



TAI-SAW TECHNOLOGY CO., LTD.

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

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

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Product Specifications Approval Sheet

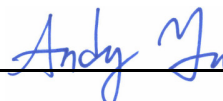
Product Description: SAW Rx Filter 806 MHz LTE Band 20 SMD 1109 mm (BW=30 MHz)

TST Part No.: TA2041B (This part is compliant with AEC-Q200)

Customer Part No.: _____

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

Checked by: _____ Anne Chen 

Approved by: _____ Andy Yu 

Date: _____ 2019/12/13

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 change



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SAW Filter 806 MHz SMD 1.1X0.9 mm (BW=30 MHz)

MODEL NO.:TA2041B

REV.2.0

A. MAXIMUM RATING:

1. Operating temperature range: -40 °C to +85 °C
2. Storage temperature range: -40 °C to +100 °C
3. Input power : 10dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 100V(MM) 200V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega$

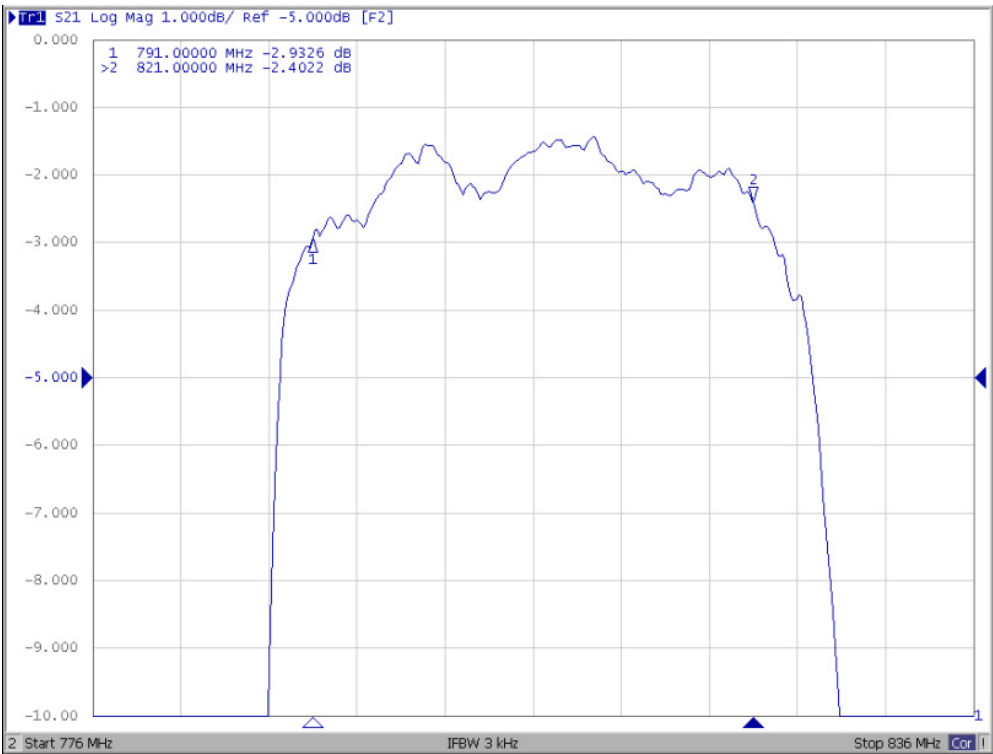
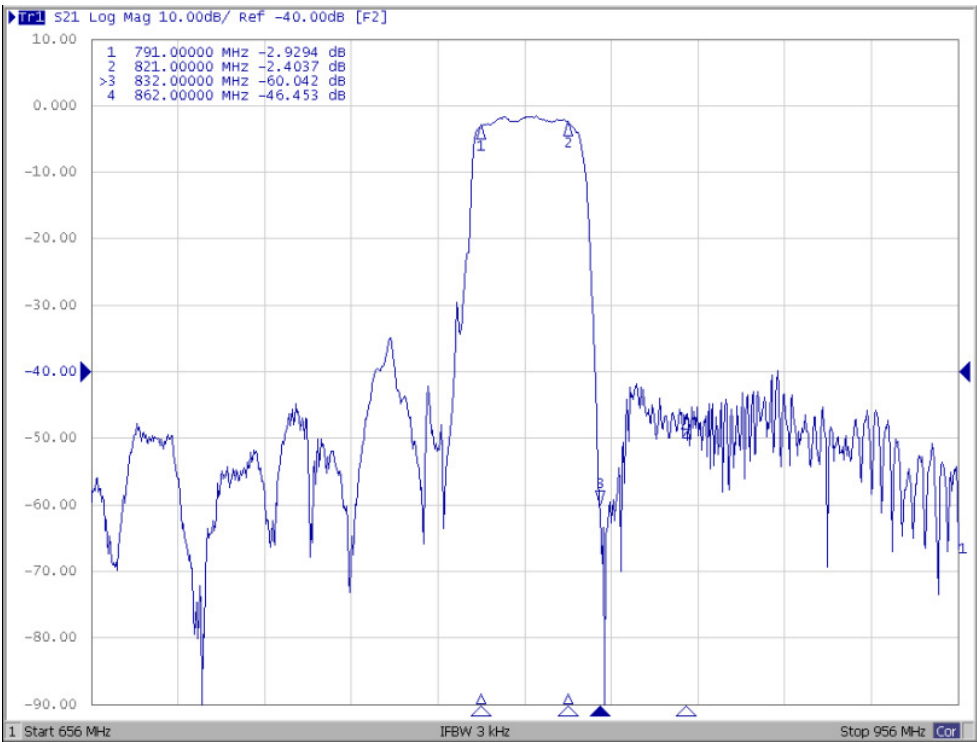
Terminating load impedance : $Z_L = 50 \Omega$

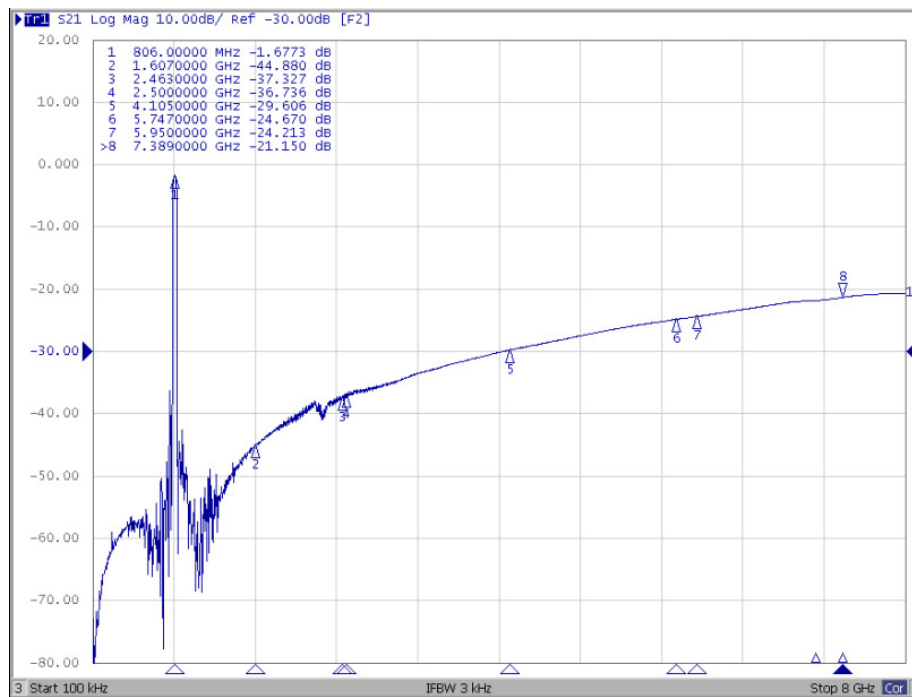
Parameters Description			Unit	Min	Typ	Max	Remarks
Insertion Loss	791~ 821MHz		Db(*1)	-	2.7	3.8	
Amplitude ripple	791~ 821MHz		dB	-	1.4	2.6	
VSWR	Input	791~ 821MHz	-	-	2.1	2.4	
	Output	791~ 821MHz	-	-	2.1	2.4	
Attenuation:							
832 ~ 862 MHz			dB	37	41	-	
1559 ~ 1607 MHz			dB	40	45	-	
1582 ~ 1642 MHz			dB	40	45	-	
2373 ~ 2463 MHz			dB	30	37	-	
2400 ~ 2500 MHz			dB	30	37	-	
3164 ~ 3284 MHz			dB	25	34	-	
3955 ~ 4105 MHz			dB	20	31	-	
4746 ~ 4926 MHz			dB	20	29	-	
4900 ~ 5950 MHz			dB	20	26	-	
5537 ~ 5747 MHz			dB	20	27	-	
6328 ~ 6568 MHz			dB	20	25	-	
7119 ~ 7389 MHz			dB	15	23	-	
Input impedance			Ω	50			single-ended
Output impedance			Ω	50			single-ended

(*1) Specification of insertion loss excludes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:

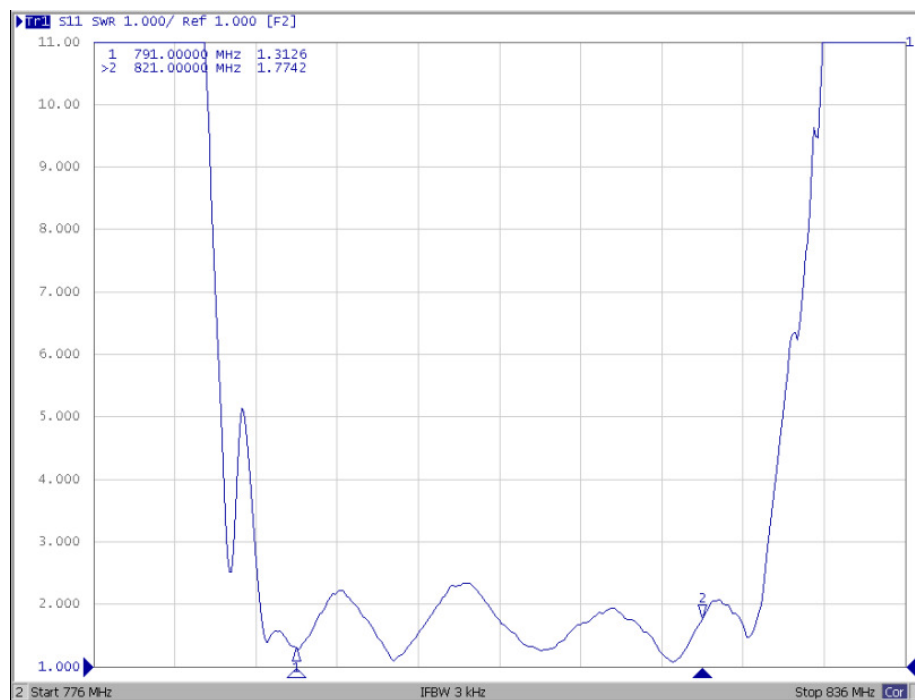
Passband



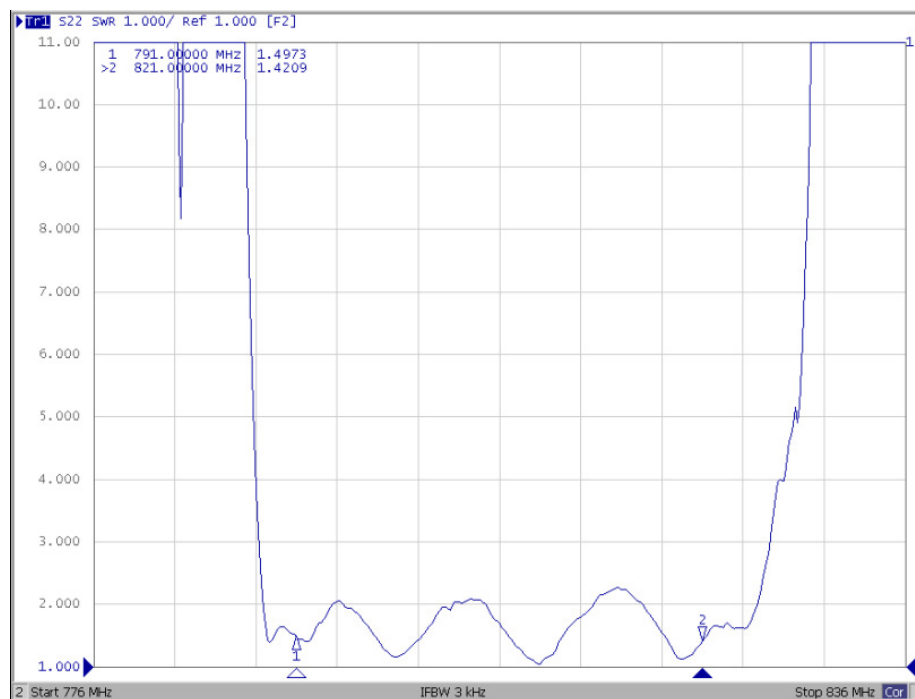


Reflection functions :

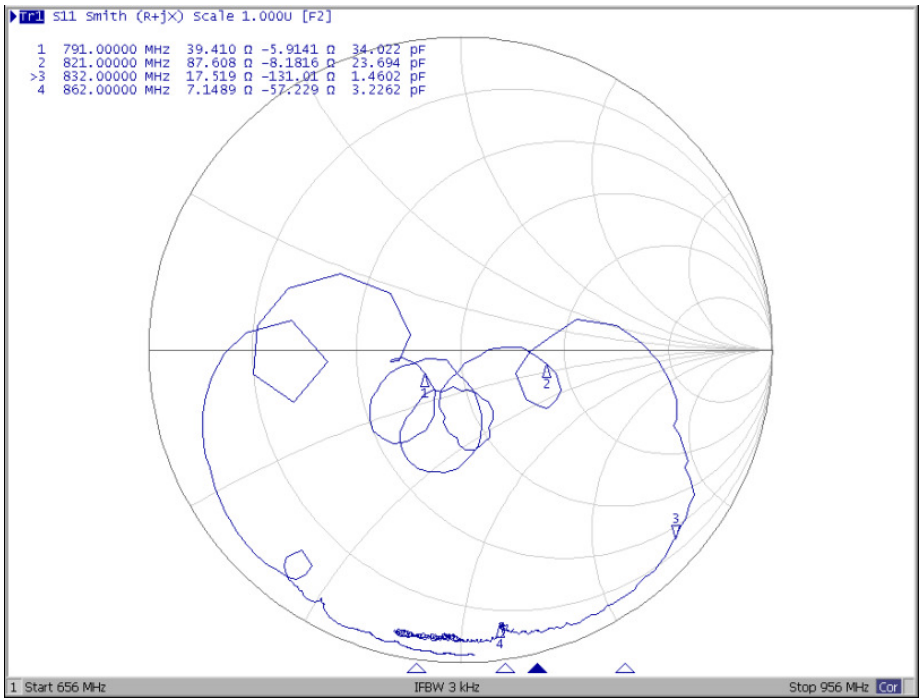
S11 VSWR



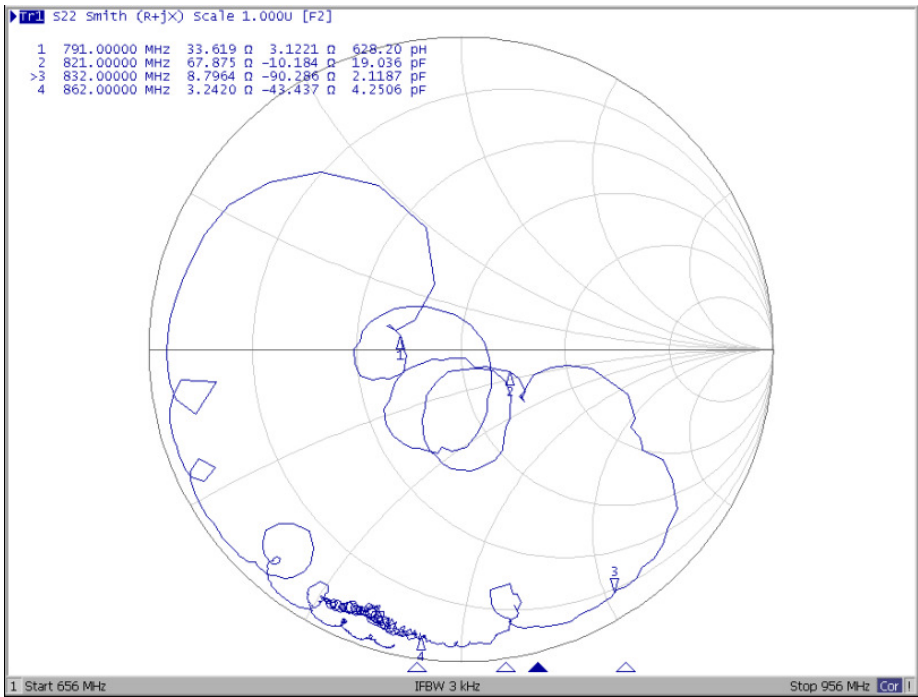
S22 VSWR



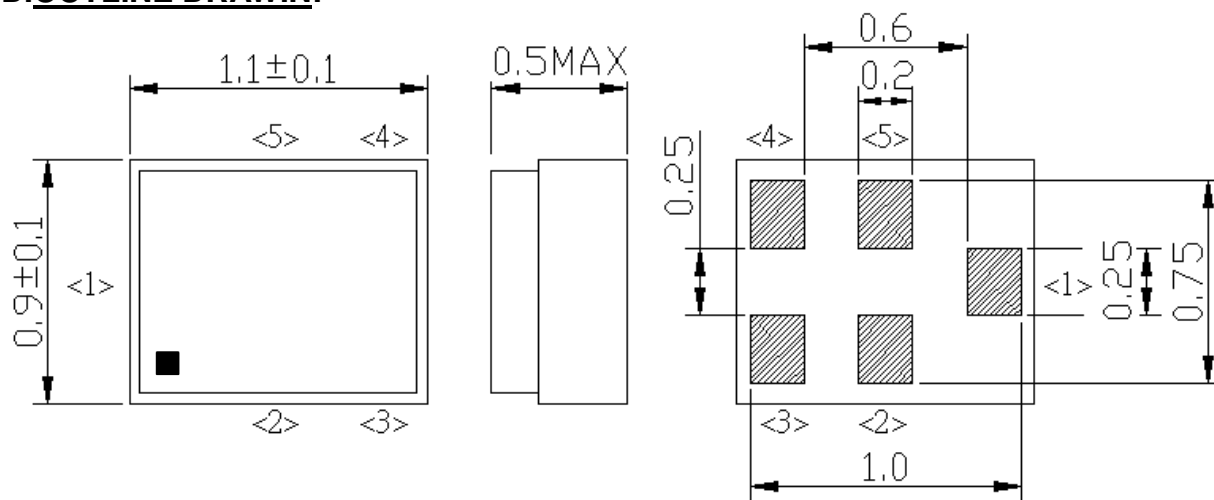
S11 Smith Chart



S22 Smith Chart



D. OUTLINE DRAWING:



Unit: mm

Not Specified Tolerance : $\pm 0.1 \text{ mm}$

Pin Configuration

Pin No.	Symbol	Function
1	IN	Single-ended pin
2	GND	Ground
3	GND	Ground
4	OUT	Single-ended pin
5	GND	Ground

Top View (Sample Production):



Top View (Mass Production):



