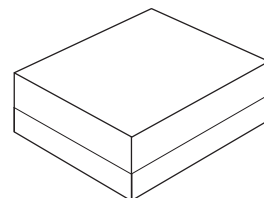


- **Miniature High Performance SAW Filter**
- **Low Passband Loss**
- **Hermetic 1.4 x 1.1 mm Surface-mount Case**
- **Complies with Directive 2002/95/EC (RoHS)**



SF2330K

**1890 MHz
SAW Filter**



SM1411-5

Absolute Maximum Ratings

Rating	Value	Units
Maximum Input Power Level 25 kHRS@+55°C	17	dBm
Maximum Input Power Level 22 kHRS@+55°C	18	dBm
Maximum Input Power Level 4 kHRS@+55°C	24	dBm
DC Voltage	5	VDC
Operating Temperature	-10 to +70	°C
Storage Temperature	-40 to +85	°C

Electrical Characteristics

Characteristic	Sym	Notes	Min	Typ	Max	Units
Center Frequency	f_c		1890			MHz
Insertion Loss, 1881.792 to 1897.344 MHz	IL_{MAX}			2.2	3.5	dB
VSWR (1881.792 to 1897.344 MHz)				1.6	2.3	
Terminating Source Impedance	Z_S			50		Ω
Terminating Load Impedance	Z_L			50		
Amplitude Ripple, 1881.792 to 1897.344 MHz				0.8	2.2	dB
Attenuation (Reference level from 0 dB)						dB
10 to 1600 MHz			30	36		
1600 to 1830 MHz			30	35		
1920 to 1980 MHz			25	38		
2730 to 2820 MHz			30	40		
Package Size		SMD 1.4x1.1				mm
Lid Symbolization		2				



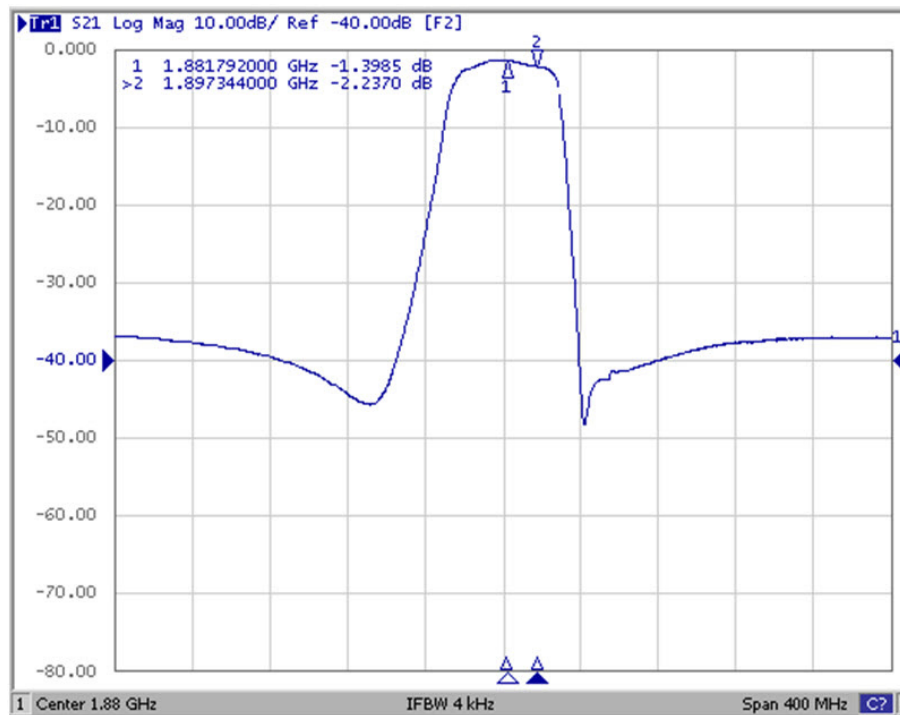
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

