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 1583 MHz (BW 46.79MHz) SMD 1.1X0.9mm

TST Parts No.:TA1573C

Customer Parts No.:_____

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by: Michael Yang Michael

Approval by: Andy Yu Andy Yu

Date: 2021/08/02

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 1583 MHz BW 47MHz SMD 1.1x0.9x0.5mm

MODEL NO.:TA1573B REV. NO.:2.0

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
5. Moisture Sensitive Level (MSL): Level 3

RoHS Compliant
Lead-free soldering

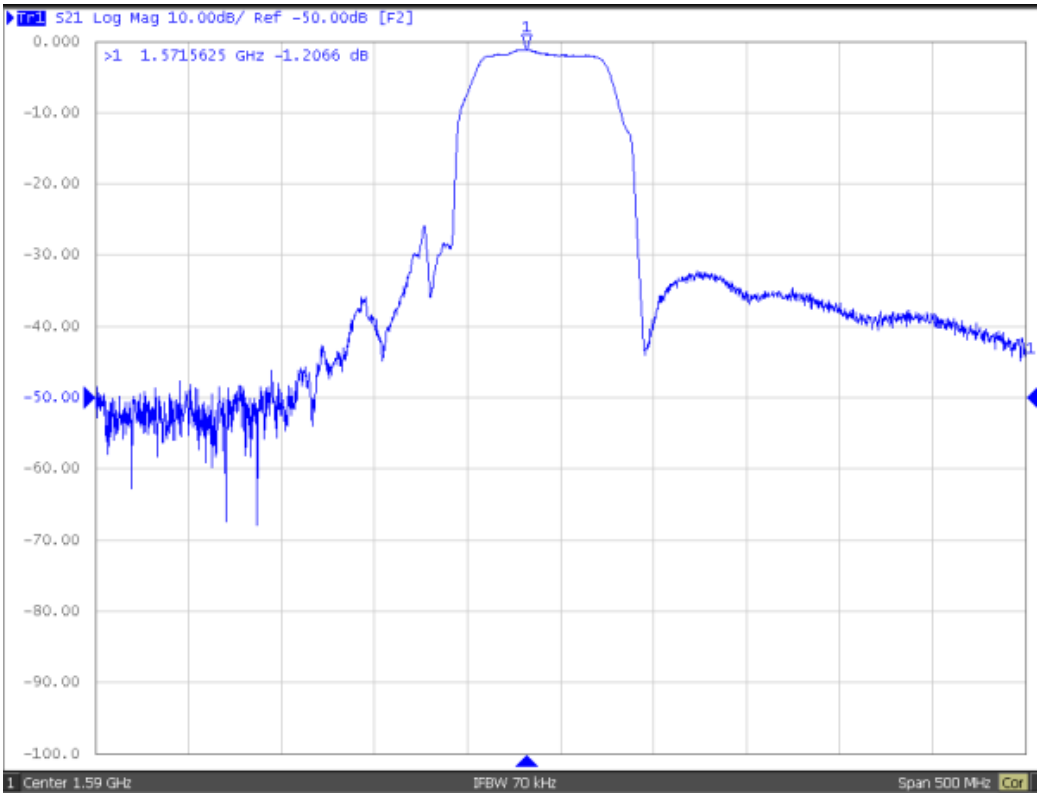
Electrostatic **S**ensitive **D**evice

B. ELECTRICAL CHARACTERISTICS:

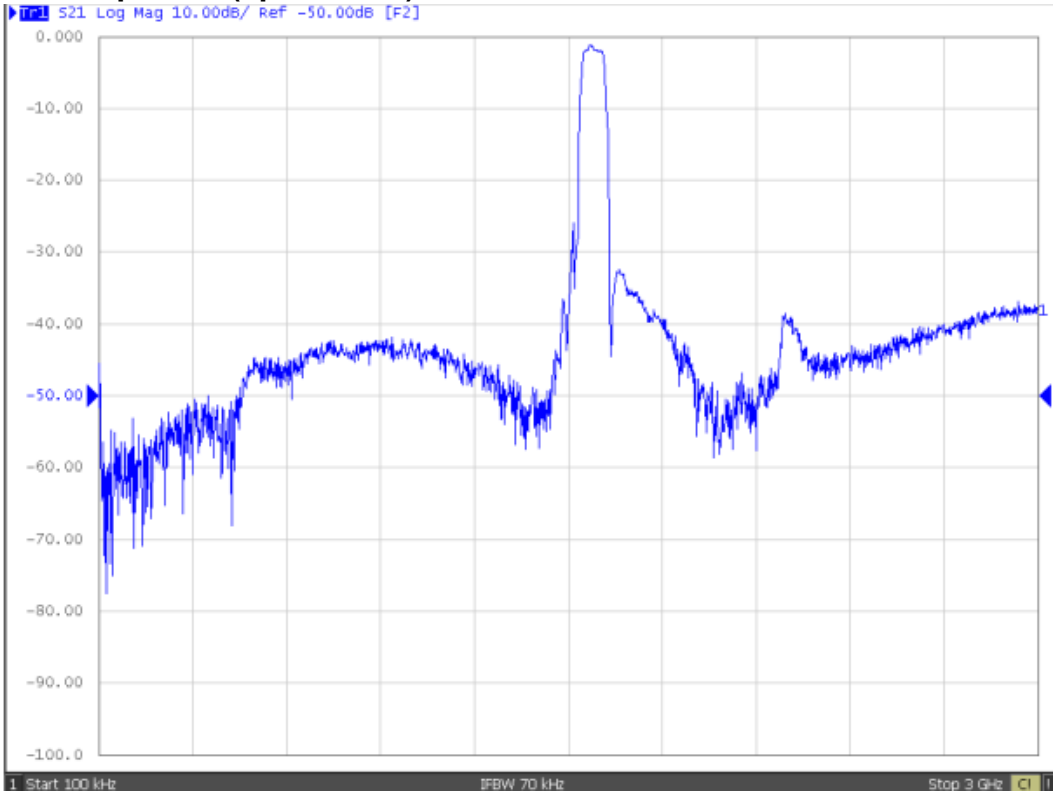
Item		Unit	Min	Type.	-30 ~ 85°C	-40 ~ 105°C
