



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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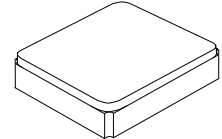
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# SF1186H-2

## 1575.42 MHz SAW Filter



SM2016-4

- 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)
- AEC-Q200 Compliant



### 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	

### 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		1.2	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 (Reference to 0 dB)		100 to 960 MHz	26	29		dB
		960 to 1460 MHz	27	30		
		1460 to 1513 MHz	22	26		
		1648 to 1710 MHz	22	30		
		1710 to 1990 MHz	25	30		
		1990 to 2300 MHz	25	33		
		2300 to 4000 MHz	21	24		
		4000 to 6000 MHz	13	16		
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

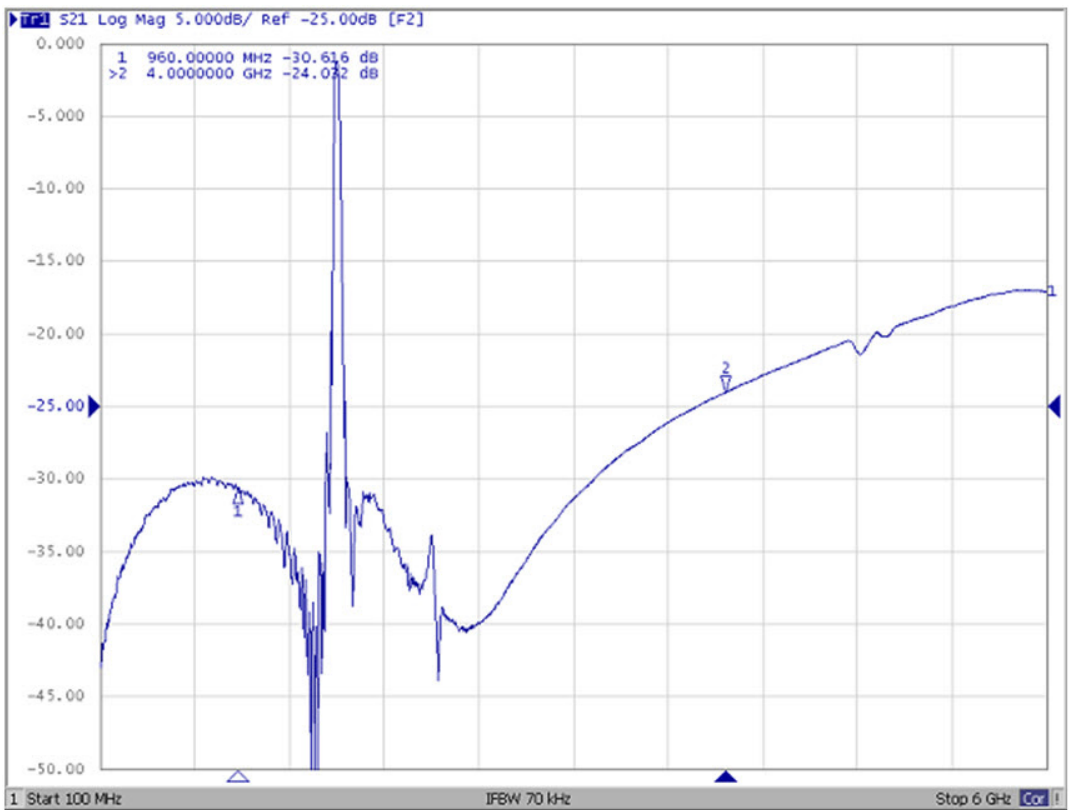
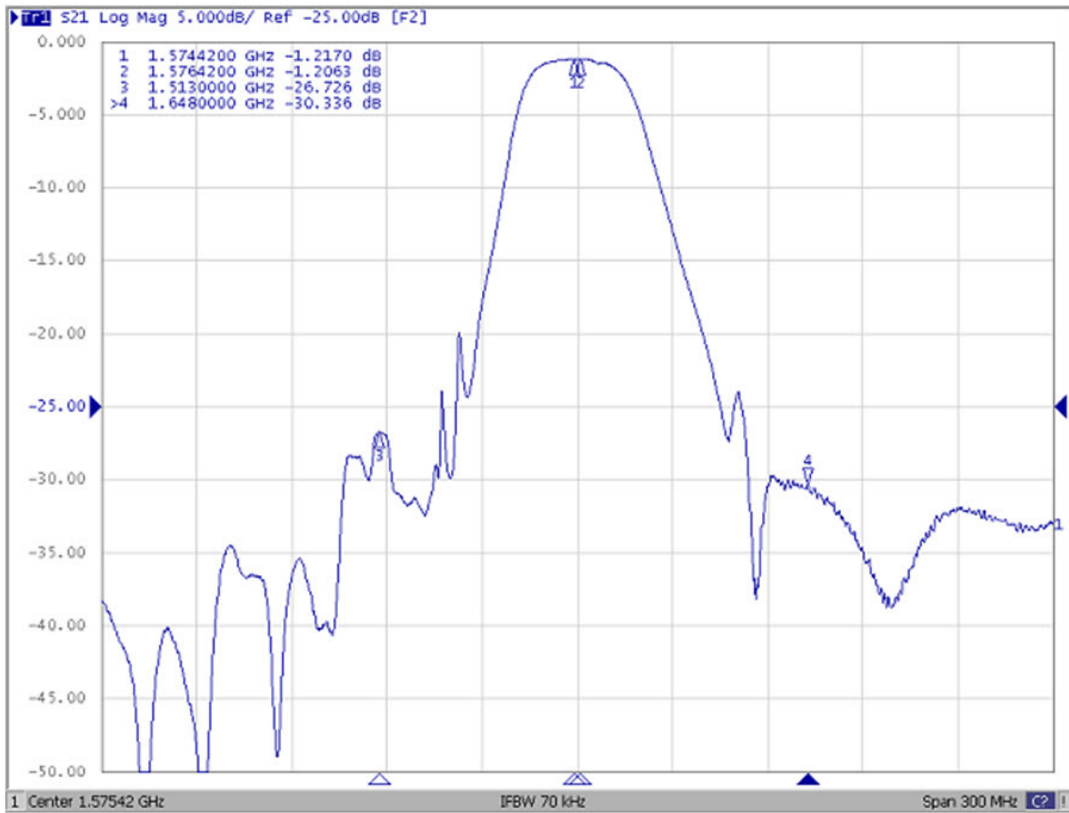


