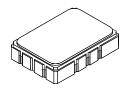
# SF1173B 374 MHz SAW Filter



## **PRELIMINARY**

- Designed for Wireless LAN Receiver IF Applications
- Balanced Input and Output



#### See Associated Plots

Characteristic		Sym	Min	Тур	Max	Units	Notes
Nominal Center Frequency		fc		374.000		MHz	1
Passband	Insertion Loss at fc	IL		8.9	10.0	dB	
	3 dB Passband	BW <sub>3</sub>	17	23		MHz	1, 2
	Amplitude Ripple over fc ±7.0 MHz			0.8	1.0	dB <sub>P-P</sub>	
	Group Delay Variation over fc ±7.0 MHz	GDT		67	100	ns <sub>P-P</sub>	
Rejection	fc-100 to -33 MHz		45	49		dB	1, 2, 3
	fc-33 to -22 MHz		40	51			
	fc –22 to –16.5 MHz		30	45			
	fc +16.5 to +22 MHz		30	39			
	fc +22 to +43 MHz		35	39			
	fc +43 to +100 MHz		40	45			
Operating Temperature Range		T <sub>A</sub>	-10		+85	°C	1

Impedance Matching to Unbalanced 50 $\Omega$	External L-C		
Case Style	SMP-03 7 x 5 mm Nominal Footprint		
Lid Symbolization (YY = year, WW = week)	RFM SF3745X7 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	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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- 10. Electrostatic Sensitive Device. Observe precautions for handling.



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