



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: ttsales@mail.taisaw.com Web: www.taisaw.com

Product Specifications Approval Sheet

Product Description: SAW Filter 154.04MHz (BW 16MHz) SMD 7.0×5.0mm

TST Parts No.:TB1083A

Customer Parts No.:_____

Customer signature required
Company:_____
Division:_____
Approved by :_____
Date:_____

Checked by:_____ Hayley Chou 

Approval by:_____ Andy Yu 

Date:_____ 2019/11/21

1. Customer signed back is required before TST can proceed with sample build and receive orders.
2. Orders received without customer signed back will be regarded as agreement on the specifications.
3. Any specifications changes must be approved upon by both parties and a new revision of specifications shall be released to reflect the changes



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,

Taoyuan, 324, Taiwan, R.O.C.

TEL: 886-3-4690038 FAX: 886-3-4697532

E-mail: tstsales@mail.taisaw.com Web: www.taisaw.com

SAW Filter 154.04 MHz(BW=16.0MHz) SMD 7.0mmX5.0mm

MODEL NO.: TB1083A

REV.2.0

A. MAXIMUM RATING:

1. Operating Temperature: -40 °C ~ +85 °C
2. Storage Temperature: -40 °C ~ +85 °C
3. Input power: 10dBm
4. Moisture Sensitivity Level: Level 1(MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device

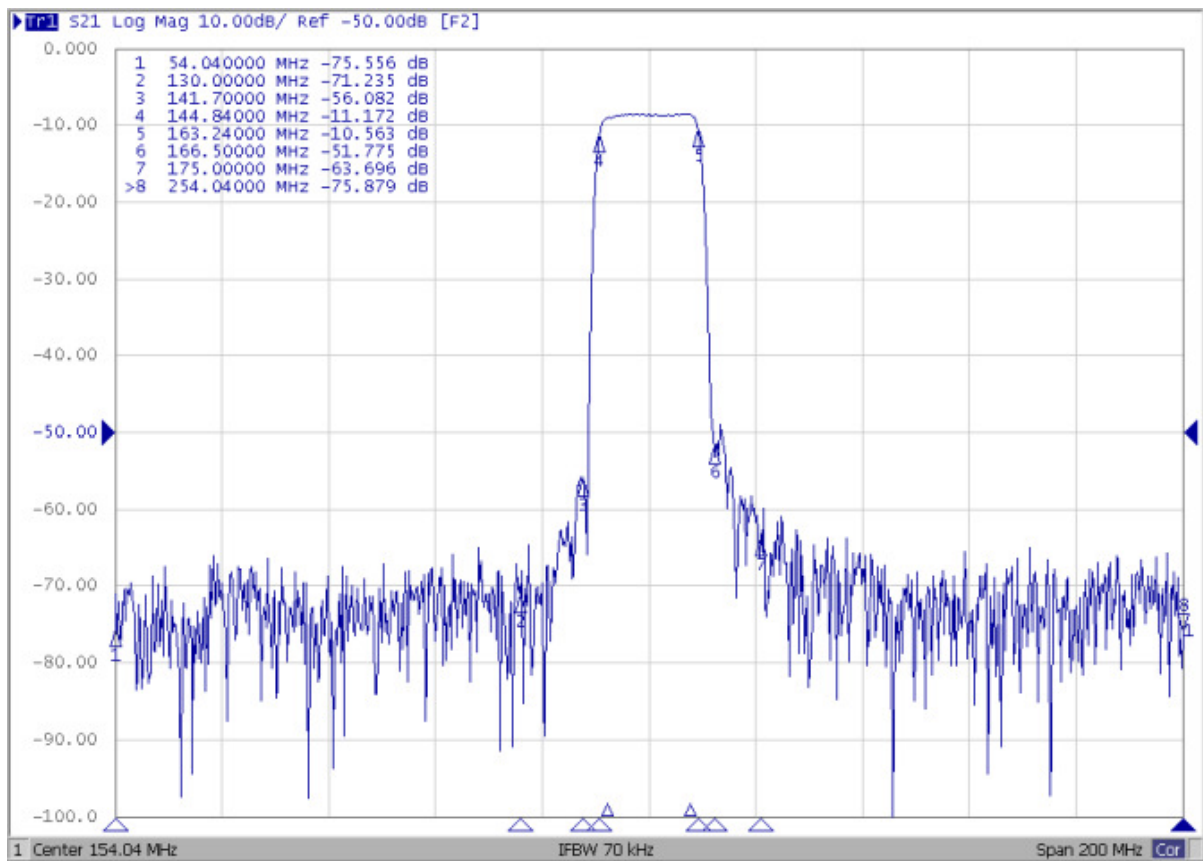
B. Characteristics :

