



# 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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## Product Specifications Approval Sheet

Product Description: SAW Rx Filter 942.5MHz LTE Band 8 SMD 1109

TST Part No.: TA1743D

Customer Part No.: \_\_\_\_\_

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

Checked by: \_\_\_\_\_ Hayley Chou *Hayley Chou*

Approved by: \_\_\_\_\_ Andy Yu *Andy Yu*

Date: \_\_\_\_\_ 2017, 04. 05

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](mailto:tstsales@mail.taisaw.com) Web: [www.taisaw.com](http://www.taisaw.com)

## SAW Rx Filter 942.5MHz LTE Band 8 SMD 1109 (35MHz BW)

MODEL NO.: TA1743D

REV.No.:2

### A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm
2. Operating Temperature: -30 °C to +85 °C
3. Storage Temperature Range: -40 °C to +85 °C
4. Moisture Sensitivity Level: Level 3
5. ESD 100V(MM) 200V(HBM)

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

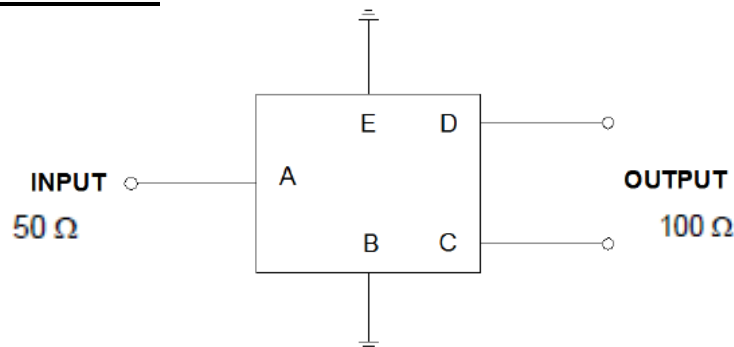
### B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance:  $Z_s = 50 \Omega$  (Single)

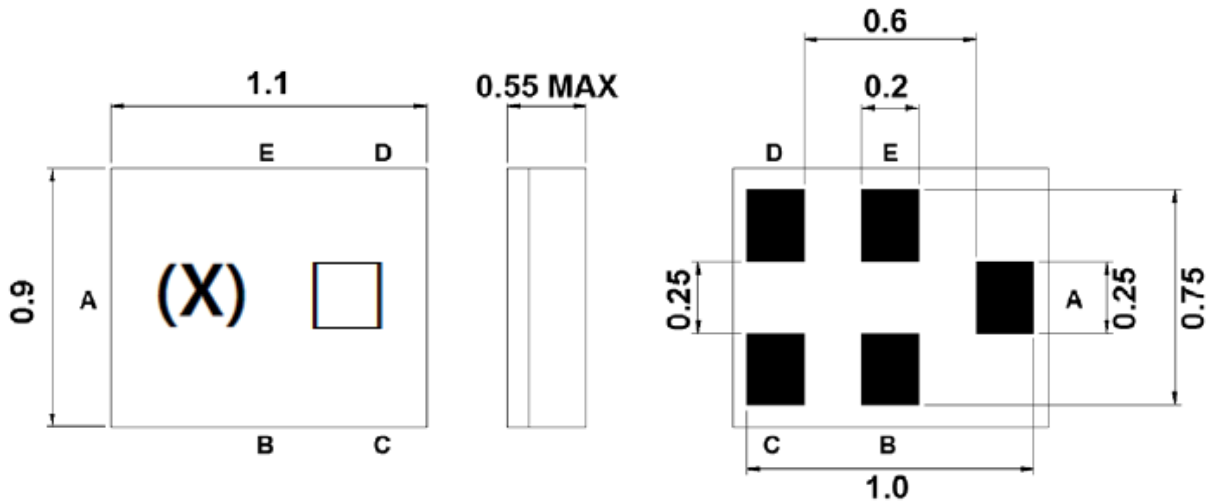
Terminating load impedance:  $Z_L = 100 \Omega$  (Balance)