Center Frequency	**Fc**	MHz	-	1583	-	-
Insertion Loss (1559.1~1563.1 MHz)	**IL**	dB		1.8	2.3	2.8
Insertion Loss (1573.42~1577.42 MHz)	**IL**	dB		1.4	1.8	2.0
Insertion Loss (1597.55~1605.89 MHz)	**IL**	dB		1.7	2.3	2.8
VSWR (1559.1~1563.1 MHz)				1.4	2.0	2.0
VSWR (1573.42~1577.42 MHz)				1.6	2.2	2.2
VSWR (1597.55~1605.89 MHz)				1.6	2.2	2.5
Amplitude ripple						
(1559.1~1563.1 MHz)		dB		0.5	0.8	1.3
(1573.42~1577.42 MHz)		dB		0.2	0.5	0.8
(1597.55~1605.89 MHz)		dB		0.3	0.6	1.3
Attenuation						
100 ~ 824 MHz		dB	40	46		
824 ~ 925 MHz		dB	40	46		
1427 ~ 1463 MHz		dB	40	45		
1710 ~ 1785 MHz		dB	36	40		
1850 ~ 1980 MHz		dB	36	40		
2400 ~ 2570 MHz		dB	36	40		
2570 ~ 3000 MHz		dB	33	40		
Package size		mm	1109			

C.FREQUENCY CHARACTERISTICS:

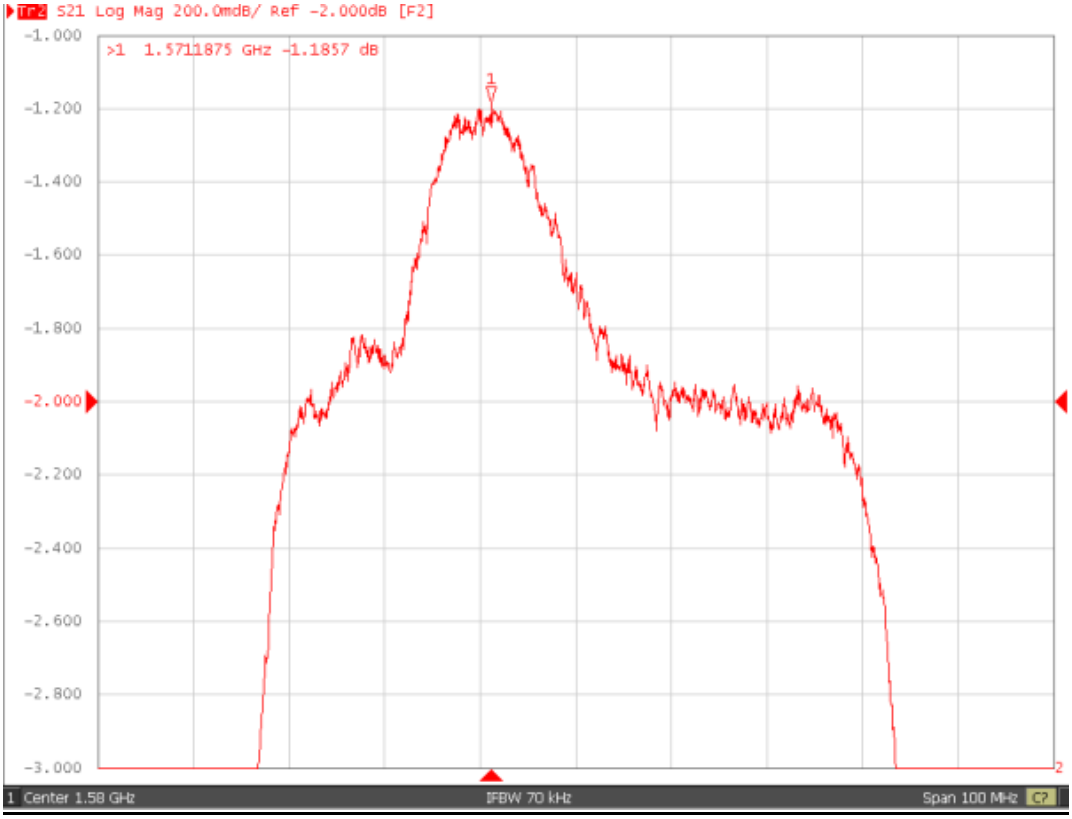
S21 response: (span 500MHz)



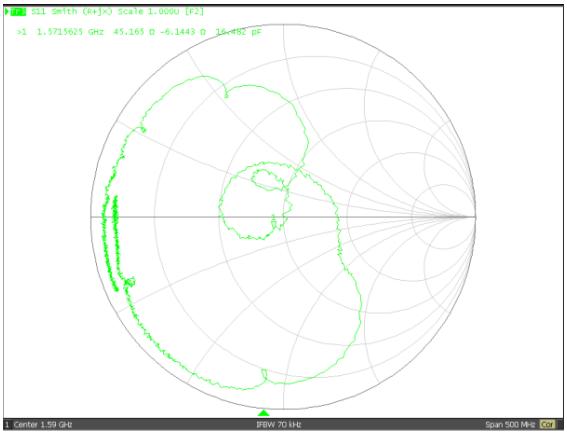
S21 response: (span 3GHz)

