00	-	0.065	0.079
D	0.47	0.60	0.73	0.019	0.024	0.029
E	2.41	2.54	2.67	0.095	0.100	0.105
H	0.87	1.0	1.13	0.034	0.039	0.044
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
Pb Free	



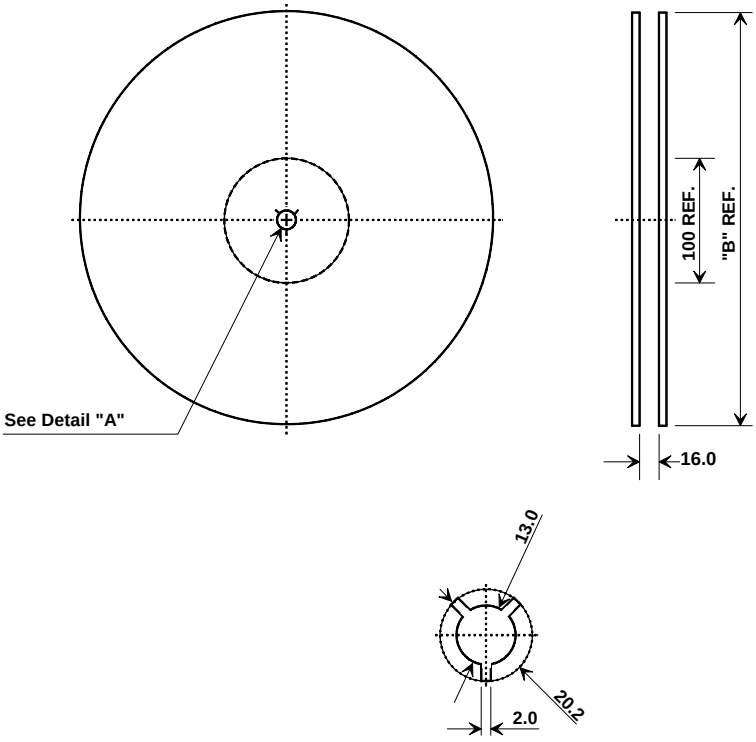
TOP VIEW



BOTTOM VIEW

© 2013 by RF Monolithics, Inc.

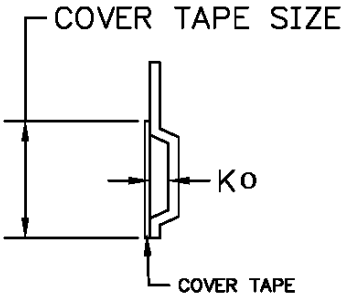
Tape and Reel Specifications

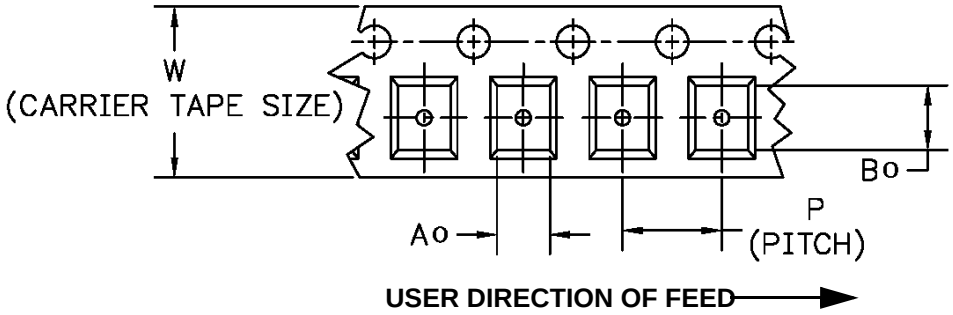


"B" Nominal Size		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000

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





© 2013 by RF Monolithics, Inc.