Item	Unit	Min.	Typ.	Max.
<b>Center Frequency</b>	MHz	-	942.5	-
<b>Insertion Loss</b> (925 ~ 960 MHz)	dB	-	1.9	3.0
<b>Insertion Loss</b> (927.4 ~ 957.6 MHz)	dB	-	2.0	2.6
<b>Amplitude Ripple</b> (925 ~ 960 MHz)	dB <sub>p-p</sub>	-	0.8	1.8
<b>VSWR</b> (925 ~ 960 MHz)	-	-	1.8	2.1
<b>Amplitude Balance</b> (925 ~ 960 MHz)	dB	-1.2	-0.3/+0.4	+1.2
<b>Phase Balance</b> (925 ~ 960 MHz)	deg	-10	-1.5/+3.4	+10
<b>Attenuation</b> (Reference level from 0 dB)				
DC ~ 880 MHz	dB	50	65	-
880 ~ 915 MHz	dB	45	56	-
882.4 ~ 912.6 MHz	dB	50	56	-
980 ~ 1025 MHz	dB	23	32	-
1025 ~ 2880 MHz	dB	35	56	-
2880 ~ 6000 MHz	dB	30	44	-

### C. MEASUREMENT CIRCUIT:



**D. OUTLINE DRAWING:**



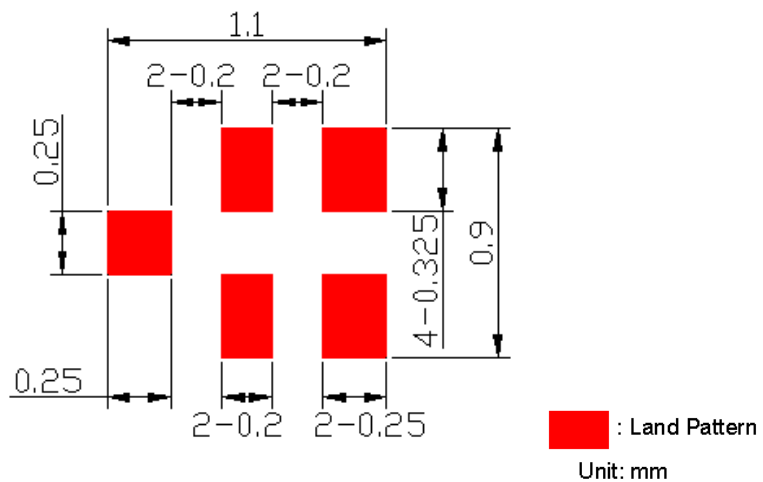
Marking Descriptions	
(X)	Series Number
□	Date Code(Year+Month)