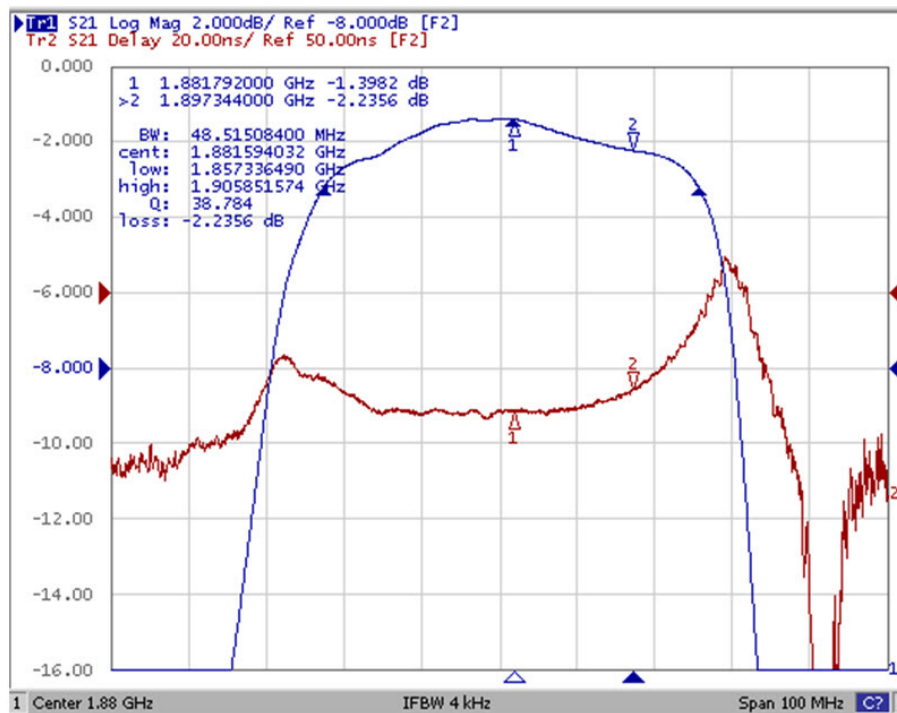
1. US and international patents may apply.
2. Murata, stylized Murata logo, and Murata N.A., Inc. are registered trademarks of Murata Manufacturing Co., Ltd.

Frequency Characteristics:

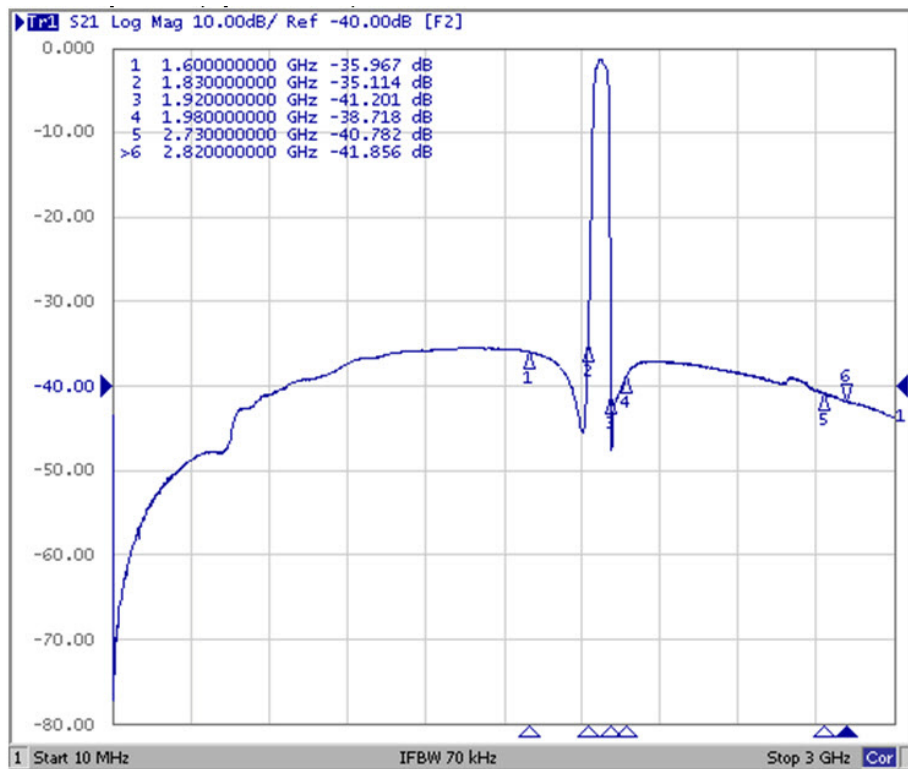
S21 Response (span 400 MHz)



