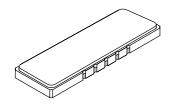
# SF1134A 170.6 MHz SAW Filter



# **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	Тур	Max	Units	Notes
Nominal Center Frequency		fc		170.600		MHz	1
Passband	Insertion Loss at fc	IL			9.0	dB	
	0.5 dB Passband		±90			kHz	1, 2
	1 dB Passband		±150				
	Amplitude Ripple over fc ±90 kHz				.5	dB <sub>P-P</sub>	
	Amplitude Ripple over fc ±150 kHz				1		
	Group Delay Variation over fc ±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:

- 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.
- 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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- 10. Electrostatic Sensitive Device. Observe precautions for handling.



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