

# Preliminary

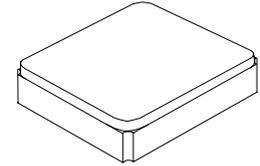


- Low-loss RF SAW Filter
- Designed for 50 ohm Source and Load Impedances
- 2.0 x 1.6 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)



**SF1208H**

**2017.5 MHz  
SAW Filter**



**SM2016-4**

## Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage On any Non-ground Terminal	5	VDC
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Temperature Profile (5 cycles maximum)	265 °C for 10 s	

## Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_c$			2017.5		MHz
Insertion Loss, 2010 to 2025 MHz	IL			1.8	2.5	dB
Amplitude Ripple, 2010 to 2025 MHz				0.6	1.5	dB <sub>P-P</sub>
Rejection Referenced to 0 dB						
DC to 1820 MHz			25	32		dB
1820 to 1850 MHz			28	35		
1850 to 1950 MHz			25	35		
2085 to 2400 MHz			25	40		
2400 to 2430 MHz			25	40		
2430 to 3000 MHz			25	40		
3000 to 4010 MHz			28	32		
4010 to 6000 MHz			15	23		
VSWR, 2010 to 2025 MHz				1.5:1	2.1:1	
Terminating Source impedance	$Z_s$			50		$\Omega$
Terminating Load impedance	$Z_L$			50		$\Omega$
Case Style			SM2016-4			
Lid Symbolization (Y=year, W=week)			TBD			



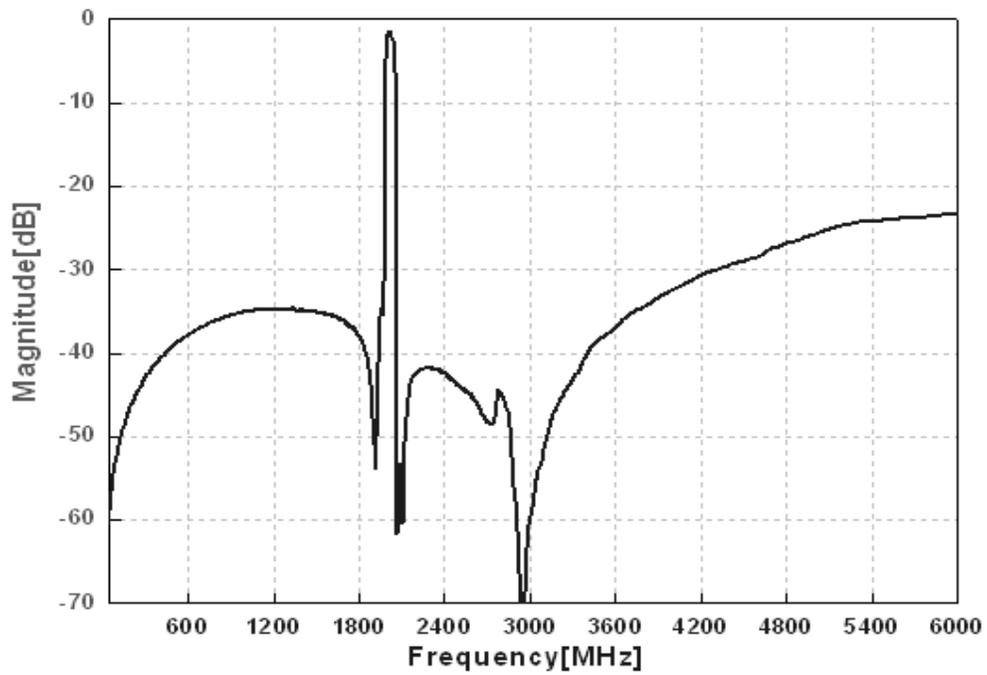
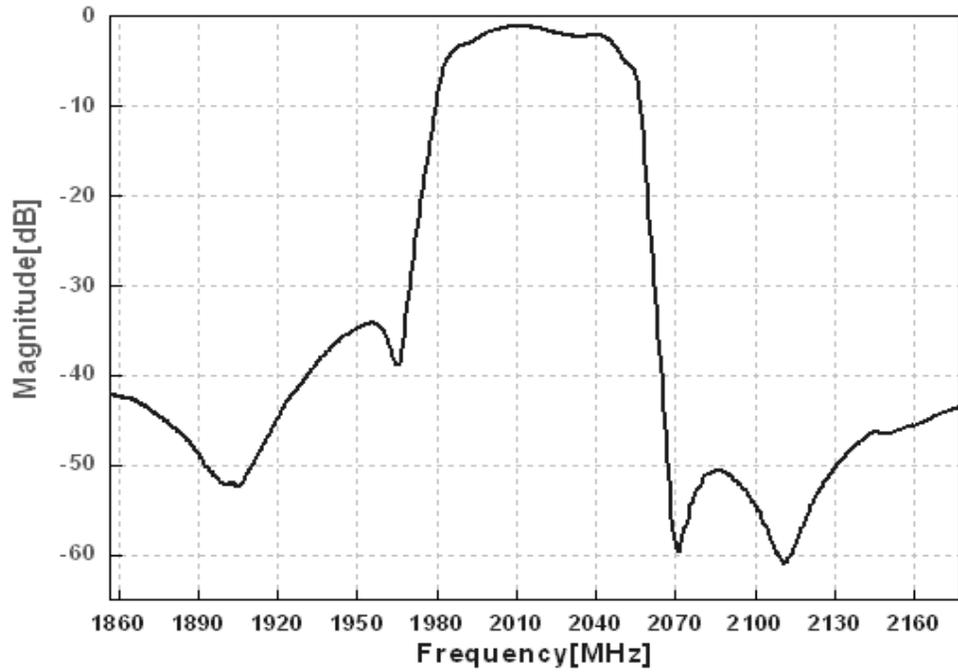
**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

