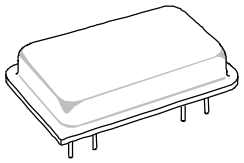
BP1051 70 MHz SAW Filter

PRELIMINARY

- *Designed for Microwave Receiver IF Applications*
- *No External Impedance Matching Required*
- *Hermetic Metal DIP*
- *Unbalanced Input and Output*



See Associated Plots

Characteristic		Sym	Min	Typ	Max	Units	Notes
Nominal Center Frequency		fc		70.000		MHz	1
Passband	Insertion Loss at fc	IL		23	25	dB	
	Insertion Loss variation				0.8	dB	
	1 dB Passband	BW_1	±4.3	±4.45		MHz	1, 2
	3 dB Passband	BW_3	±4.5	±4.7			
	Group Delay Variation over fc ±4.3 MHz	GDV		45	60	ns_{P-P}	
	Phase Linearity over fc ±4.3 MHz			3	4	$°_{P-P}$	
	Absolute Group Delay	GD		2		µs	
Rejection	At fc ±5.85 MHz		40			dB	1, 2, 3
	Ultimate			60			
Operating Temperature Specification		T_A		+25		°C	1
Frequency Temperature Coefficient		FTC		-94		ppm/°C	

Impedance Matching to 50 Ω unbalanced	None Required
Case Style	DIP14L-8 22.1 x 12.6 mm Nominal Footprint
Lid Symbolization (YY = year, WW = week) See note 4.	RFM BP1051 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 (See note 3)

Connection	Terminals
Port 1 Hot	14
Port 1 Gnd Return	1
Port 2 Hot	8
Port 2 Gnd Return	7
Case Ground	All others

Notes:

1. Unless noted otherwise, all *specifications apply at +25°C* with filter soldered to the specified demonstration board and measured with 50 Ω network analyzer. Primary variation with temperature is center frequency per temperature coefficient.
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.
9.
10. Electrostatic Sensitive Device. Observe precautions for handling.

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European Sales Office

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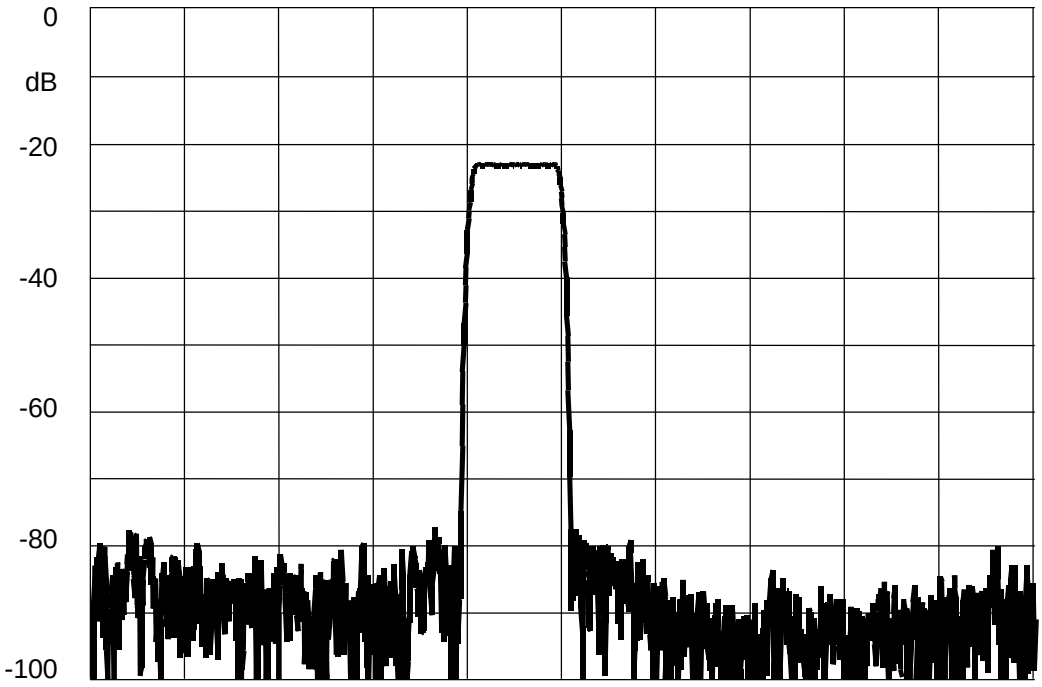

