



RFM Integrated Device, Inc.

PRODUCT SPECIFICATION

Part Number: SF2124K

FILTER, 2441.75 MHz, BW 83.50
MHz, IL 2.6 dB, OP TEMP -30 TO 85C

A. MAXIMUM RATING:

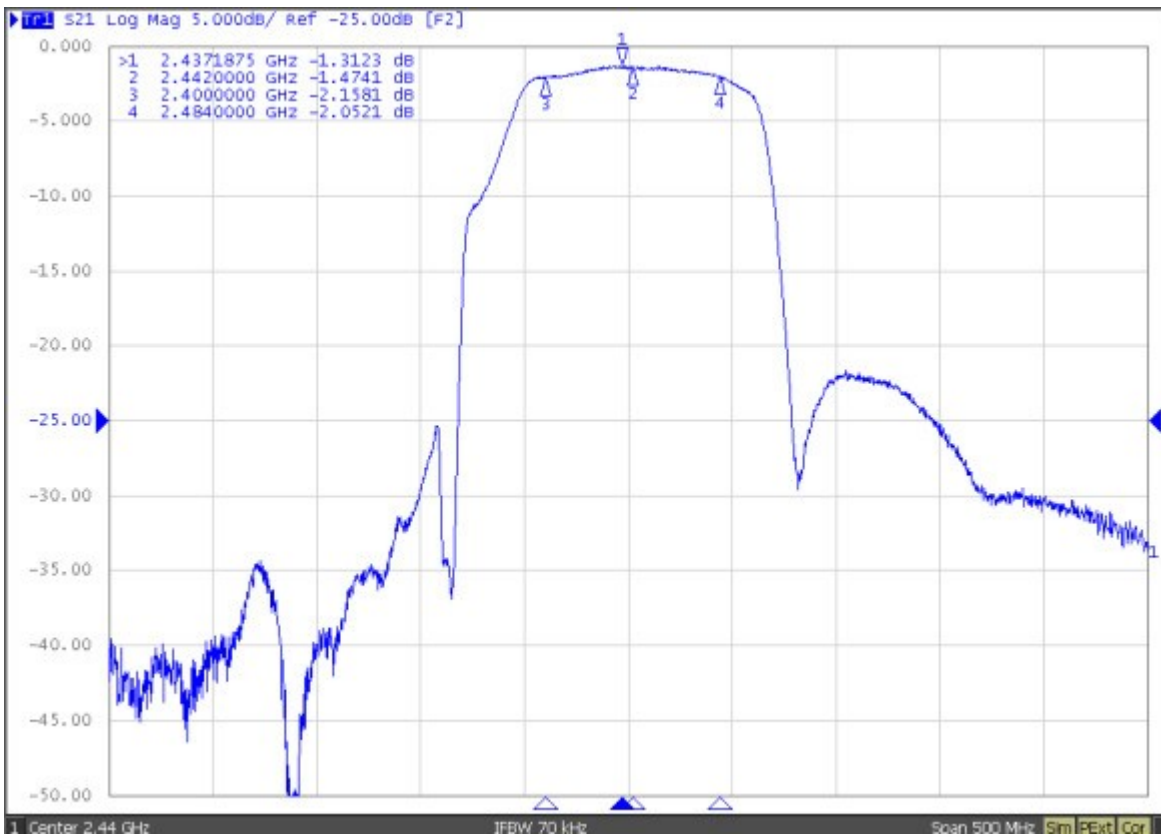
1. Input Power Level: 13 dBm
2. DC Voltage : 3V
3. Operating Temperature: -30°C to +85°C
4. Storage Temperature: -40°C to +105°C
5. Moisture Sensitivity Level: Level 3(MSL3)
6. ESD: 50 V(MM), 100 V(HBM)