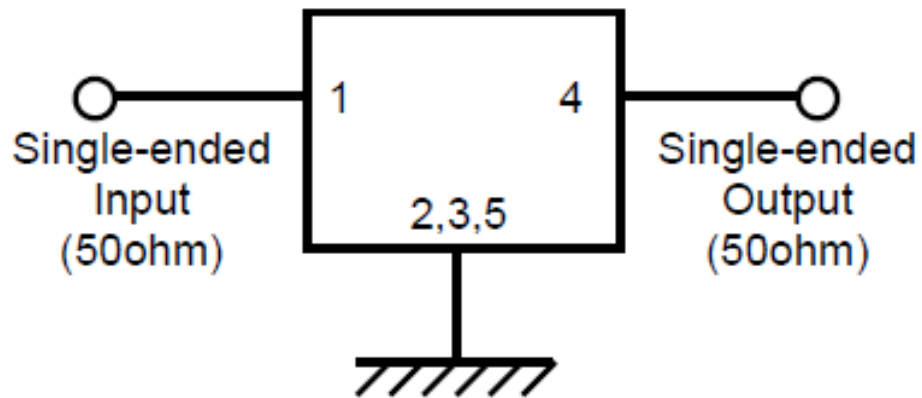
△ : Date Code

□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

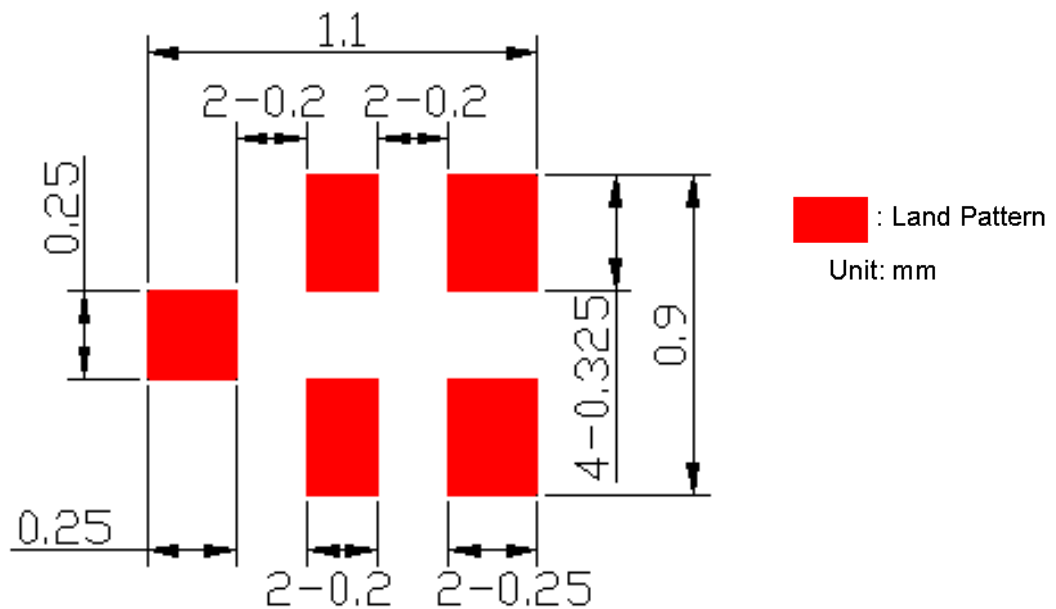
Date Code: Follow below table. (4-year cycle)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
2021 / 2025	A	B	C	D	E	F	G	H	J	K	L	M
2022 / 2026	N	P	Q	R	S	T	U	V	W	X	Y	Z

E.Evaluation Circuit



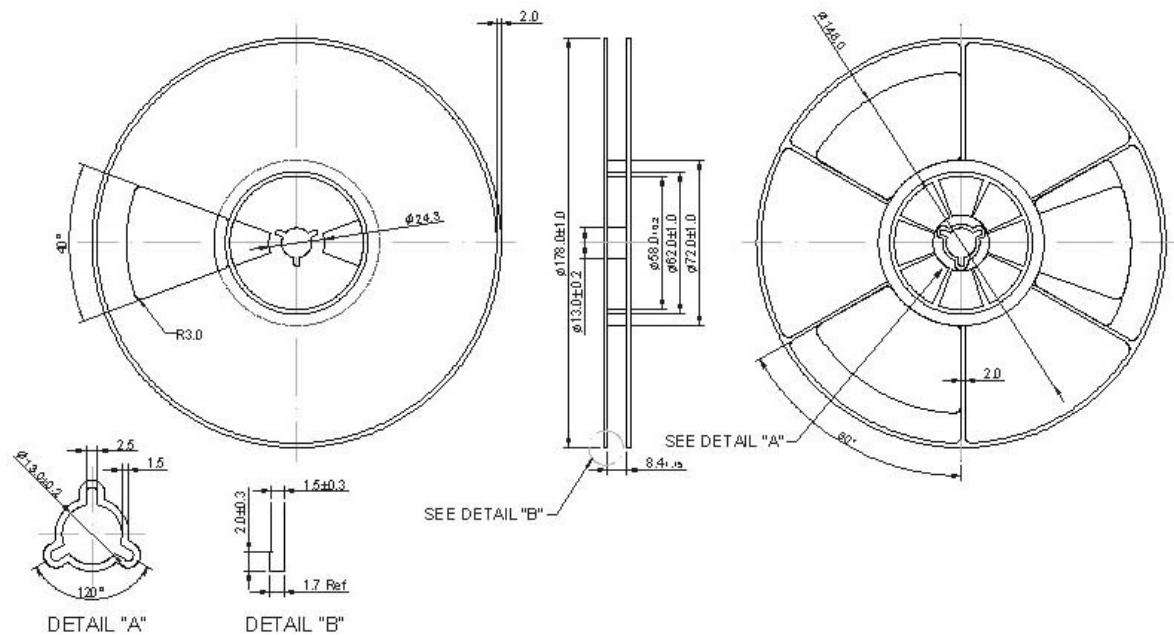
F. PCB Footprint :