Ambient Temperature: 25 °C

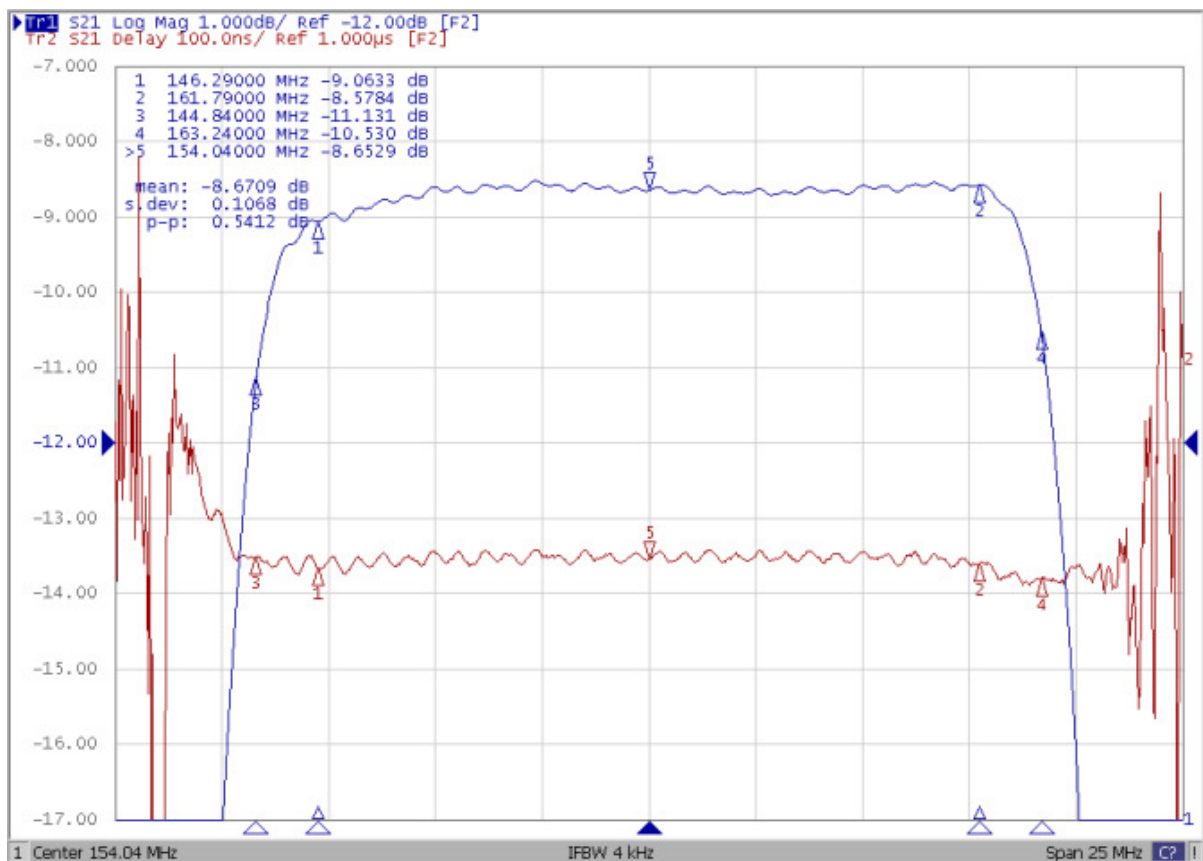
Characteristics		Value			Note
		Min.	Typ.	Max.	
Center frequency F_c	MHz	-	154.04	-	-
Minimum Insertion loss I.L.	dB	-	8.5	13.0	-
Lower 1 dB Band Edge			145.41	146.29	
Upper 1 dB Band Edge		161.79	162.85		
1dB BW	MHz	16.0	16.53	-	
Passband Ripple (146.29~161.79MH)	dB	-	0.5	1.2	-
Return Loss (146.29~161.79MH)	dB		6		
Attenuation (Reference to Minimum Insertion loss)					
10 ~ 50 MHz	dB	45	55	-	-
50 ~ 130MHz	dB	40	53	-	-
130 ~ 141.7MHz	dB	35	44	-	
142.48 ~ 144.84MHz	dB	-	2.6	-	-
163.24 ~ 165.48MHz	dB	-	2.1	-	-
166.5 ~ 175MHz	dB	35	42	-	
175 ~ 300MHz	dB	40	52	-	
300 ~ 420MHz	dB	45	54	-	
Temp Coefficient	ppm/K	-	-94	-	-