**B. ELECTRICAL CHARACTERISTICS:**

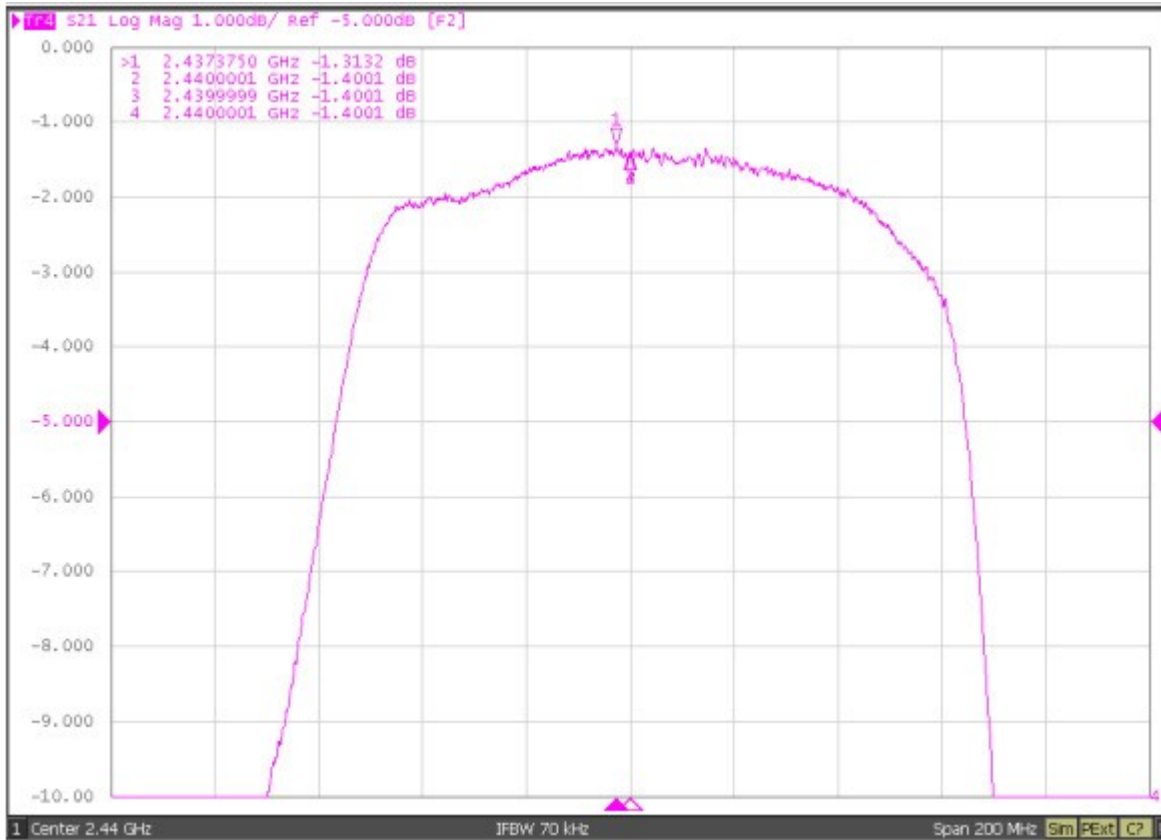
Item	Unit	Min	Type.	Max
Center Frequency Fc	MHz	-	2441.75	-
Insertion Loss IL 2400 – 2483.5 MHz	dB		2.2	2.6
Amplitude ripple 2400 – 2483.5 MHz			0.7	1.5
VSWR 2400 – 2483.5 MHz			2.0	2.4
Attenuation				
0.1 – 960 MHz	dB	30	35	
1570 – 1990 MHz	dB	30	33	
2110 – 2170 MHz	dB	38	43	
2170 – 2300 MHz	dB	29	34	
2300 – 2320 MHz	dB	29	34	
2320 – 2345 MHz	dB	23	28	
2345 – 2365 MHz	dB	5	10	
2550 – 2800 MHz	dB	15	20	
2800 – 4000 MHz	dB	30	35	
4000 – 5000 MHz	dB	30	33	
Temperature coefficient	ppm/°C	-36		
Package size	mm	SMD 1.4 x 1.1		

