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

Product Specifications Approval Sheet

Product Description: SAW Filter 1582.47 MHz (BW 46.84MHz) SMD 1.1X0.9mm

TST Parts No.:TA2542A(This part is compliant with AEC-Q200)

Customer Parts No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____Andrew Chen_____ Andrew Chen

Approval by:_____Kazuma Lee_____ Kazuma Lee

Date:_____2025/01/06_____

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 1582.47 MHz (BW 46.84MHz) SMD 1.1x0.9x0.5mm

MODEL NO.:TA2542A REV. NO.:4.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40°C to +105°C
4. Storage Temperature: -40°C to +105°C
4. Moisture Sensitivity Level: Level 1(MSL2a)

RoHS Compliant
Lead free
Lead-free soldering

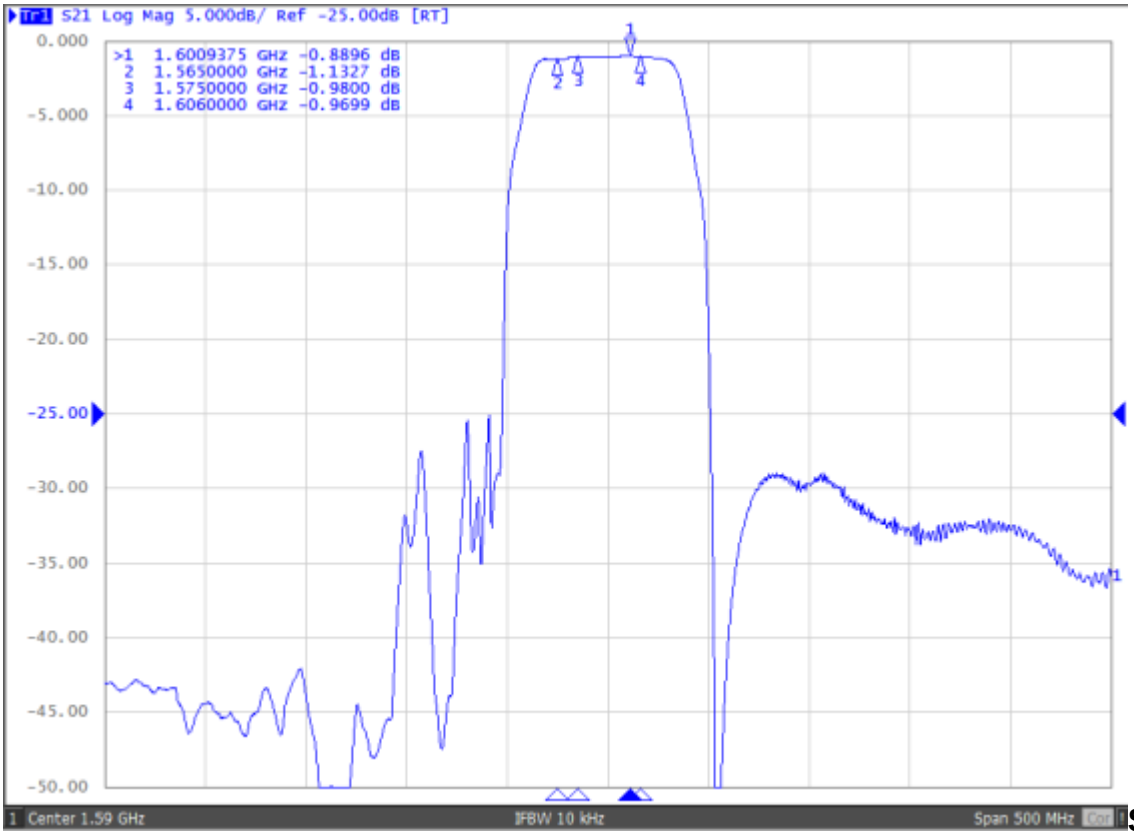
