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 1.4X1.1 mm

TST Part No.: TA1661B

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Michael Yang _____

Approval by:_____ Andy Yu _____

Date:_____ 2021/06/11 _____

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.:TA1661B REV. NO.:4.0

A. MAXIMUM RATING:

1. Input Power Level: 15 dBm
2. DC Voltage : 5Vmax
3. Operating Temperature: -40°C to +125°C
4. Storage Temperature: -40°C to +125°C
5. Moisture Sensitivity Level: Level 2a (MSL2a)
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead-free soldering

Electrostatic **S**ensitive **D**evice (**ESD**)

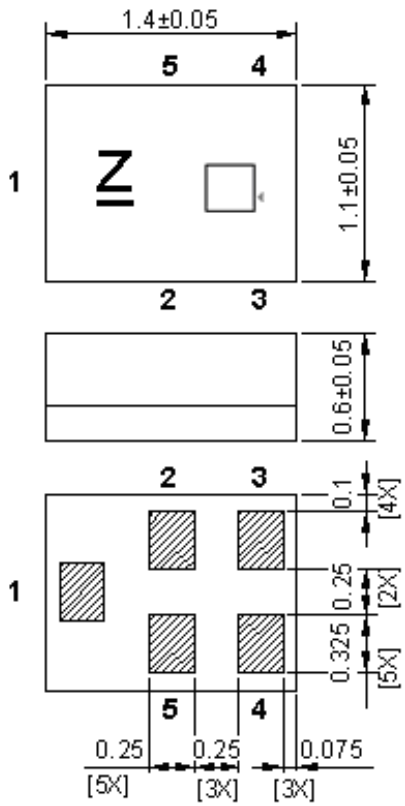
B. ELECTRICAL CHARACTERISTICS:

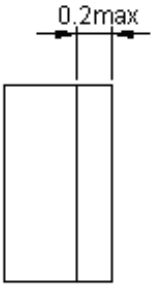
Terminating source impedance (single) : Z_S = 50 Ω
Terminating load impedance(single) : Z_L = 50 Ω

Item		Unit	25±2℃	Type.	-40 ~ +85℃	-40 ~ +125℃
Center Frequency	**Fc**	MHz	-	1583	-	
Insertion Loss (1559.1~1563.1 MHz)	**IL**	dB	1.9max	1.8	2.1max	2.5max
Insertion Loss (1573.42~1577.42 MHz)	**IL**	dB	1.5max	1.4	1.6max	2.0max
Insertion Loss (1597.55~1605.89 MHz)	**IL**	dB	1.8max	1.7	2.1max	3.0max
VSWR (1559.1~1563.1 MHz)			1.5max	1.4	1.8max	2.3max
VSWR (1573.42~1577.42 MHz)			1.7max	1.6	2.0max	2.0max
VSWR (1597.55~1605.89 MHz)			1.7max	1.6	1.9max	2.4max
Amplitude ripple						
(1559.1~1563.1 MHz)		dB	0.6max	0.5	0.8max	1.0max
(1573.42~1577.42 MHz)		dB	0.3max	0.2	0.5max	1.0max
(1597.55~1605.89 MHz)		dB	0.5max	0.3	0.6max	1.5max
Attenuation						
100 ~ 824 MHz		dB	44min	46	40min	40min
824 ~ 925 MHz		dB	44min	46	40min	40min
1427 ~ 1463 MHz		dB	43min	45	40min	40min
1710 ~ 1785 MHz		dB	38min	40	36min	36min
1850 ~ 1980 MHz		dB	38min	40	36min	36min
2400 ~ 2570 MHz		dB	38min	40	36min	36min

2570 ~ 3000 MHz	dB	35min	40	33min	33min	
Package size	mm	1411				

C.OUTLINE DRAWING:





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

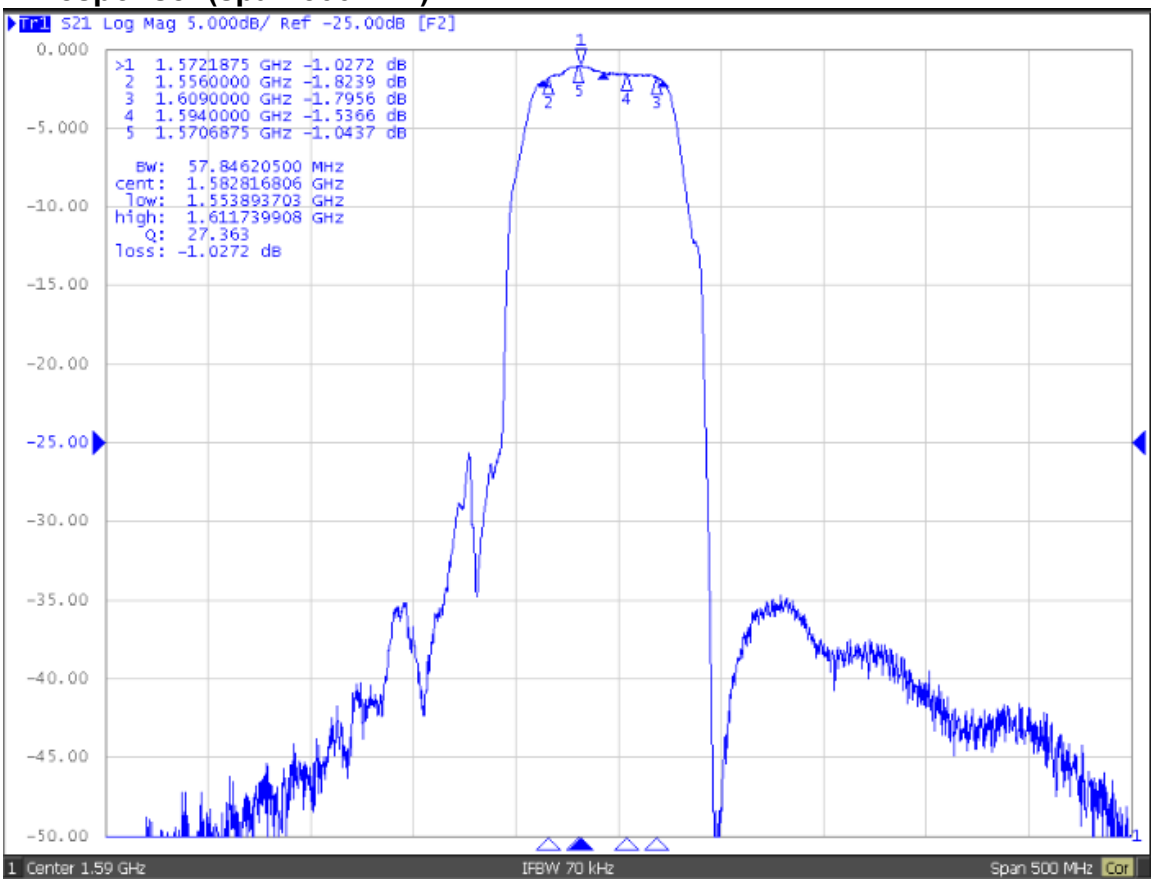
Pin No.	Symbol	Function
1	IN	Input
2	GND	Ground
3	GND	Ground
4	OUT	Output
5	GND	Ground

□ : Year/Month Code (Follow the table)

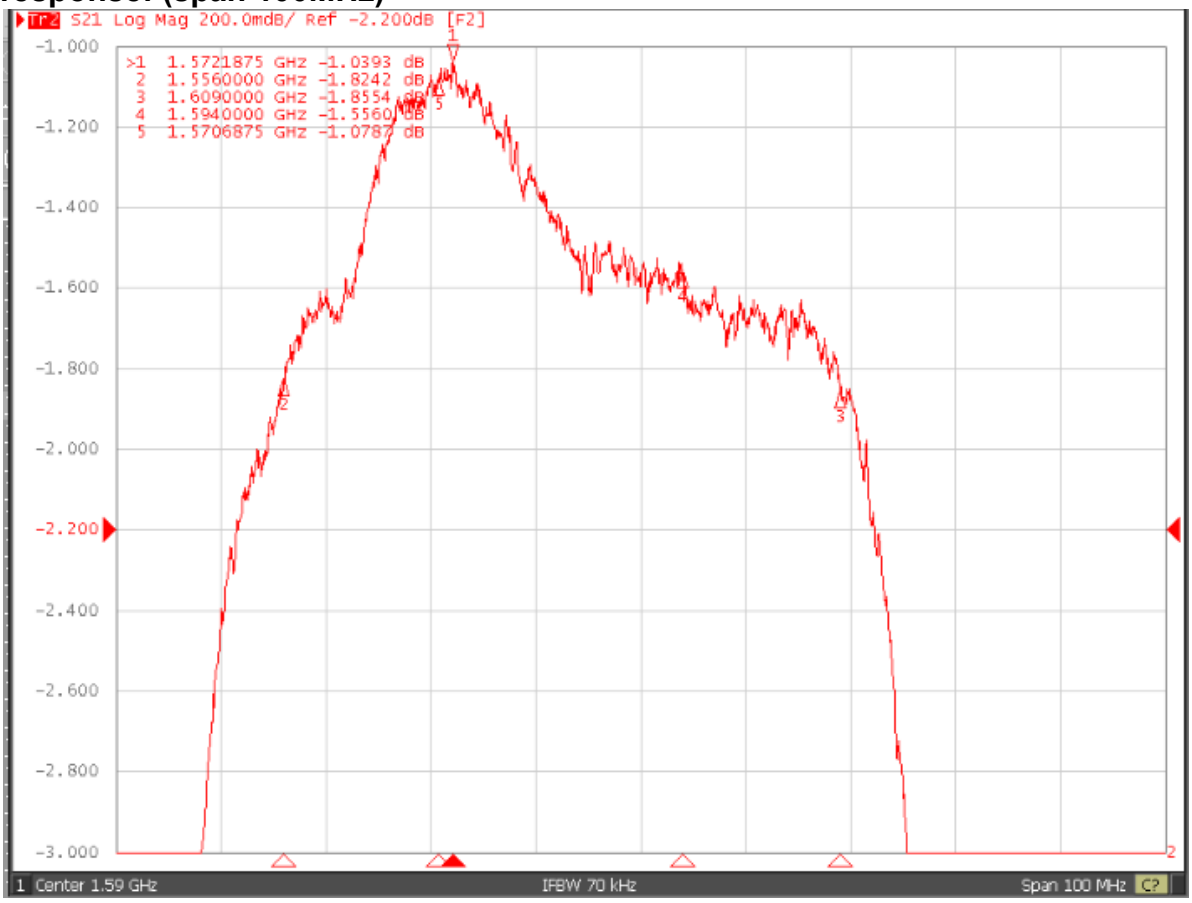
YEAR/Month	1	2	3	4	5	6	7	8	9	10	11	12
2013/2021	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**J**	**K**	**L**	**M**
2014/2022	**N**	**P**	**Q**	**R**	**S**	**T**	**U**	**V**	**W**	**X**	**Y**	**Z**
2015/2023	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**j**	**k**	**l**	**m**
2016/2024	**n**	**p**	**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. Frequency Characteristics:

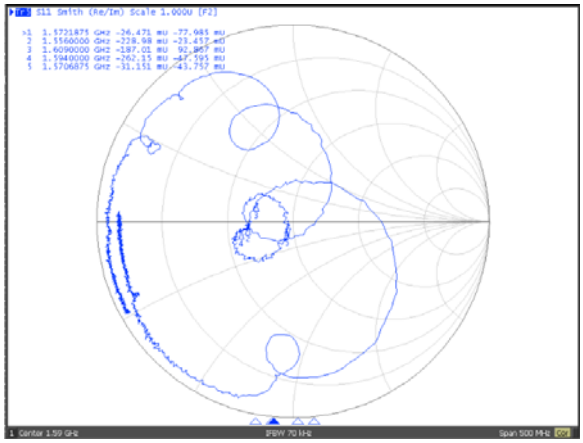
S21 response: (span 500MHz)

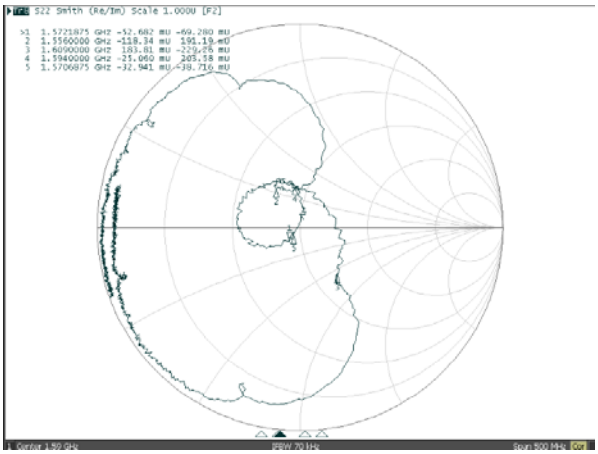


S21 response: (span 100MHz)