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

### NOTES:

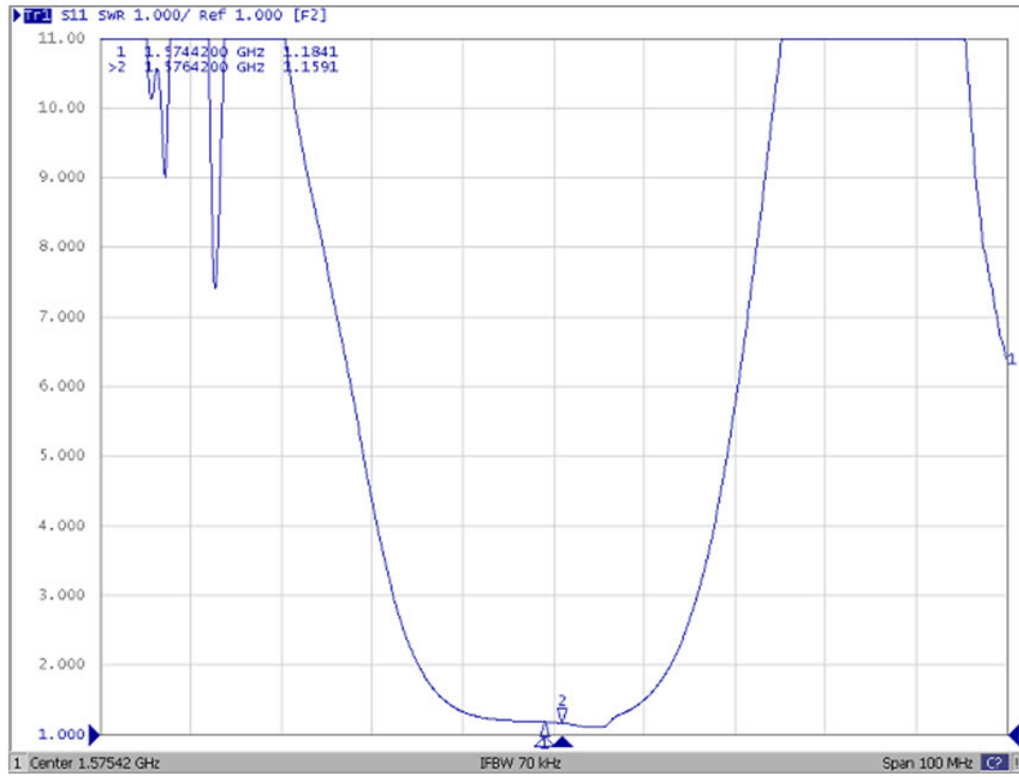
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Frequency Characteristics

