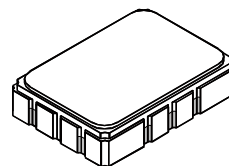




- **Low Insertion Loss**
- **5.0 X 7.0 mm Surface-Mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**

**SF1200B****96.00 MHz
SAW Filter****SMP-03****Absolute Maximum Ratings**

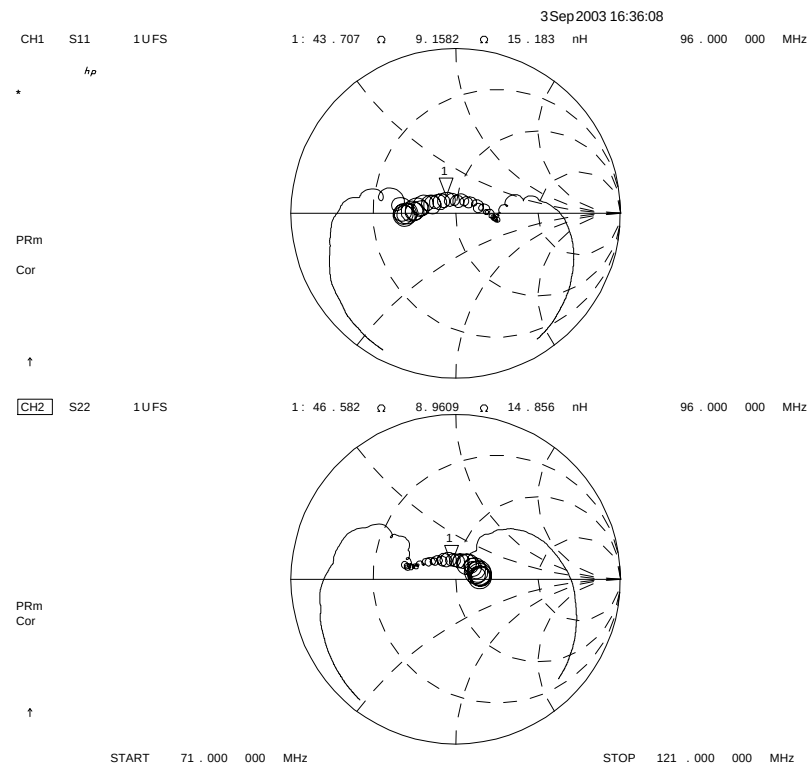
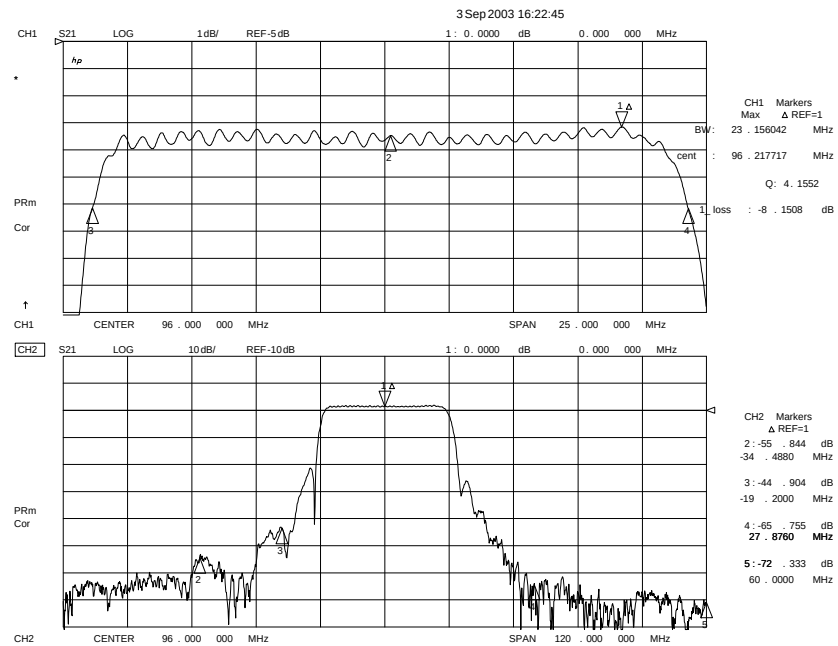
Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Max Soldering Profile	265°C for 10 s	