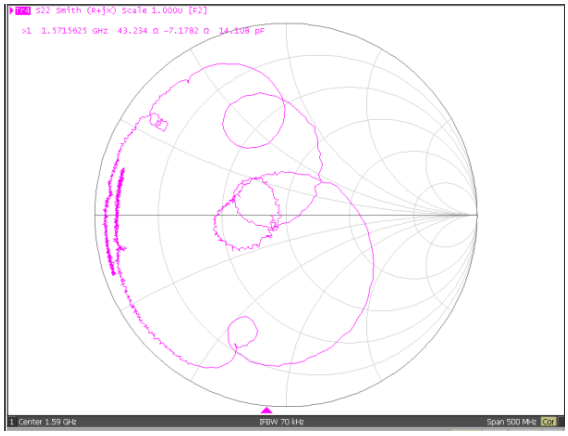


S21 response: (span 100MHz)

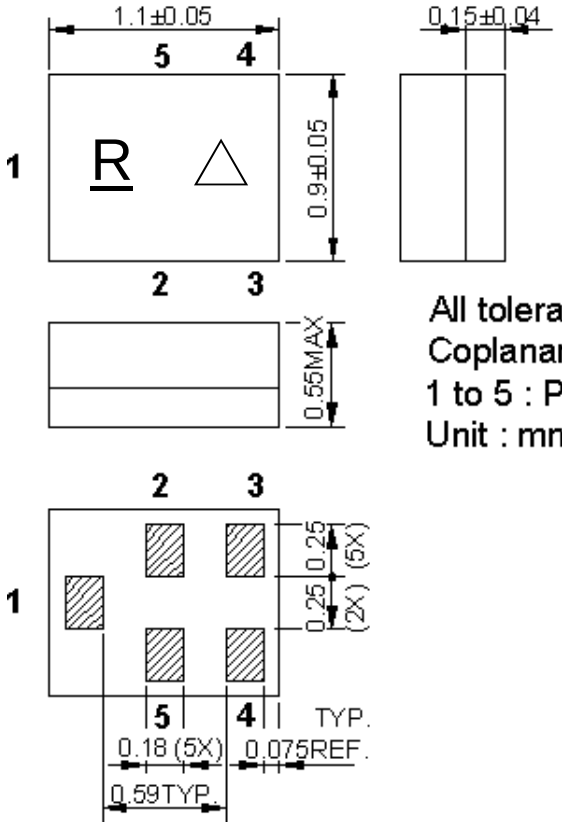


S11 & S22





D.OUTLINE DRAWING:



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

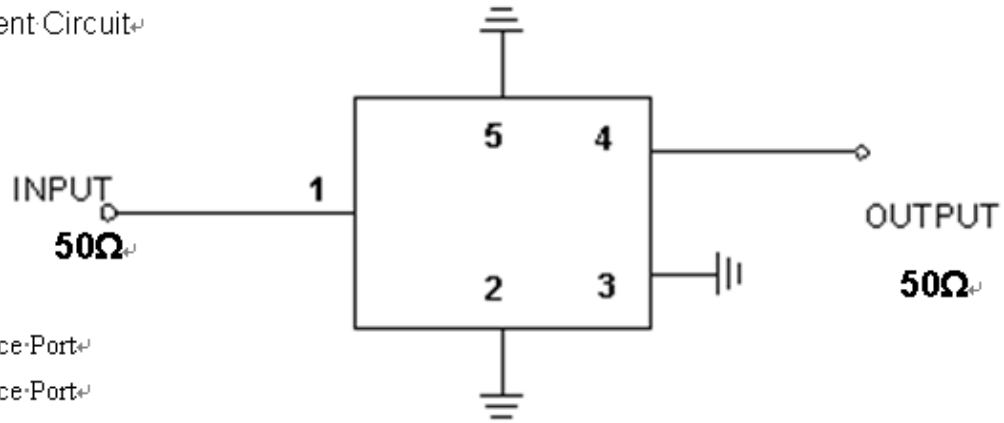
Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

