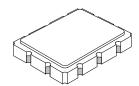


## **PRELIMINARY**

- Designed for CDMA BTS Applications
- Low Insertion Loss
- 9.1 x 7.1 mm Surface-Mount Case
- Unbalanced Input and Output



## Л

Characteristic		Sym	Min	Тур	Max	Units	Notes
Nominal Center Frequency		fc		380.000		MHz	1
Passband	Insertion Loss at fc	IL		7	8.0	dB	
	3 dB Passband	BW <sub>3</sub>		TBD		kHz	1, 2
	5 dB Passband	BW <sub>5</sub>	±630				
	Amplitude Ripple over fc ±630 kHz				1.0	dB <sub>P-P</sub>	
	Phase Linearity over fc ±630 kHz				6	°P-P	
Rejection	At fc ±1.25 MHz		40			dB	1, 2, 3
	Ultimate			TBD			
Operating Temperature Range		T <sub>A</sub>	-30		+80	°C	1

Impedance Matching to 50 $\Omega$ unbalanced	External L-C			
Case Style	SM9171-10 9.1 x 7.1 mm Nominal Footprint			
Lid Symbolization (YY = year, WW = week) See note 4.	RFM SF1123A 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**

2100111041 00111100110110					
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:

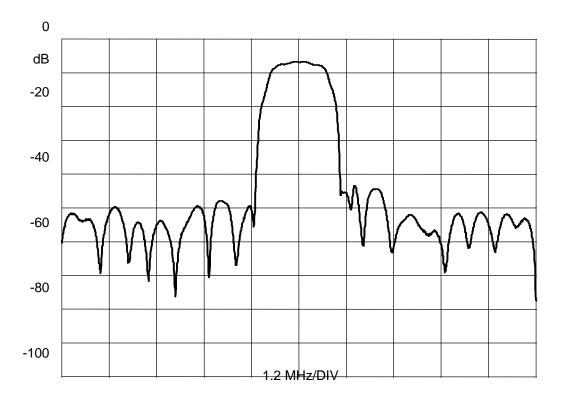
- 1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50  $\Omega$  and measured with 50  $\Omega$  network analyzer.
- 2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency, fc.
- 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.
- US and international patents may apply.
- 8. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
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- 10. Electrostatic Sensitive Device. Observe precautions for handling.

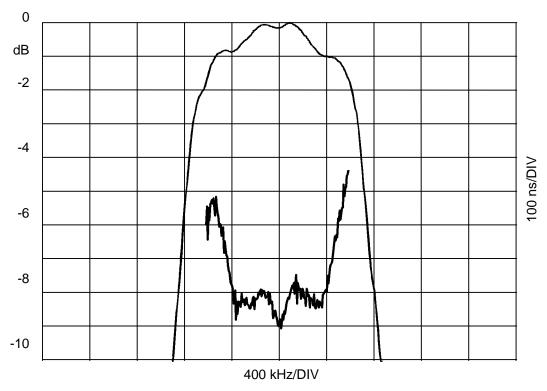


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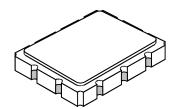








# 10-Terminal Ceramic Surface-Mount Case 9.1 x 7.1 mm Nominal Footprint

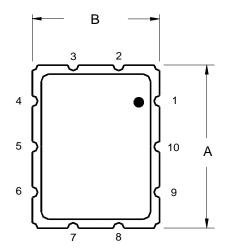


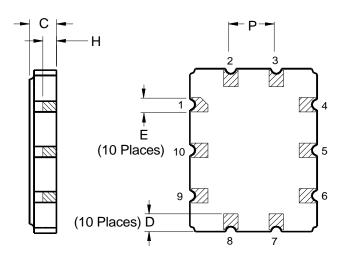
### **Case Dimensions**

Dimension	mm			Inches			
Dilliension	Min	Nom	Max	Min	Nom	Max	
Α	8.86	9.09	9.40	0.349	0.358	0.370	
В	6.88	7.11	7.40	0.271	0.280	0.291	
С		1.91	2.00		0.075	0.079	
D		0.99			0.039		
E		0.79			0.031		
Н		1.0			0.039		
Р		2.54			0.100		

## **Electrical Connections**

	Connection	Terminals			
Port 1	Input or Return	6			
	Return or Input	5			
Port 2	Output or Return	1			
	Return or Output	10			
Ground		All others			
Single Ended Operation		Return is ground			
Differential Operation		Return is hot			





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