C. FREQUENCY CHARACTERISTICS:

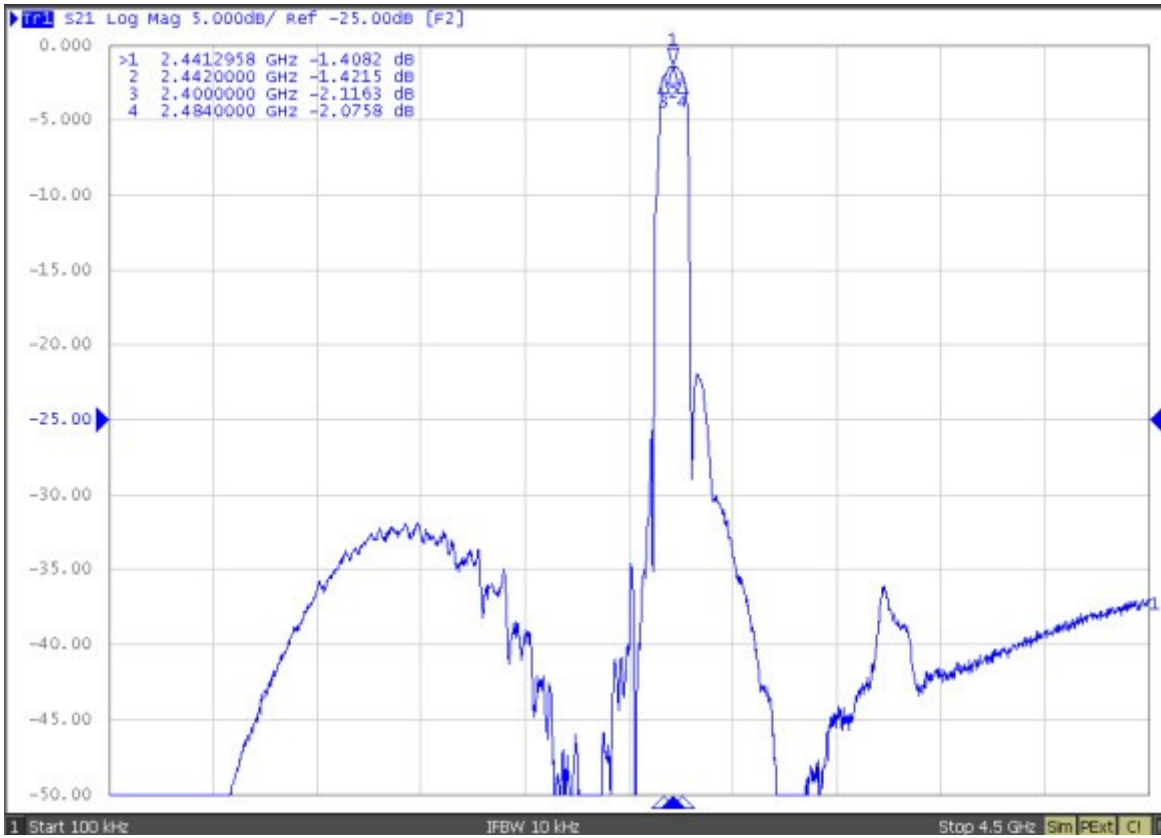
S21 response: (span 500MHz)



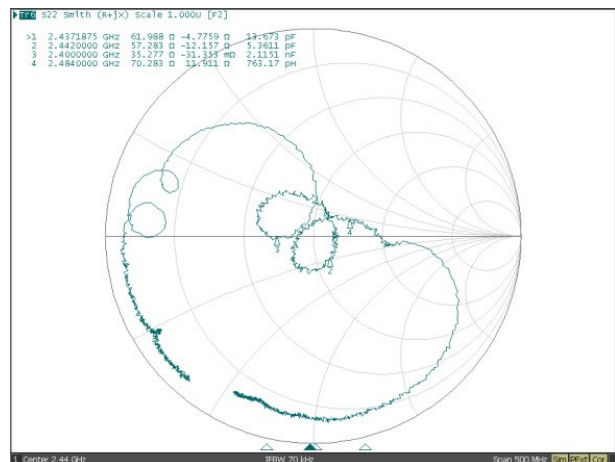
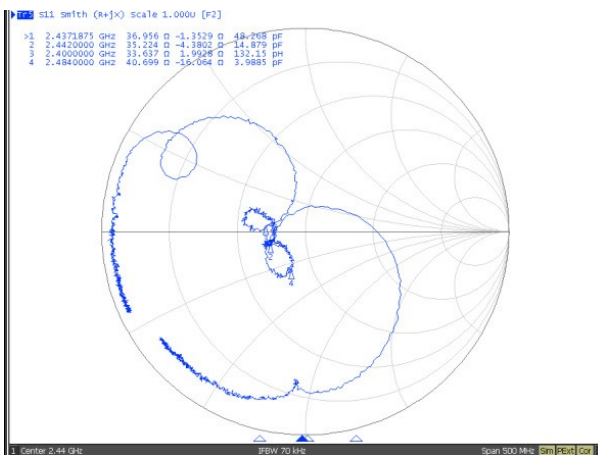
S21 response: (span 200MHz)



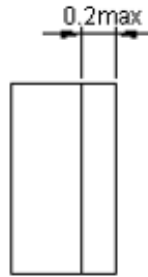
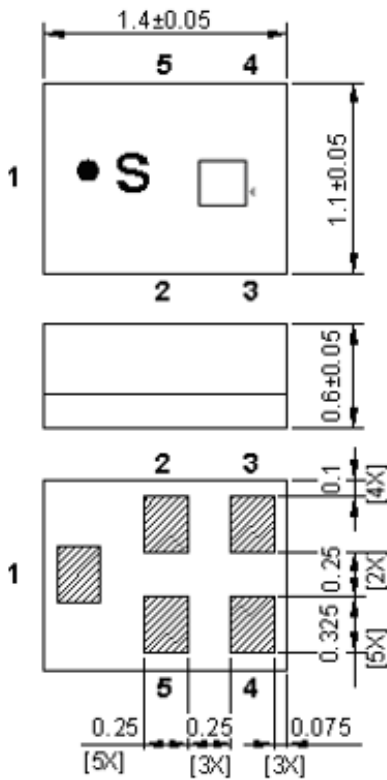
S21 response: (span 4.5GHz)



S11/S22 response:



D.OUTLINE DRAWING:



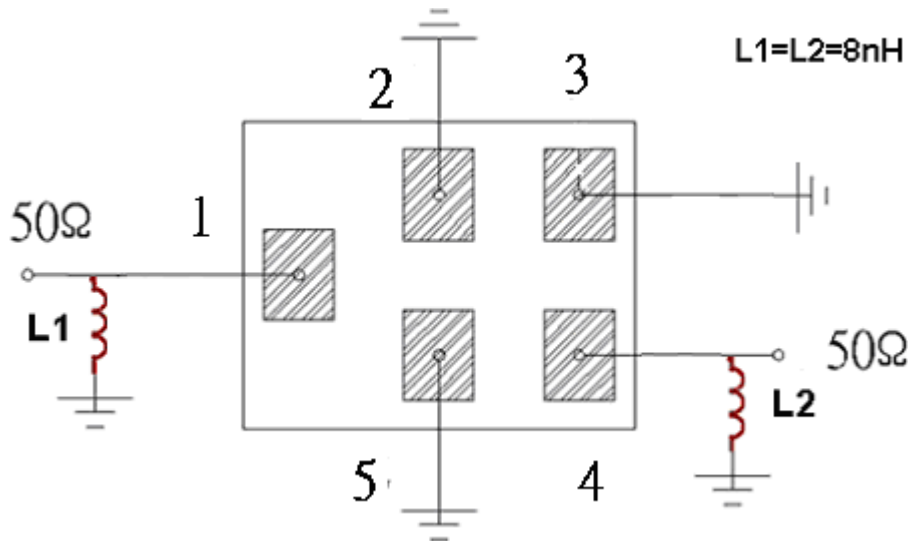
All tolerances are +/-0.05 mm unless otherwise specified
 Coplanarity : 0.1 mm max.
 1 to 5 : Pin No.
 Unit : mm

Pin No.Ⓟ	SymbolⓅ	FunctionⓅ
1Ⓟ	INⓅ	InputⓅ
2Ⓟ	GNDⓅ	GroundⓅ
3Ⓟ	GNDⓅ	GroundⓅ
4Ⓟ	OUTⓅ	OutputⓅ
5Ⓟ	GNDⓅ	GroundⓅ

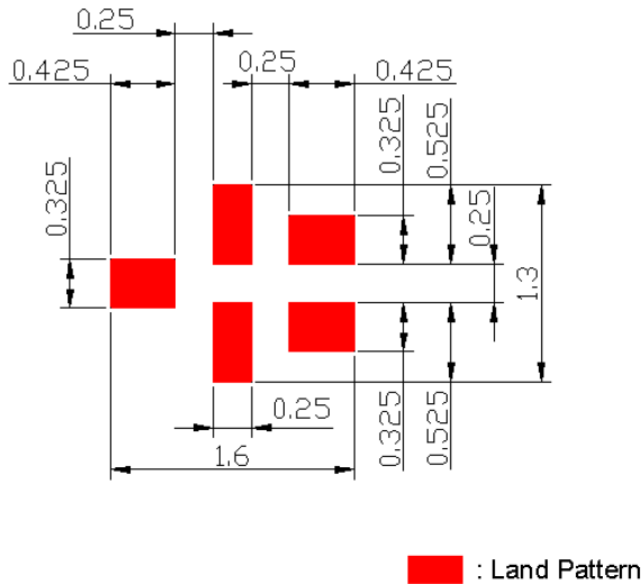
□ : Year/Month Code (Follow the table)

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>

E. MEASUREMENT CIRCUIT:



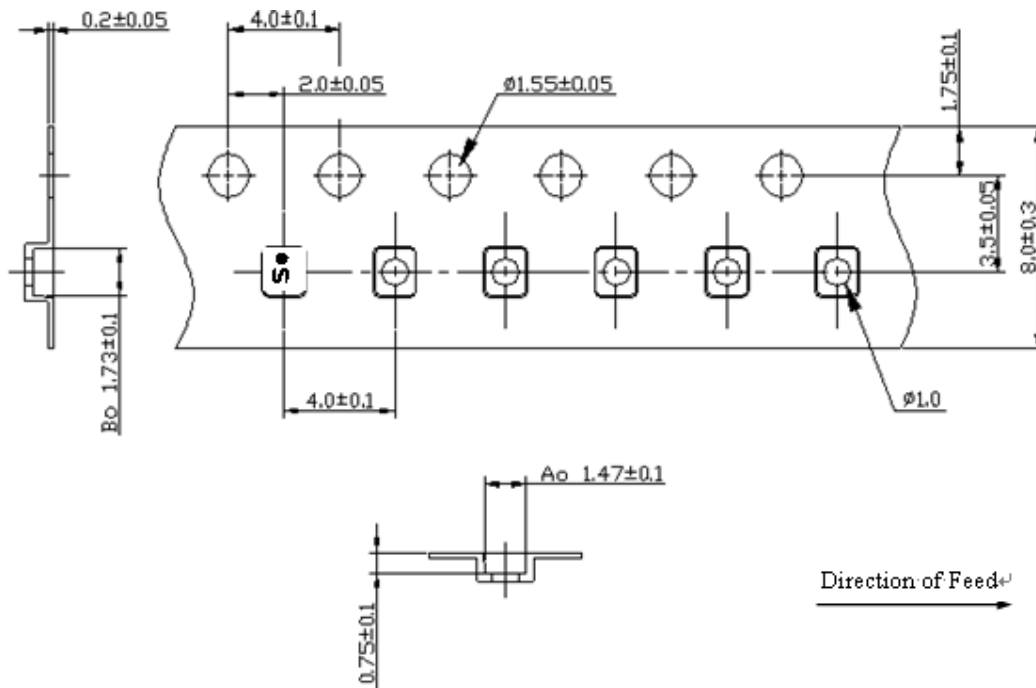
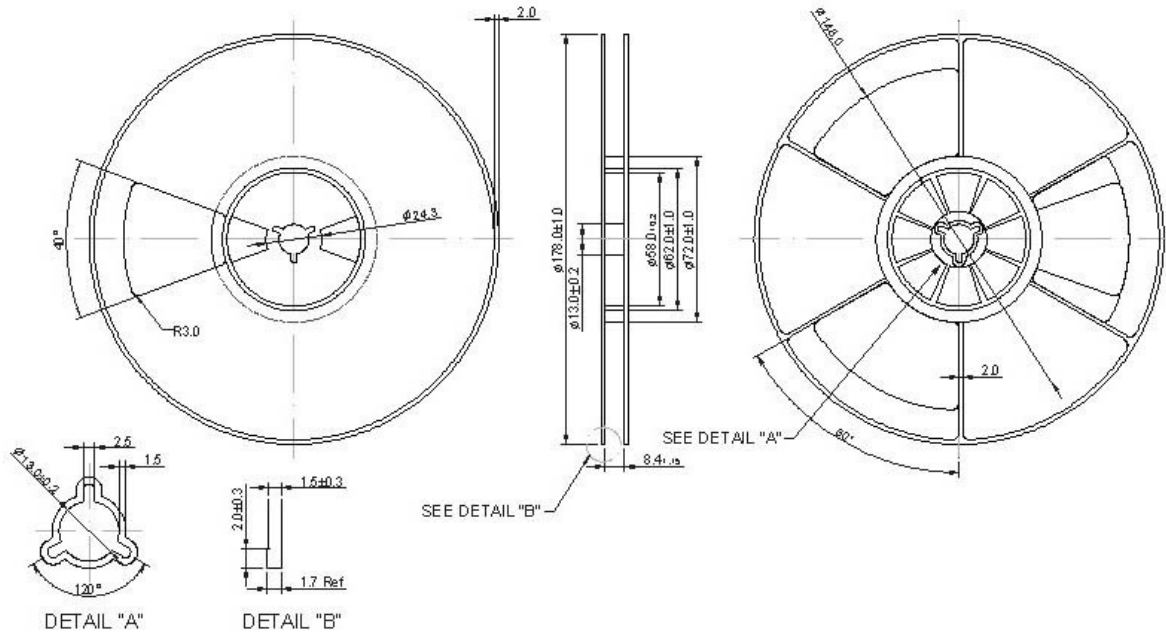
F. PCB Footprint:



G. PACKING:

1. REEL DIMENSION

7" Reel = 3000



H. 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 (20~40sec).
4. Time: 2 times.