C. FREQUENCY CHARACTERISTICS :

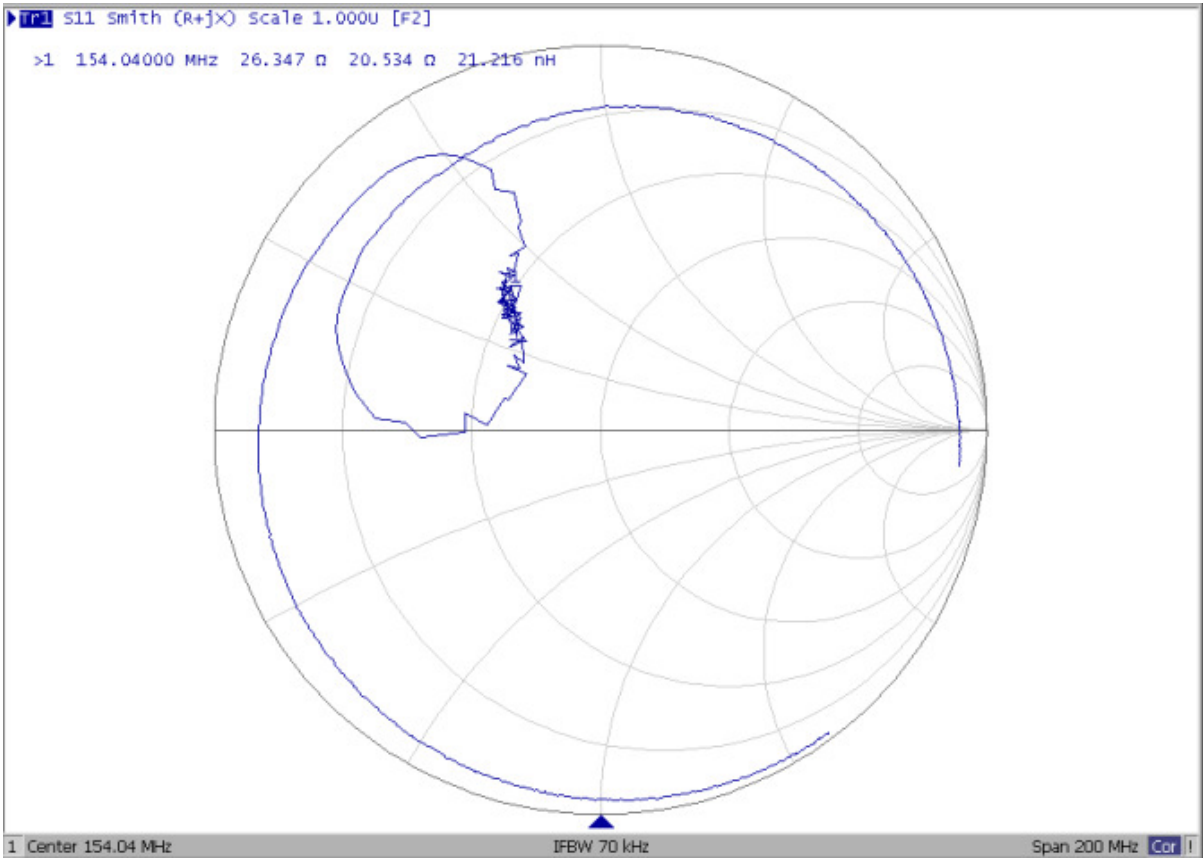
1.Sdd21 Response: (span : 200MHz)