Pin Description	
B, E	Ground
A	Input
C,D	Balanced Output

**Product date Code (EIAJ)**

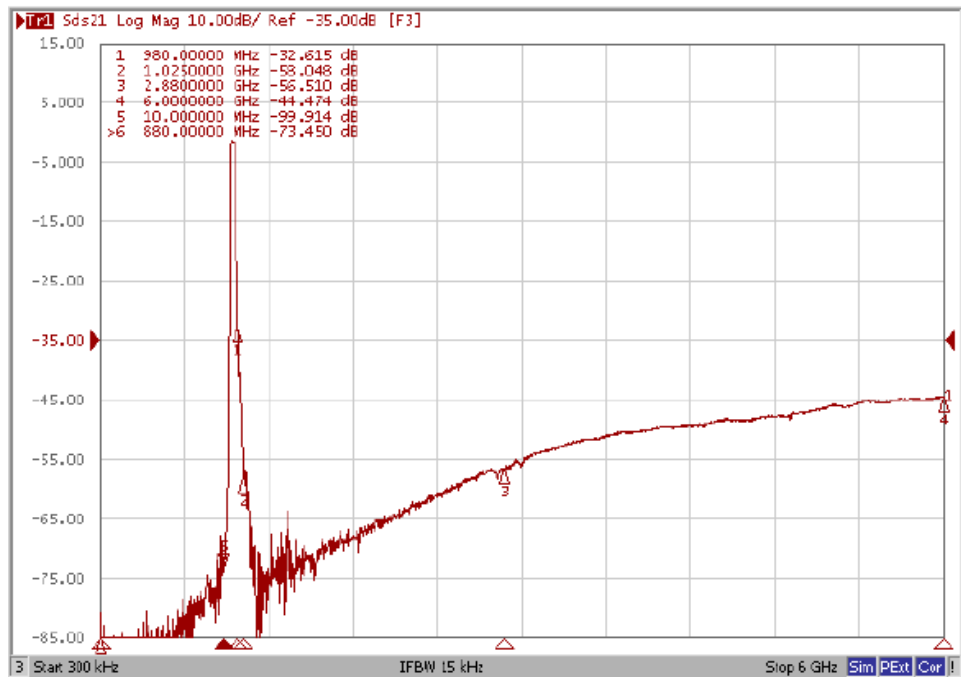
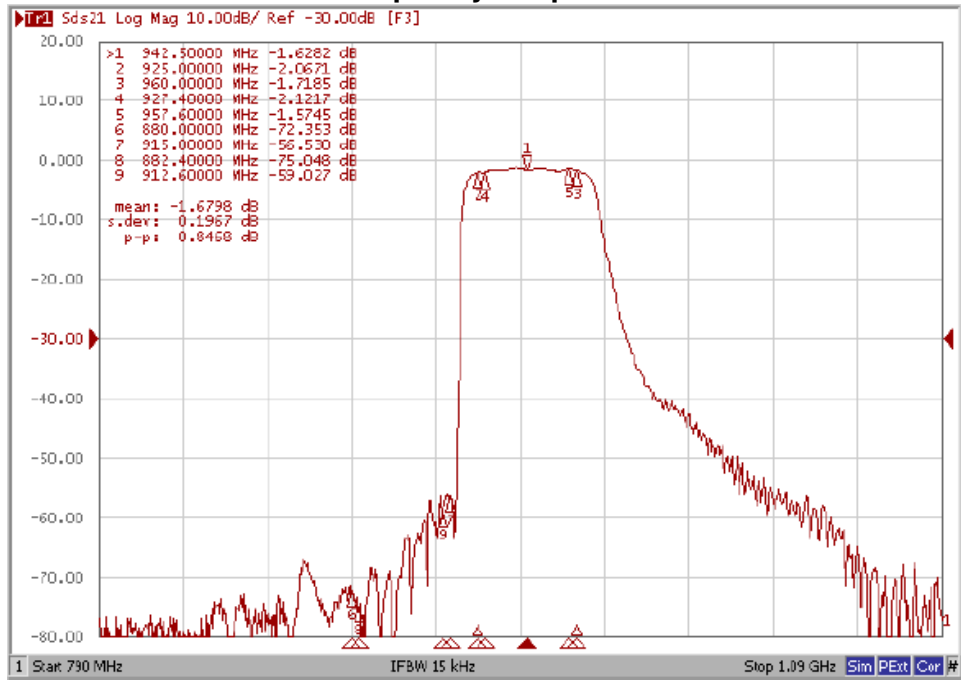
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	a	b	c	d	e	f	g	h	j	k	l	m
2016	n	p	q	r	s	t	u	v	w	x	y	z
2017	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
2018	<u>N</u>	<u>P</u>	<u>Q</u>	<u>R</u>	<u>S</u>	<u>T</u>	<u>U</u>	<u>V</u>	<u>W</u>	<u>X</u>	<u>Y</u>	<u>Z</u>

**E. PCB Footprint:**

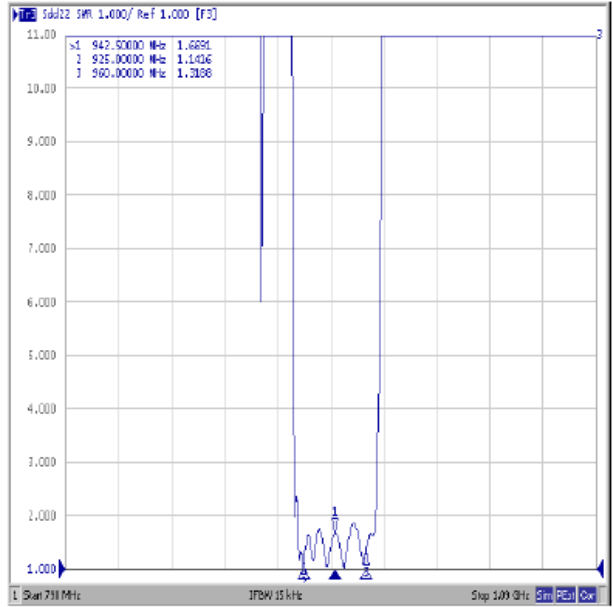
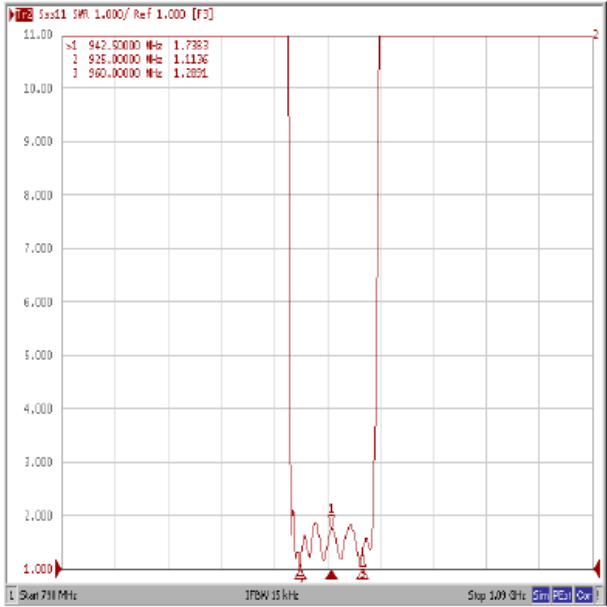