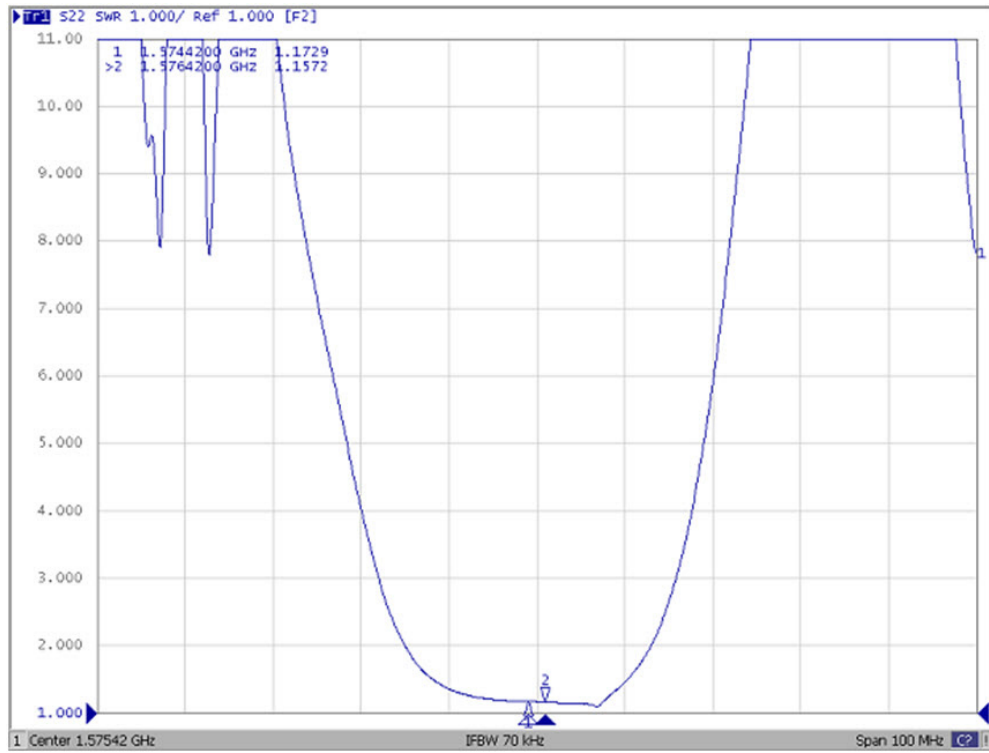


## Reflection Functions

S11



S22



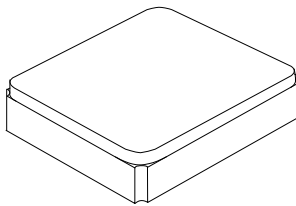
# SM2016-4 Case

## 4-Terminal Ceramic Surface-Mount Case 2.0 X 1.6 mm Nominal Footprint

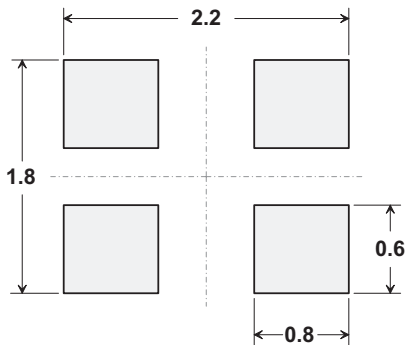
### Electrical Connections

Connection	Terminals
Input	1
Output	3
Ground	2, 4

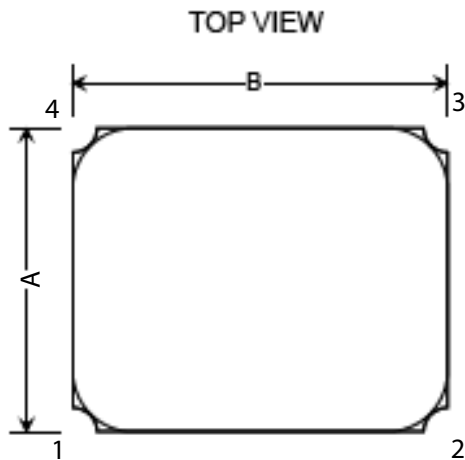
Dimensions	Millimeters			Inches		
	Min	Nom	Max	Min	Nom	Max
A		1.60			0.062	
B		2.0			0.078	
C		0.90			0.035	
D		0.10			0.003	
E		0.10			0.003	
F		0.70			0.027	
G		0.50			0.019	
H		0.10			0.003	



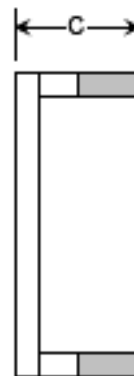
PCB PAD LAYOUT



Dimensions in mm  
All pads have the same dimensions



SIDE VIEW



BOTTOM VIEW