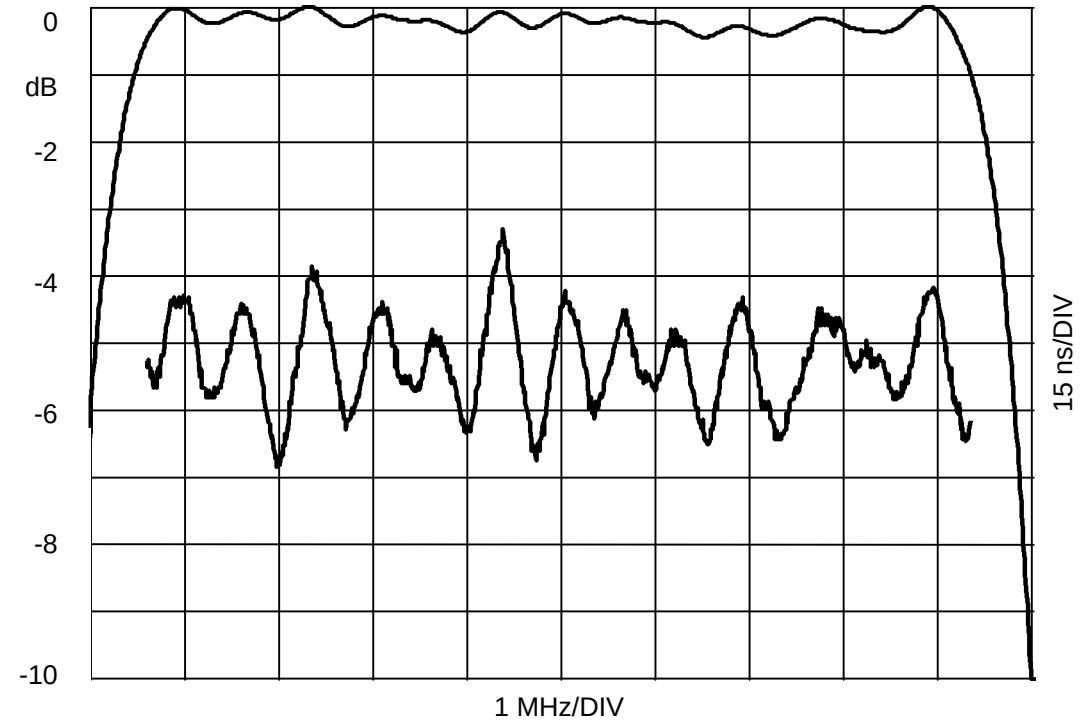

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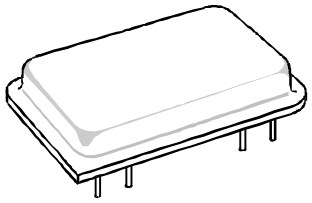
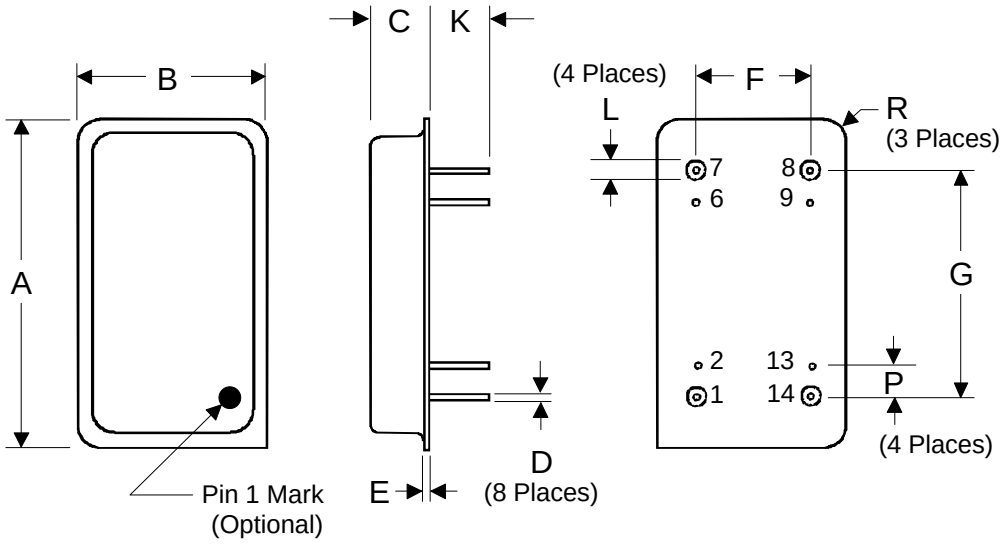
DIP14L-8 Case

Metal 8-Pin DIP in 14-Pin (Long) Configuration
22.1 x 12.6 mm Nominal Footprint



Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A		22.10	22.50		0.870	0.886
B		12.55	13.00		0.494	0.512
C		3.56	3.81		0.140	0.150
D	0.41	0.48	0.51	0.016	0.019	0.020
E		0.89			0.035	
F		7.62			0.300	
G		15.24			0.600	
K	3.30	3.81	6.73	0.130	0.150	0.265
L	1.37	1.45	1.52	0.054	0.057	0.060
P		2.54			0.100	
R		1.60			0.063	



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