## F. EFREQUENCY CHARACTERISTICS:

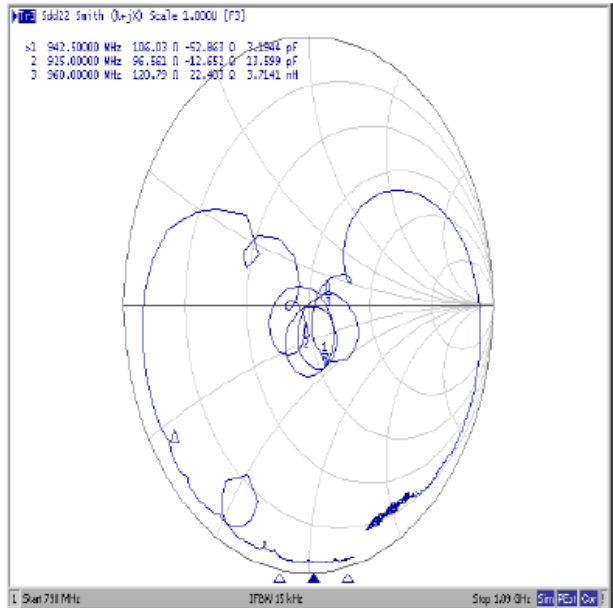
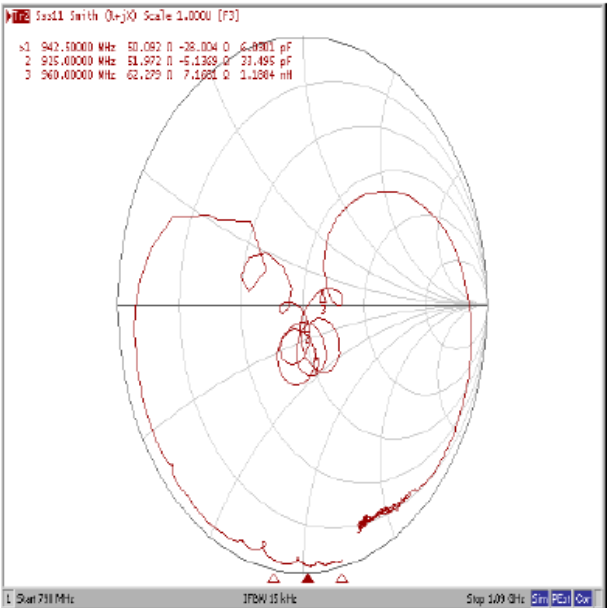
### Frequency Response



