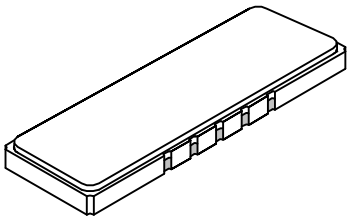
SF1114A-1 137.2 MHz SAW Filter

PRELIMINARY

- *Designed for WLL Receiver Applications*
- *Low Insertion Loss*
- *Hermetic SMP-75 Surface-Mount Case*
- *Unbalanced Input and Output*



Characteristic		Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency		fc		137.200		MHz	1
Passband	Insertion Loss at fc	IL		14	15.5	dB	
	1 dB Passband	BW_1	±825	±900		kHz	1, 2
	3 dB Passband	BW_3	±1000	±1050			
	Group Delay Variation over fc ±825 kHz	GDV		150	200	ns_{P-P}	
Rejection	fc-1.665 to fc-1.5 and fc+1.5 to fc+1.665 MHz		20	30		dB	1, 2, 3
	fc-8.0 to fc-1.665 and fc+1.665 to fc+8.0 MHz		40	42			
	fc±8.0 MHz		45	50			
	Ultimate			55			
Operating Temperature Range			-10		+85	°C	1

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 SF1114A-1 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

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 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.
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.
9.
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: info@rfm.com
Home page: www.rfm.com

European Sales Office
44 1963 251383
44 1963 251510

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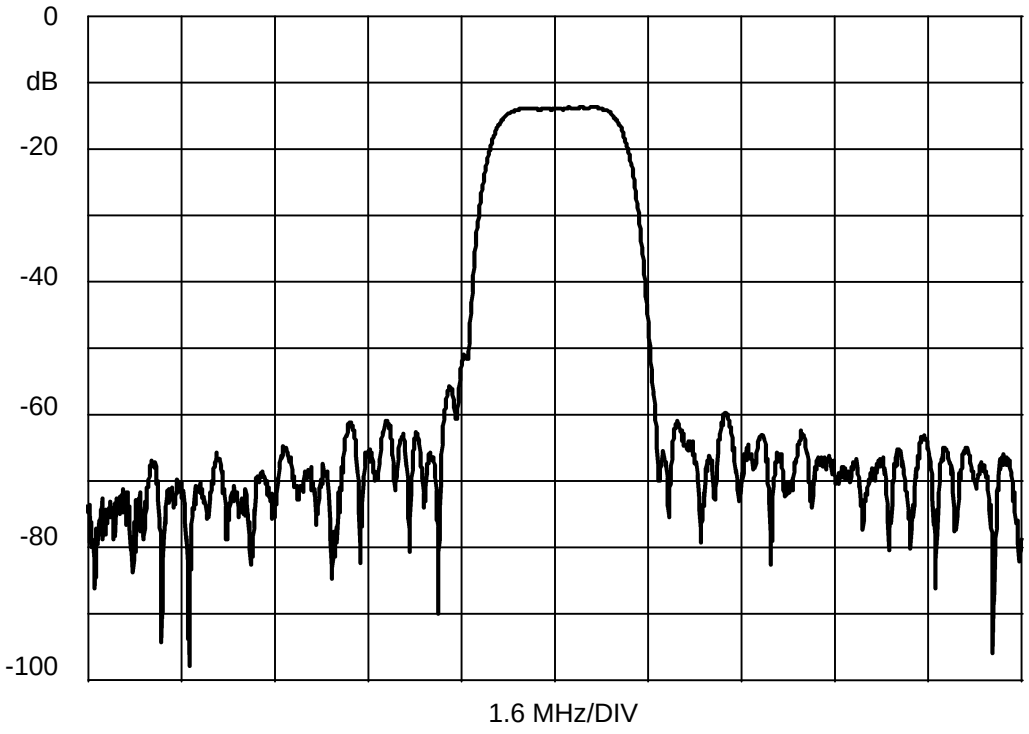

