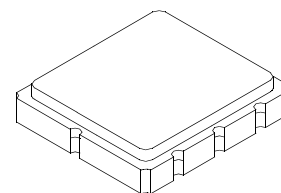




- **RF Filter for Family Radio Service Applications**
- **Low Insertion Loss**
- **5.0 x 5.0 x 1.7 mm Surface-Mount Case**
- **No Matching Required**

SF1188C

465.00 MHz SAW Filter



SM5050-8

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 Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Nominal Center Frequency	f_c	1	465.000			MHz
Passband IL across $f_c \pm 2.0$ MHz	IL			2.0	4.0	dB
Amplitude Ripple over $f_c \pm 2.0$ MHz				1.0	2.0	dB _{P-P}
Rejection $f_c - 100$ to $f_c - 45$ MHz		1, 2	50			dB
$f_c + 45$ to $f_c + 100$ MHz			50			
Operating Temperature Range	T_A	1	-10		+50	°C

Differential Input / Output Impedance Match	No External L-C required for 50 Ω match
Case Style	SM5050-8 5 X 5 mm Nominal Footprint
Lid Symbolization (Y=year, WW=week S=shift)	RFM 452 YWWS

Electrical Connections

Connection	Terminals
Input	2
Output	6
Case Ground	All others

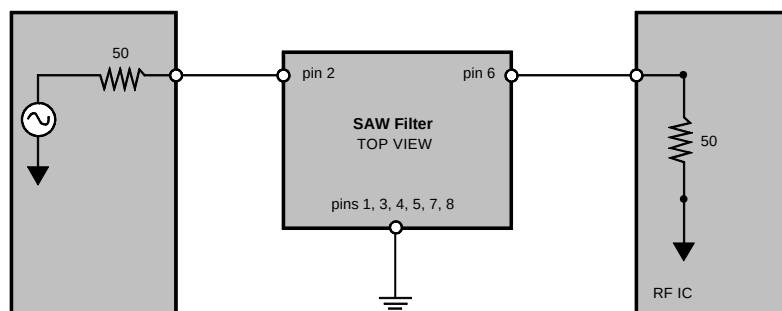


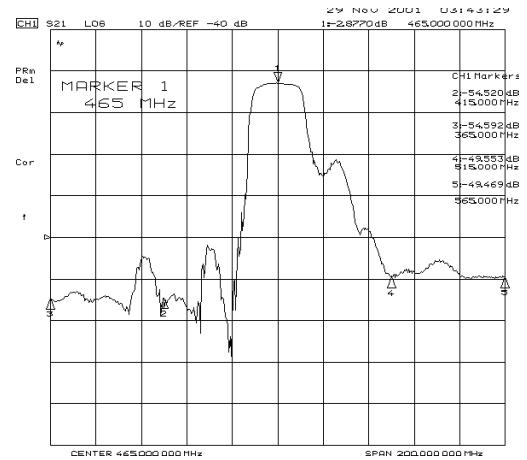
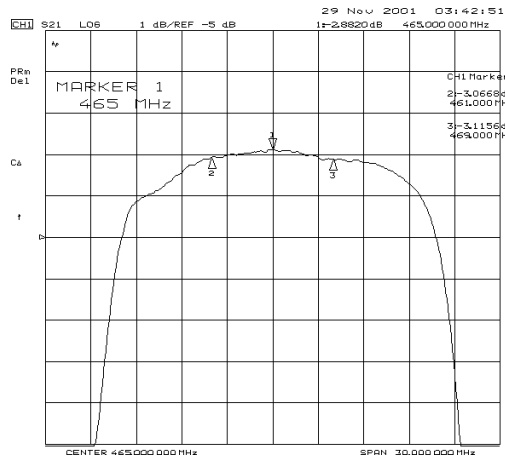
figure 1

Notes:

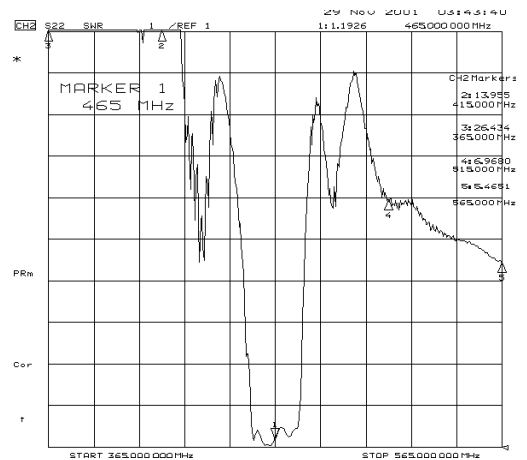
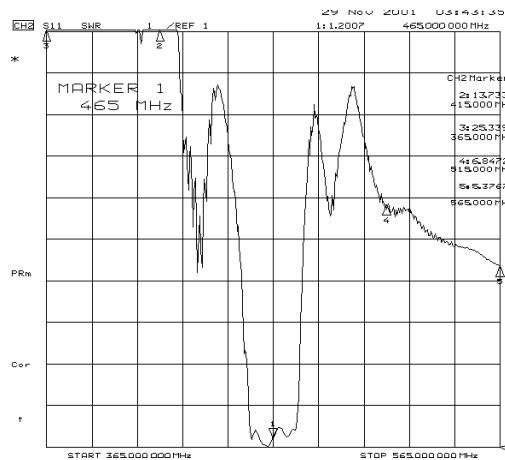
1. Unless noted otherwise, all specifications apply over the operating temperature range with filter soldered to the specified demonstration board with impedance matching to 50 Ω and measured with 50 Ω network analyzer.
2. Rejection is measured as attenuation below the minimum IL point in the pass-band. Rejection in final user application is dependent on PCB layout and external impedance matching design. See Application Note No. 42 for details.
3. The design, manufacturing process, and specifications of this filter are subject to change.
4. US and international patents may apply.
5. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.
6. ©Copyright 1999, RF Monolithics Inc.
7. Electrostatic Sensitive Device. Observe precautions for handling.



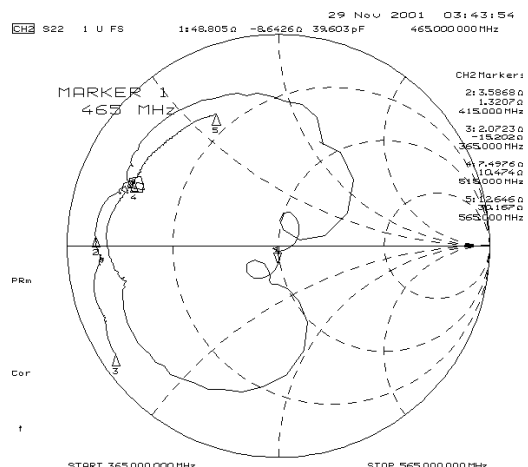
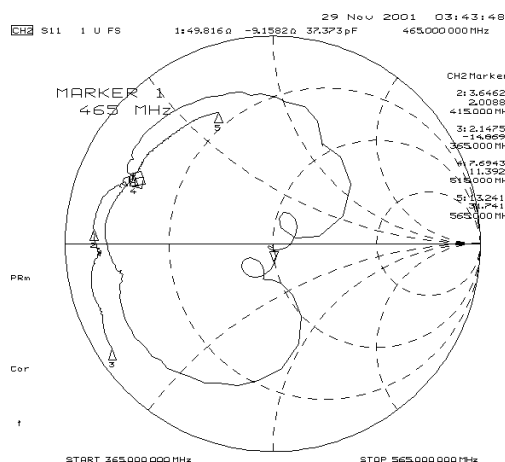
Response