Δ : Year/Month Code (Follow the table) 8year cycle

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

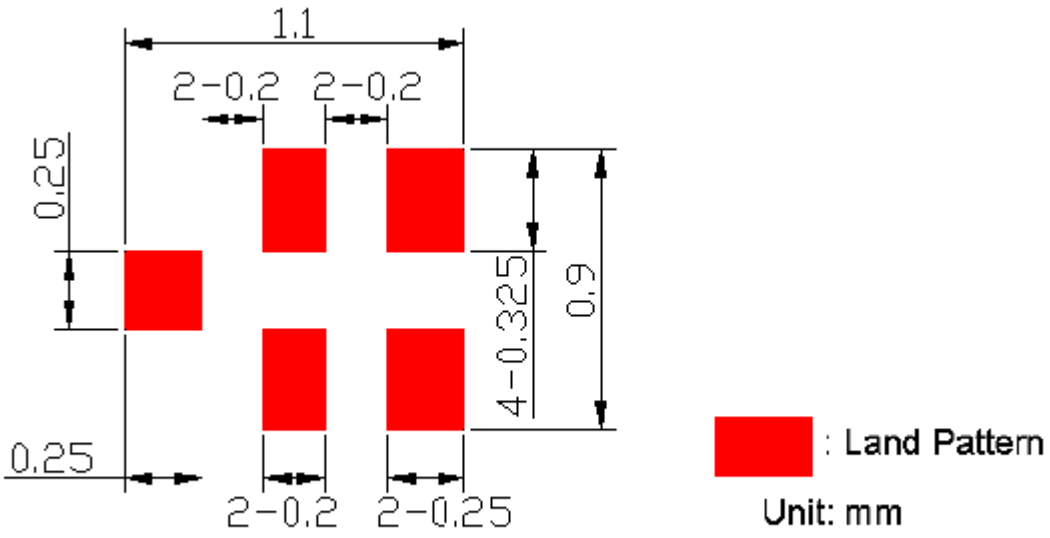
E. MEASUREMENT CIRCUIT:

Measurement Circuit



(1): Unbalance Port
(4): Unbalance Port
Others: Ground

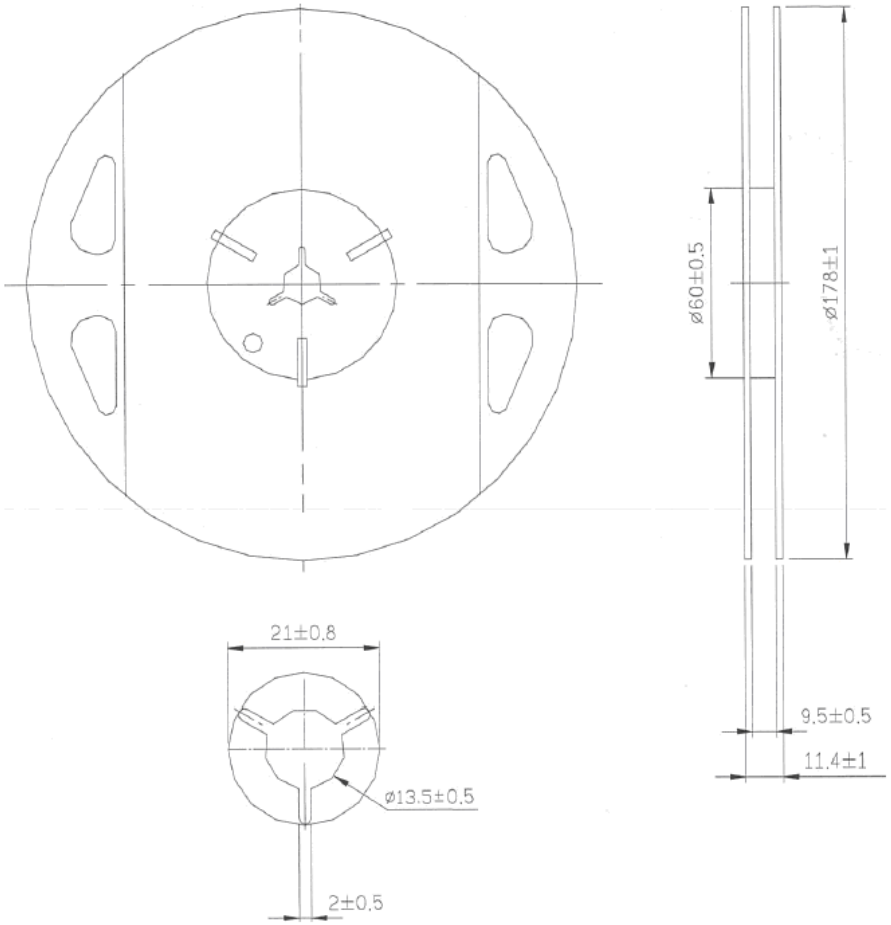
F. PCB Footprint:



G. PACKING:

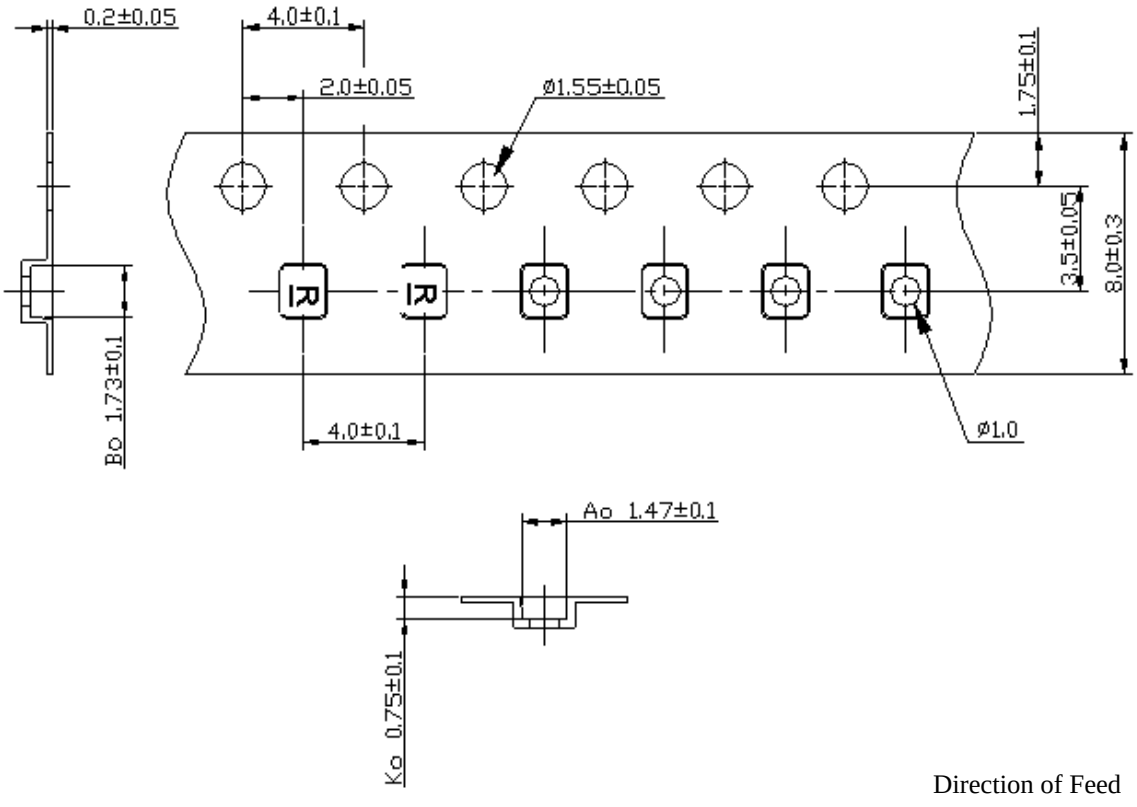
1. REEL DIMENSION

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



Unit: mm

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.