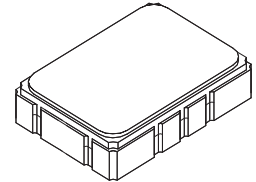


SF2332B

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)
- AEC-Q200



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

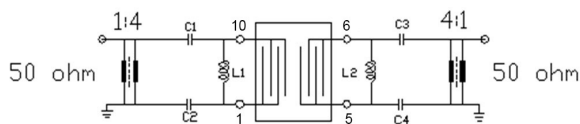
Electrical Characteristics

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 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
$f_c \pm 0.9\text{ MHz}$			28	31		
$f_c \pm 1.25\text{ MHz}$			33	36		
$f_c \pm 1.7\text{ MHz}$			30	33		
$f_c \pm 2.05\text{ MHz}$			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##

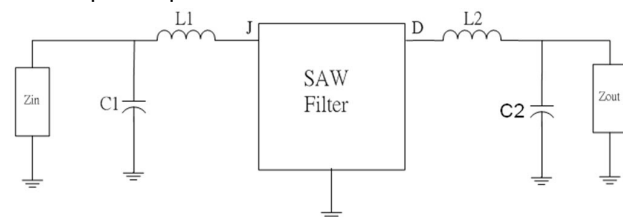
Measurement Circuit - SF2332B

200 Ω Input/Output



$C1=C2=7\text{PF}$ $C3=C4=4\text{PF}$
 $L1=33\text{NH}$ $L2=56\text{NH}$

50 Ω Input/Output



$L1=100\text{nH}$, $C1=27\text{pF}$, $L2=56\text{nH}$, $C2=36\text{pF}$



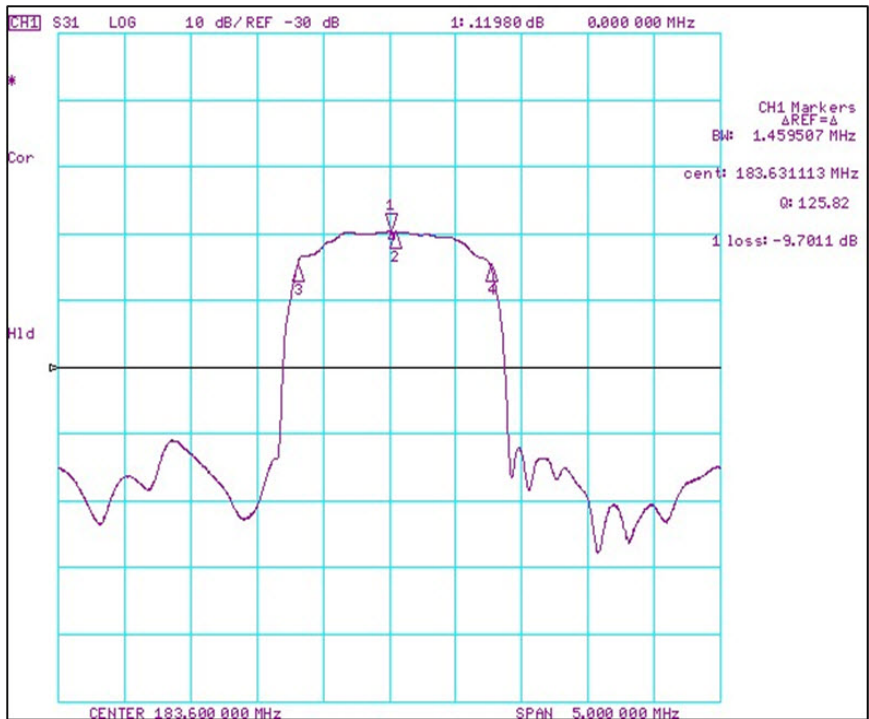
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