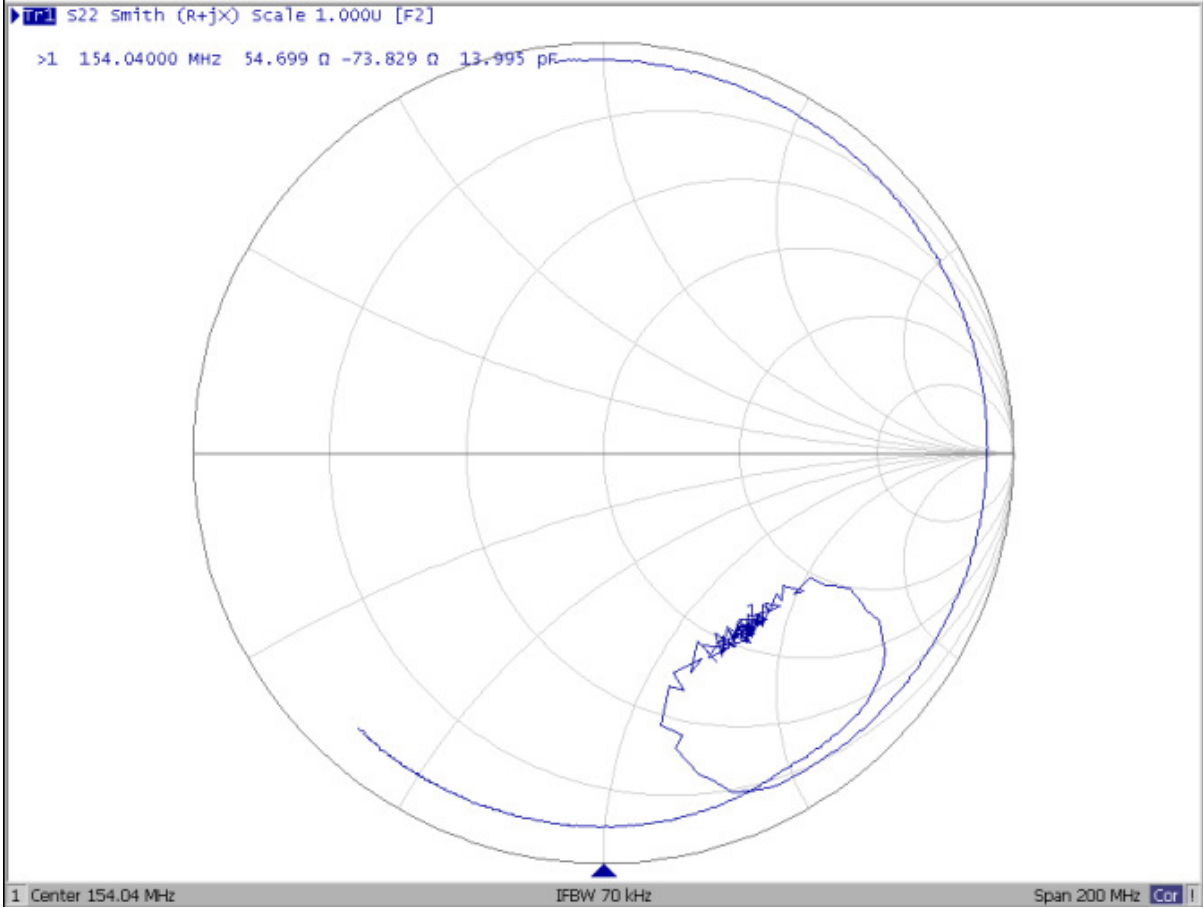
2. Pass-band Response: (span : 60MHz)



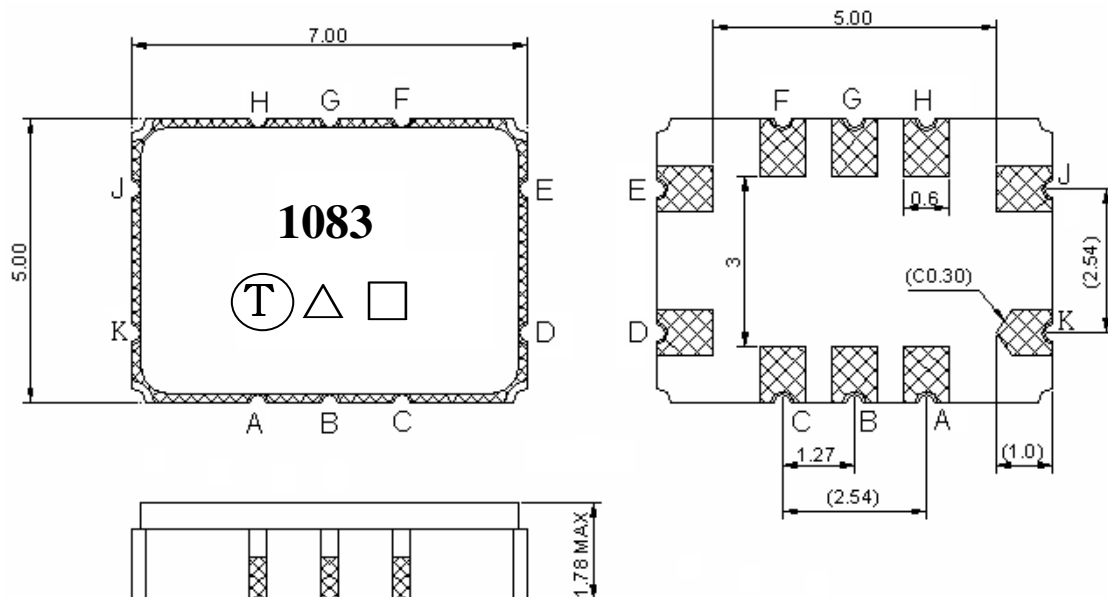
3. S11 Smith Chart (span : 200MHz)



