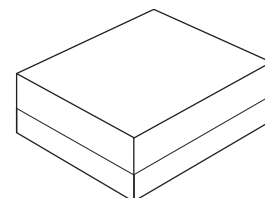


- 403.5 MHz SAW RF Filter
- 3 MHz Bandwidth
- 2.0 x 1.6 mm Surface-mount Case
- Complies with Directive 2002/95/EC (RoHS)



**SF2352H**

**403.5 MHz  
SAW Filter**



**SM2016-4**

#### Absolute Maximum Ratings

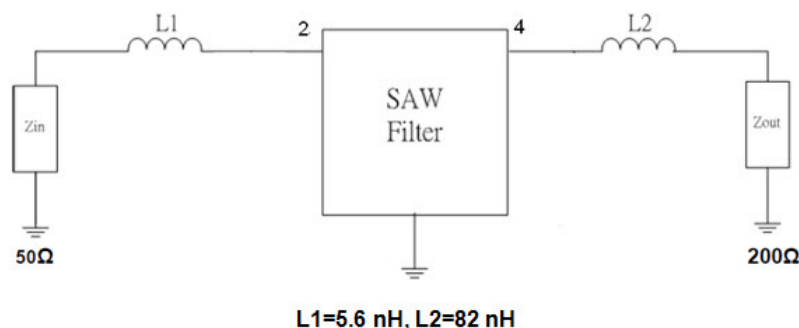
Rating	Value	Units
Maximum Incident Power in Passband	+17	dBm
Maximum DC Voltage On any Non-ground Terminal	3	VDC
Operating Temperature Range	+0 to +55	°C
Storage Temperature Range in Tape and Reel	-20 to +70	°C
Maximum Soldering Temperature Profile (5 cycles maximum)	265 °C for 10 s	

#### Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f <sub>C</sub>			403.50		MHz
Insertion Loss, 402 to 405 MHz (Ripple is included)	IL			2.5	4.0	dB
Bandwidth at -1.5 dB	BW		3.0	5.1		MHz
Amplitude Ripple, 402 to 405 MHz	Δα			0.8	2.0	dB <sub>P-P</sub>
Attenuation (relative to IL)	α <sub>rel</sub>					dB
0.3 to 380 MHz			30	52		
380 to 398 MHz			20	28		
412 to 430 MHz			20	27		
430 to 2000 MHz			30	36		
Case		2.0 X 1.6 X .55 mm, 4 Terminals				
Lid Symbolization, □ = week character, A-Z and a-z, 52 total characters		7U				
Terminating Source Impedance: Single-Ended				50		Ω
Terminating Source Impedance: Single-Ended				200		Ω
Temperature Coefficient of Frequency				-36		ppm/°C
Frequency Aging ABS Value First Year					10	ppm/yr
DS Insulation Resistance between Any 2 Pins			1.0			MΩ