Electrostatic **S**ensitive **D**evice

B. ELECTRICAL CHARACTERISTICS:

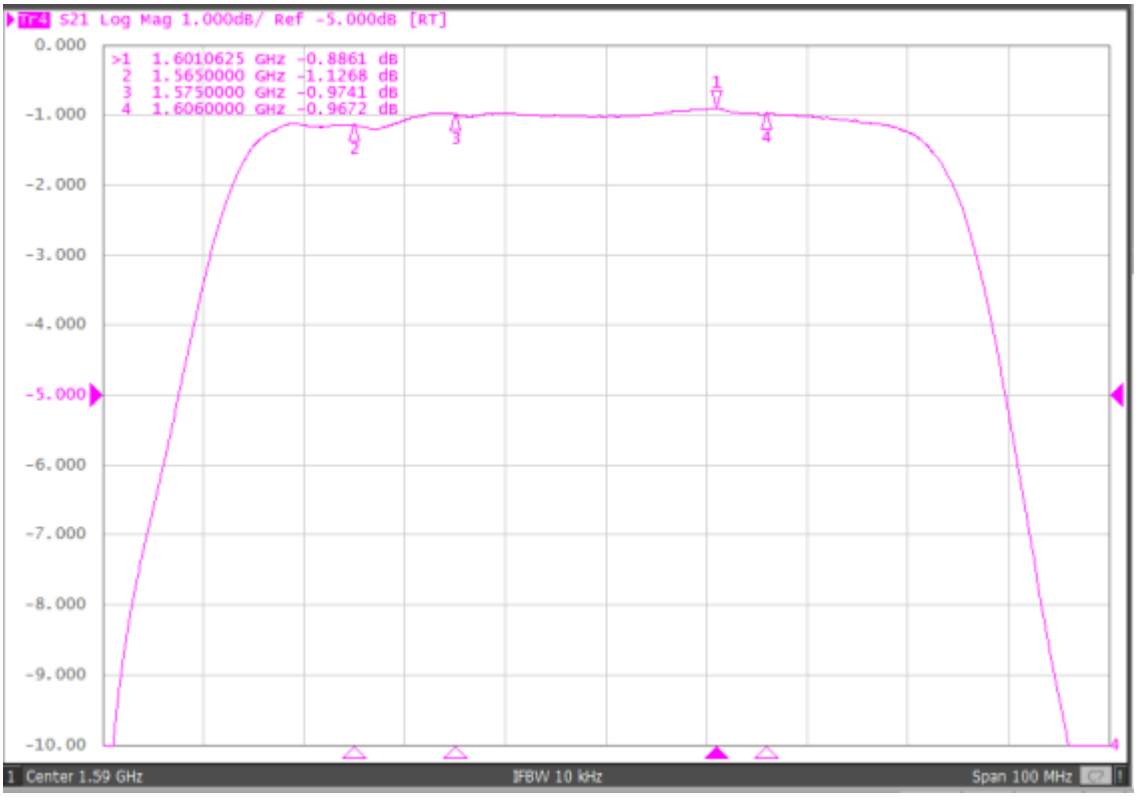
Item	Unit	Min.	Type.	Max. -	
Center Frequency Fc	MHz	-	1582.47	-	
Insertion Loss (1559.05~1563.15 MHz) **IL**	dB	-	1.4	2.0	
Insertion Loss (1574.39~1576.45 MHz) **IL**			1.2	1.4	
Insertion Loss (1597.55~1605.89 MHz) **IL**	dB		1.4	2.0	
VSWR (1597.55~1605.89 MHz)		-	1.5	2.0	
Group Delay Variation					
(1597.55~1605.89 MHz)	ns		5	15	
Attenuation					
10 ~ 960 MHz	dB	35	40	-	
1427 ~ 1463 MHz	dB	37	42	-	
1710 ~ 1797 MHz	dB	27	32	-	
1850 ~ 1980 MHz	dB	33	38	-	
2010 ~ 2025 MHz	dB	38	43	-	
2305 ~ 2315 MHz	dB	38	43	-	
2401 ~ 2483 MHz	dB	38	43	-	
5160 ~ 5885 MHz	dB	25	30	-	-
Temperature coefficient	ppm/℃	-36			
Package size	mm	SMD 1.1x0.9			

C.FREQUENCY CHARACTERISTICS:

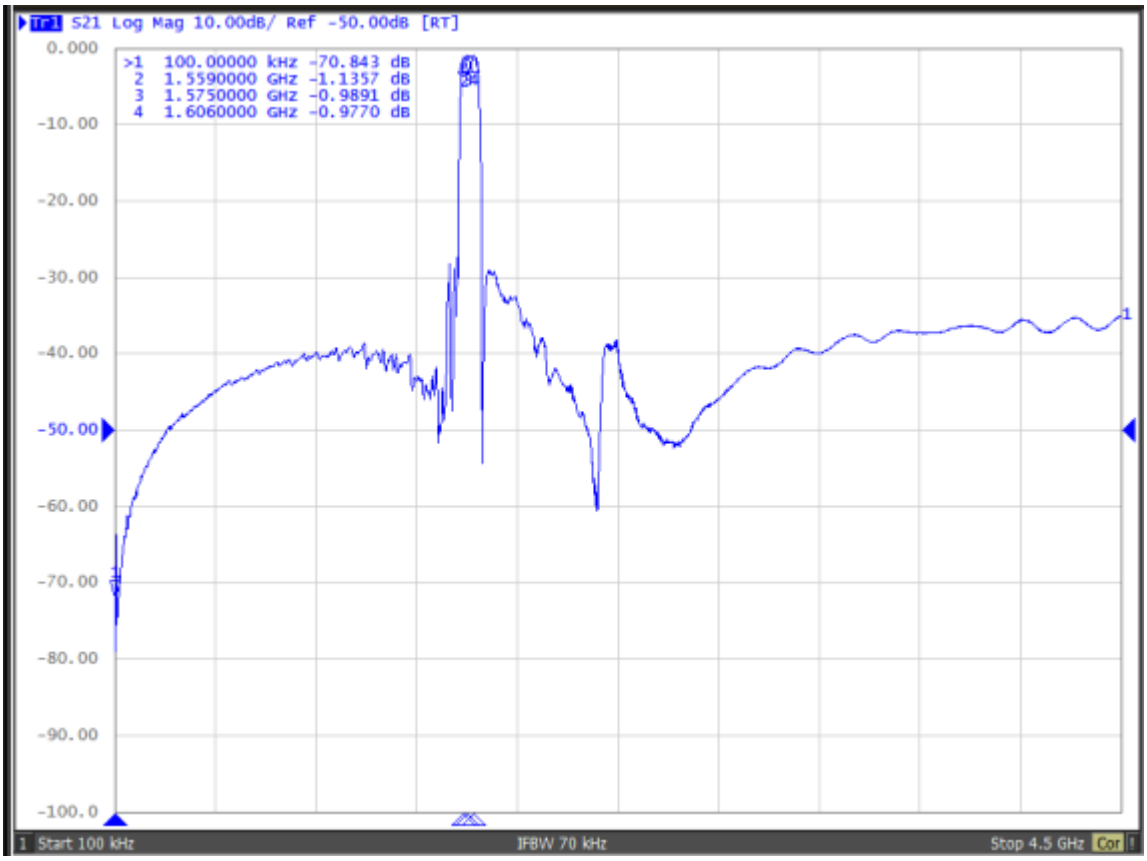
S21 response: (span 500MHz)



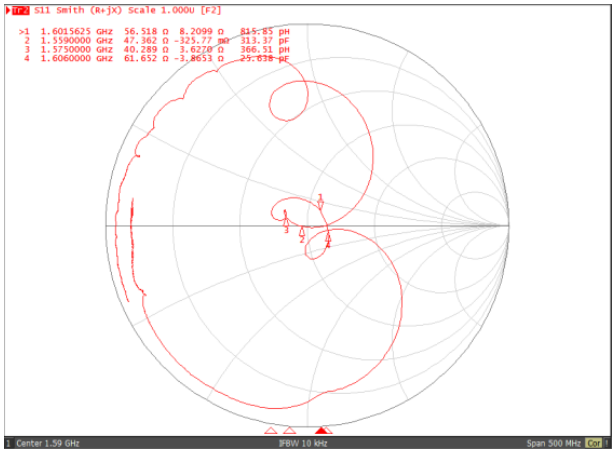
S21 response: (span 100MHz)