VSWR

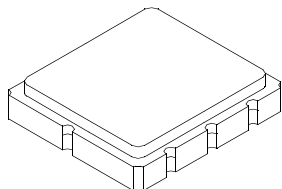


Smith Chart



SM5050-8 Case

8-Terminal Ceramic Surface-Mount Case
5.0 X 5.0 mm Nominal Footprint



Case Dimensions

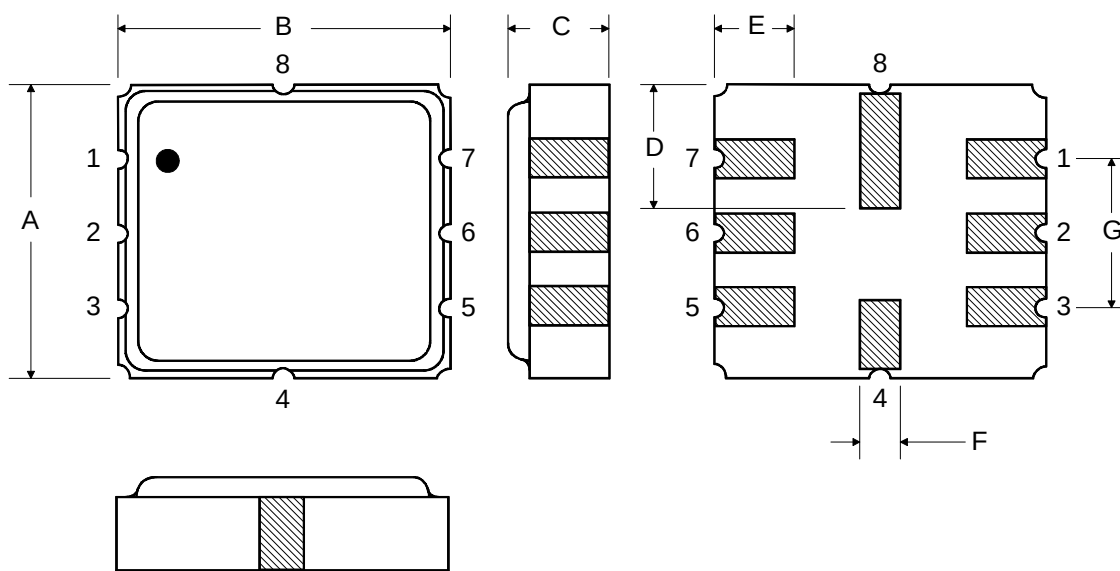
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	4.8	5.0	5.2		0.1968	
B	4.8	5.0	5.2		0.1968	
C			1.7			0.0669
D		2.08			0.0818	
E		1.17			0.046	
F		0.64			0.0252	
G	2.39	2.54	2.69		0.100	

Electrical Connections

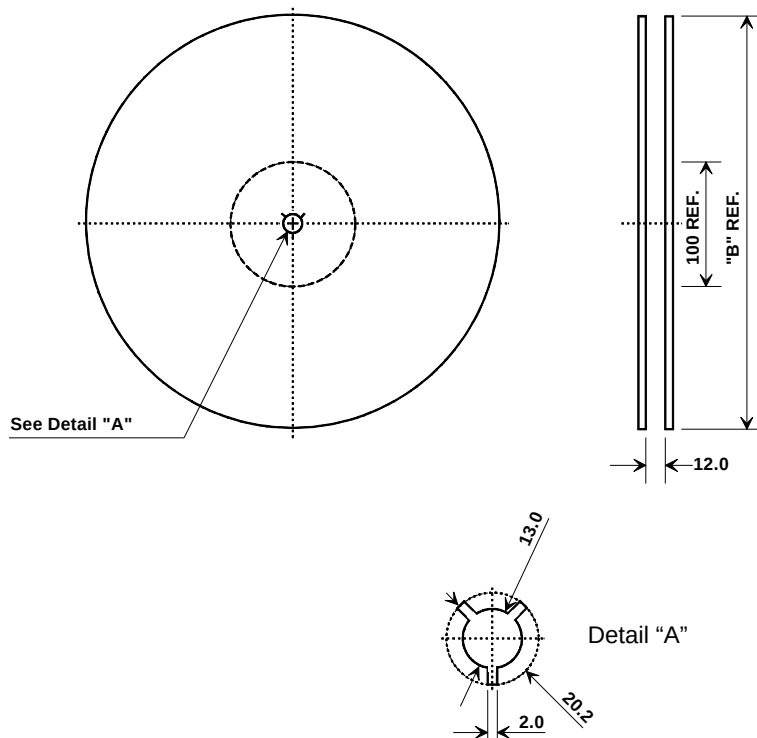
Connection		Terminals
Port 1	Input	2
Port 2	Output	6
	Ground	All others
Dot indicates Pin 1		

TOP VIEW

BOTTOM VIEW



Tape and Reel Specifications



"B" Nominal Size		Quantity Per Reel
Inches	Millimeters	
7	178	500 pcs
13	330	2,000 pcs

COMPONENT ORIENTATION