#### Electrical Connections

Connection	Terminals
Input	2
Output	4
Ground	All Others

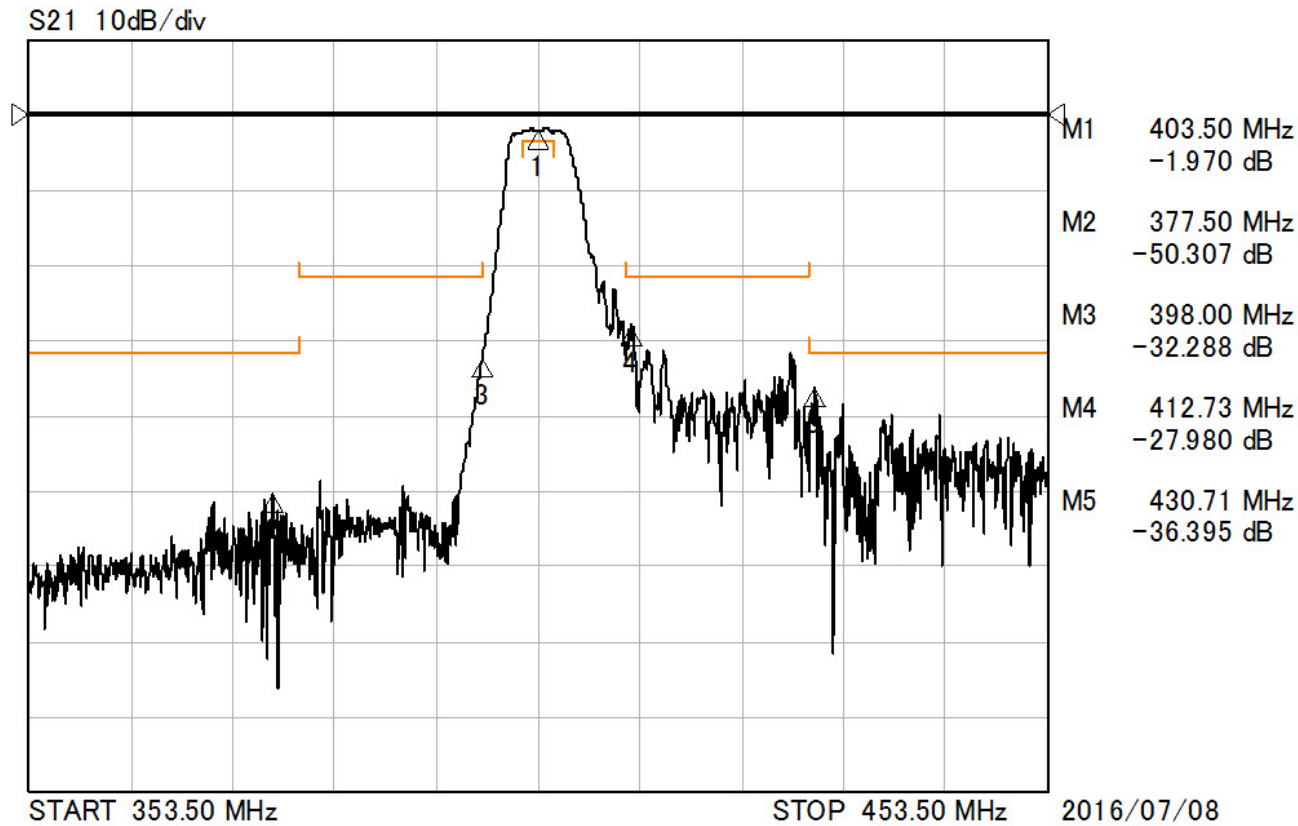
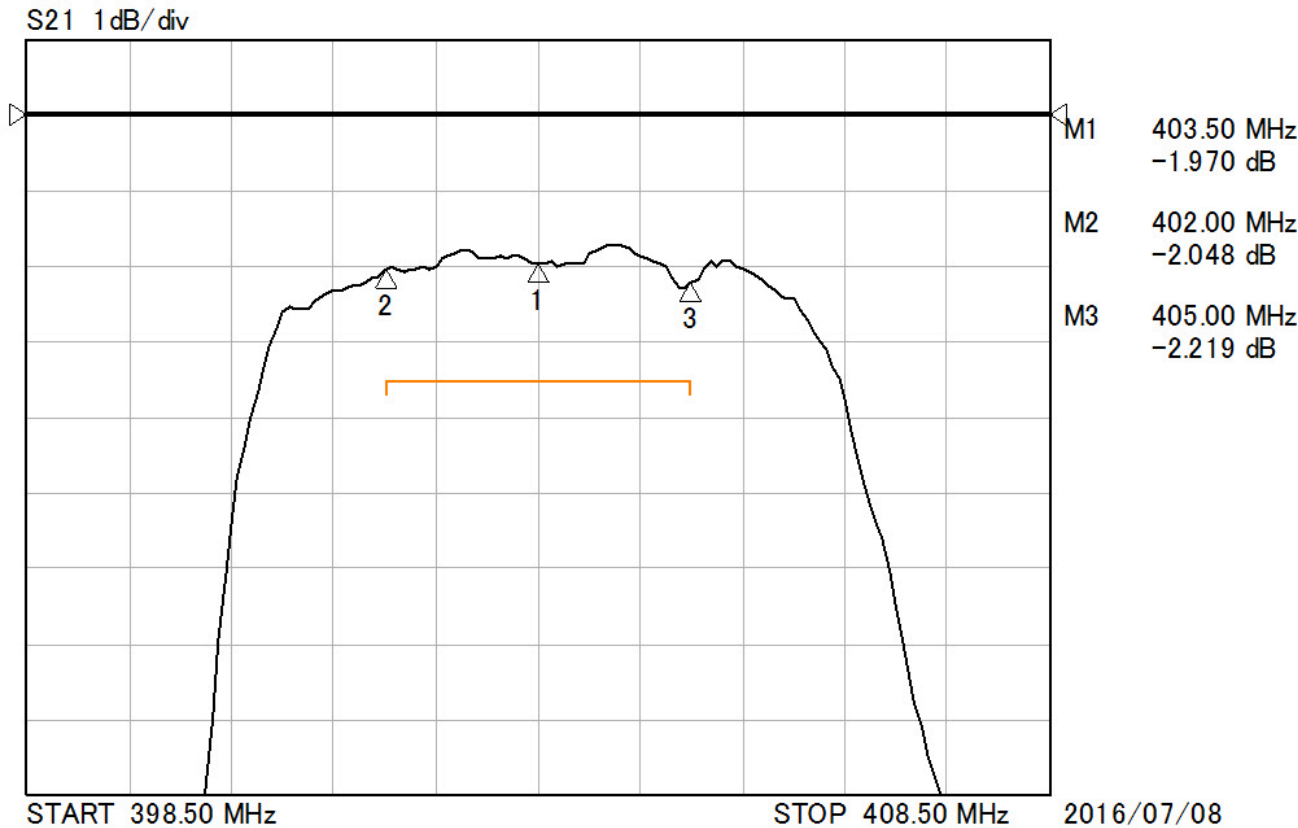


**CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.**

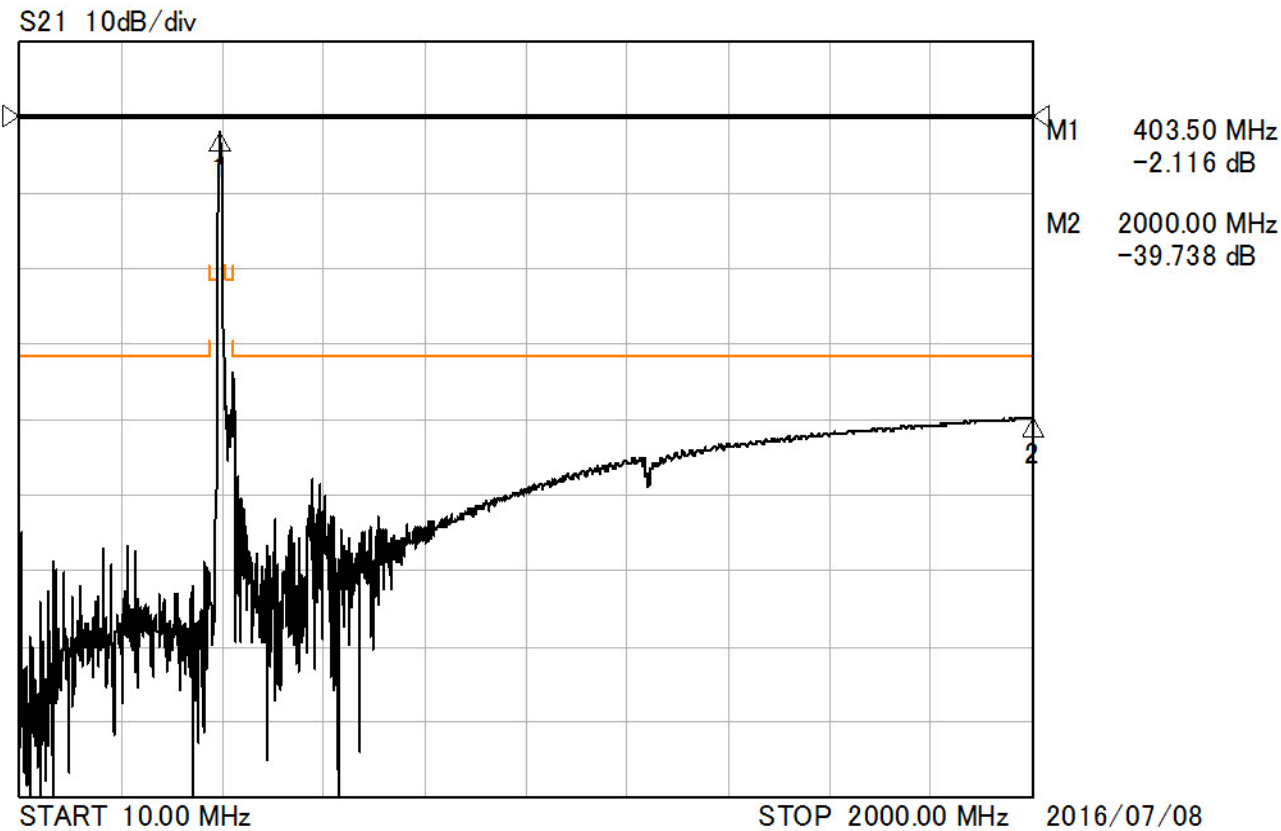
#### NOTES:

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.

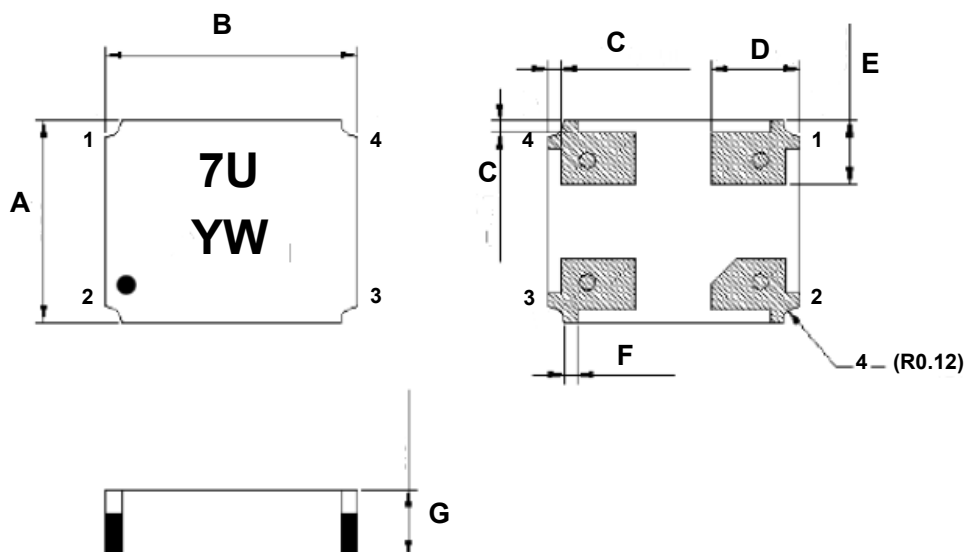
# Frequency Response Plots



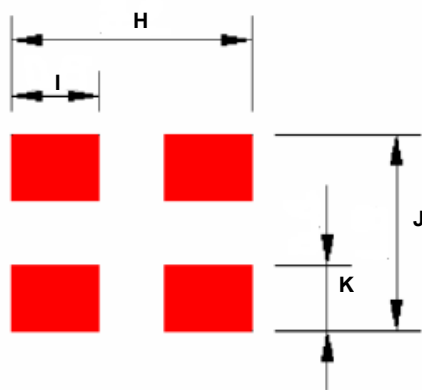
# Frequency Response Plots



## SM2016 - 2.0 X 1.6 mm -Terminal Surface-mount Case Drawing



### PCB Footprint

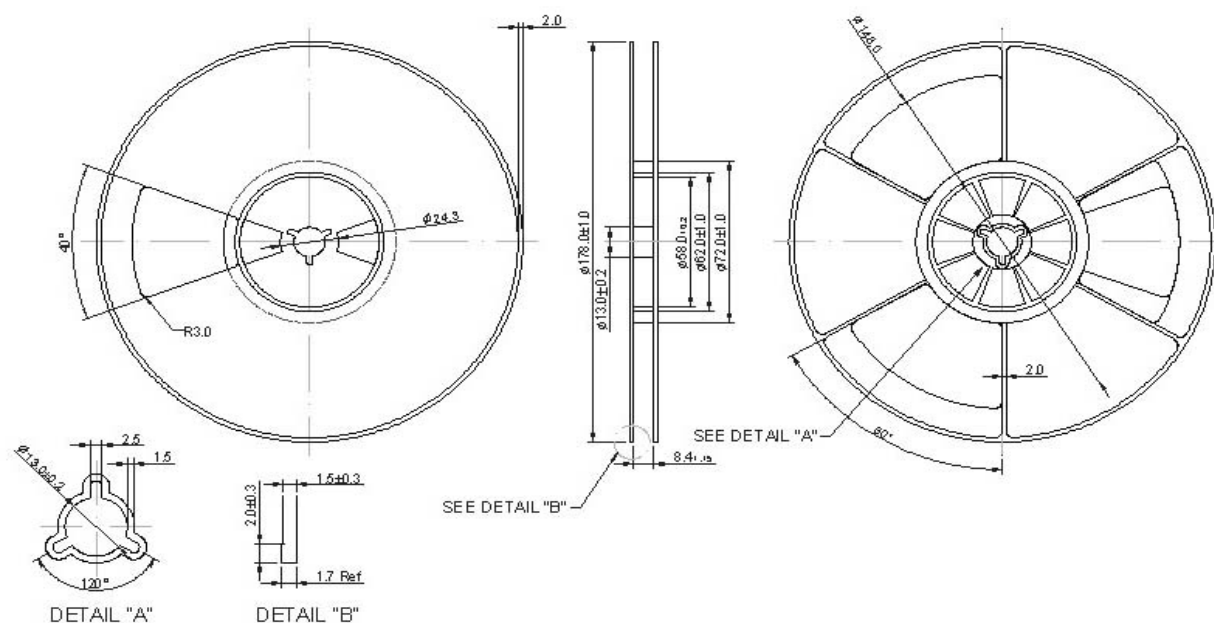


### Case and PCB Footprint Dimensions

Dimension	mm			Inches		
	Min	Nom	Max	Min	Nom	Max
A	1.57	1.65	1.73	0.064	0.062	0.068
B	1.97	2.05	2.13	0.077	0.080	0.083
C	-	0.10	-	-	0.003	-
D	0.53	0.70	0.83	0.020	0.027	0.032
E	0.37	0.50	0.63	0.014	0.019	0.024
F	-	0.10	-	-	0.003	-
G	0.55	0.625	0.70	0.024	0.021	0.027
H	-	2.20	-	-	0.086	-
I	-	0.80	-	-	0.031	-
J	-	1.80	-	-	0.070	-
K	-	0.60	-	-	0.023	-

Materials	
Solder Pad Plating	0.3 to 1.0 $\mu$ m Gold over 1.27 to 8.89 $\mu$ m Nickel
Lid Plating	1.27 $\mu$ m (minimum) Nickel over Cold Rolled Steel
Body	Al <sub>2</sub> O <sub>3</sub> Ceramic
Pb Free	

## Reel Dimensions - 7 inch Reel



## Tape Dimensions