### Notes:

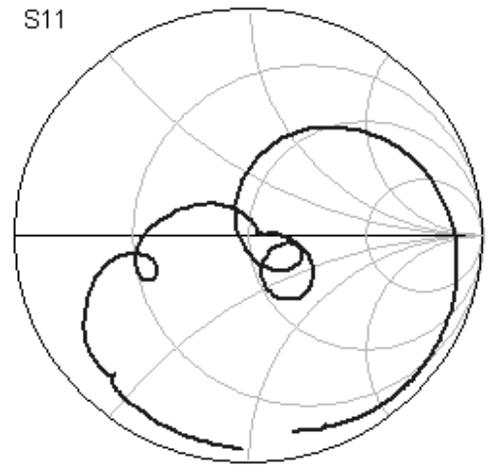
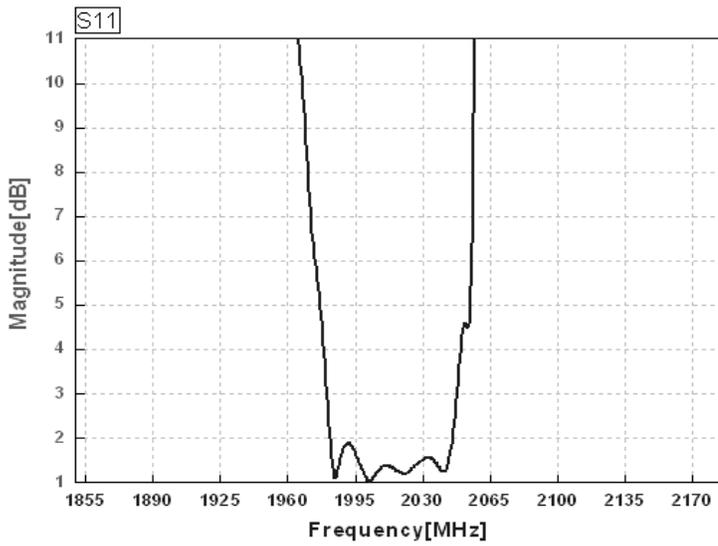
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2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

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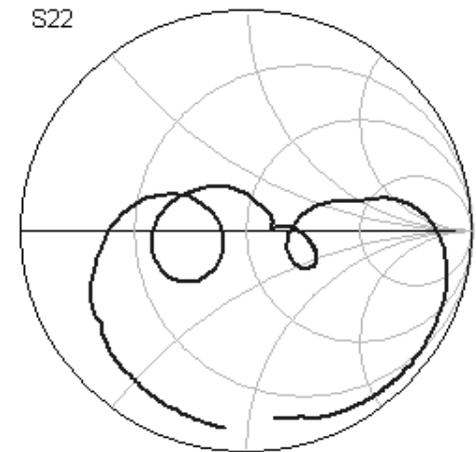
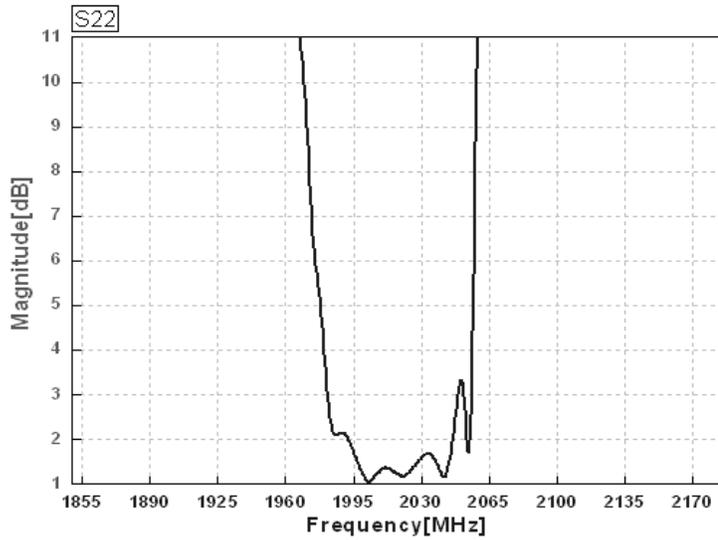
## Frequency Response Plots



## Input Impedance Plots



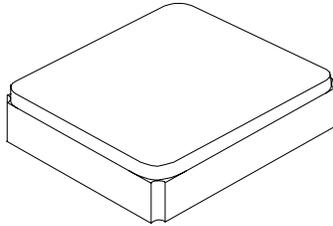
## Output Impedance Plots



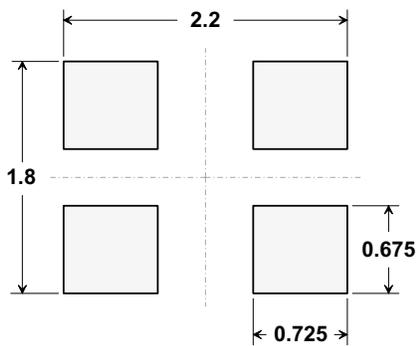
# SM2016-4 Case

## 4-Terminal Ceramic Surface-Mount Case

### 2.0 X 1.6 mm Nominal Footprint



PCB PAD LAYOUT

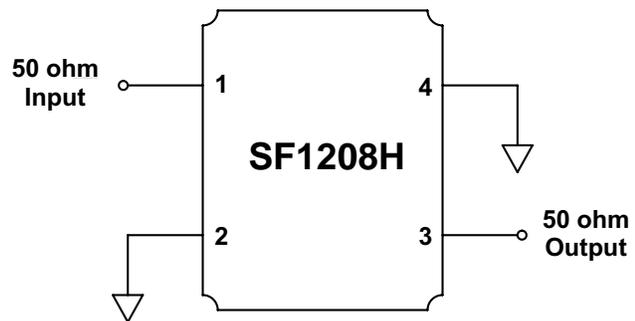


Dimensions in mm  
All pads have the same dimensions

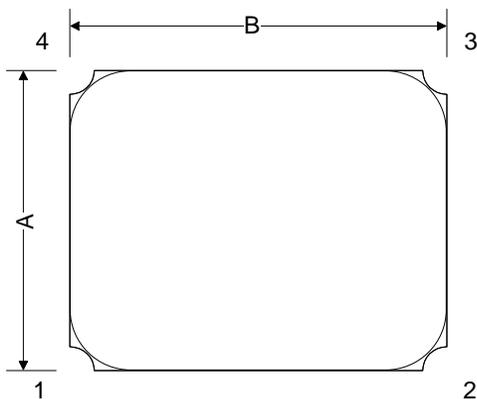
#### Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	2, 4

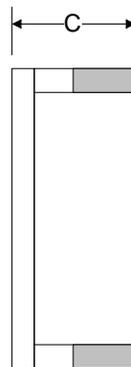
Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A		1.60			0.063	
B		2.00			0.079	
C			0.70			0.028
D		0.10			0.004	
E		0.10			0.004	
F		0.70			0.028	
G		0.50			0.020	
H		0.10			0.004	



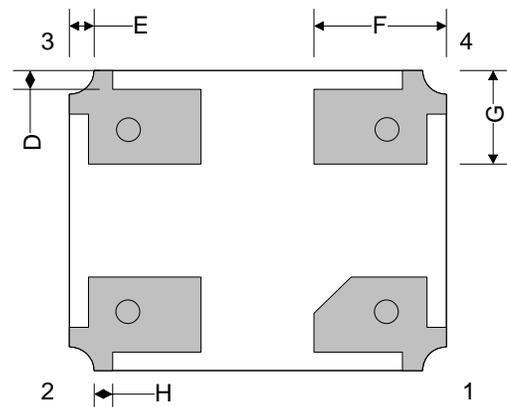
TOP VIEW



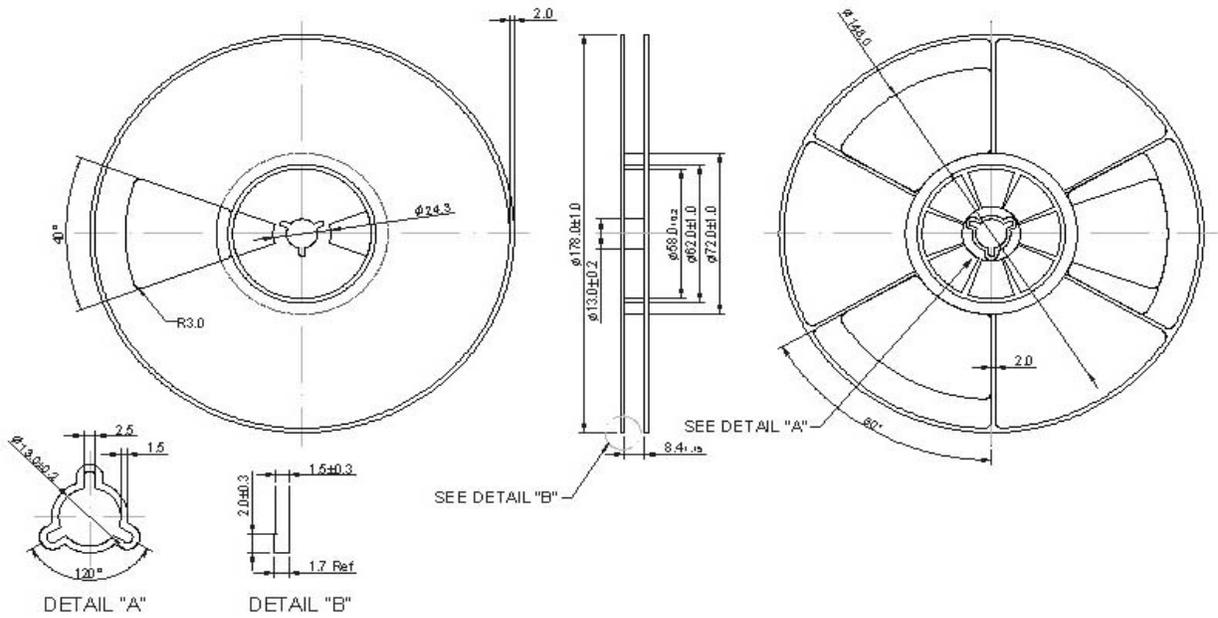
SIDE VIEW



BOTTOM VIEW



# Reel Dimensions - 7 inch Reel, 3000 Filters



# Tape Dimensions

