Preliminary

RFM®

SF2050A

44.00 MHz
SAW Filter

- ***Designed for 802.16 and WIMAX Receiver IF Application***
- ***Low Insertion Loss***
- ***5.0 X 9.0 mm Surface-Mount Case***
- ***Differential Input and Output***
- ***Complies with Directive 2002/95/EC (RoHS)*** Pb

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+13	dBm
Max. DC voltage between any 2 terminals	30	VDC
Storage Temperature Range	-40 to +85	°C
Suitable for lead-free soldering - Max Soldering Profile	260°C for 30 s	

Electrical Characteristics

Characteristic		Sym	Notes	Min	Typ	Max	Units
Center Frequency		f_C	1		44.00		MHz
Insertion Loss				18.00			dB
Rejection	1dB min, Frequency lower					42.3	MHz
	1dB min, Frequency upper			45.7			
	Bandwidth, 38dB min			10.70	10		
	38dB min, Frequency lower			39.00			
	38dB min, Frequency upper					49.00	
	15 to 39MHz			38	40		dB
	49 to 75MHz			38	42		dB
Group Delay (Across 1 dB frequencies)					100	150	nsec pk-pk
Amplitude Ripple (Across 1 dB frequencies)					0.5	1	dBpk-pk
Reflected Wave Signal Suppression							
	1 usec after main pulse			20	30		
	2 usec after main pulse			30	40		
	3 usec after main pulse			40	50		
Input Impedance (Differential)					1000		Ohms
Output Impedance (Differential)					1000		Ohms
Temperature	Operating			-40		85	°C
	Storage			-40		85	
Case Style		9 x 5 mm Nominal Footprint					
Lid Symbolization (YY=year, WW=week, S=shift) See note 4		RFM SF2050A YYWWS					

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. "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
4. The design, manufacturing process, and specifications of this filter are subject to change.
5. 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.
6. US and international patents may apply.
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RF Monolithics, Inc. Phone: (972) 233-2903 Fax: (972) 387-8148 E-mail: info@rfm.com
RFM Europe Phone: 44 1963 251383 Fax: 44 1963 251510 http://www.rfm.com