

# SAW Filter 431.5624MHz

MODEL NO.:TA2409A

REV. NO.1

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 0V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device

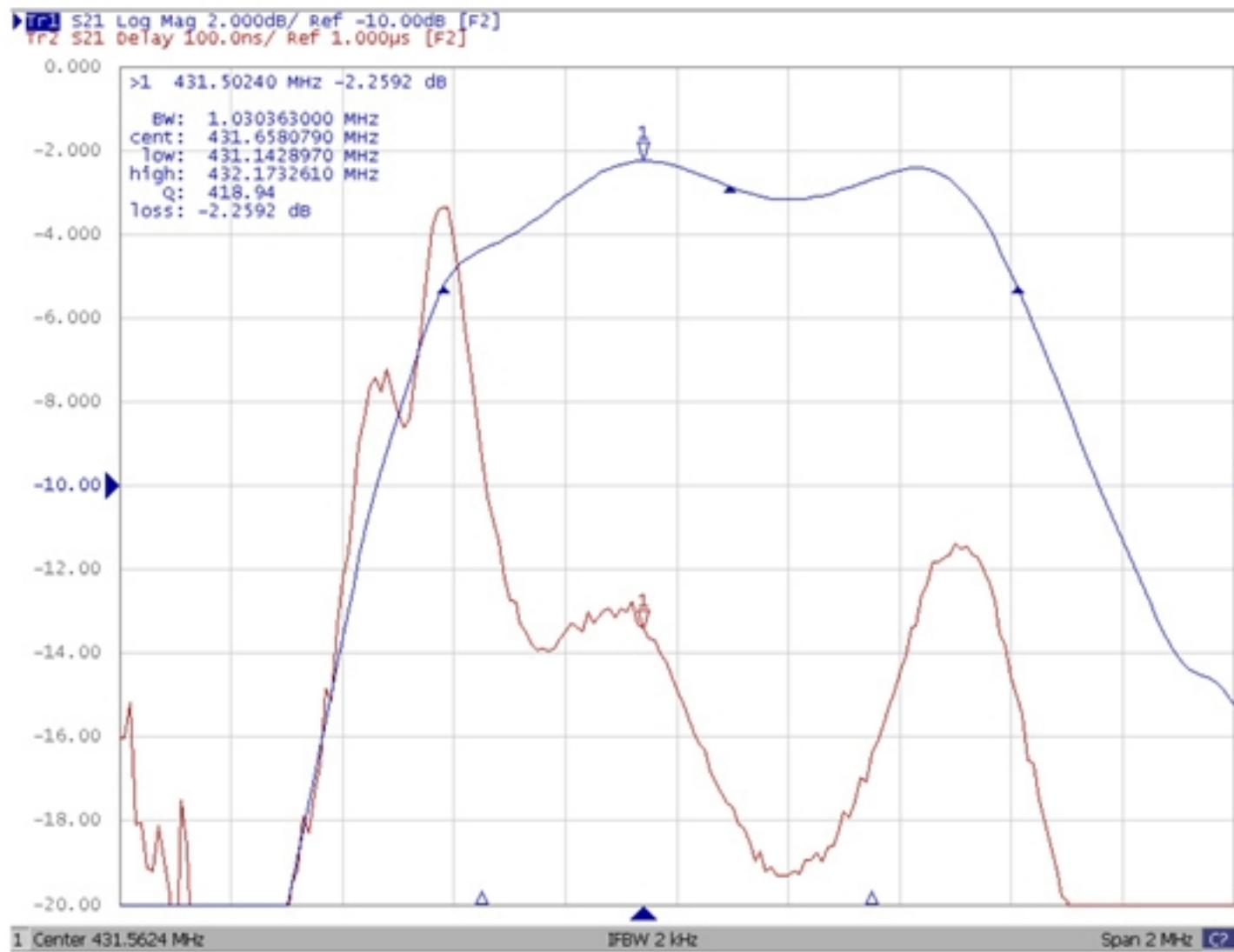
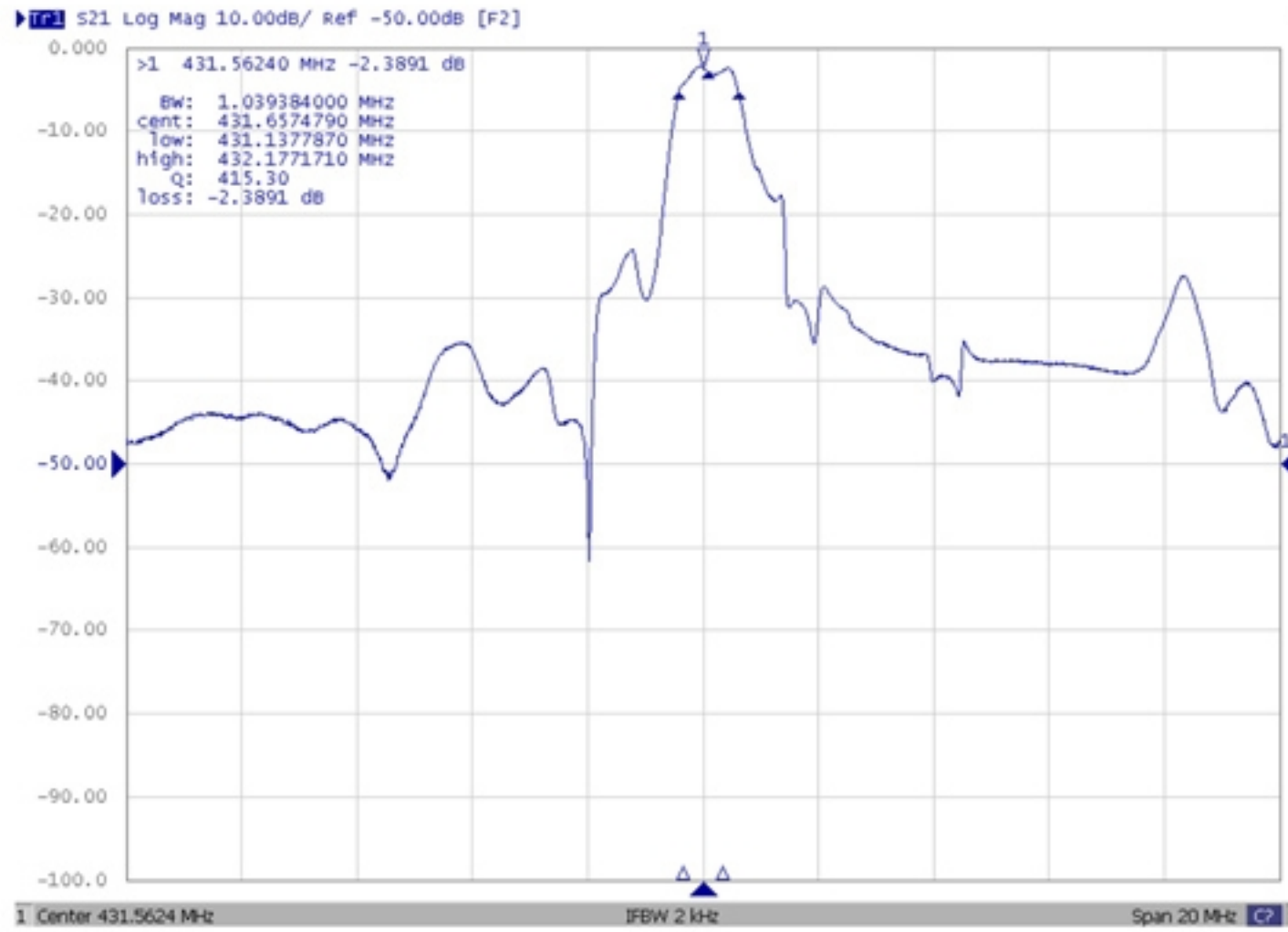
## B. ELECTRICAL CHARACTERISTICS:

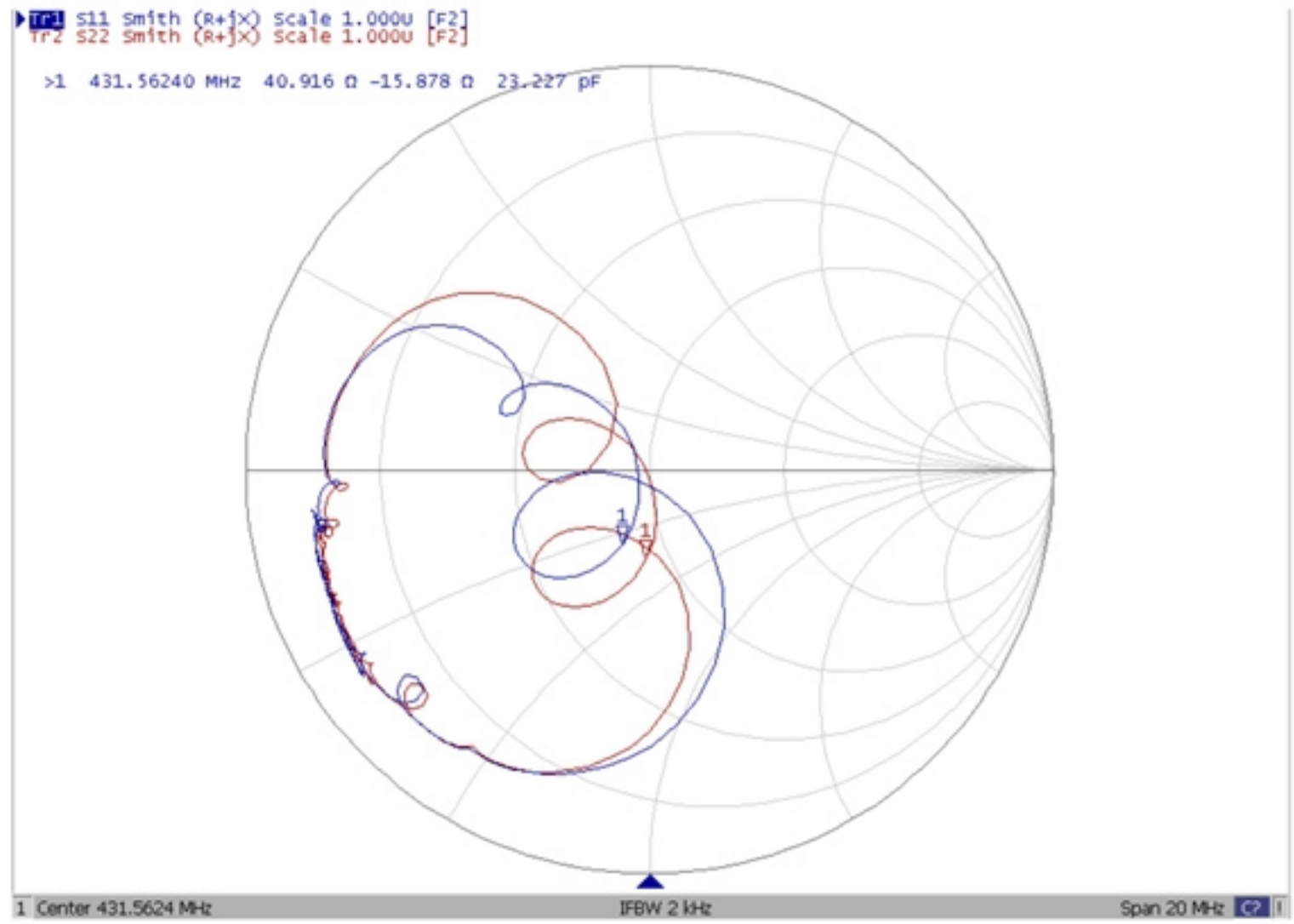
Ambient Temperature: 25 °C

Item	Unit	Min.	Typ.	Max.
Center frequency <b>Fc</b>	MHz	-	431.5624	-
3dB BW	MHz	-	1.0	-
Minimum insertion loss <b>IL(min)</b> Incl. loss of matching elements *1)	dB	-	2.2	4.0
Passband (relative to $IL_{min}$ ) *1) 431.2124 MHz ~ 431.9124 MHz	dB	-	1.5	3.0
Group Delay Variation 431.2124 MHz ~ 431.9124 MHz	ns	-	500	-
Attenuation (relative to $IL_{min}$ ) *1) @430.775 MHz	dB	5	22	-
@432.35 MHz	dB	5	8	-
Input $Z_{in} = R_{in} \parallel C_{in}$	$\Omega \parallel pF$		$\parallel$	
Output $Z_{out} = R_{out} \parallel C_{out}$	$\Omega \parallel pF$		$\parallel$	

