

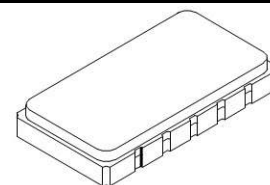
PRELIMINARY



RFM products are now
Murata products.

SF2021B

**73.5996 MHz
SAW Filter**



SMP-53-S Case

• **Hermetic 13.3 x 6.5 mm Surface3-Mount Case**

Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+20	dBm
Max DC Voltage between any 2 terminals	30	VDC
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-40 to +85	°C
Solder Reflow Temperature, 10 seconds	265	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	fc	1		73.5996		MHz
Maximum Insertion Loss at fc	IL			9	10	dB
1 dB Passband	BW ₁			3.73		MHz
Amplitude Ripple over fc ±1.865 MHz		1, 2			1	dB _{p-p}
Amplitude Tilt over fc ±1.865 MHz					0.5	dB
Phase Variation over fc ±1.875 MHz					11	° _{p-p}
Rejection						dBc
Fc-5.8 MHz offset to 0 MHz		1, 2, 3	45			
Fc+5.8 MHz offset to 150 MHz			45			
Input return loss: Match to 50 Ω single end Impedance			>10dB, with External L-C			
Output return loss: Match to 50 Ω single end Impedance			>10dB, with External L-C			
Case Style			SMP-53-S Case			
Lid Symbolization (Y=year, WW=week, S=shift) dot=pin 1 indicator			RFM SF2021B YYWWS			



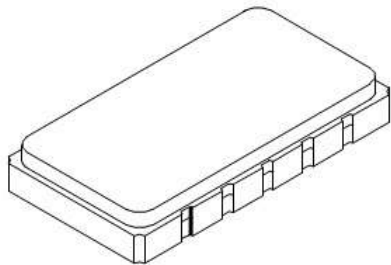
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

1. Unless noted otherwise, all *specifications apply over temperature range*.
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.
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.
8. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

SMP-53-S Case

10-Terminal Ceramic Surface-Mount Case 13.3 X 6.5 mm Nominal Footprint



Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		13.3			.524	
B		6.5			.256	
C			2.0			.078
D		2.3			.091	
E		1.91			.075	
F		1.02			.040	
G		1.0			0.039	

Electrical Connections

Connection	Terminals
Input	1
Output	6
Case Ground	All others