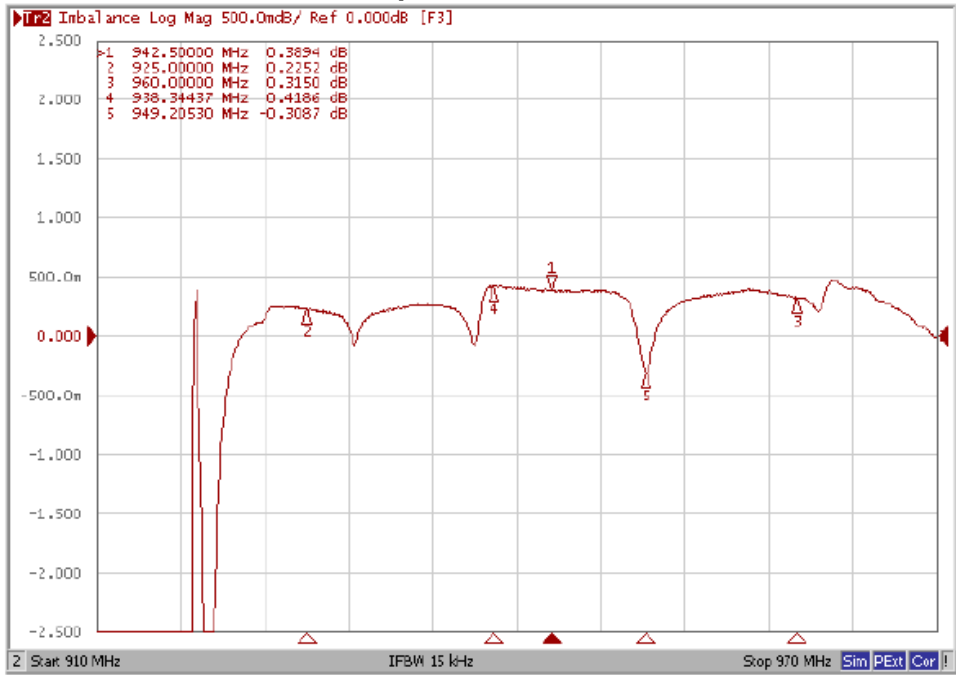
## VSWR



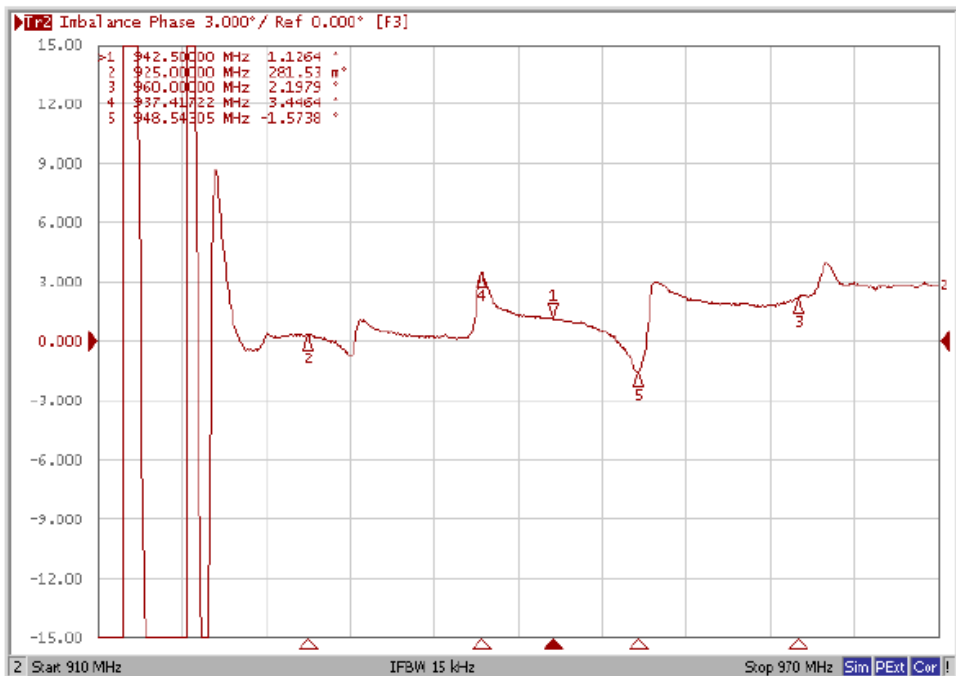
## Smith Chart



## Amplitude balance

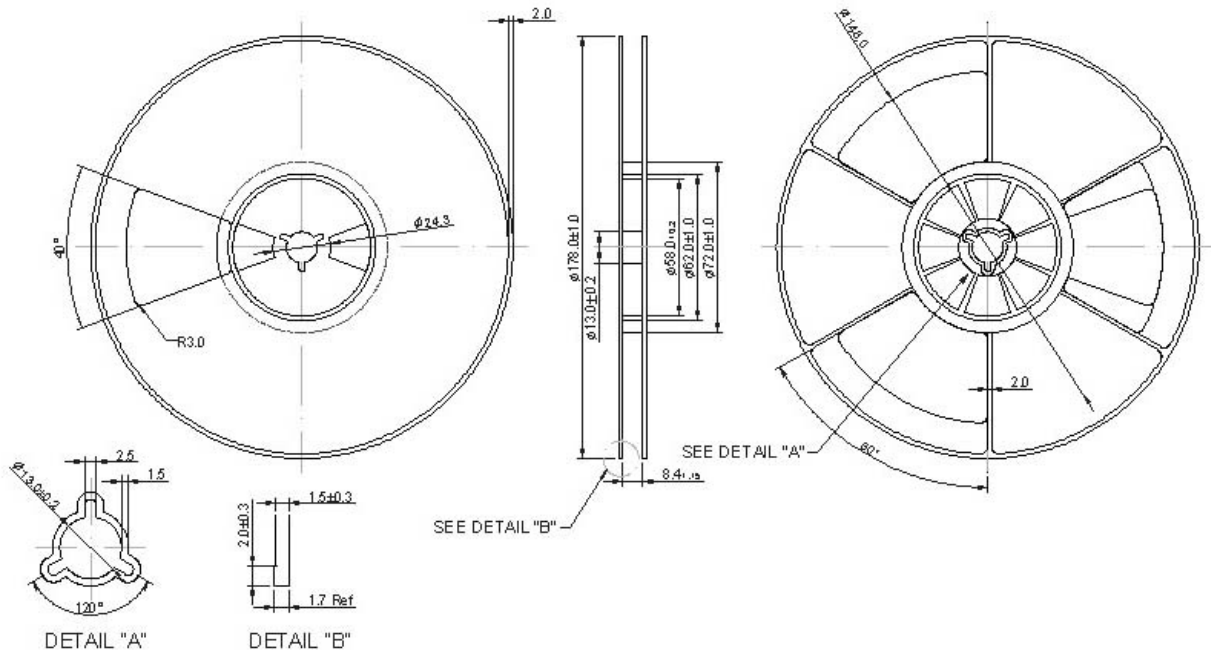