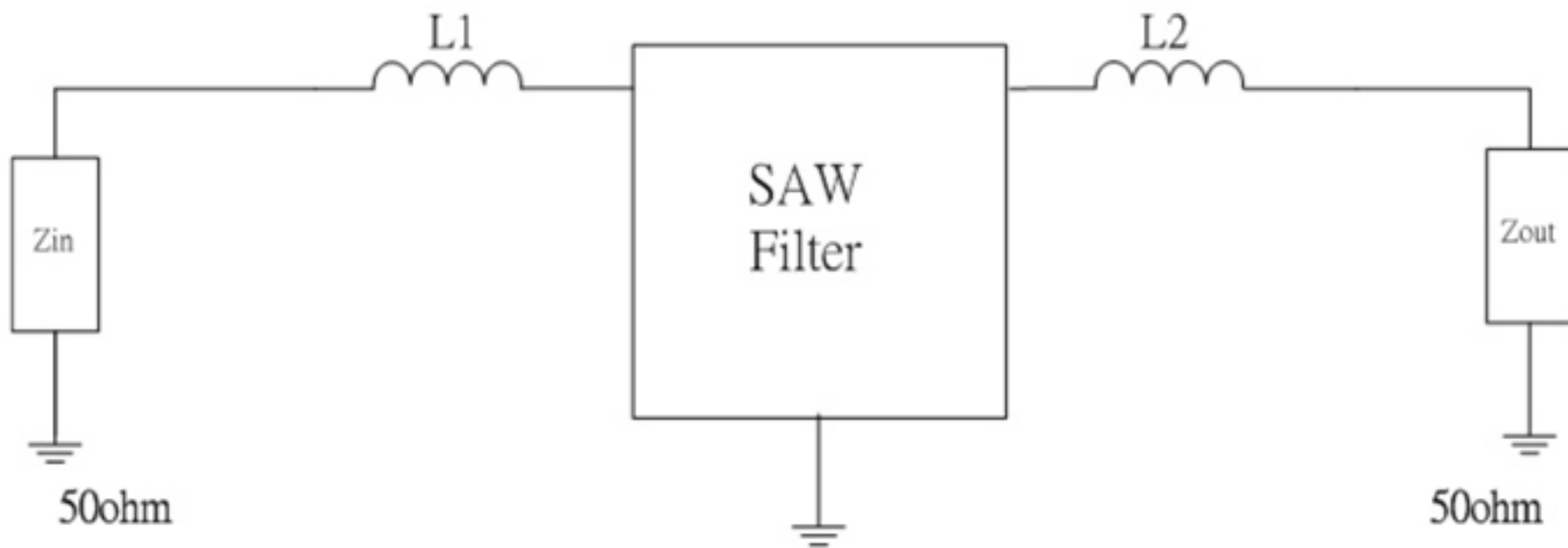
\*1) : The matching circuit is real by actual passive components.  
0805 Coilcraft CS series chip conductor is used for inductor.  
0402 muRata GRM series is used for capacitor.

