

# Preliminary

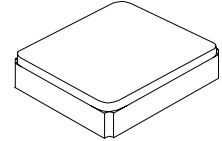


- RF SAW Filter, 719 MHz, 5 MHz Bandwidth
- 2.0 x 1.6 x 0.9 mm Surface-mount Case
- Input/Output Impedance 50Ω/50Ω
- Complies with Directive 2002/95/EC (RoHS)



**SF2171H**

**719 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	3	VDC
Operating Temperature Range	-30 to +85	°C
Storage Temperature Range in Tape and Reel	-40 to +85	°C
Maximum Soldering Profile, 5 Cycles	265 °C for 10 s	

## Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	$f_C$			719		MHz
Maximum Insertion Loss, 716.5 - 721.5 MHz	$IL_{MAX}$			2.7	3.2	dB
Amplitude Ripple, p-p, 716.5 - 721.5 MHz				0.7	2.2	
Return Loss, 716.5 - 721.5 MHz			5	8		ns
Group Delay Ripple, 716.5 - 721.5 MHz				42	95	
Attenuation, Referenced to 0 dB:						dB
0 to 690 MHz			40	54		
690 to 704 MHz			35	47		
704 to 710 MHz			30	48		
728 to 734 MHz			25	29		
734 to 750 MHz			27	33		
750 to 824 MHz			37	53		
824 to 960 MHz			45	54		
960 to 2500 MHz			32	39		
Temperature Coefficient of Frequency				-36		ppm/C
Terminating Source impedance	$Z_S$			50		Ω
Terminating Load impedance	$Z_L$			50		Ω
Single Ended Input / Output, Impedance match	No matching network required for operation at 50 ohms					
Case Style	SM2016-4					
Lid Symbolization	3N					

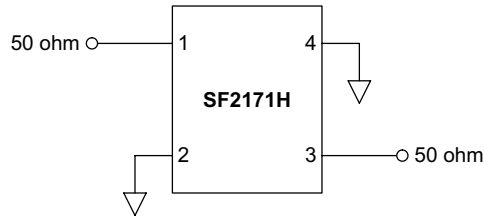


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

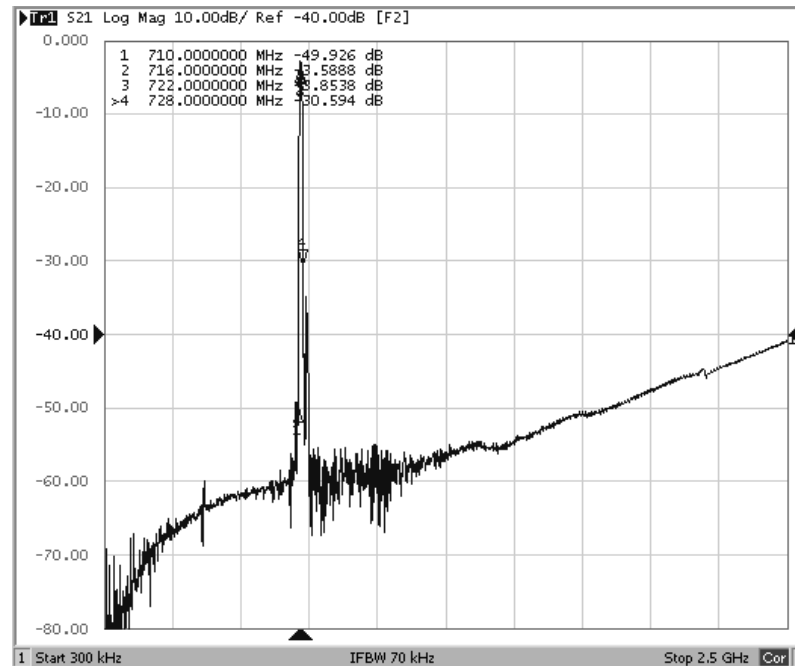
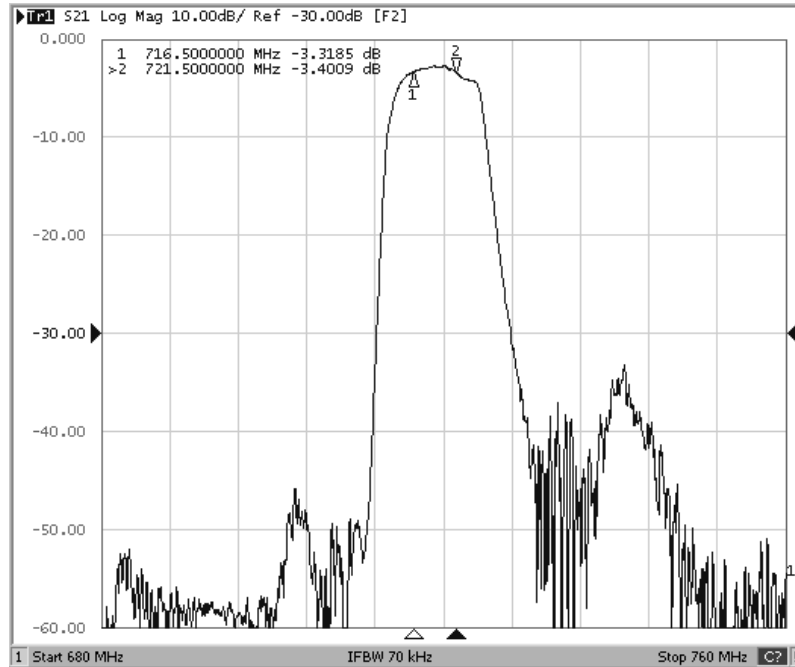
### Notes:

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

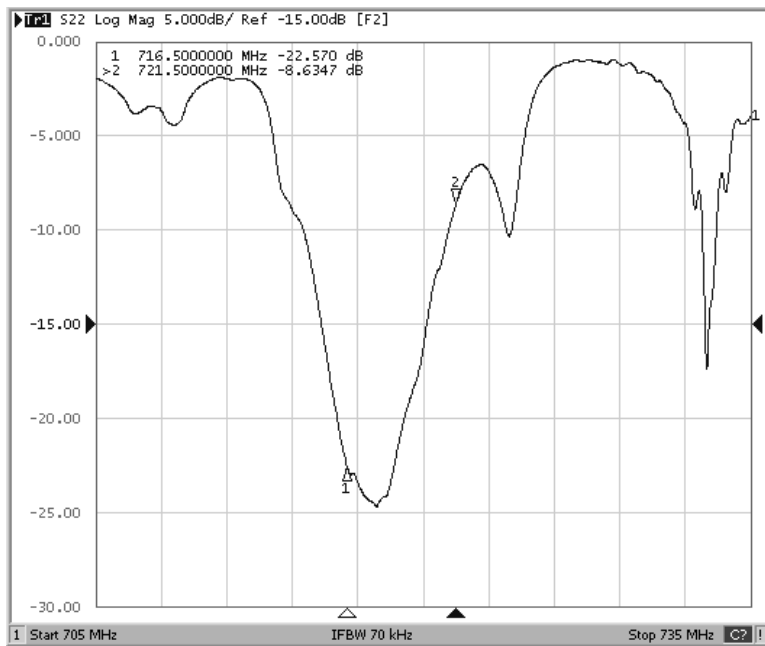
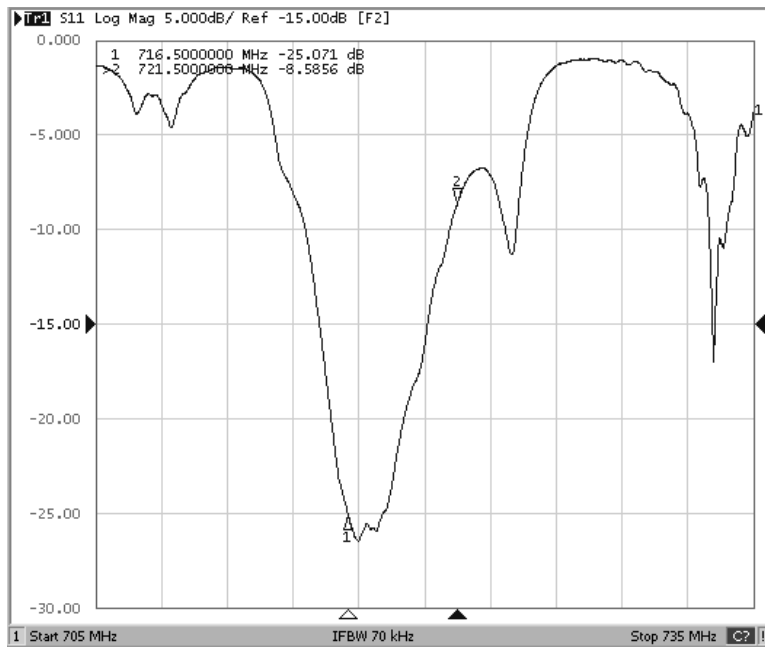
# Matching Circuit



# Frequency Response Plots



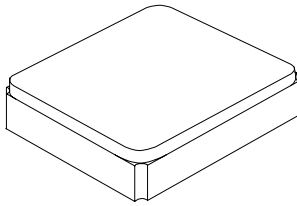
# Return Loss Plots



# SM2016-4 Case

## 4-Terminal Ceramic Surface-Mount Case

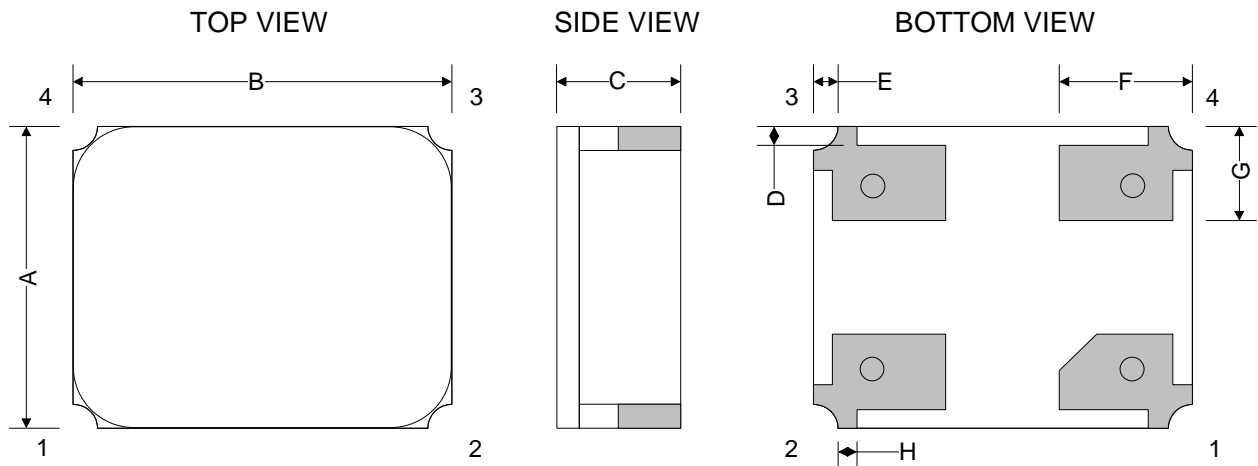
### 2.0 X 1.6 mm Nominal Footprint



#### Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	2, 4

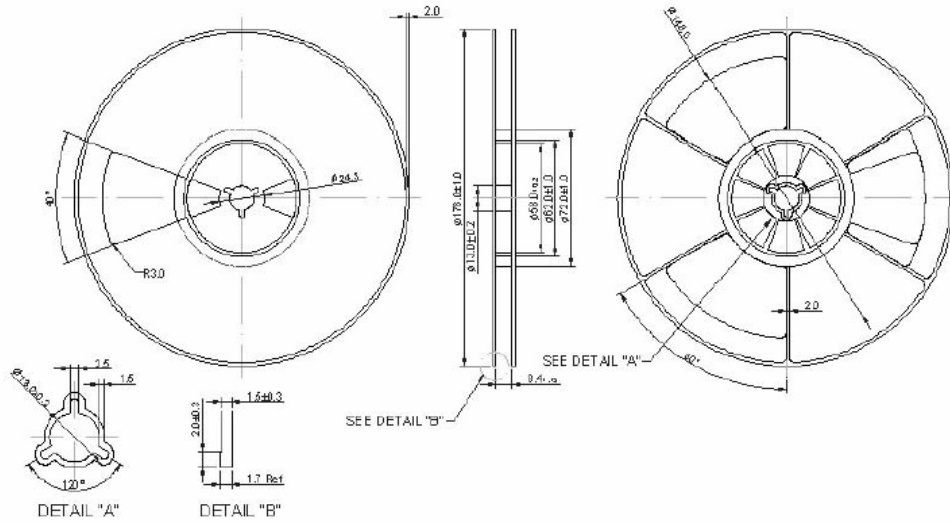
Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A		1.60			0.063	
B		2.00			0.079	
C		0.90			0.035	
D		0.10			0.004	
E		0.10			0.004	
F		0.70			0.028	
G		0.50			0.020	
H		0.10			0.004	



**F. PACKING:**

**1. REEL DIMENSION**

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



**2. TAPE DIMENSION**