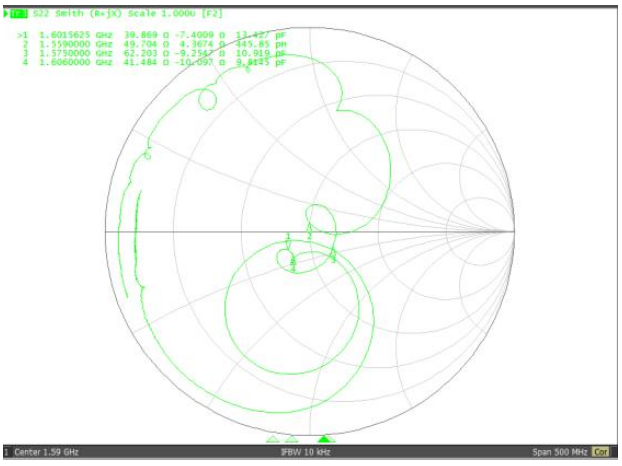


S21 response: (span 4.5GHz)

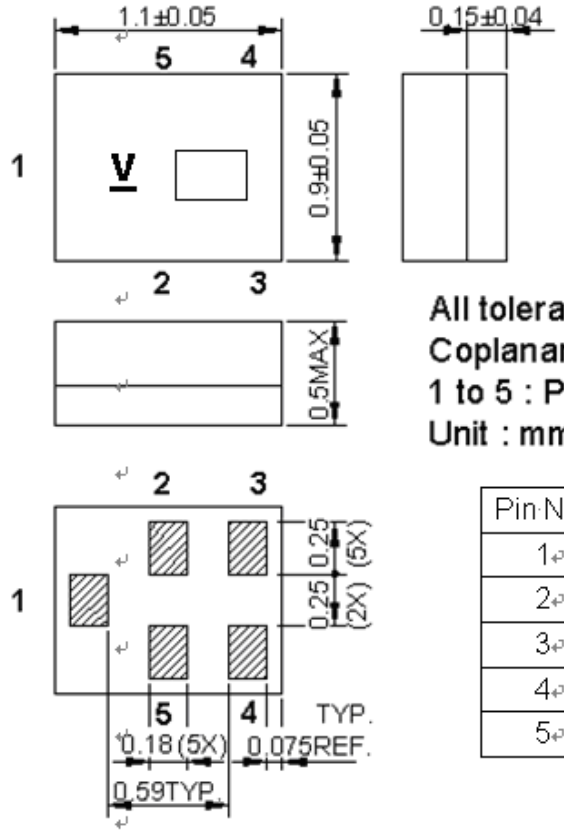


S11/S22 response:





D.OUTLINE DRAWING:



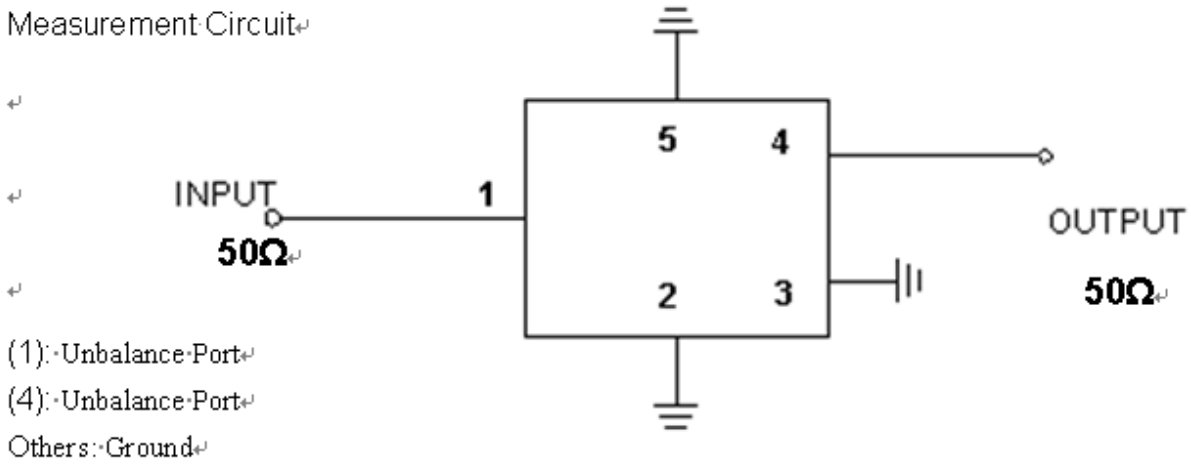
All tolerances are +/-0.05 mm unless otherwise specified
Coplanarity : 0.1 mm max.
1 to 5 : Pin No.
Unit : mm