### C. FREQUENCY CHARACTERISTICS:



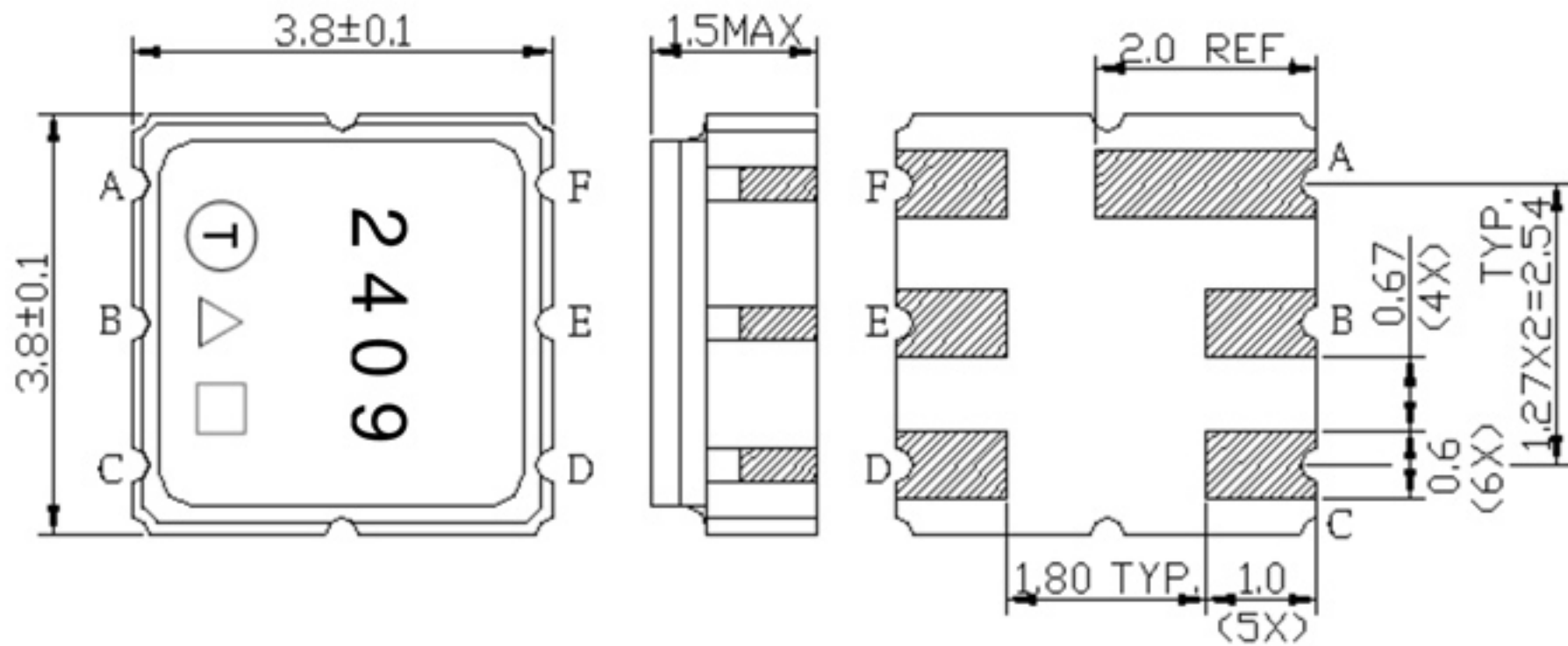


**D. MEASUREMENT CIRCUIT:**



**$L1=68nH+5.6nH$   $L2=68nH+8nH$**

**E.OUTLINE DRAWING:**



#B: Input

#E: Output

Others: Ground

□: Week Code

△: Product / Year Code

Unit: mm

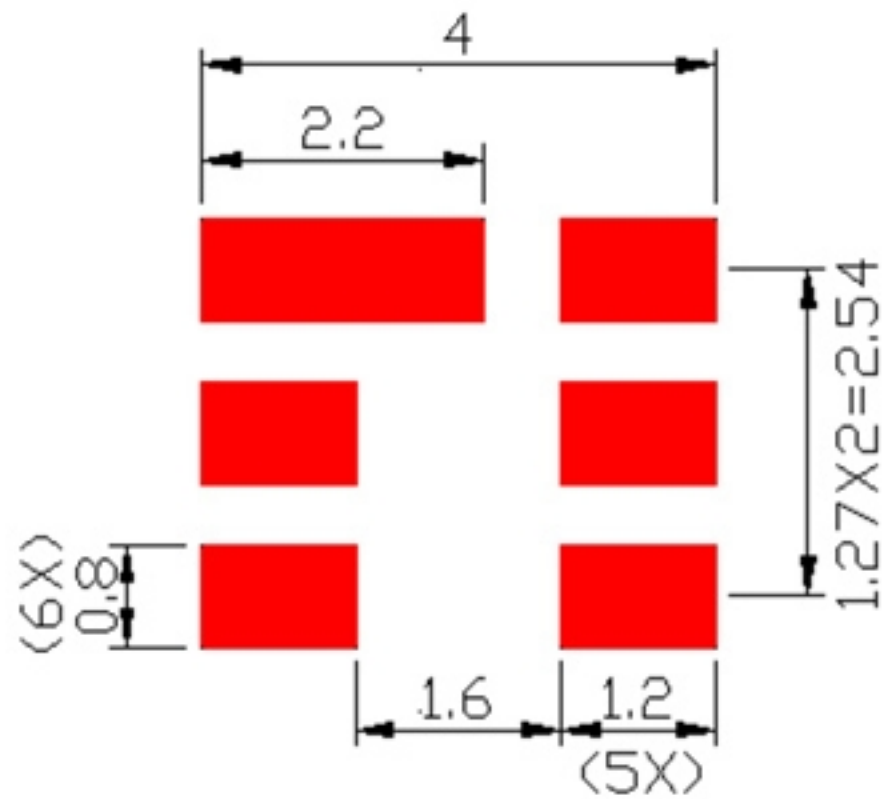
**Product / Year Code**

Year	2017	2018
	2019	2020
	2021	2022
Product Code	A	a

**Week Code**

WK01	WK02	WK03	WK04	WK05	WK06	WK07	WK08	WK09	WK10	WK11	WK12	WK13
A	B	C	D	E	F	G	H	I	J	K	L	M
WK14	WK15	WK16	WK17	WK18	WK19	WK20	WK21	WK22	WK23	WK24	WK25	WK26
N	O	P	Q	R	S	T	U	V	W	X	Y	Z
WK27	WK28	WK29	WK30	WK31	WK32	WK33	WK34	WK35	WK36	WK37	WK38	WK39
a	b	c	d	e	f	g	h	i	j	k	l	m
WK40	WK41	WK42	WK43	WK44	WK45	WK46	WK47	WK48	WK49	WK50	WK51	WK52
n	o	p	q	r	s	t	u	v	w	x	y	z