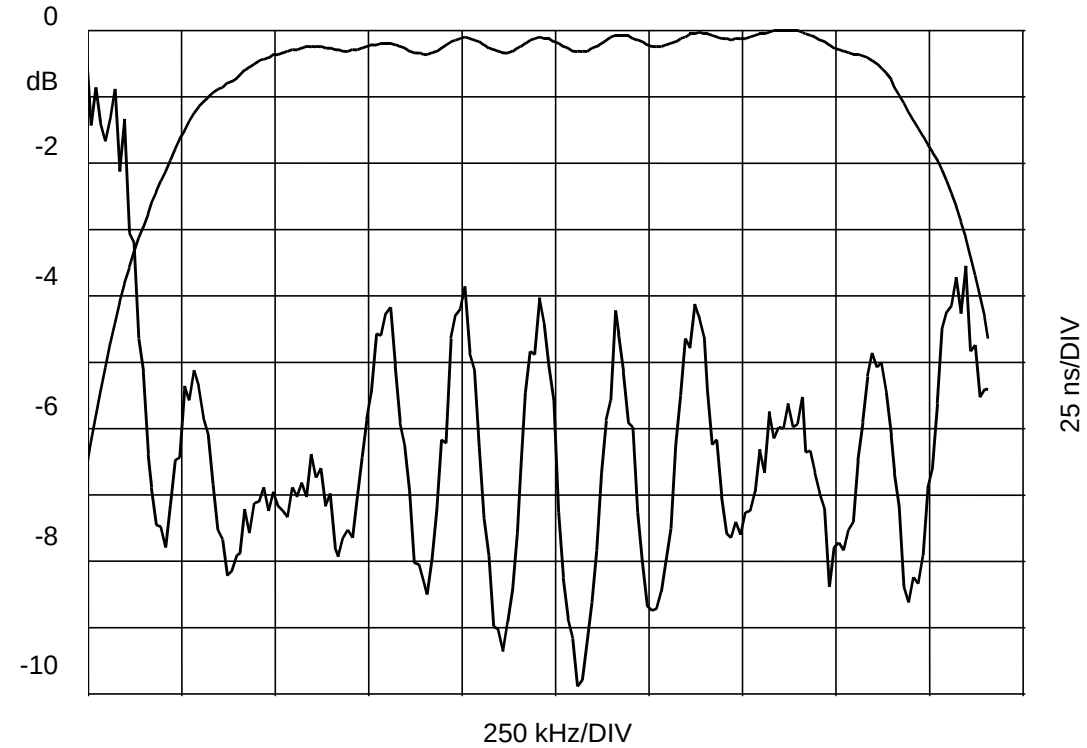

RF Monolithics, Inc.
4347 Sigma Road
Dallas, Texas 75244
USA

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Fax: +1(972)387-8148
e-mail: info@rfm.com
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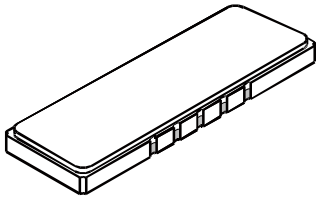
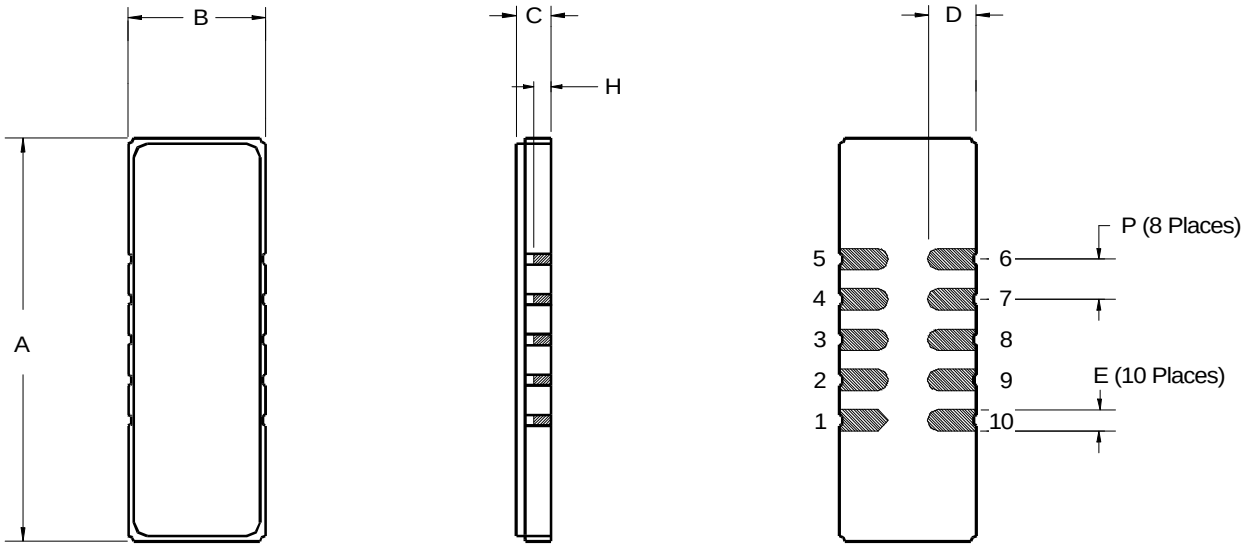
SMP-75 Case

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



Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	18.80	19.00	19.30	0.740	0.748	0.760
B	6.30	6.50	6.80	0.248	0.256	0.268
C		1.75	2.00		0.069	0.079
D		2.29			0.090	
E		1.02			0.040	
H		0.76			0.030	
P		1.905			0.075	



RF Monolithics, Inc. Phone: (972) 233-2903 Fax: (972) 387-8148 E-mail: info@rfm.com
RFM Europe Phone: 44 1963 251383 Fax: 44 1963 251510 http://www.rfm.com