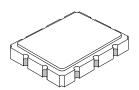


# **PRELIMINARY**

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



## $\int \int_{\mathbb{R}^n}$

Characteristic			Min	Тур	Max	Units	Notes
Nominal Center Frequency		fc	371.000		MHz	1	
Passband	Insertion Loss at fc	IL		9.5	10.5	dB	
	1 dB Passband	BW <sub>1</sub>	±750	±800		kHz	1, 2
	3 dB Passband	BW <sub>3</sub>		±1140	±1250		
	Amplitude Ripple over fc ±500 kHz			0.25	0.7	dB <sub>P-P</sub>	
	Group Delay Variation over fc ±750 kHz	GDV		60	100	ns <sub>P-P</sub>	
Rejection	fc-15.0 to fc-5.0 and fc+5.0 to fc+15.0 MHz		40	42		dB	1, 2, 3
	100 MHz to fc-15 MHz and fc+15 MHz to 1 GHz		45	47			
Operating Temperature Range		T <sub>A</sub>	-20		+60	°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)	RFM SF1104A YYWW				

**Absolute Maximum Ratings** 

Value	Units	
+10	dBm	
30	VDC	
-40 to +85	°C	
265°C for 10 s		
	+10 30 -40 to +85	

## **Electrical Connections**

Connection	Terminals		
Port 1 Hot	1		
Port 1 Gnd Return	10		
Port 2 Hot	6		
Port 2 Gnd Return	5		
Case Ground	All Others		

#### Notes:

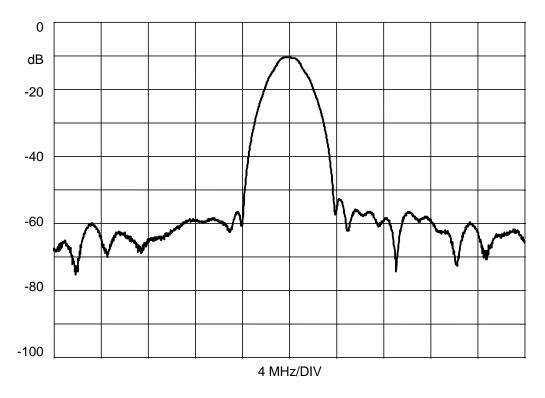
- Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
- 2. Unless noted otherwise, all frequency specifications are referenced to the nominal 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.
- 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. 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.

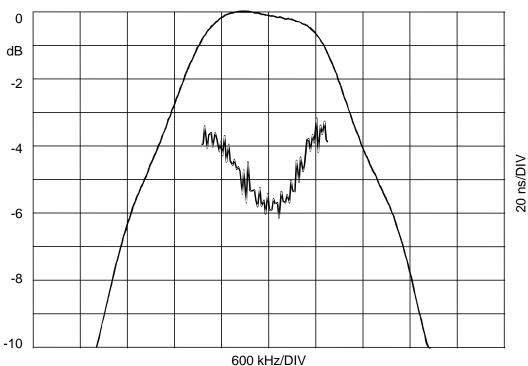


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**European Sales Office**44 1963 251383
44 1963 251510

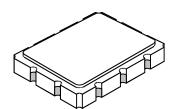








# 10-Terminal Ceramic Surface-Mount Case 9.1 x 7.1 mm Nominal Footprint

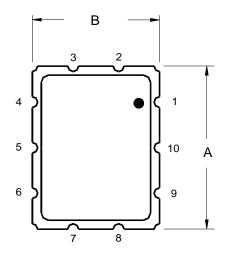


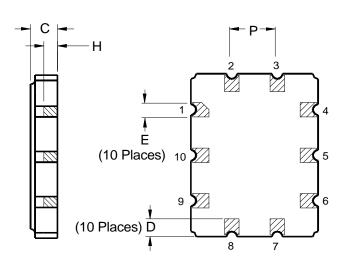
### **Case Dimensions**

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			
Differer	ntial Operation	Return is hot			





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