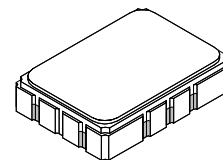


# SF1102B 230 MHz SAW Filter



## PRELIMINARY

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



See Associated Plots

Characteristic	Sym	Min	Typ	Max	Units	Notes	
Nominal Center Frequency	fc		230.000		MHz	1	
Passband	Insertion Loss at fc	IL		16	18.0	dB	1, 2
	1 dB Passband	BW <sub>1</sub>	±2.0	±2.2			
	3 dB Passband	BW <sub>3</sub>		±2.5			
	Amplitude Ripple over fc ±2.0 MHz				1.0	dB <sub>P-P</sub>	
Group Delay Variation over fc ±2.0 MHz	GDV		100	150	ns <sub>P-P</sub>		
Rejection	fc-25 to fc-5.0		40			dB	1, 2, 3
	fc+5 to fc+25		38				
Operating Temperature Range	T <sub>A</sub>	-20		+80	°C	1	

Matching to Unbalanced 50 Ω	External L-C
Case Style	SMP-03 7 x 5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week) See note 4	RFM SF1102A-1 YYWW

### 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	

### 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

### 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.
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