



RFM products are now Murata products.

96.00 MHz

SF2069A-1

Absolute Maximum Ratings

• Hermetic 19 x 6.5 mm Surface-mount Case

Complies with Directive 2002/95/EC (RoHS)

· Low Insertion Loss

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 +150	°C
Suitable for lead-free soldering - Max. Soldering Profile	260°C	for 30 s



SMP-75

Electrical Characteristics

Characteristic		Sym	Notes	Min	Тур	Max	Units
Nominal Center Frequency (@ 25°C)		f _O		95.9	96.00	96.1	MHz
Minimum Insertion Loss Attenuation			1		14	16	dB
Passband	α min \leq 1dB , B1dB			4.3	5.0		MHz
Amplitude Ripple (p-p)	±2.40MHz				0.8	1.5	dB
Group Delay Ripple	±2.40MHz				80	125	ns
Relative Attenuation (relative to αmin)							
	40 to 87 MHz			43	48		dB
	111 to 150 MHz			50	55		dB
Operating Temperature		T _A	1	-40		+85	°C

Impedance Matching to 50 Ω unbalanced	External L-C
Case Style	SMP-75 19 x 6.5 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week)	RFM SF2069A-1 YYWW

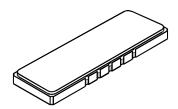
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

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 W and measured with 50 Ω network analyzer.
- Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc. 2
- 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.
- "LRIP" or "L" after the part number indicates "low rate initial production" and "ENG" or "E" indicates "engineering prototypes."
- 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.
- US and international patents may apply.

SMP-75 Case

10-Terminal Ceramic Surface-Mount Case 19 x 6.5 mm Nominal Footprint



Case Dimensions							
Dimension	mm			Inches			
Dilliension	Min	Nom	Max	Min	Nom	Max	
Α	18.80	19.00	19.30	0.740	0.748	0.760	
В	6.30	6.50	6.80	0.248	0.256	0.268	
С		1.75	2.00		0.069	0.079	
D		2.29			0.090		
E		1.02			0.040		
Н		1.0			0.039		
Р		1.905			0.075		

Electrical Connections				
	Connection	Terminals		
Port 1	Hot	10		
	Ground Return	1		
Port 2	Hot	5		
	Ground Return	6		
	Case Ground	All others		
Single I	Ended Operation	Return is ground		
Differer	ntial Operation	Return is hot		

	Materials
Solder Pad Termination	Au plating 30 - 60 μinches (76.2-152 μm) over 80-200 μinches (203-508 μm) Ni.
Lid	Fe-Ni-Co Alloy Electroless Nickel Plate (8-11% Phosphorus) 100-200 µinches Thick
Body	Al ₂ O ₃ Ceramic
Pb Free	