4. S22 Smith Chart (span : 200MHz)



E.OUTLINE DRAWING:



Pin J : Input

Pin D: Output

Pin A, B, C, E, F, G, H, K: To be Ground

□ : Week Code (Follow the table from planner each year)

Unit : mm (week01, 02, 03...52 =>A, B, C...z)

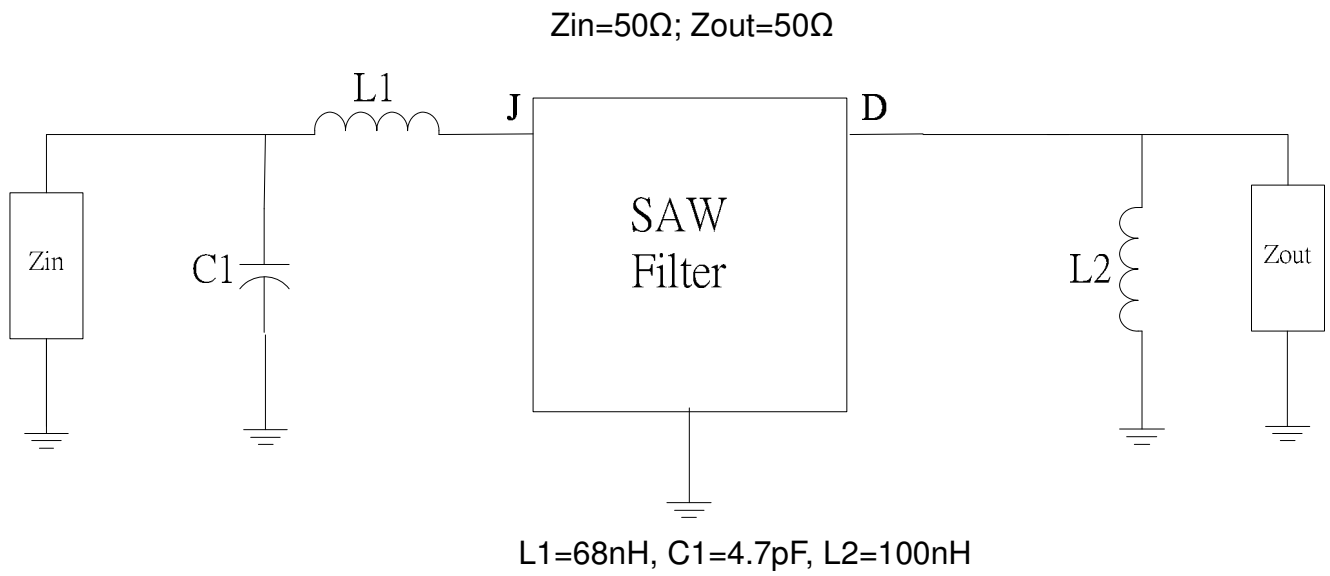
△ : Product / Year Code

Year	2013 2017	2014 2018	2015 2019	2016 2020
Product Code	B	b	<u>B</u>	<u>b</u>

