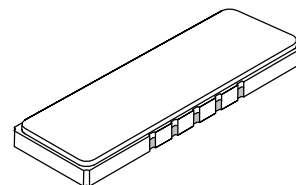


# SF1134A 170.6 MHz SAW Filter



## PRELIMINARY

- Designed for EDGE BTS Receiver IF Applications
- Low Insertion Loss
- Excellent Size-Performance Ratio
- Hermetic SMP-75 Surface-Mount Case
- Unbalanced Input and Output



Associated Plots Attached

Characteristic	Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency	fc	170.600			MHz	1
Passband	Insertion Loss at fc			9.0	dB	1, 2
	0.5 dB Passband	$\pm 90$			kHz	
	1 dB Passband	$\pm 150$				
	Amplitude Ripple over fc $\pm 90$ kHz			.5	dB <sub>P-P</sub>	
	Amplitude Ripple over fc $\pm 150$ kHz			1		
Group Delay Variation over fc $\pm 90$ kHz	GDV		TBD	400	ns <sub>P-P</sub>	
Rejection	fc-0.6 to fc-0.4 and fc+0.4 to fc+0.6 MHz	13	15		dB	1, 2, 3
	fc-0.8 to fc-0.6 and fc+0.6 to fc+0.8 MHz	27	35			
	fc-1.6 to fc-0.8 and fc+0.8 to fc+1.6 MHz	40	45			
	fc-3.0 to fc-1.6 and fc+1.6 to fc+3.0 MHz	43	55			
	fc-5.8 to fc-3.0 and fc+3.0 to fc+5.8 MHz	47	55			
	fc-35 to fc-5.8 and fc+5.8 to fc+35 MHz	50	55			
	fc-75 to fc-35 and fc+35 to fc+75 MHz	45	55			
DC to fc-75 and fc+75 to fc+1000 MHz	40					
Operating Temperature Range		-10		+85	°C	1

Impedance Matching to 50 $\Omega$ unbalanced	External L-C
Case Style	SMP-75 19 x 6.5 mm Nominal Footprint
Lid symbolization (YY = year, WW = week)	RFM SF1088A YYWW

### Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+20	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 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  $\Omega$  and measured with 50  $\Omega$  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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