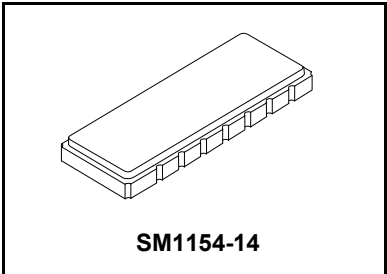




- Low-loss SAW Filter
- 11.5 X 4.0 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS) 

**SF2055A**

**240.050 MHz  
SAW Filter**



**Absolute Maximum Ratings**

Rating	Value	Units
Input Power Level	10	dBm
DC Voltage	0	V
Operating Temperature Range	0 to +60	°C
Storage Temperature Range	-40 to +85	°C

**Electrical Characteristics**

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_0$			240.05		MHz
Insertion Loss at $f_0$					5.0	dB
3 dB Bandwidth			$\pm 150$			kHz
In-band Ripple, $f_0 \pm 100$ kHz					0.5	dB <sub>P-P</sub>
Amplitude Variation, $f_0 \pm 100$ kHz				0.5	1	dB
Relative Group Delay, $f_0 \pm 100$ kHz					0.5	$\mu$ s <sub>P-P</sub>
Attenuation:	$f_0 - 600$ kHz		36	40		dB
	$f_0 + 600$ kHz		36	46		
	$f_0 - 1.2$ MHz		40	48		
	$f_0 + 1.2$ MHz		38	46		
	$f_0 - 21.6$ MHz		60	72		
	$f_0 + 21.6$ MHz		60	68		
	10 to 215 MHz		20	67		
265 MHz to 2 GHz		20	24			
I/O Impedance				50		$\Omega$
Absolute Delay, $f_0 \pm 100$ kHz				$1.85 \pm 0.6$		$\mu$ s

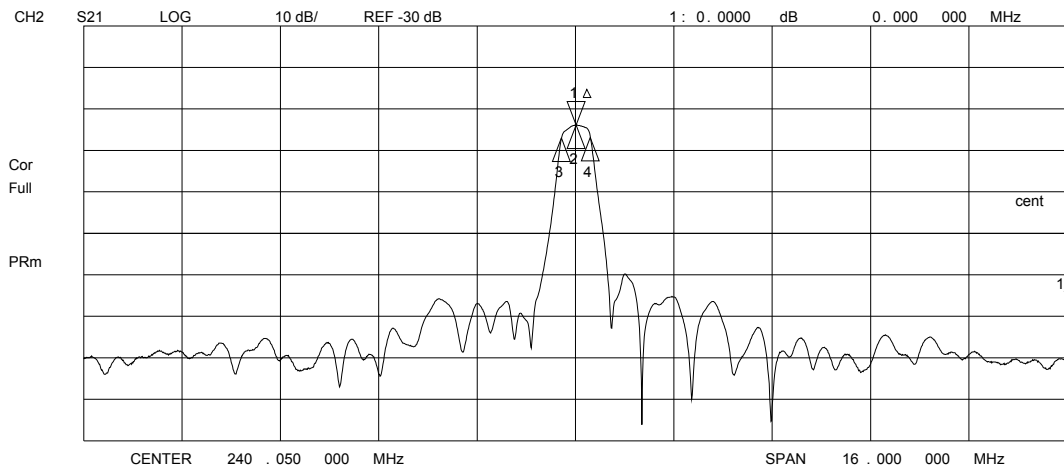
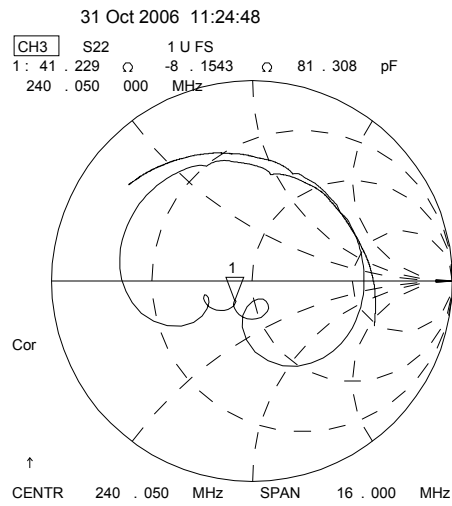
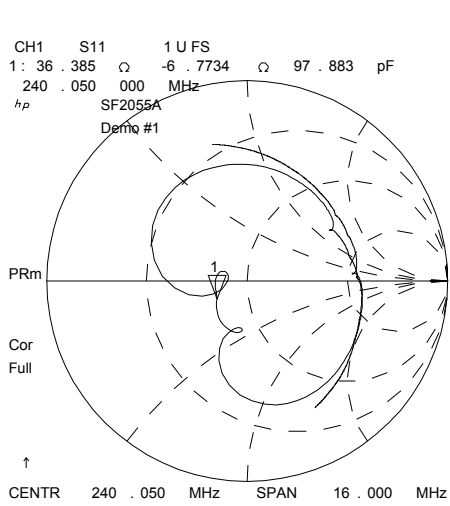
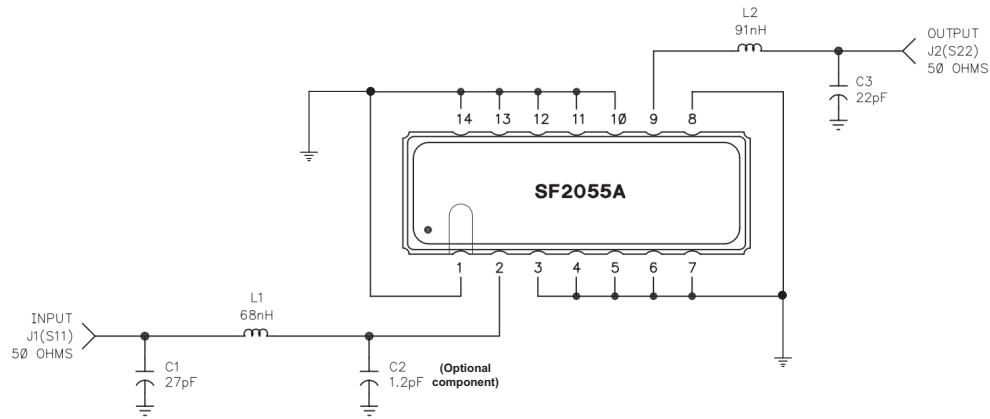
Case Style	SM1154-14 11.5 x 4.0 mm Nominal Footprint		
Lid Symbolization (YY=year, WW=week, S=shift, ##=sequence code) dot=pin 1 indicator	SF2055A, YYWWS##		
Standard Reel Quantity	Reel Size 7 Inch	500 Pieces/Reel	
	Reel Size 13 Inch	2000 Pieces/Reel	

**Electrical Connections**

Connection	Input	Output	Ground
Terminals	2	9	All others

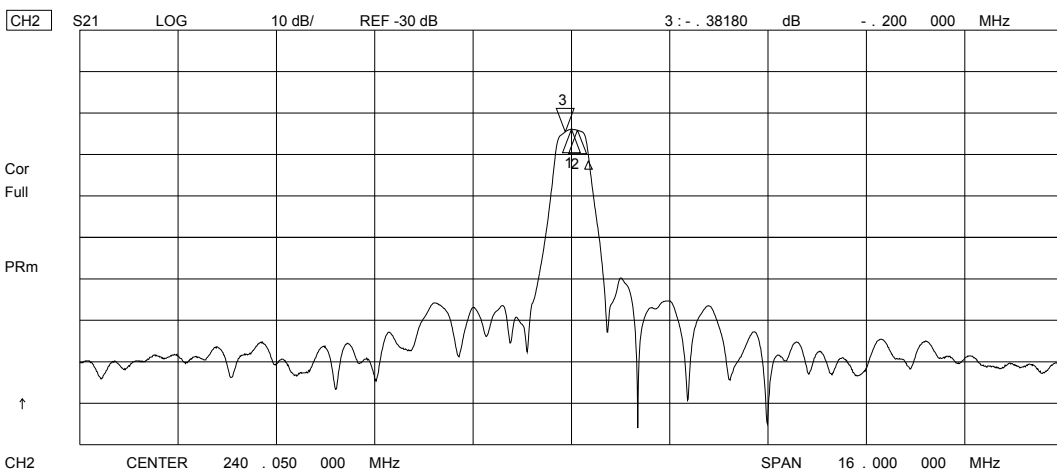
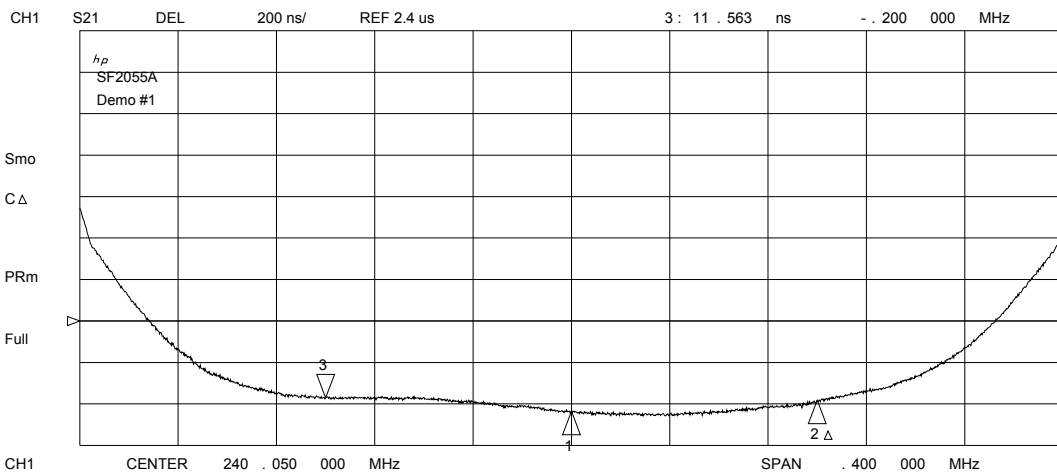
 **CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**  
Notes:

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  $\Omega$  and measured with 50  $\Omega$  network analyzer.
2. Unless noted otherwise, all frequency specifications are referenced to the nominal center frequency,  $f_c$ .
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.



CH2 Markers  
 Δ REF=1  
 BW: .470834 MHz  
 cent: 240.058572 MHz  
 Q: 509.86  
 1 loss: -3.9442 dB

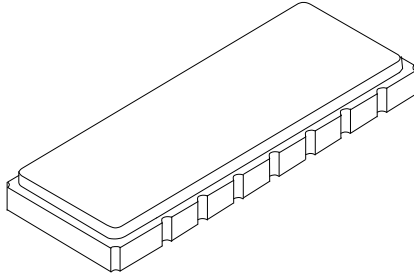
31 Oct 2006 11:26:58



# SM1154-14 Case

## 14-Terminal Ceramic Surface-Mount Case

### 11.5 x 4.0 mm Nominal Footprint

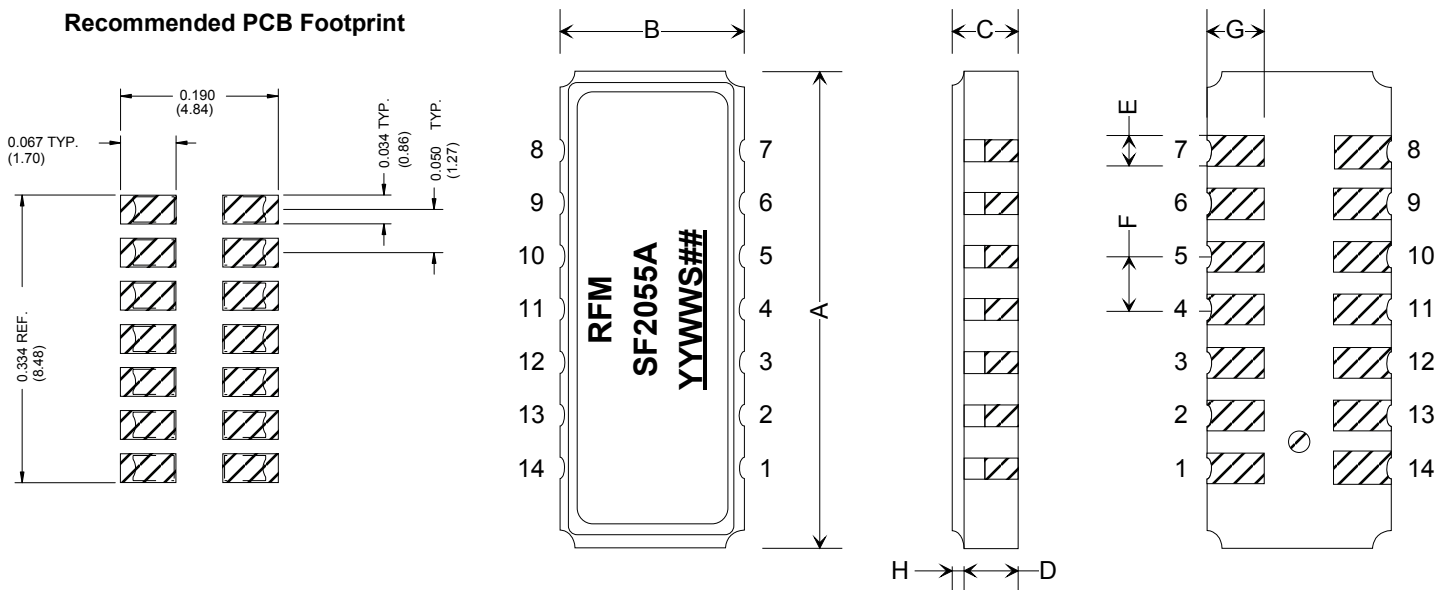


Case Dimensions						
Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	11.4	11.5	11.6	.442	0.450	0.458
B	3.8	4.0	4.2	.150	0.157	.166
C	1.4	1.6	1.8	.057	0.063	.069
D				0.041	0.047	0.053
E		0.76			0.030	
F		1.27			0.050	
G		1.27			0.050	
H		0.1			0.004	

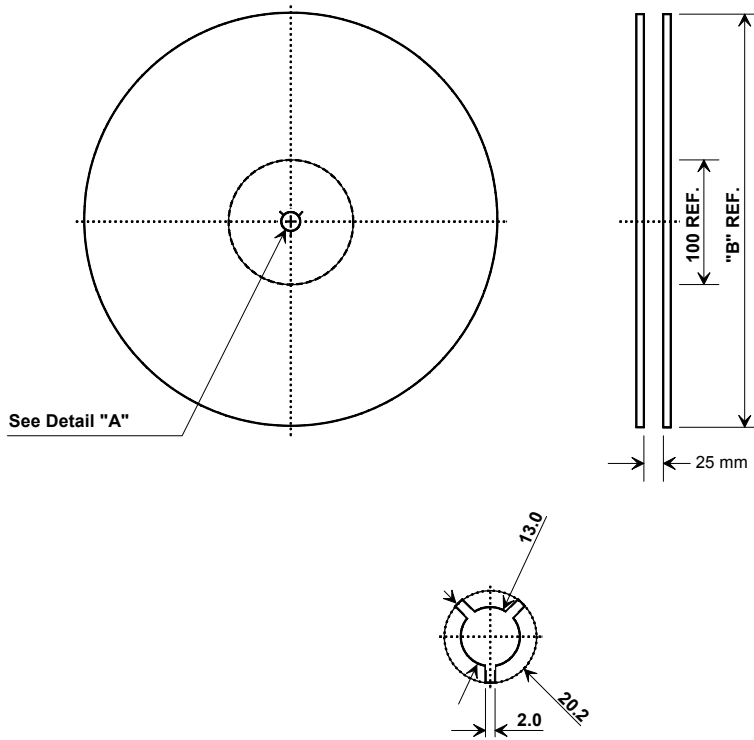
Electrical Connections	
Connection	Terminals
Input	2
Output	9
Ground	All Others

Materials	
Solder Pad Plating	0.3 to 1.0 $\mu\text{m}$ Gold over 1.27 to 8.89 $\mu\text{m}$ Nickel
Lid Plating	2.0 to 3.0 $\mu\text{m}$ Nickel
Body	$\text{Al}_2\text{O}_3$ Ceramic
Pb Free	

#### Recommended PCB Footprint



## Tape and Reel Specifications



"B"		Quantity Per Reel
Inches	millimeters	
7	178	500
13	330	2000
Tape and Reel Standard Per ANSI / EIA 481		

## COMPONENT ORIENTATION and DIMENSIONS

Carrier Tape Dimensions	
<b>Ao</b>	4.55 mm
<b>Bo</b>	12.04 mm
<b>Ko</b>	2.13 mm
<b>Pitch</b>	8.00 mm
<b>W</b>	24.00 mm