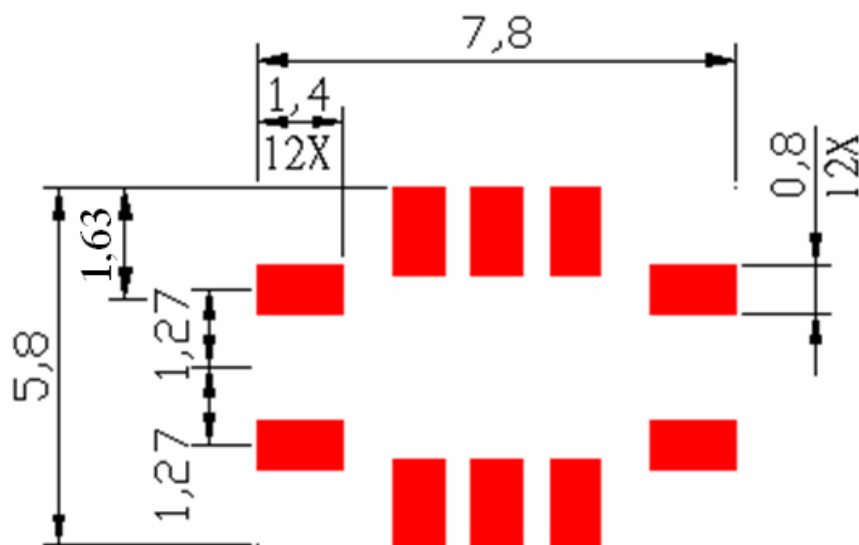
Week Code Table

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. MEASUREMENT CIRCUIT



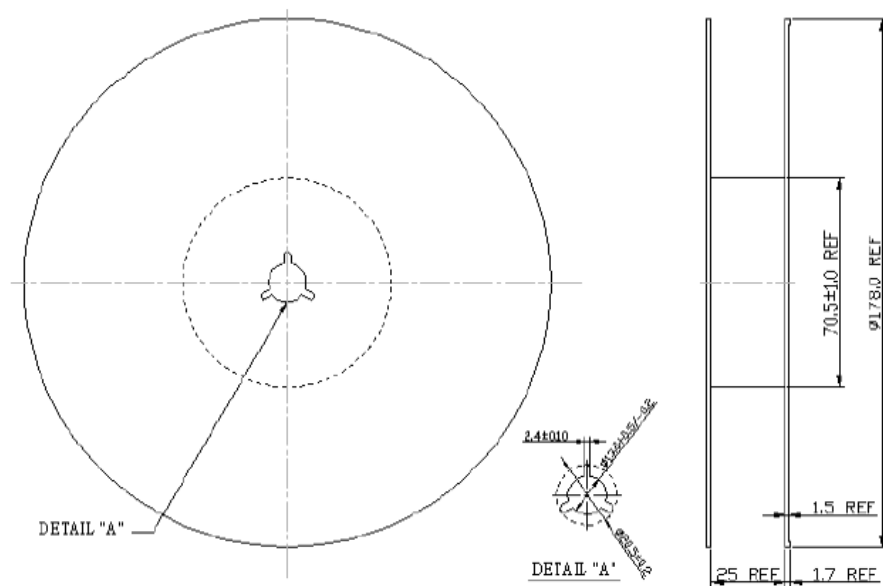
G. PCB Footprint



Unit: mm

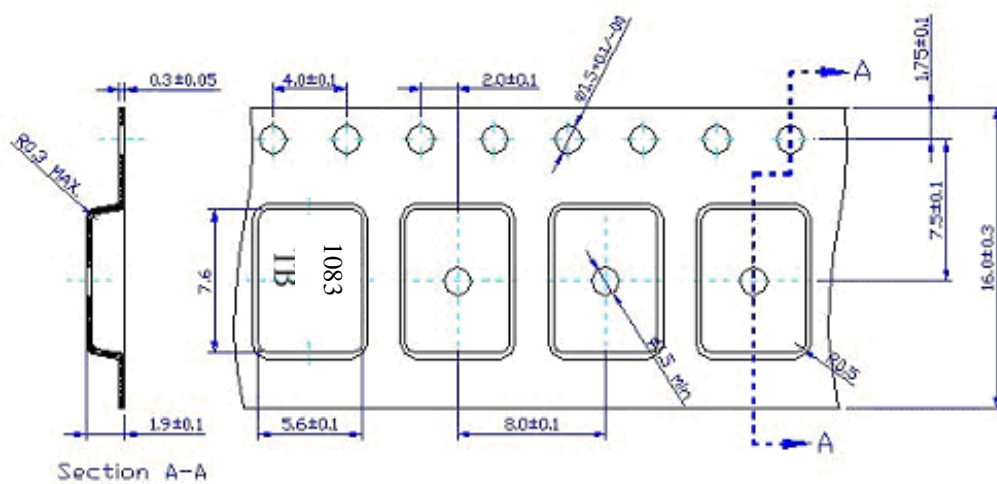
H. PACKING:

1. REEL DIMENSION



Unit: mm

2. TAPE DIMENSION



Unit: mm

I. 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.

