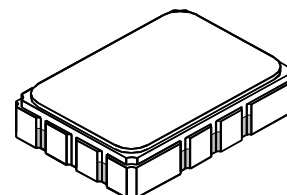


**SF1102A**

- **Designed for WCDMA 3G IF Applications**
- **Quartz Temperature Stability**
- **Small Size**
- **Hermetic 7 x 5 Surface-Mount Case**

**230 MHz
SAW Filter****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	235°C for 90 s	

**SMP-03****Electrical Characteristics**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_C	1	230.000			MHz
Passband	Insertion Loss at f_C	1, 2	± 2.0	16	18.0	dB
	1 dB Passband			± 2.2		MHz
	3 dB Passband			± 2.5		
	Amplitude Ripple over $f_C \pm 2.0$ MHz				1.0	dB _{p-p}
	Group Delay Variation over $f_C \pm 2.0$ MHz			100	150	ns _{p-p}
Rejection	$f_C - 25$ to $f_C - 5.0$ and $f_C + 5.0$ to $f_C + 25$ MHz	1, 2, 3	40			dB
	Ultimate			50		
Operating Temperature Range	T_A	1	-20		+80	°C

Matching to Unbalanced 50 Ω	External L-C
Case Style	SMP-03 7 x 5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF1102A 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, 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. "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	10
Port 1 Gnd Return	1
Port 2 Hot	5
Port 2 Gnd Return	6
Case Ground	All others