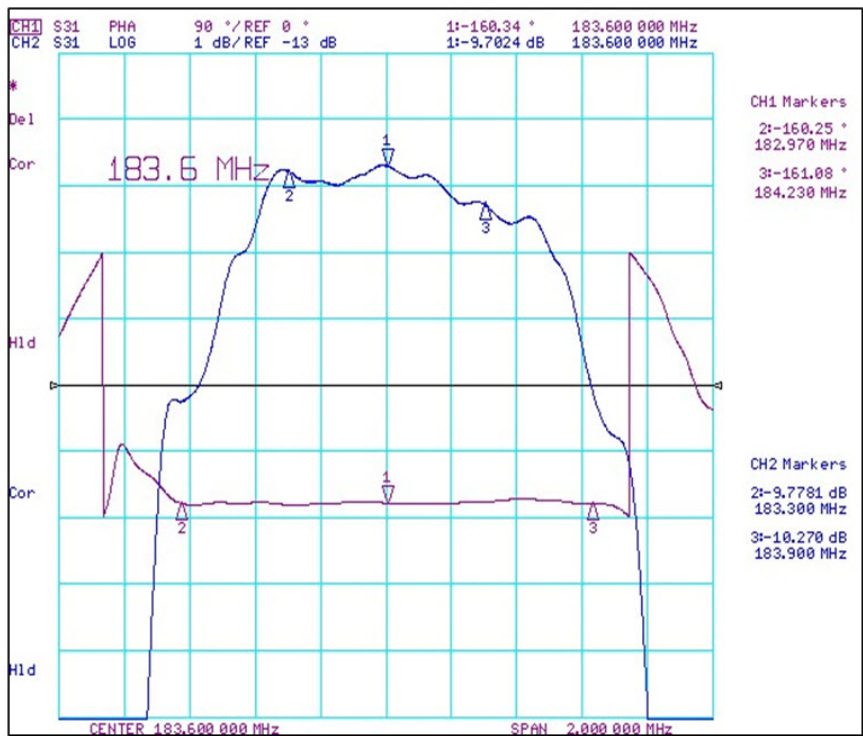
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Filter Response Plots