## Phase balance

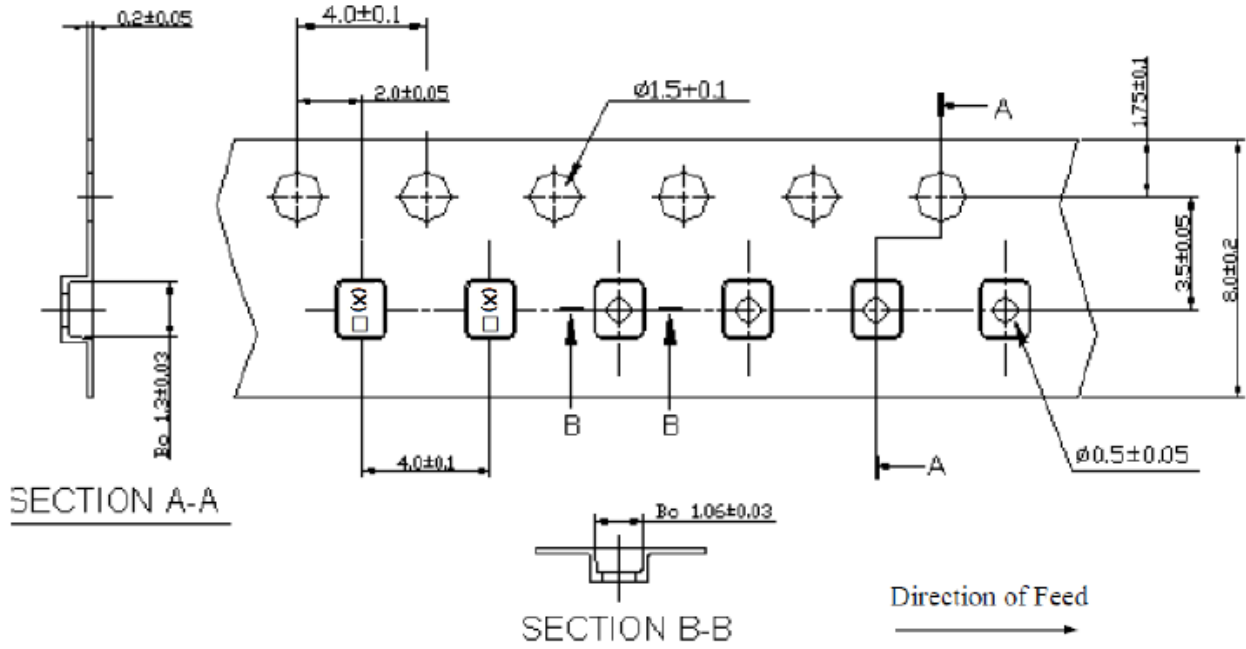


## G. PACKING:

### 1. REEL DIMENSION



### 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 260°C +0/-5°C peak (20~40sec).
4. Time: 2 times.

