



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 Filter 1583 MHz (BW 46.79MHz) SMD 1.4X1.1 mm

TST Part No.: TA2312A

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Michael Yang *Michael*

Approval by: _____ Andy Yu *Andy Yu*

Date: _____ 2018/04/02

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.



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SAW Filter 1583MHz

MODEL NO.:TA2312A

REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 13 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 3(MSL3)

RoHS Compliant
Lead free
Lead-free soldering

B. ELECTRICAL CHARACTERISTICS:

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

Terminating load impedance(single) : $Z_L = 50 \Omega$

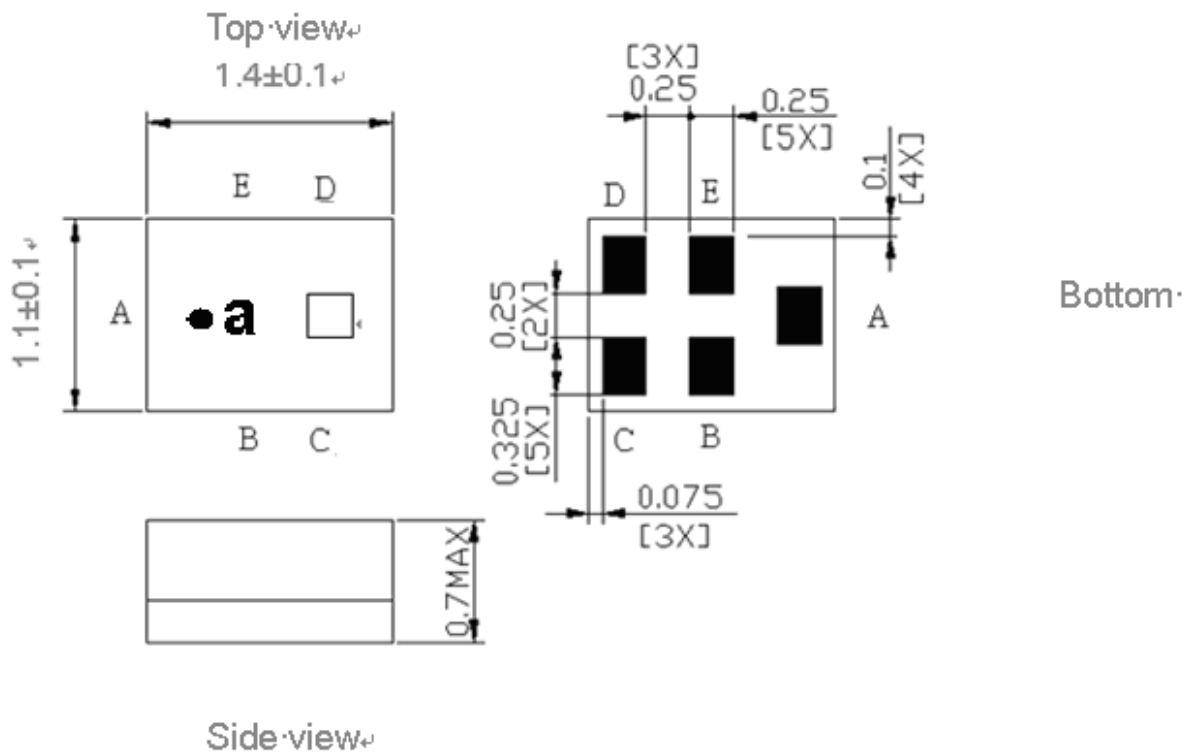
Item	Unit	Min	Type.	Max
Center Frequency Fc	MHz	-	1583	-
Insertion Loss (1559.1~1563.1 MHz) IL	dB		1.3	1.6
Insertion Loss (1573.42~1577.42 MHz) IL	dB		1.2	1.5
Insertion Loss (1597.55~1605.89 MHz) IL	dB		1.3	1.9
VSWR (1559.1~1563.1 MHz)			1.4	1.8
VSWR (1573.42~1577.42 MHz)			1.6	1.9
VSWR (1597.55~1605.89 MHz)			1.6	1.9
Amplitude ripple (1559.1~1563.1 MHz)	dB		0.5	0.8
(1573.42~1577.42 MHz)	dB		0.2	0.5
(1597.55~1605.89 MHz)	dB		0.3	0.6
Attenuation				
10 ~ 824 MHz	dB	18	22	
824 ~ 925 MHz	dB	18	22	
1427 ~ 1463 MHz	dB	18	22	
1710 ~ 1785 MHz	dB	21	23	
1850 ~ 1980 MHz	dB	22	24	
2010 ~ 2025 MHz		22	24	
2300 ~ 2400 MHz		23	25	
2400 ~ 3000 MHz	dB	24	26	

5180 ~ 5825 MHz		40	45	
Package size	mm	SMD 1.4x1.1		

C.OUTLINE DRAWING:

Pin Description

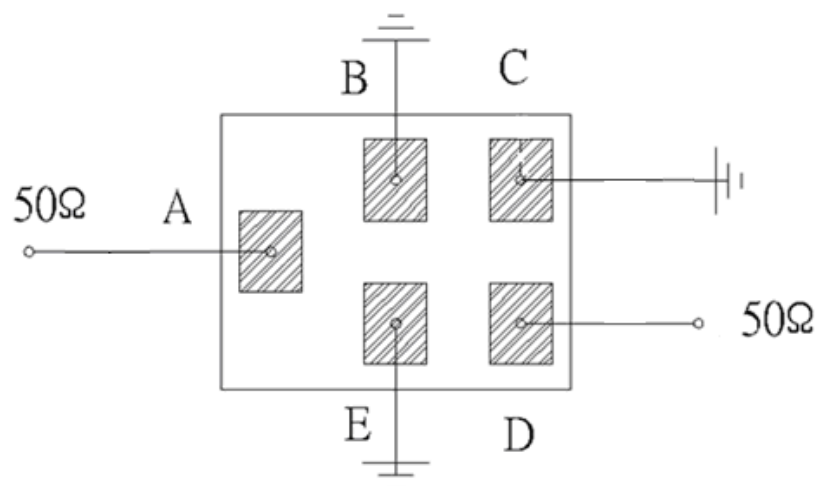
B, C, E	Ground
A	Input
D	Output



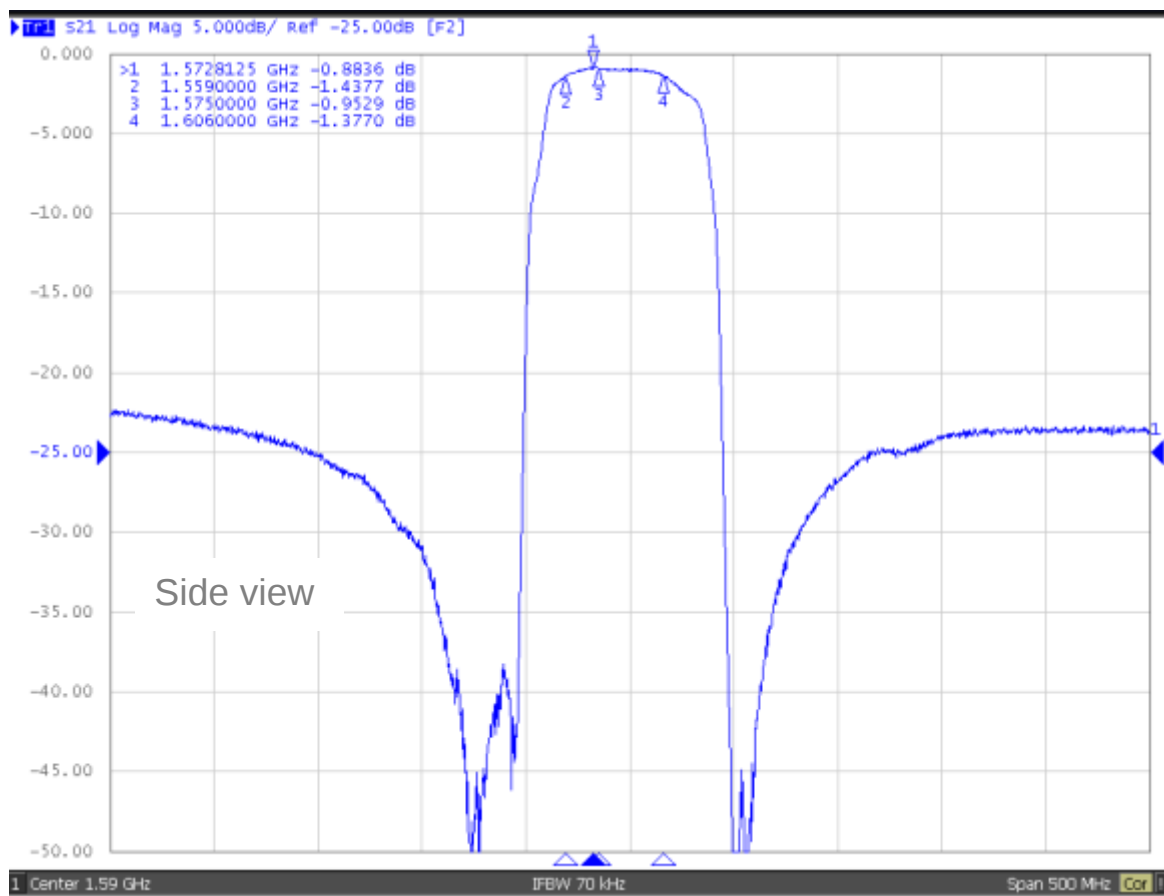
□ : Year/Month Code (Follow the table)

YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013	A	B	C	D	E	F	G	H	J	K	L	M
2014	N	P	Q	R	S	T	U	V	W	X	Y	Z
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>
2019	<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>
2020	<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>

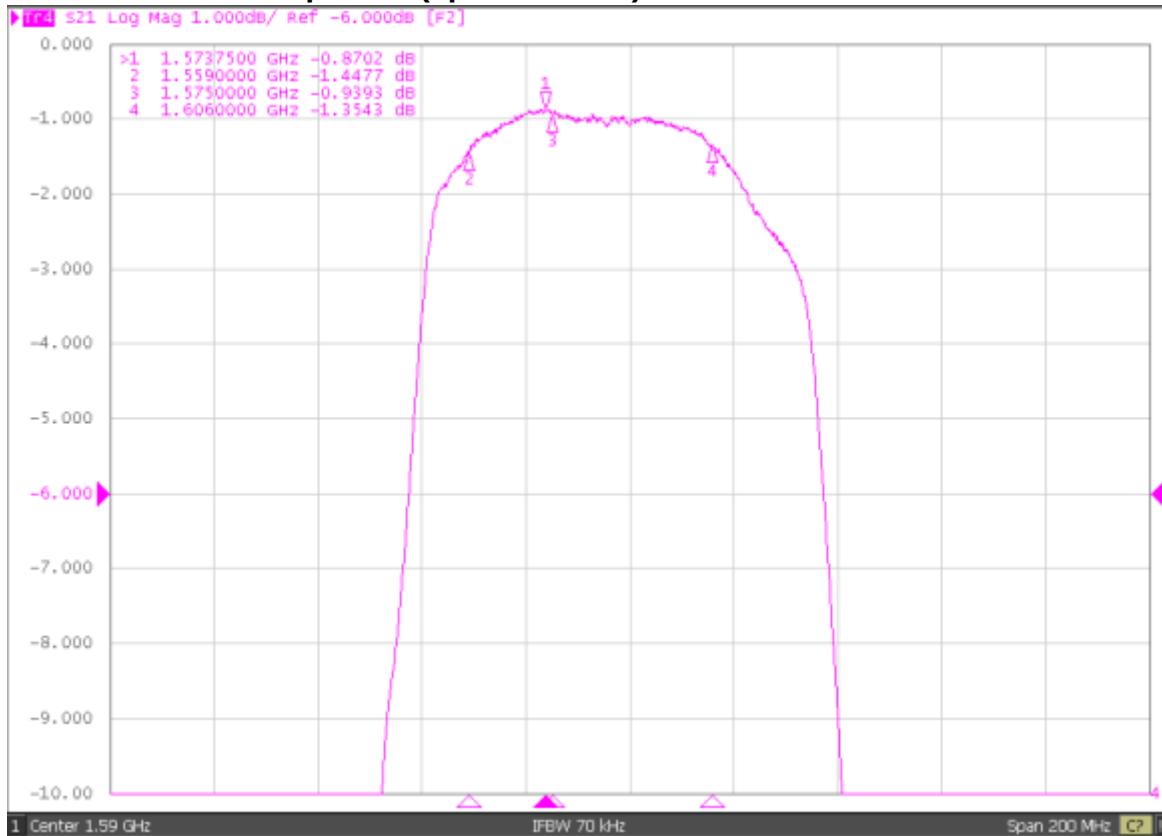
D. MEASUREMENT CIRCUIT:



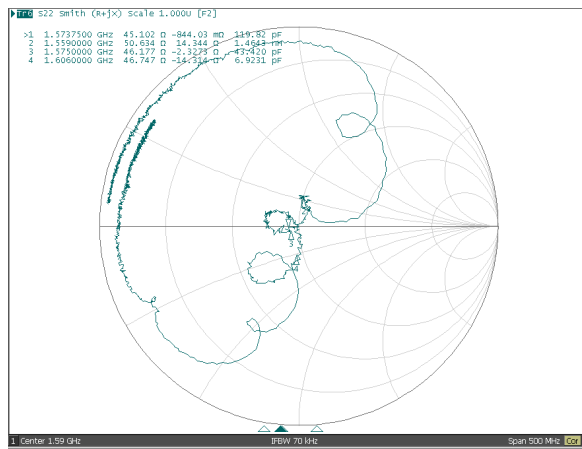
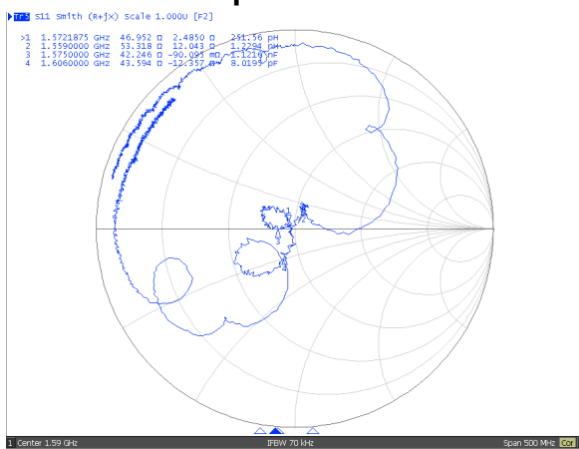
E. Frequency Characteristics: S21 response: (span 500MHz)



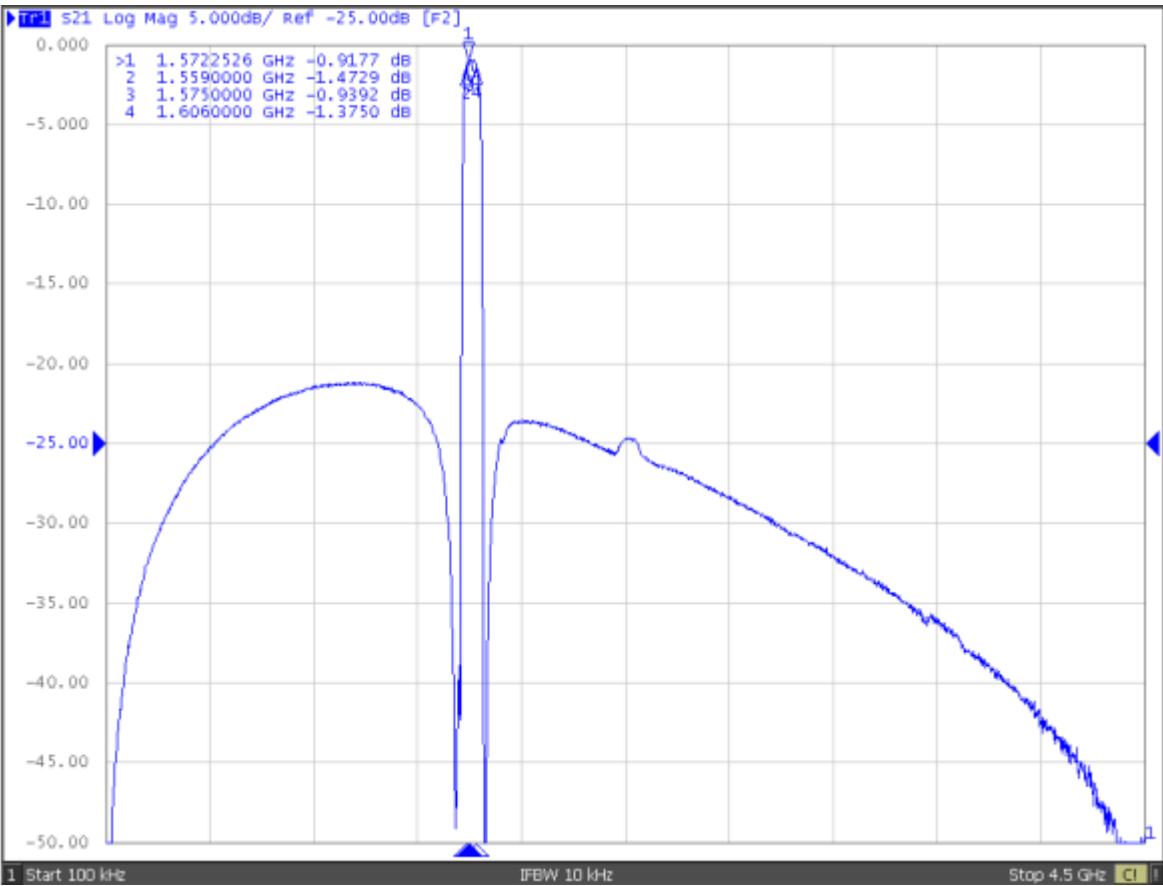
S21 response: (span 200MHz)



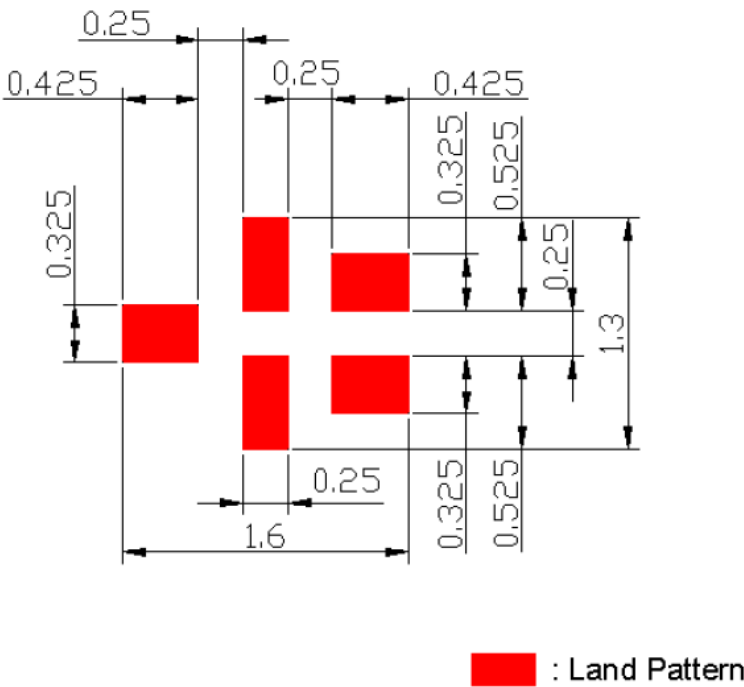
S11/S22 response :



S21 response: (span 3GHz)



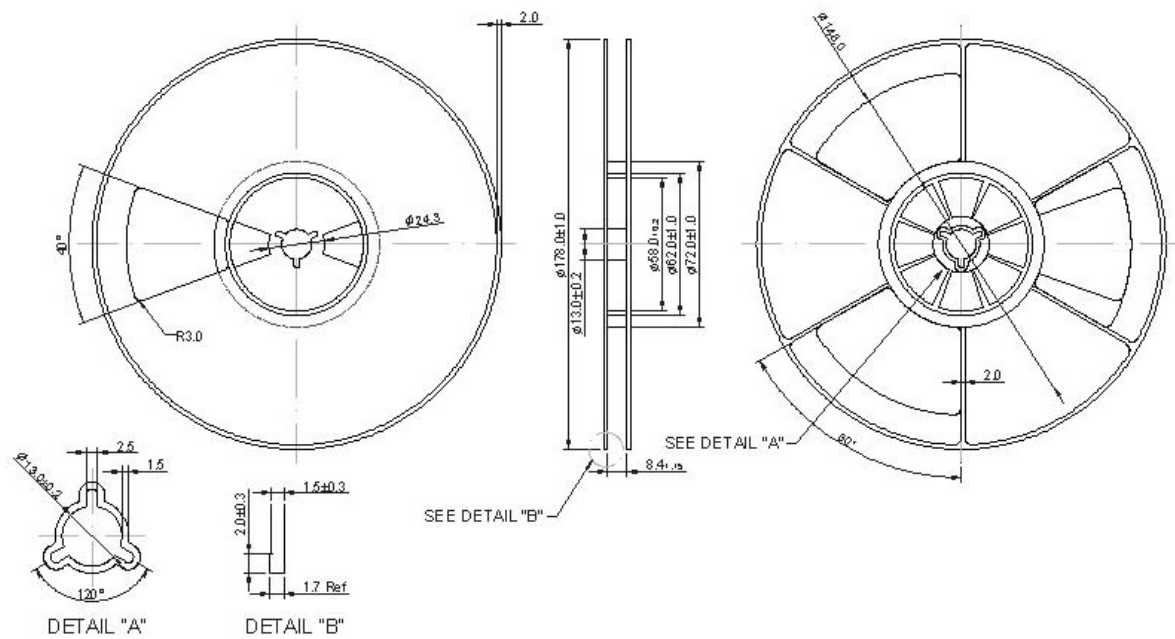
F. PCB Footprint:



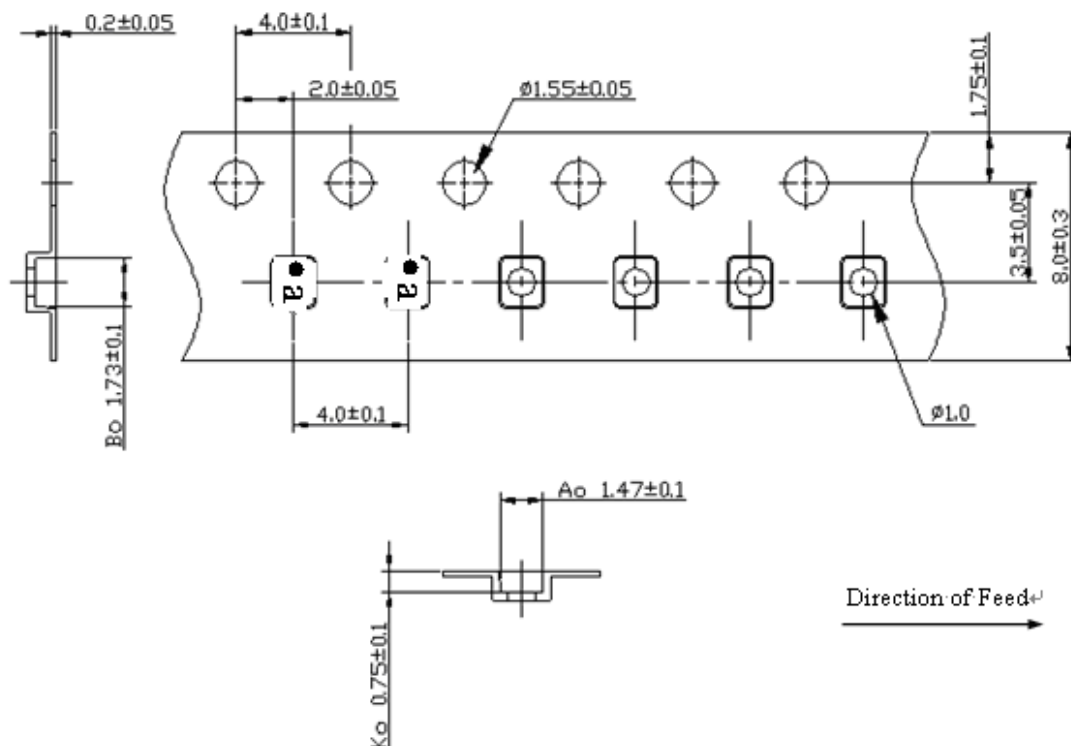
F. PACKING:

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

