



# SF1186H-2

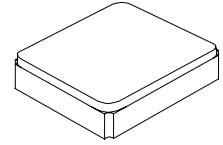
- RF Filter Designed for Front End GPS Applications
- Low Insertion Loss
- Improved Rejection
- 2.0 x 1.6 mm Surface-Mount Case
- Complies with Directive 2002/95/EC (RoHS)



# 1575.42 MHz SAW Filter

### Absolute Maximum Ratings

Rating	Value	Units
Maximum Incident Power in Passband	+10	dBm
Maximum DC Voltage Between any Two Terminals	3	VDC
Operating Temperature Range	-40 to +85	°C
Storage Temperature Range	-55 to +95	°C
Maximum Soldering Profile	265°C for 10 s	



SM2016-4

### Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_c$		1575.42			MHz
Maximum Insertion Loss		1574.42 to 1576.42 MHz		1.15	1.6	dB
Amplitude Ripple		1574.42 to 1576.42 MHz		0.1	0.5	
VSWR		1574.42 to 1576.42 MHz		1.2	1.9	
Attenuation		100 to 960 MHz	31	33		dB
		960 to 1460 MHz	31	33		
		1460 to 1513 MHz	22	26		
		1648 to 1710 MHz	22	28		
		1710 to 1990 MHz	25	32		
		1990 to 2300 MHz	25	30		
		2300 to 4000 MHz	29	31		
		4000 to 6000 MHz	20	24		
Source impedance	$Z_s$			50		$\Omega$
Load impedance	$Z_L$			50		$\Omega$

Single-ended Input / Output Impedance Match	No matching network required for operation at 50 ohms
Case Style	SM2016-4
Lid Symbolization ( Y=year, W=week)	2Y, YW