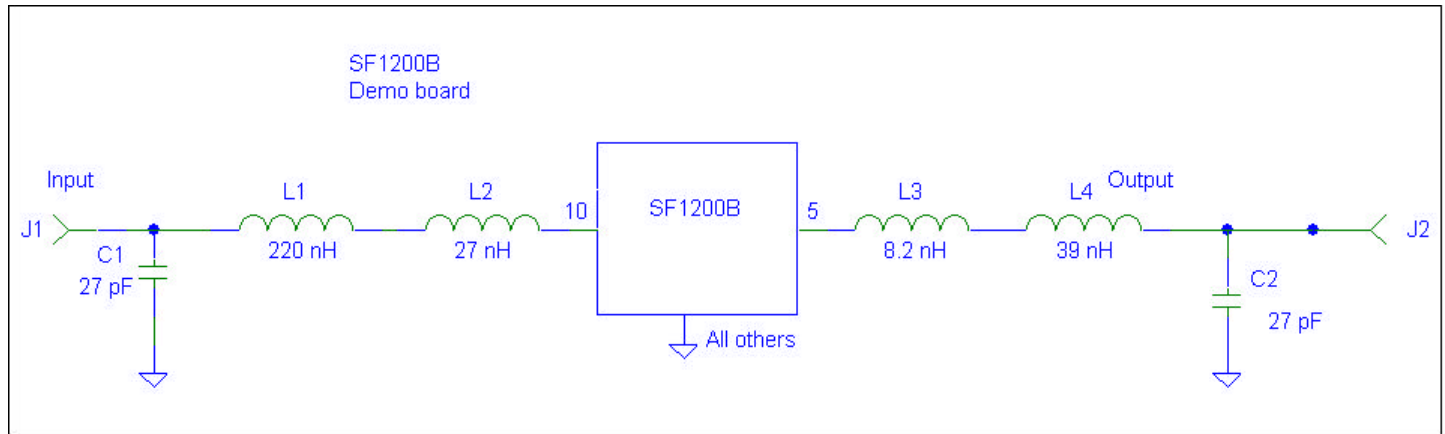
Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency		f_c	1	96			MHz
Passband Bandwidth				20			MHz
Insertion Loss	86.0-----106.0MHz	IL	1, 2		8	12	dB
Relative attenuation to I.L. @ out of pass band (Rejection)	0-----68.4MHz		1, 3	51	57		
	76.8MHz			40	45		
	123.6-----162.8MHz			56	65		
	162.8-----1000MHz			35	40		
Amplitude Ripple (p-p)	86.0-----106.0MHz		1, 4		0.9	1.6	ns
Amplitude Ripple (p-p) @ 25°C	86.0-----106.0MHz		1, 4		1.2		
Group Delay Ripple (p-p)	86.0-----106.0MHz		1, 5		120	150	
1dB Compression Point	86.0-----106.0MHz		1	12	15		dBm
Input IP3			1	35	40		dBm
Operating Temperature			1	-40		+85	°C
Terminating Impedance					50		Ohm
Case Style	SMP-03 7 x 5 mm Nominal Footprint						
Lid Symbolization (YY=year, WW=week, S=shift) See note 4	RFM SF1200B YYWWS						

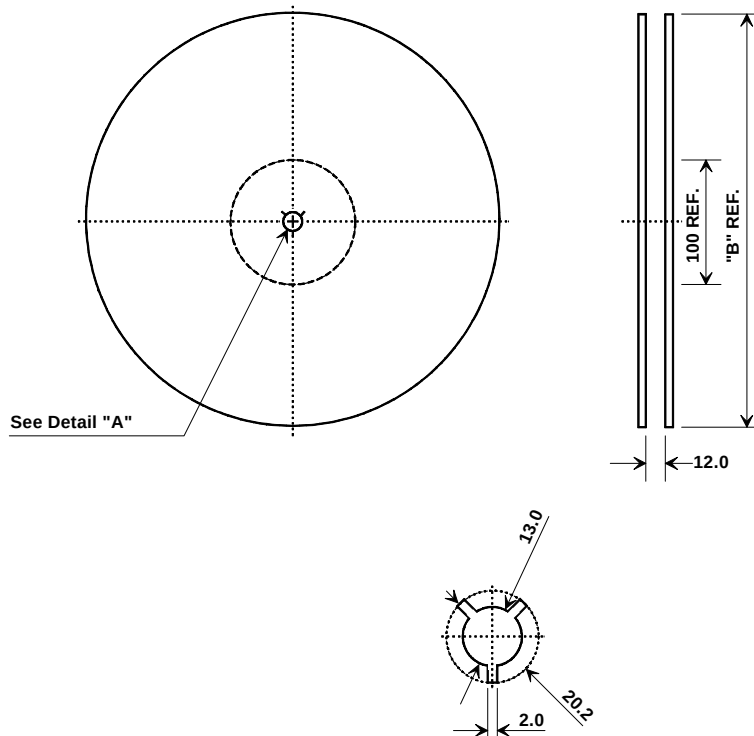
Notes:

1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, f_c .
3. Rejection is measured as attenuation below the minimum IL point in the passband. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. US and international patents may apply.
6. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
7. ©Copyright 1999, RF Monolithics Inc.
8. Electrostatic Sensitive Device. Observe precautions for handling. 





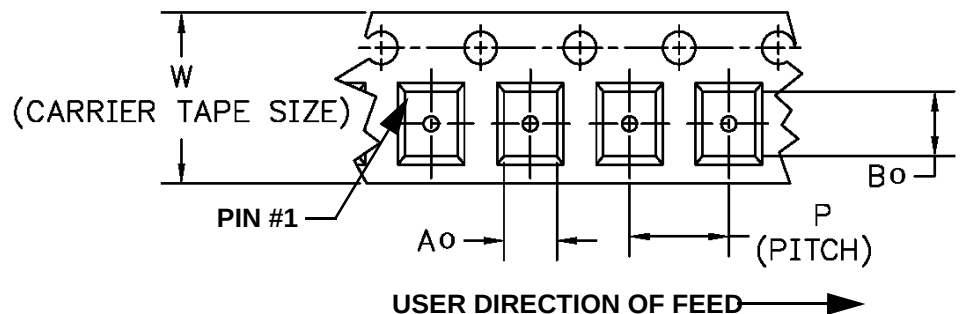
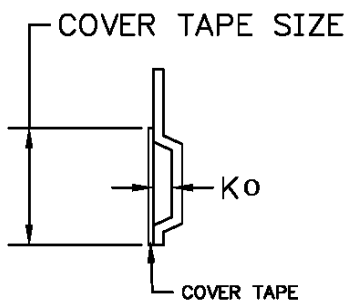
Tape and Reel Specifications



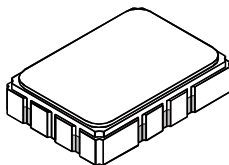
"B "		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000

COMPONENT ORIENTATION and DIMENSIONS

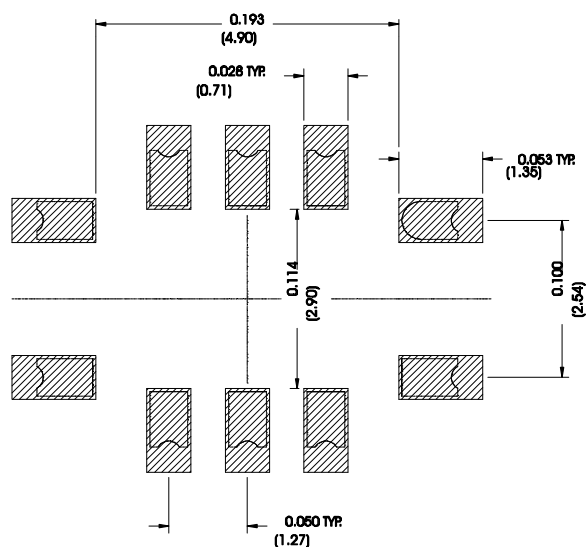
Carrier Tape Dimensions	
Ao	9.4 mm
Bo	7.4 mm
Ko	2.0 mm
Pitch	8.0 mm
W	16.0 mm



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	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	.47	0.60	.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	Input or Return	10
	Return or Input	1
Port 2	Output or Return	5
	Return or Output	6
Ground		All others
Single Ended Operation		Return is ground
Differential Operation		Return is hot

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
Pb Free	