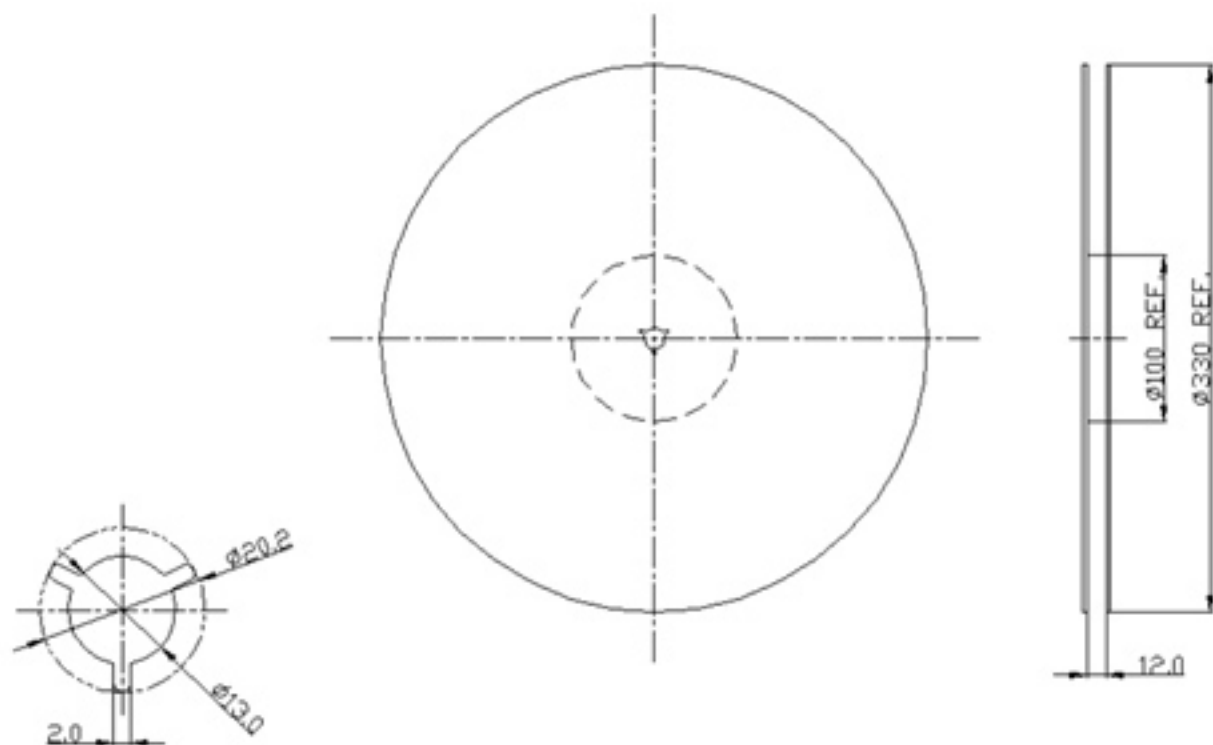
**F. PCB FOOTPRINT:**



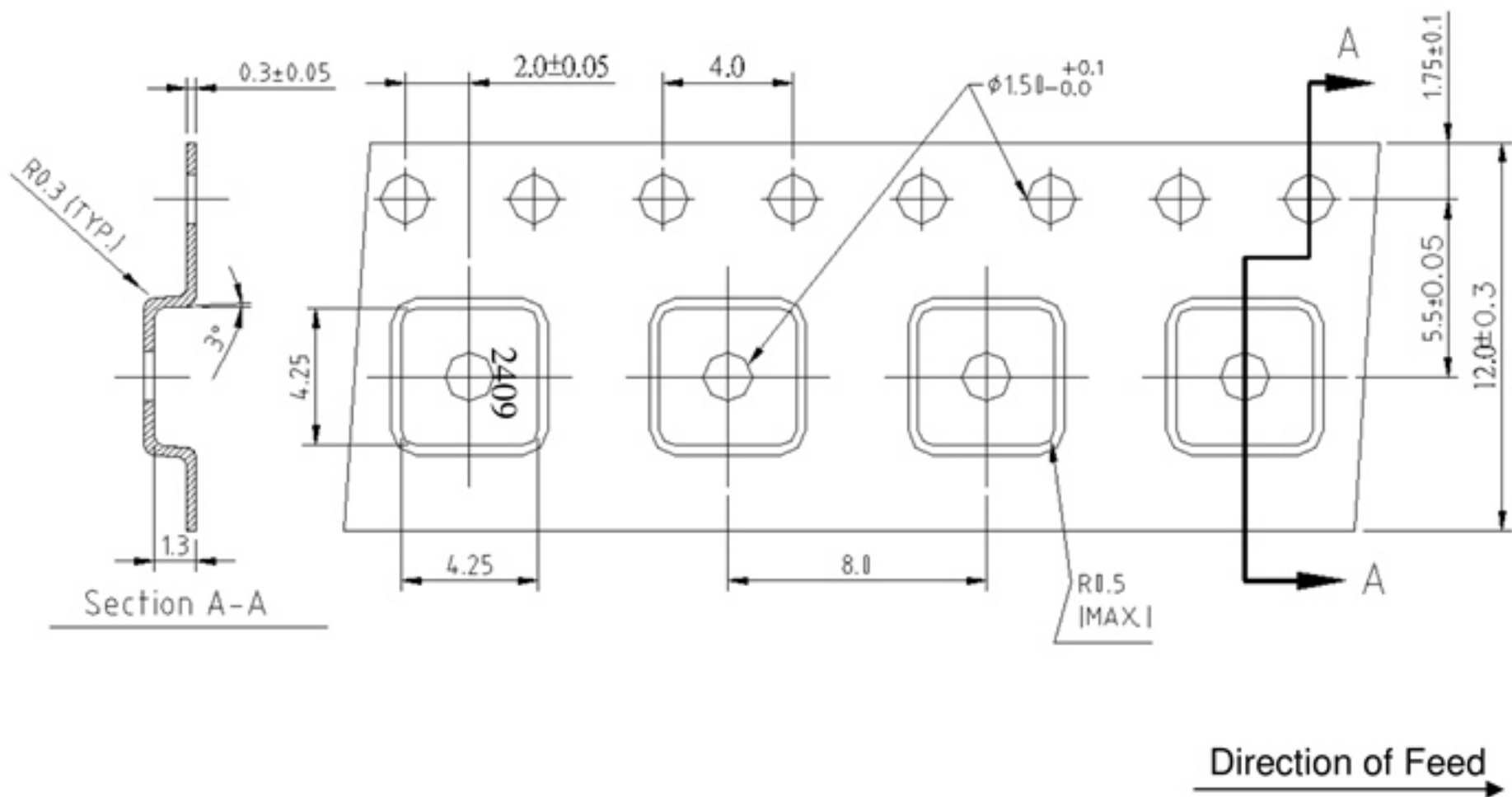
**G. PACKING:**

**1. REEL DIMENSION**

(Please refer to FR-75D10 for packing quantity and FR-75M03 for MSL)



## 2. TAPE DIMENSION



## H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at  $150 \sim 180^{\circ}\text{C}$  for 60~90 seconds.
2. Ascending time to preheating temperature  $150^{\circ}\text{C}$  shall be 30 seconds min.
3. Heating shall be fixed at  $220^{\circ}\text{C}$  for 50~80 seconds and at  $260^{\circ}\text{C} \pm 0/-5^{\circ}\text{C}$  peak (20~40sec).
4. Time: 2 times.