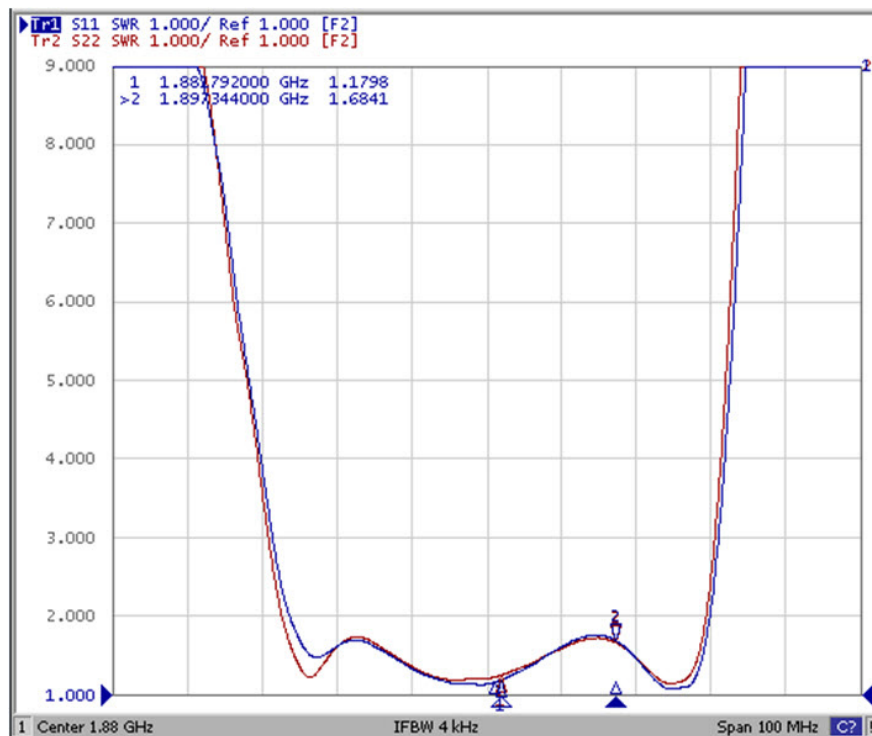
S21 Response (span 100 MHz)



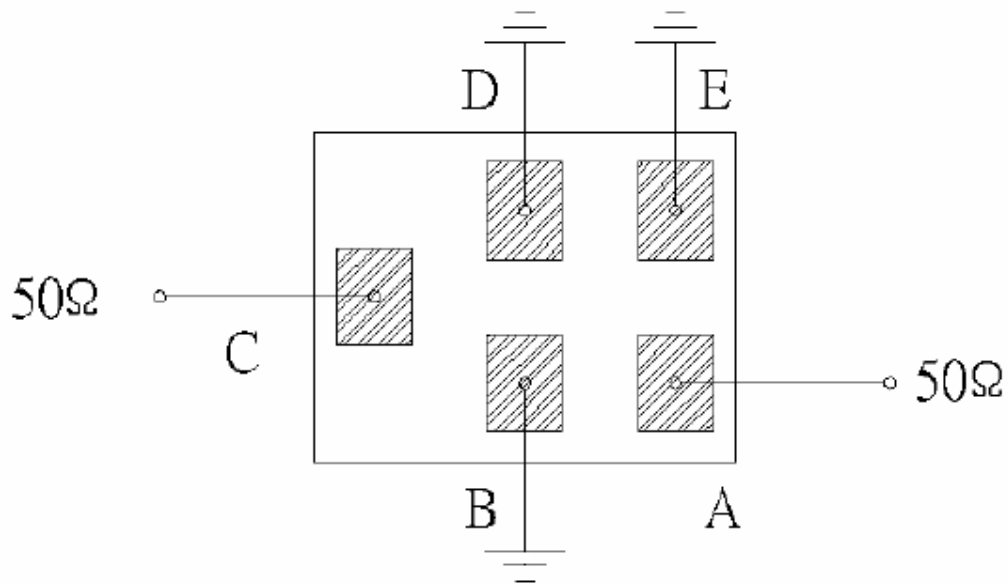
S21 Response (span 3GHz)



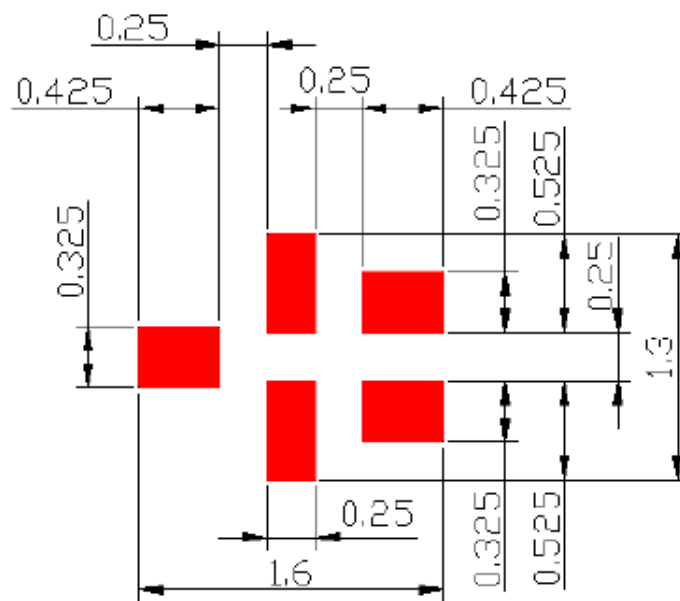
S11 and S22 Response (span 100 MHz)



