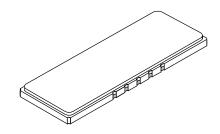
SF1112A 160 MHz SAW Filter



- Designed for CDMA2000 BTS Applications
- Simple External Impedance Matching
- Hermetic SMP-97 Surface-Mount Case
- Unbalanced Input and Output



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Characterist	ic	Sym	Min	Тур	Max	Units	Notes
Nominal Cen	ter Frequency	fc	160.000 MHz		MHz	1	
Passband	Insertion Loss at fc	IL		18	20.0	dB	
	3 dB Passband	BW ₃	±1.9	±2.0		MHz	1, 2
	Phase Linearity over fc ±1.75 MHz				5	°rms	
Rejection	fc-3.2 to fc-2.55 and fc+2.55 to fc+3.2 MHz		38			dB	1, 2, 3
	fc±3.2 MHz		50				
Operating Temperature Range		T _A	-20		+70	°C	1

Impedance Matching to 50 Ω unbalanced	External L-C				
Case Style	SMP-97 24.6 x 9 mm Nominal Footprint				
Lid Symbolization (YY = year, WW = week)	RFM SF1112A YYWW				

Absolute Maximum Ratings

Rating	Value	Units	
Maximum Incident Power in Passband	+20	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 (See note 3)

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:

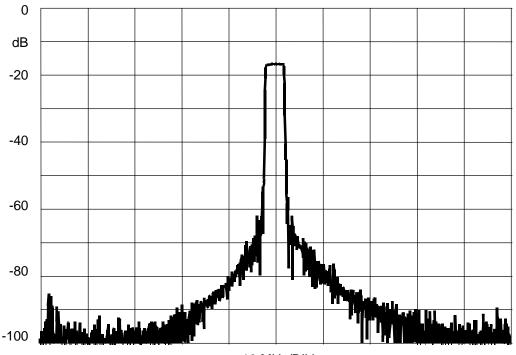
- Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
- 2. Unless noted otherwise, all frequency specifications are referenced to the nominal 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. All "NC" or "no connection" terminals should be grounded.
- 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. 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.



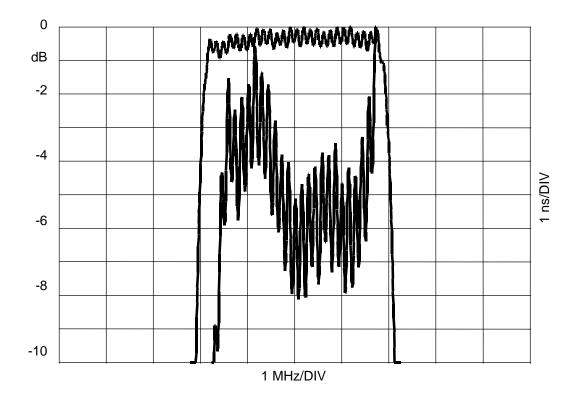
RF Monolithics, Inc. 4347 Sigma Road Dallas, Texas 75244 USA Phone: +1(972)233-2903 Fax: +1(972)387-8148 e-mail: <u>info@rfm.com</u> Home page: www.rfm.com

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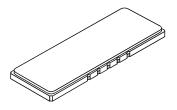




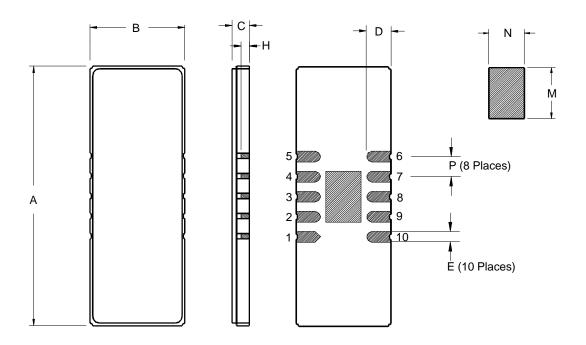




10-Terminal Ceramic Surface-Mount Case 24.6 x 9 mm Nominal Footprint



Dimension	mm		Inches			
Diffiction	Min	Nom	Max	Min	Nom	Max
Α	24.41	24.64	24.94	0.961	0.970	0.982
В	8.80	8.99	9.30	0.349	0.354	0.366
С		1.75	2.00		0.069	0.079
D		2.29			0.090	
E		1.02			0.040	
Н		0.76			0.030	
M		4.83			0.190	
N		3.40			0.134	
Р		1.905			0.075	



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