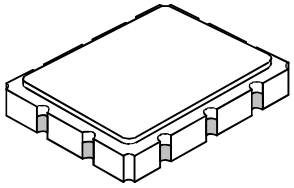
SF1122A

190 MHz SAW Filter

- ***Designed for CDMA BTS Applications***
- ***Low Insertion Loss***
- ***9.1 x 7.1 mm Surface-mount Case***
- ***Single Ended Input and Output***



SM9171-10

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		190.000		MHz
Passband	Insertion Loss at fc	IL			9.5	10.5	dB
	3 db Passband	BW_3	1, 2		±675		kHz
	5 db Passband	BW_5		±630	±735		
	Amplitude Ripple over fc±504 kHz					1.5	dB_{P-P}
	Group Delay Dev. fc±630 kHz					1,000	nsec
Rejection	fc±1.25 MHz		1, 2, 3	35			dB
	Ultimate				45		
Operating Temperature Range		T_A	1	-30		+80	°C

Impedance Matching to 50Ω Unbalanced	External L-C
Case Style	SM9171-10 9.1 x 7.1 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF1122A YYWW

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, fc.
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. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
5. The design, manufacturing process, and specifications of this filter are subject to change.
6. Either Port 1 or Port 2 may be used for either input or output in the design. However, impedances and impedance matching may vary between Port 1 and Port 2, so that the filter must always be installed in one direction per the circuit design.
7. US and international patents may apply.
8. Electrostatic Sensitive Device. Observe precautions for handling.

Electrical Connections

Connection	Terminals
Port 1 Hot	1
Hot or Port 1 Gnd Return	10
Port 2 Hot	6
Hot or Port 2 Gnd Return	5
Case Ground	All others

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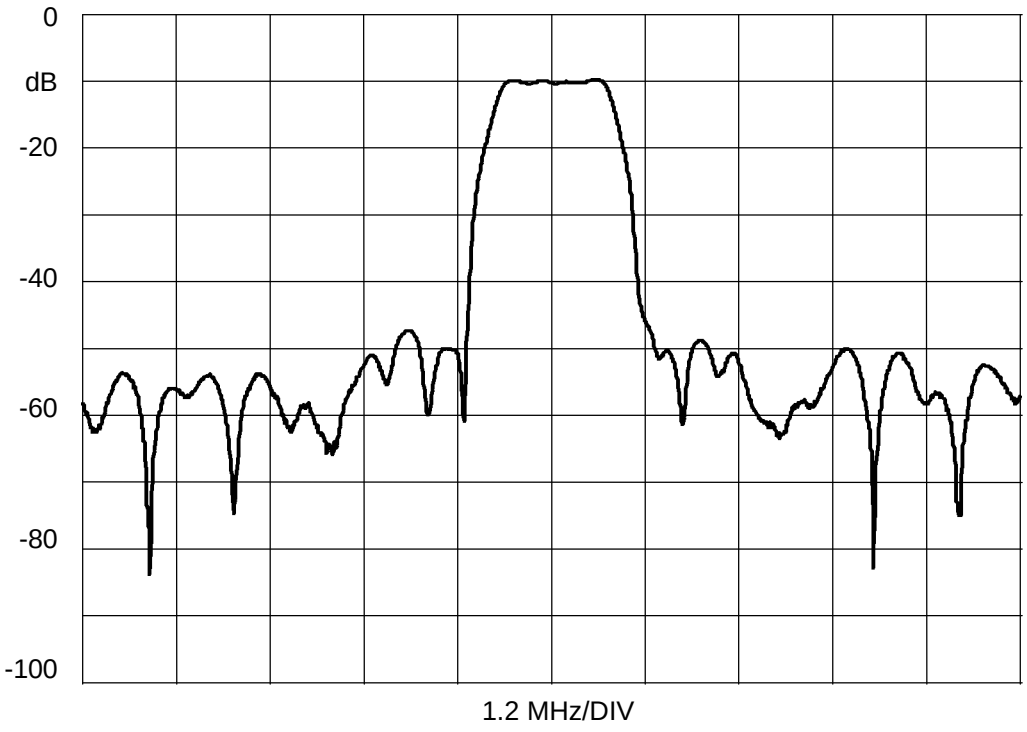
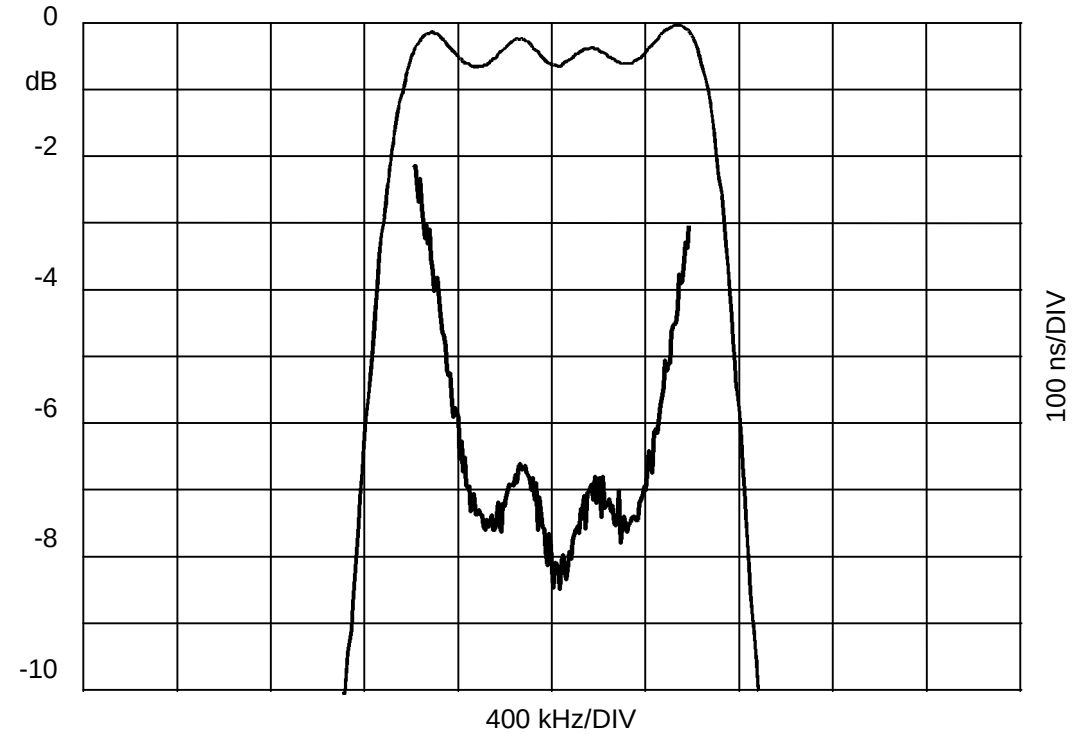
SF1122A 190 MHz SAW Filter