Measurement Circuit:

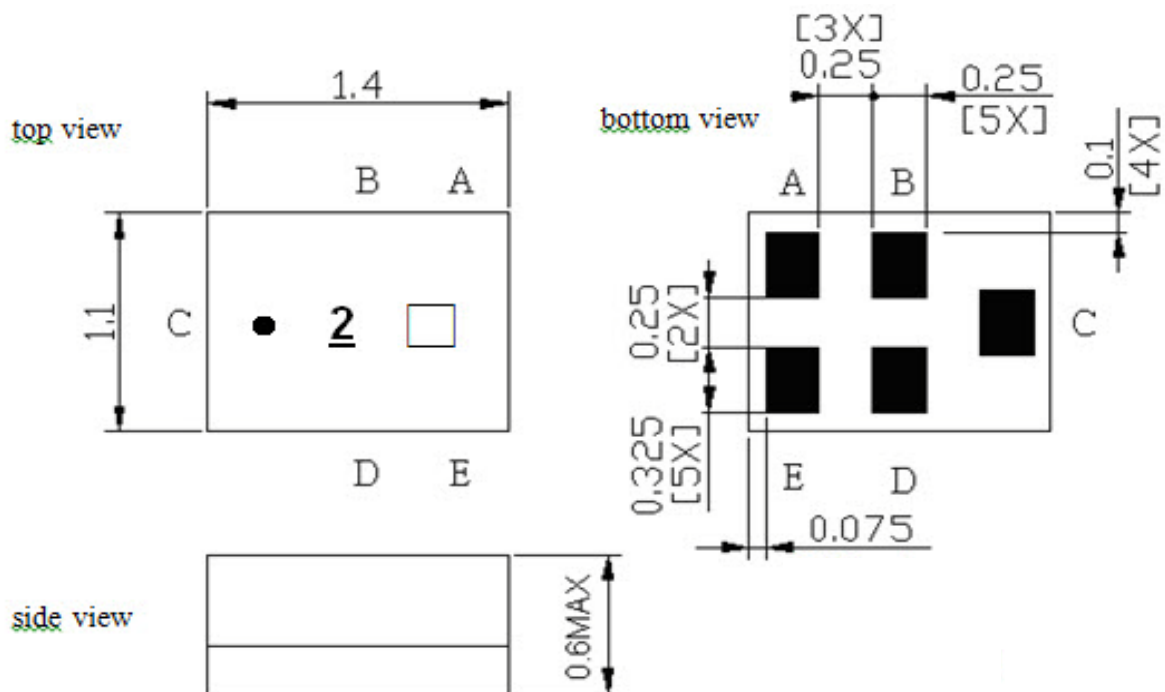


PCB Footprint :



 : Land Pattern
Unit : mm

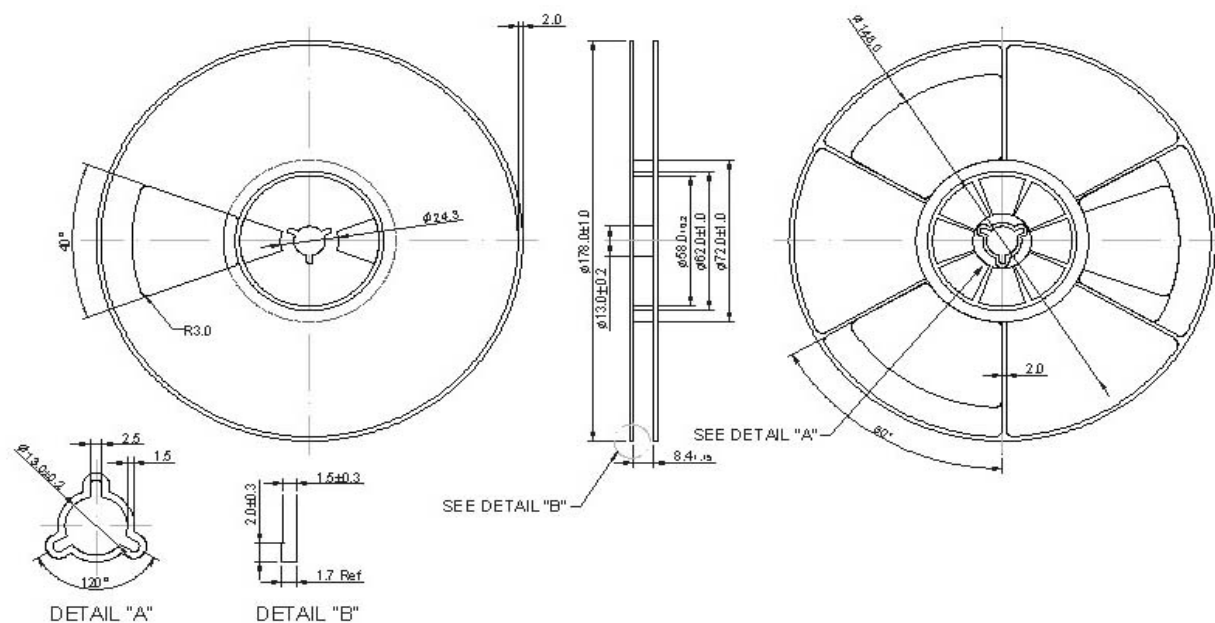
Outline Drawing:



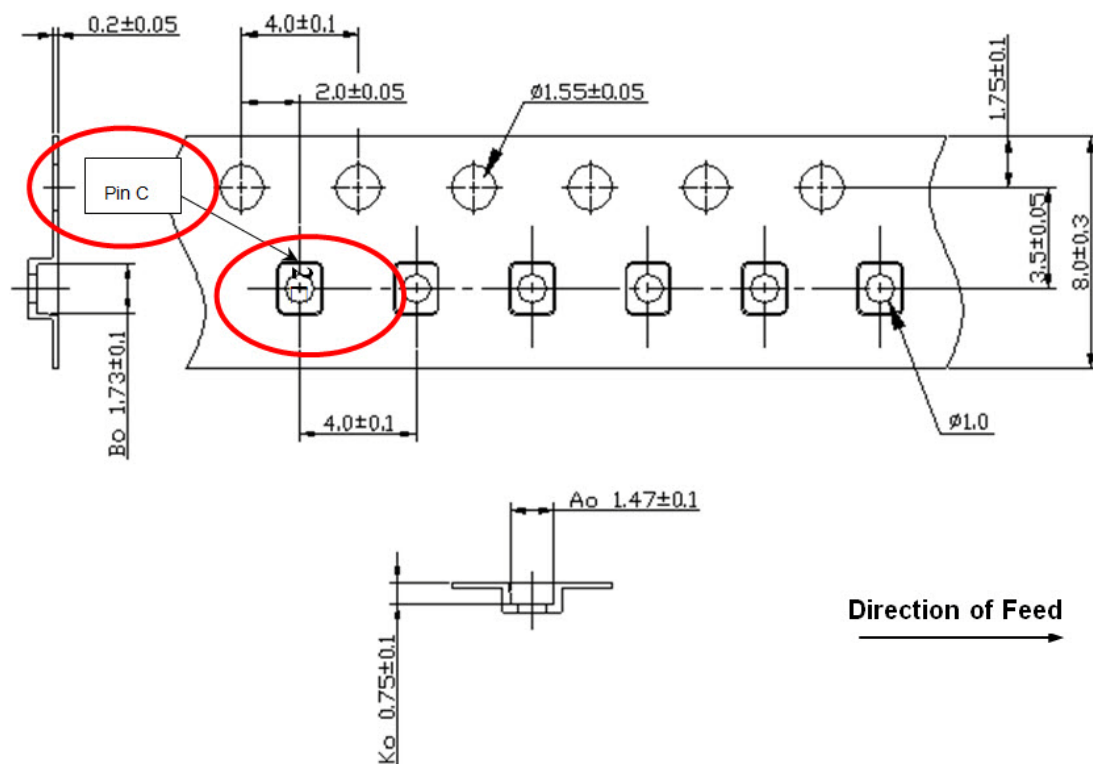
☐ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>
2019	<u>a</u>	<u>b</u>	<u>c</u>	<u>d</u>	<u>e</u>	<u>f</u>	<u>g</u>	<u>h</u>	<u>j</u>	<u>k</u>	<u>l</u>	<u>m</u>
2020	<u>n</u>	<u>p</u>	<u>q</u>	<u>r</u>	<u>s</u>	<u>t</u>	<u>u</u>	<u>v</u>	<u>w</u>	<u>x</u>	<u>y</u>	<u>z</u>

Reel Dimensions - 7 inch Reel, 3000 Filters:



Tape Dimensions:



Recommended Reflow Profile:

