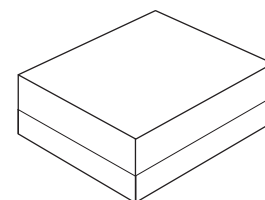


SF2330K

1890 MHz
SAW Filter



SM1411-5

- **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)**
- **Moisture Sensitivity Level: 2A**

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)	10 to 1600 MHz		30	36		dB
	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			<u>2</u>			



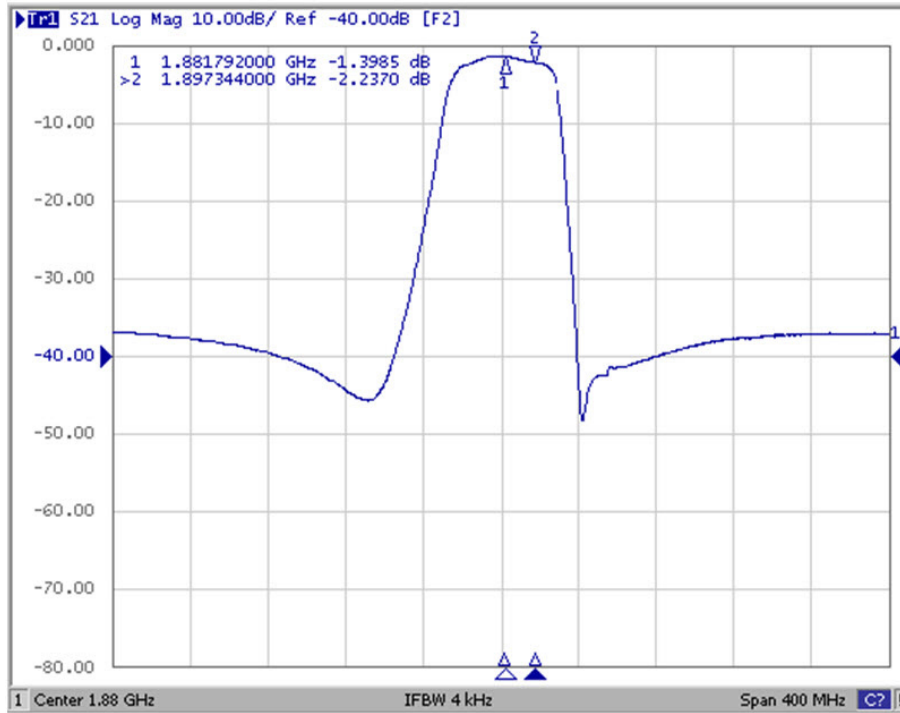
CAUTION: Electrostatic Sensitive Device. Observe precautions for handling.

NOTES:

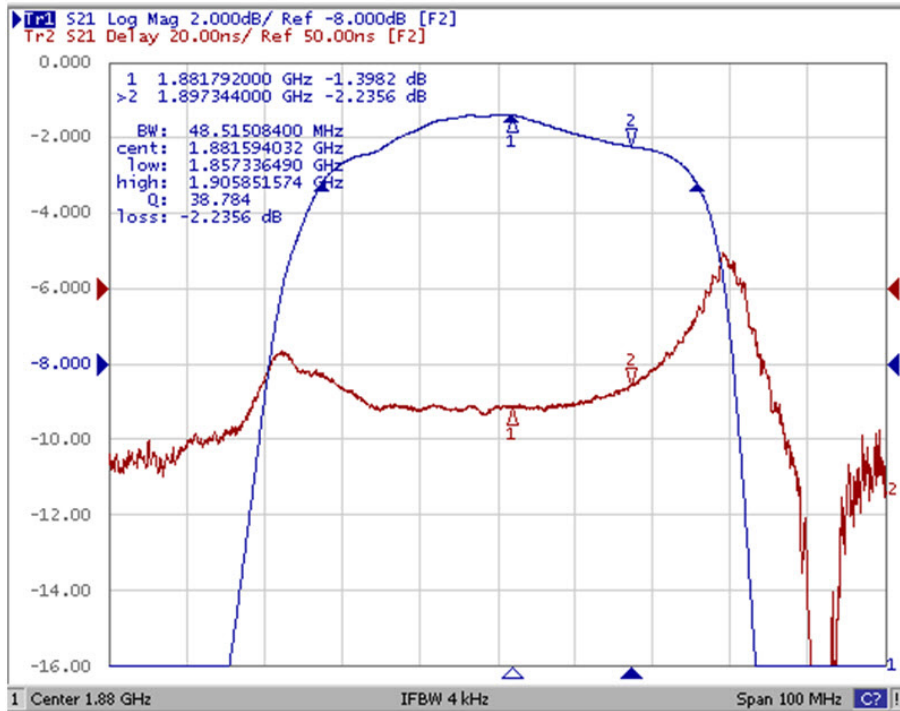
1. The design, manufacturing process, and specifications of this device are subject to change.
2. US or International patents may apply.
3. RoHS compliant from the first date of manufacture.

Frequency Characteristics:

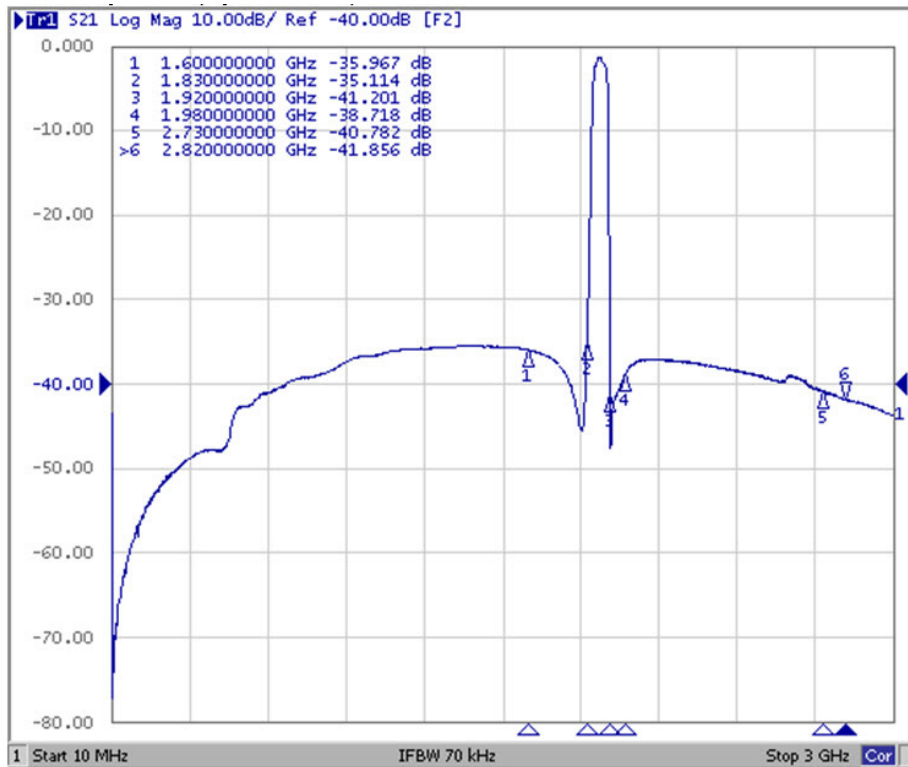
S21 Response (span 400 MHz)



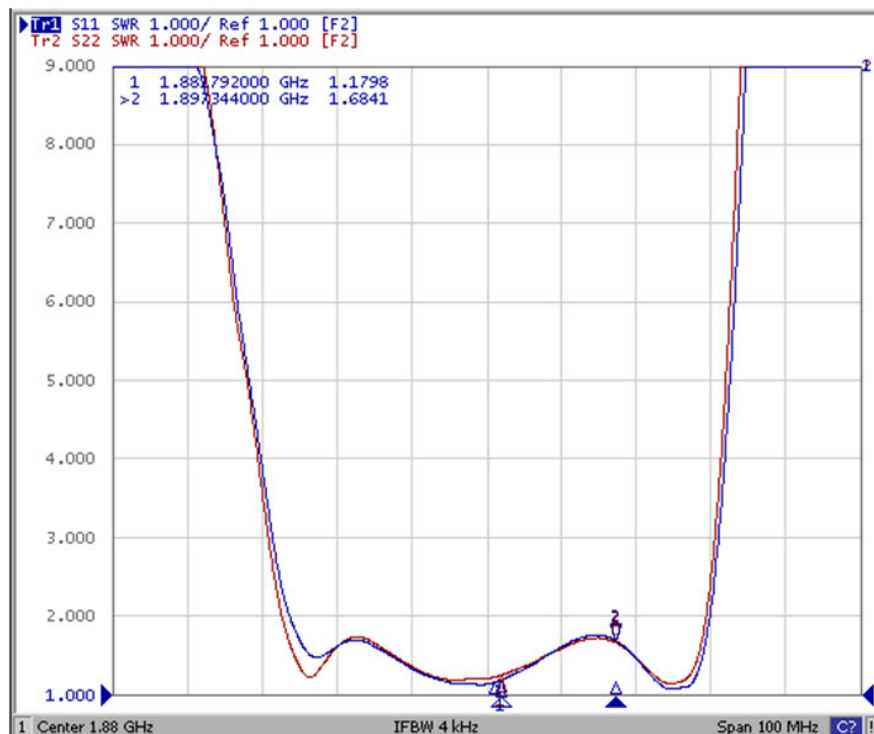
S21 Response (span 100 MHz)



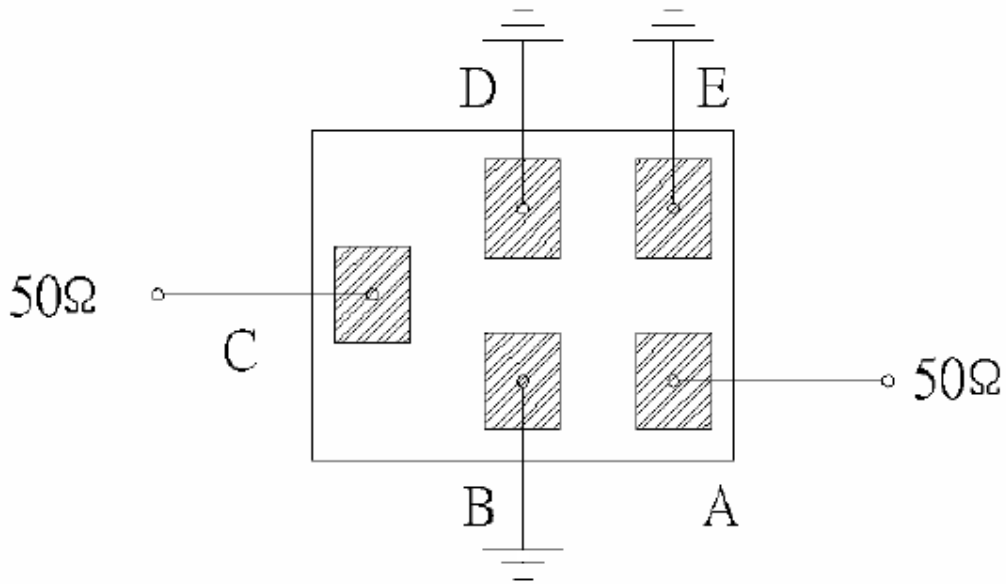
S21 Response (span 3GHz)



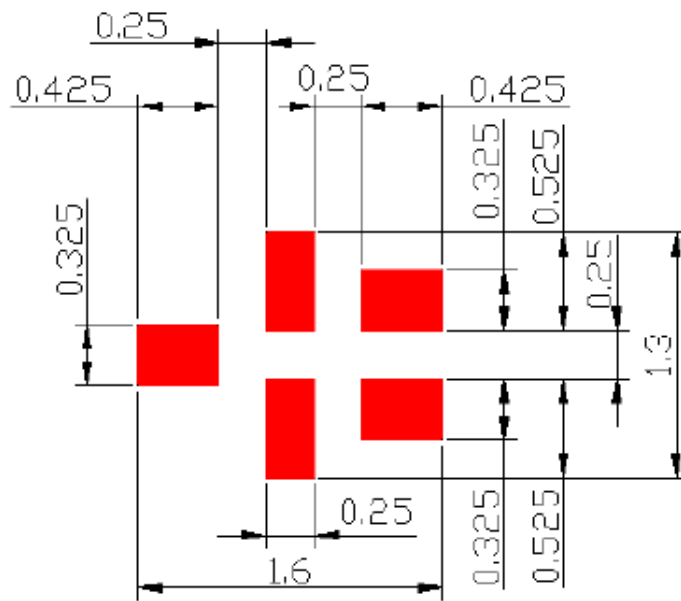
S11 and S22 Response (span 100 MHz)



Measurement Circuit:

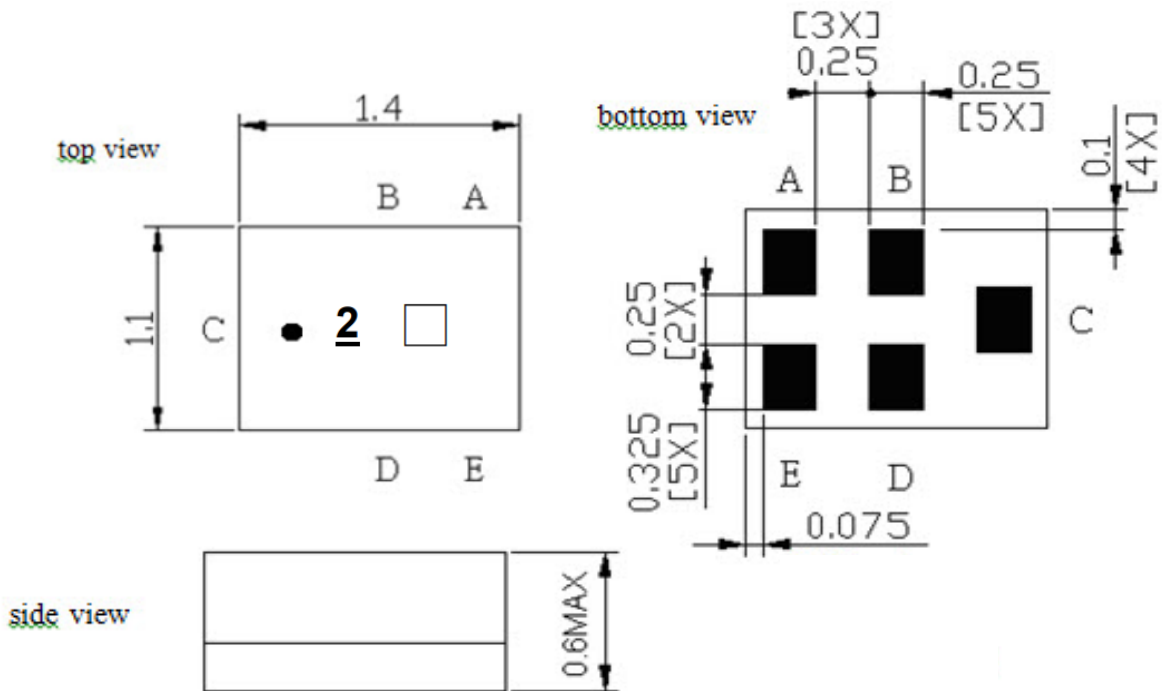


PCB Footprint:



 : Land Pattern
Unit : mm

Outline Drawing:

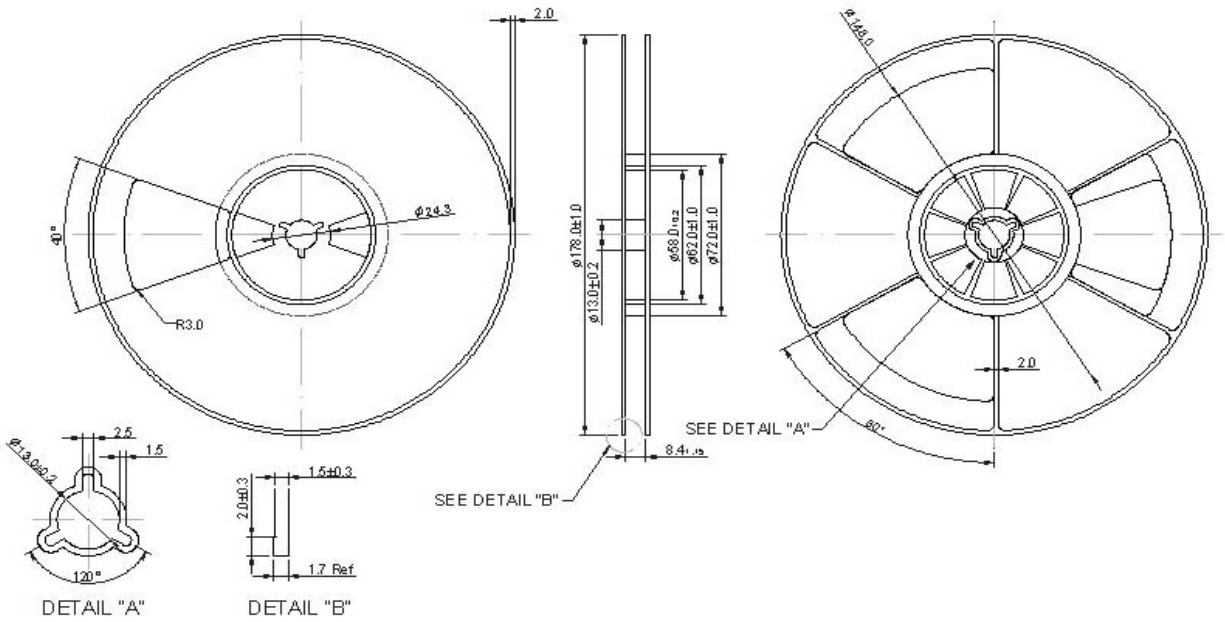


□ : Year/Month Code (Follow the table)

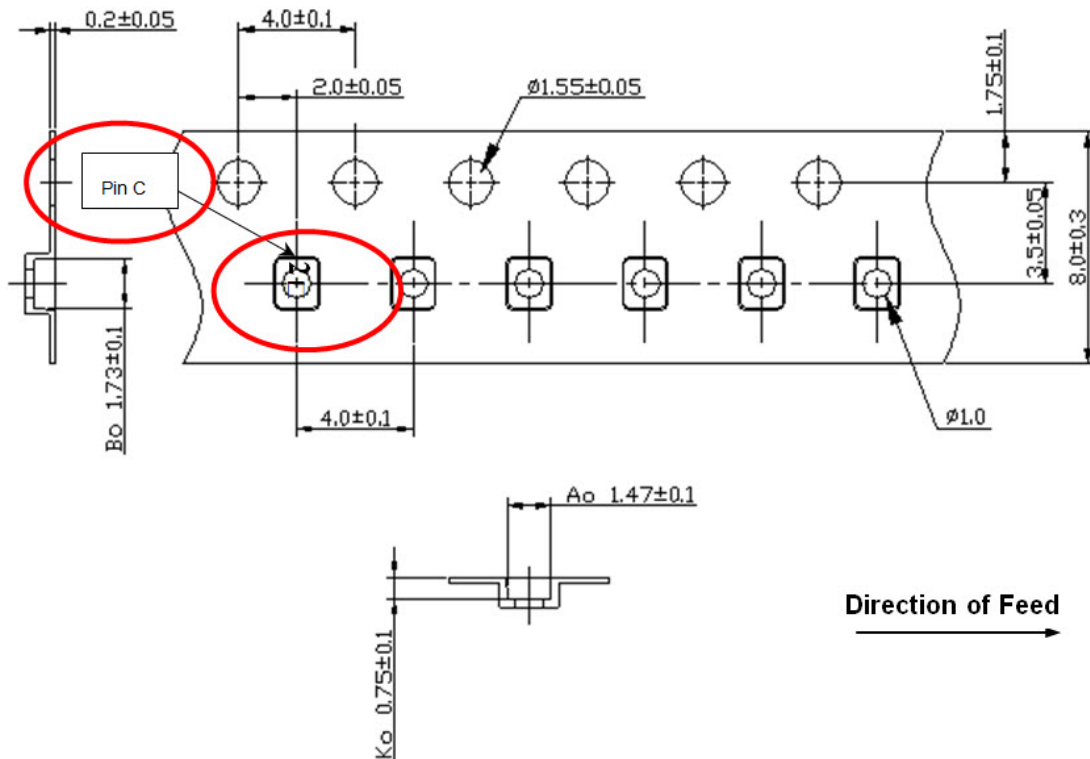
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

Reel Dimensions - 7 inch Reel, 3000 Filters:

Tape and Reel Standard per ANSI/EIA-481



Tape Dimensions:



Recommended Reflow Profile

1. Preheating shall be fixed at 150~180°C for 60~90 seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for 50~80 seconds and at 260°C +0/-5°C peak (10 seconds).
4. Time: 5 times maximum.