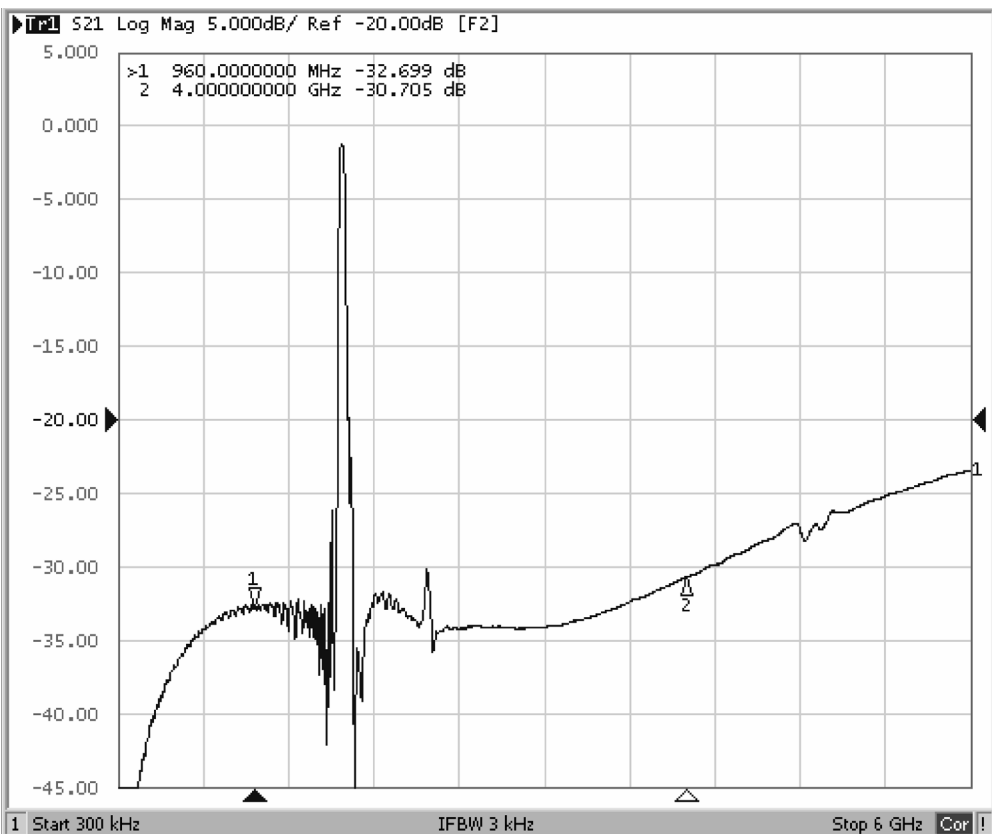
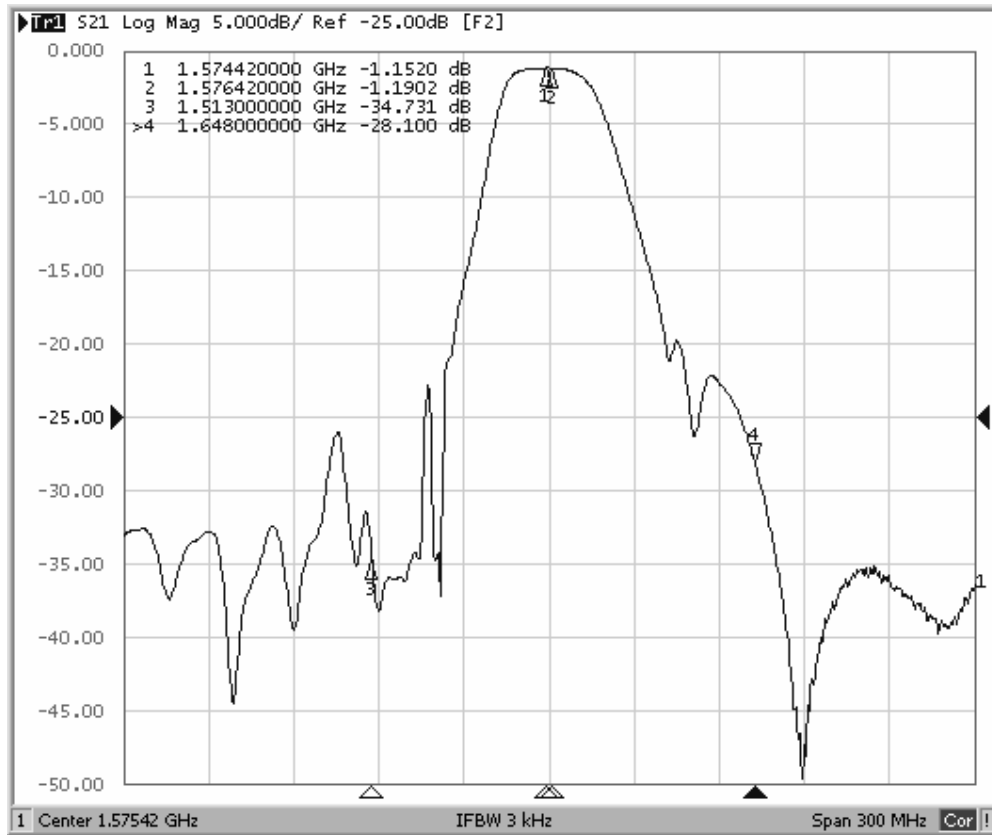


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

#### Notes:

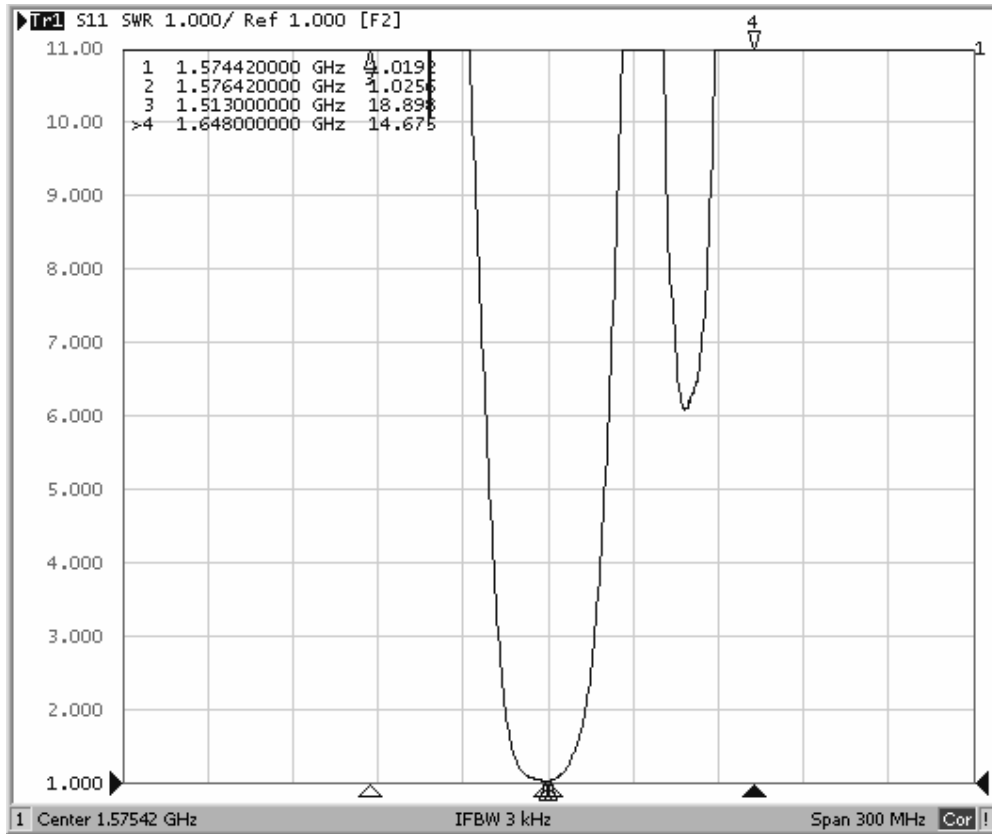
1. US and international patents may apply.
2. RFM, stylized RFM logo, and RF Monolithics, Inc. are registered trademarks of RF Monolithics, Inc.

## Frequency Characteristics

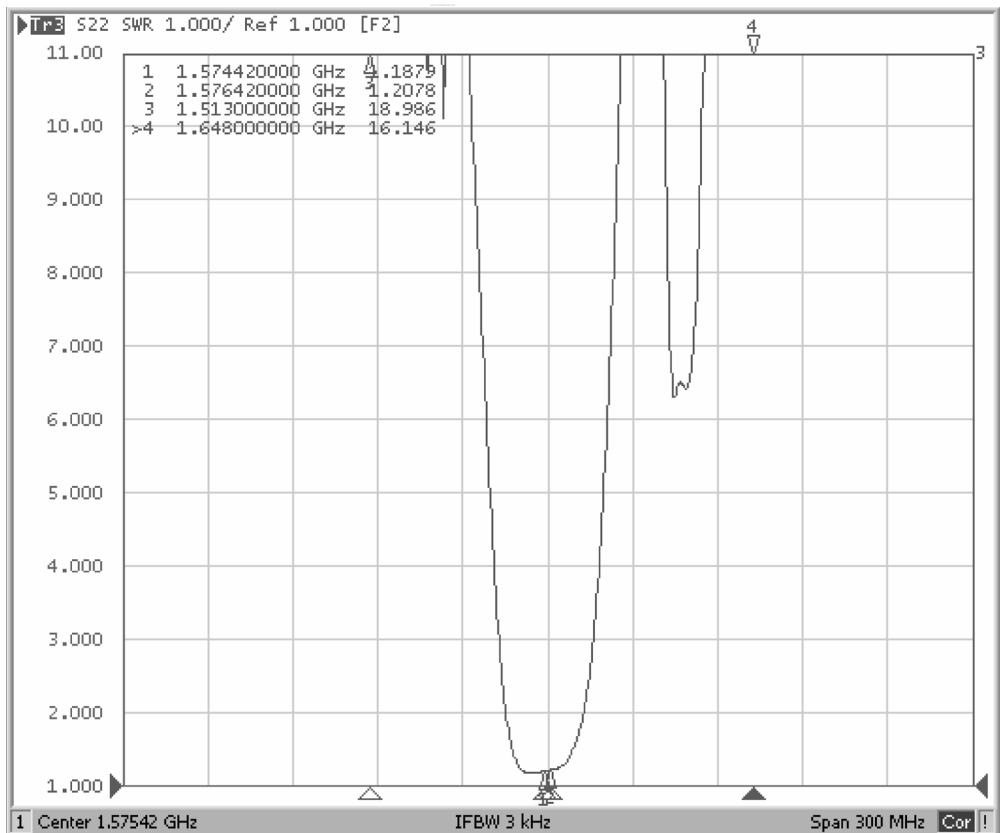


## Reflection Functions

S11



S22



# SM2016-4 Case

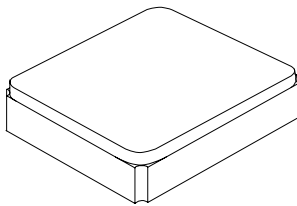
## 4-Terminal Ceramic Surface-Mount Case

### 2.0 X 1.6 mm Nominal Footprint

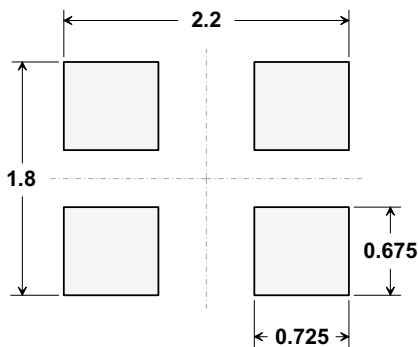
#### Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	2, 4

Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A		1.60				
B		2.0				
C		0.90				
D		0.10				
E		0.10				
F		0.70				
G		0.50				
H		0.10				

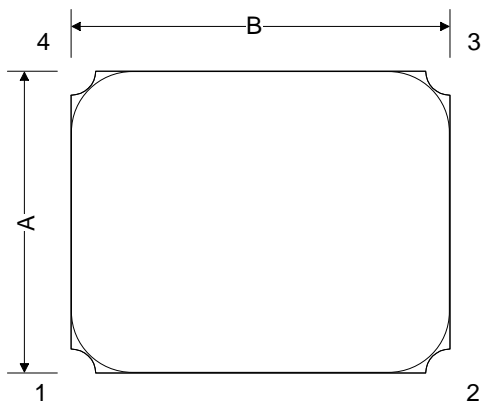


PCB PAD LAYOUT

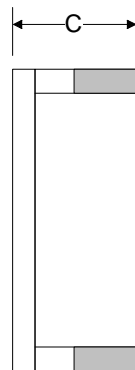


Dimensions in mm  
All pads have the same dimensions

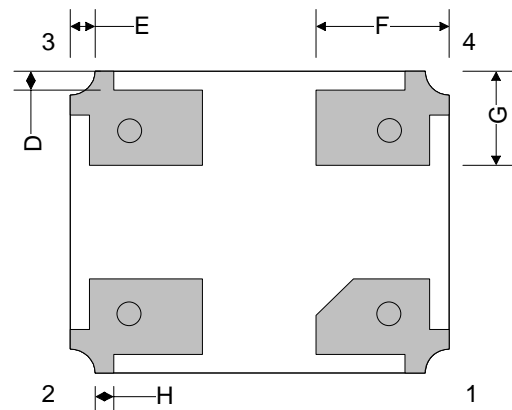
TOP VIEW



SIDE VIEW



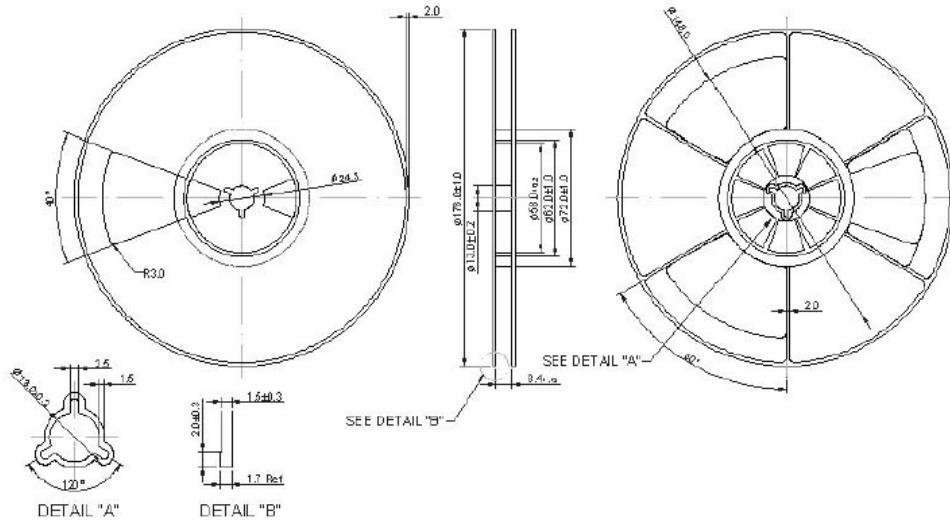
BOTTOM VIEW



**F. PACKING:**

**1. REEL DIMENSION**

( Reel Count : 7"=2000 typ. ; 13"=10000 typ.)



**2. TAPE DIMENSION**