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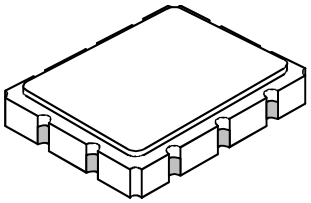
SM9171-10 Case

10-Terminal Ceramic Surface-Mount Case
9.1 x 7.1 mm Nominal Footprint

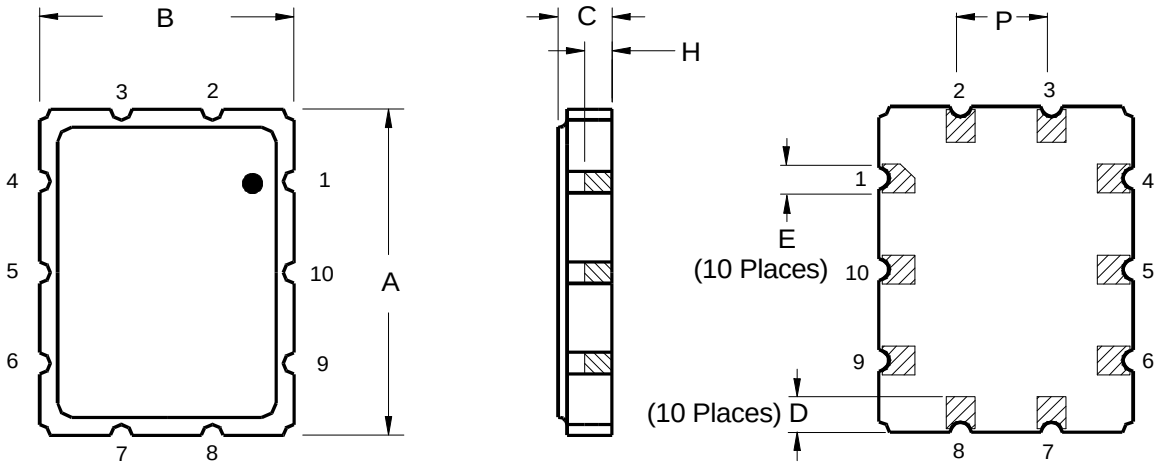


Case Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	8.86	9.09	9.40	0.349	0.358	0.370
B	6.88	7.11	7.40	0.271	0.280	0.291
C		1.91	2.00		0.075	0.079
D		0.99			0.039	
E		0.79			0.031	
H		1.0			0.039	
P		2.54			0.100	

Electrical Connections

Connection		Terminals
Port 1	Input or Return	6
	Return or Input	5
Port 2	Output or Return	1
	Return or Output	10
Ground		All others
Single Ended Operation		**Return is ground**
Differential Operation		**Return is hot**



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