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

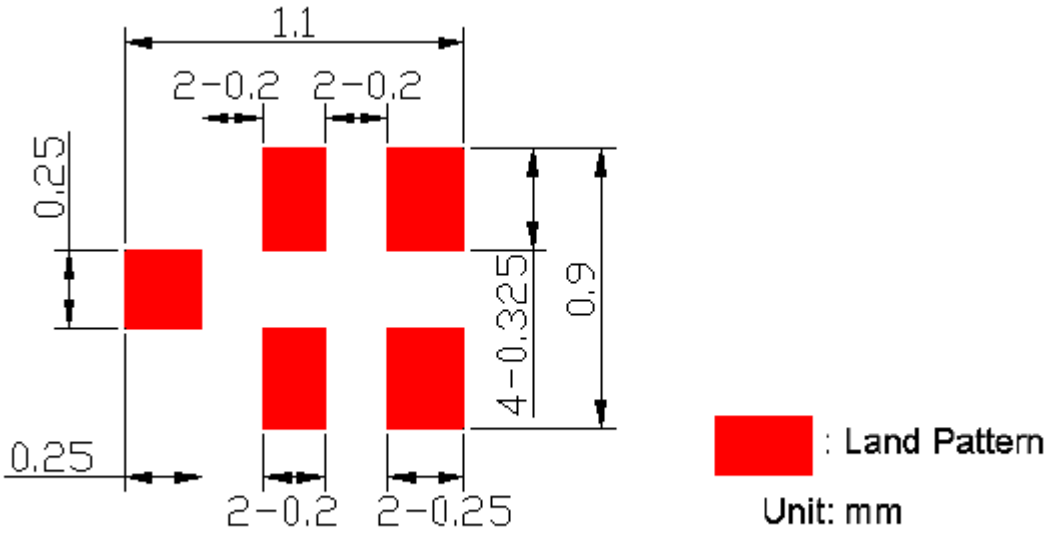
☐ **: Year/Month Code (Follow the table)**

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013/2021	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2014/2022	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2015/2023	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2016/2024	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**
2017/2025	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2018/2026	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2019/2027	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2020/2028	**n**	**p**	**q**	**r**	**s**	**t**	**u**	**v**	**w**	**x**	**y**	**z**

E. MEASUREMENT CIRCUIT:



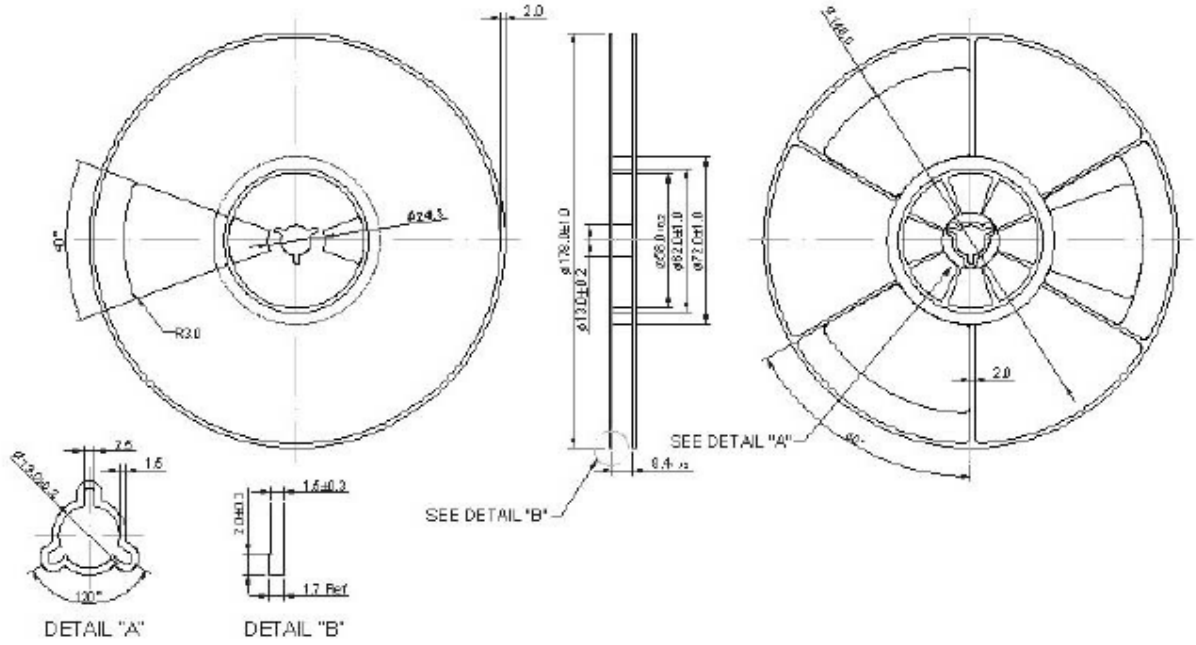
F. PCB Footprint:



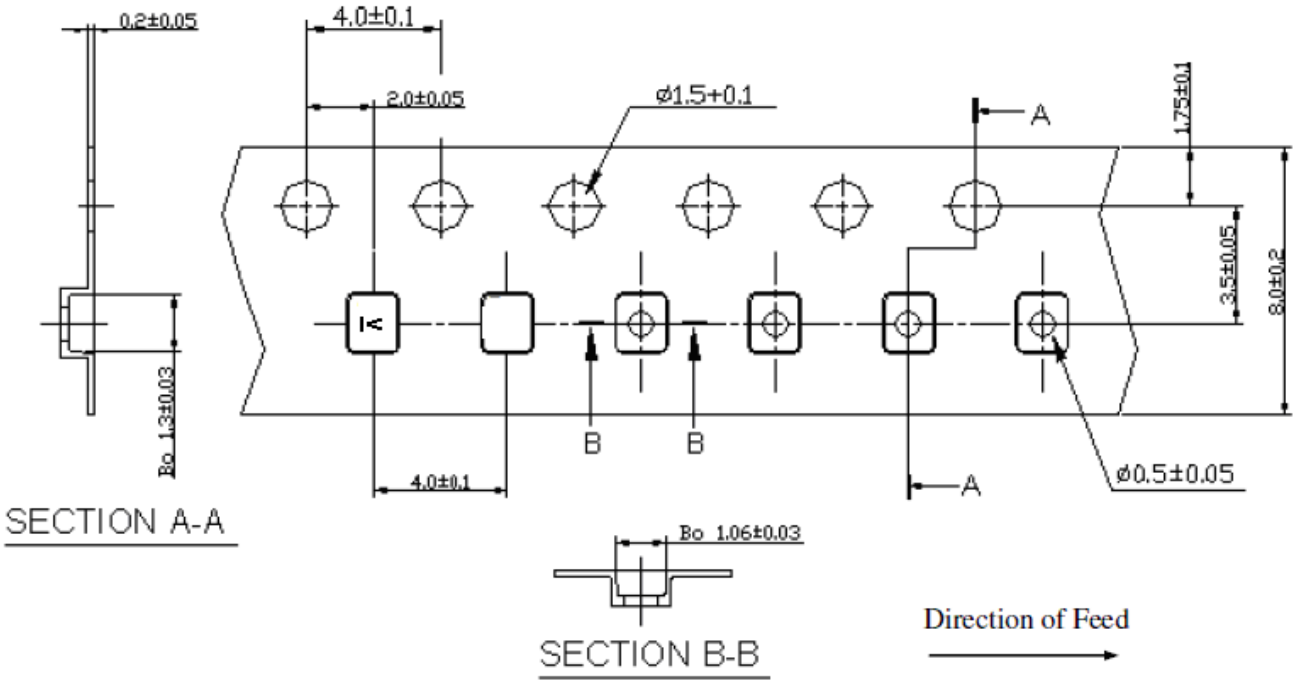
G. <u>PACKING</u>:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H. <u>RECOMMENDED REFLOW PROFILE</u> :

1. Preheating shall be fixed at 150~180℃ for 60~90 seconds.
2. Ascending time to preheating temperature 150℃ shall be 30 seconds min.
3. Heating shall be fixed at 220℃ for 50~80 seconds and at 260℃+0/-5℃ peak (20~40sec).
4. Time: 2 times.