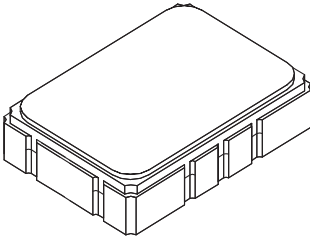
Wide Band Response



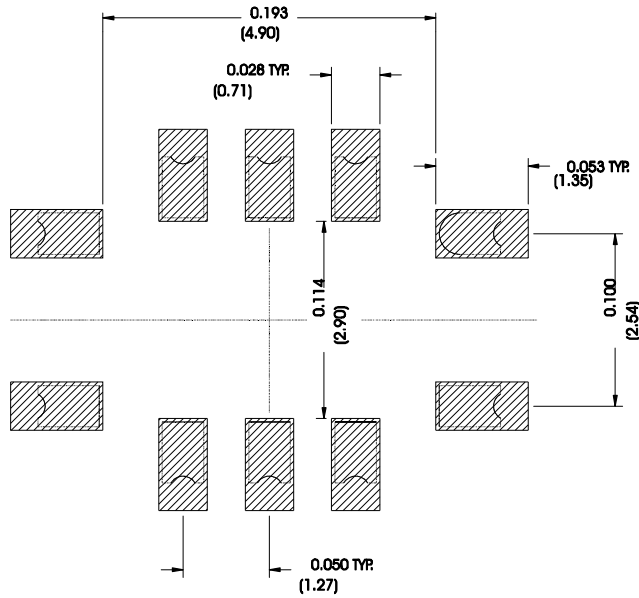
Pass Band Response



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



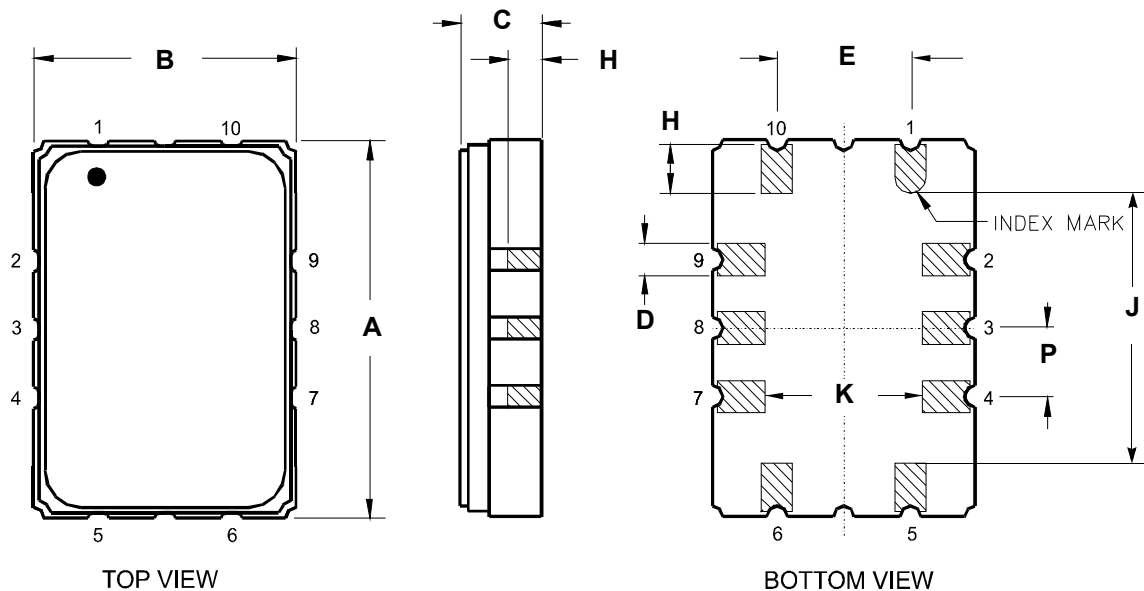
Recommended PCB Footprint



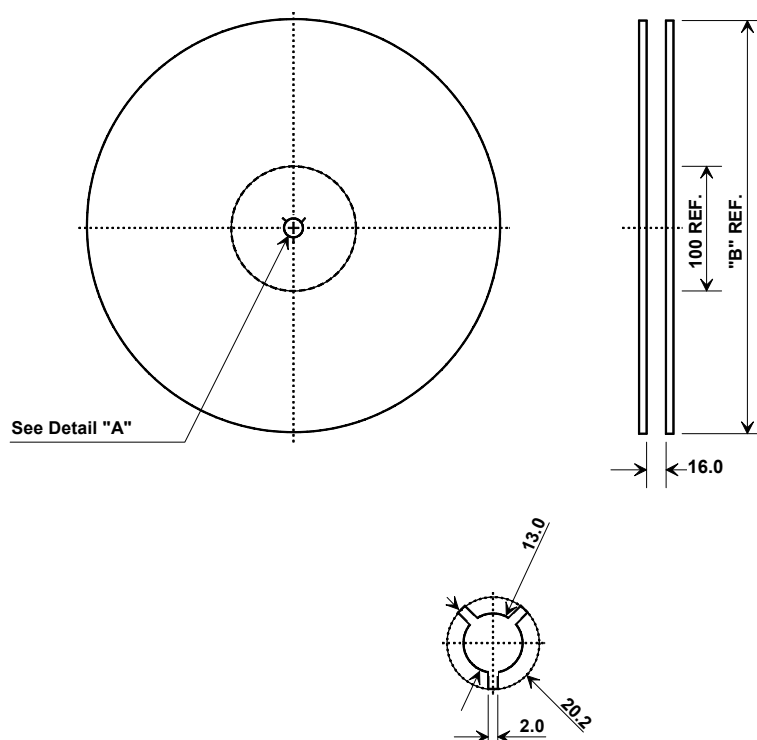
Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	6.80	7.00	7.20	0.268	0.276	0.283
B	4.80	5.00	5.20	0.189	0.197	0.205
C	-	1.65	2.00	-	0.065	0.079
D	0.47	0.60	0.73	0.019	0.024	0.029
E	2.41	2.54	2.67	0.095	0.100	0.105
H	0.87	1.0	1.13	0.034	0.039	0.044
J	4.87	5.00	5.13	0.192	0.197	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	



Tape and Reel Specifications



"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