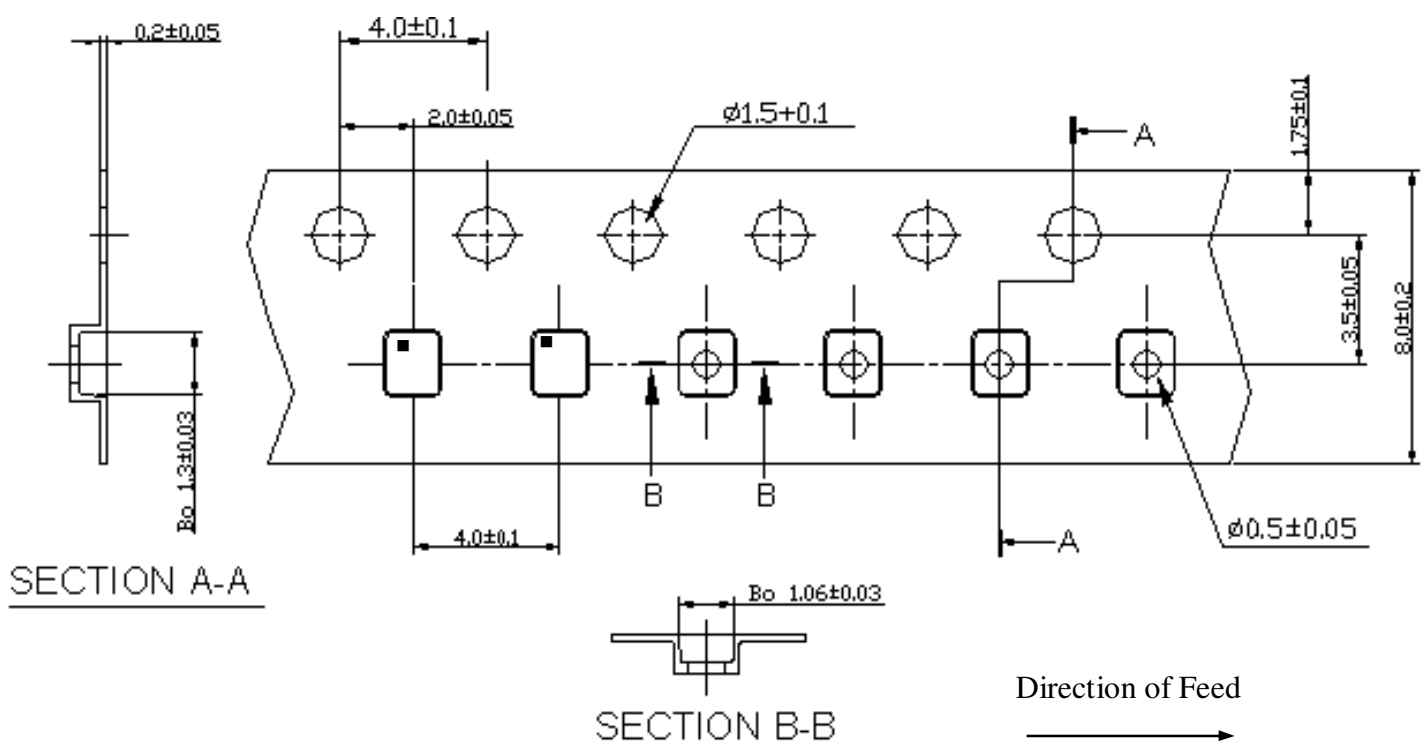
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



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 245~260°C peak (min. 10sec).
4. Time : 2 times.