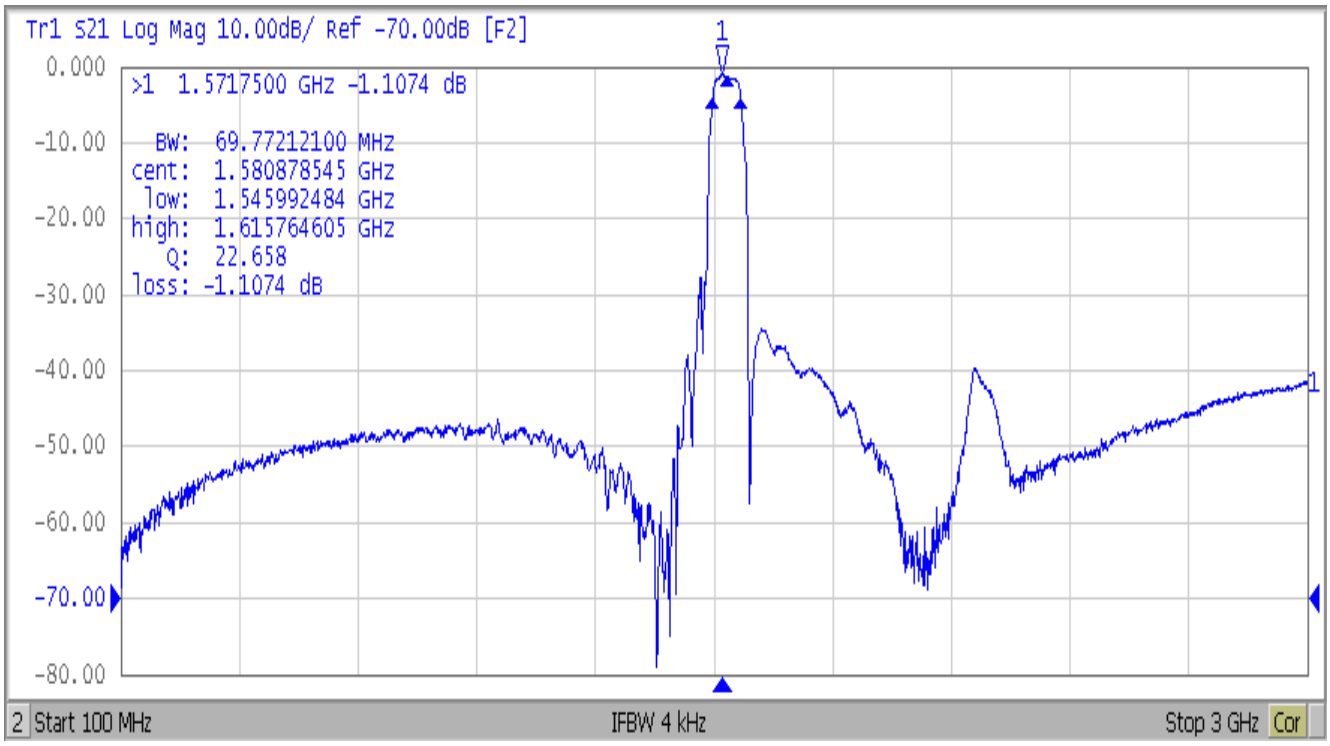


S11/S22 response：

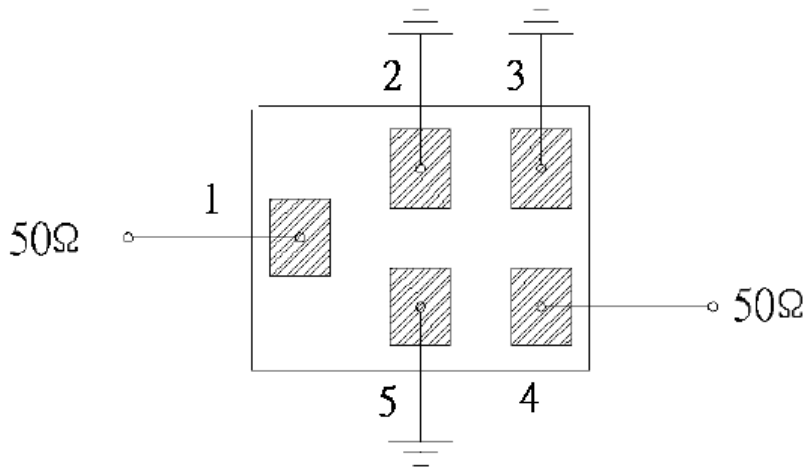




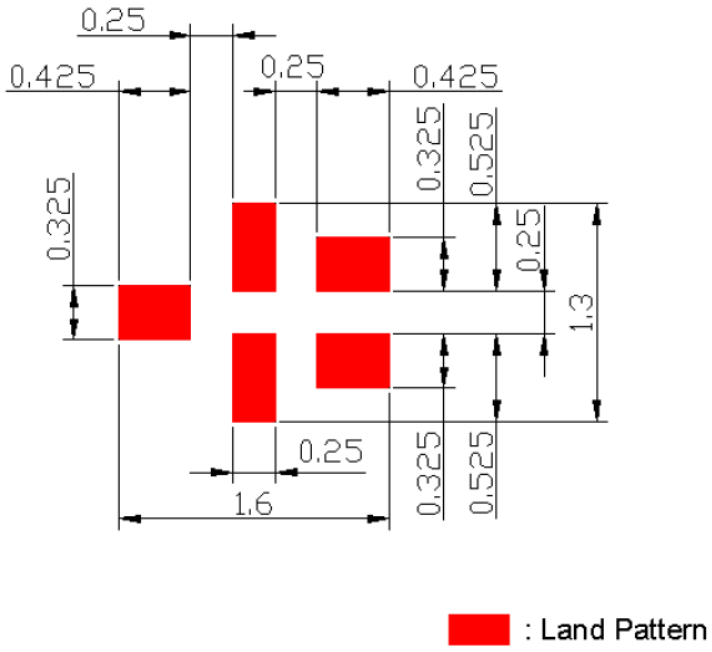
S21 response: (span 3GHz)



D. MEASUREMENT CIRCUIT:



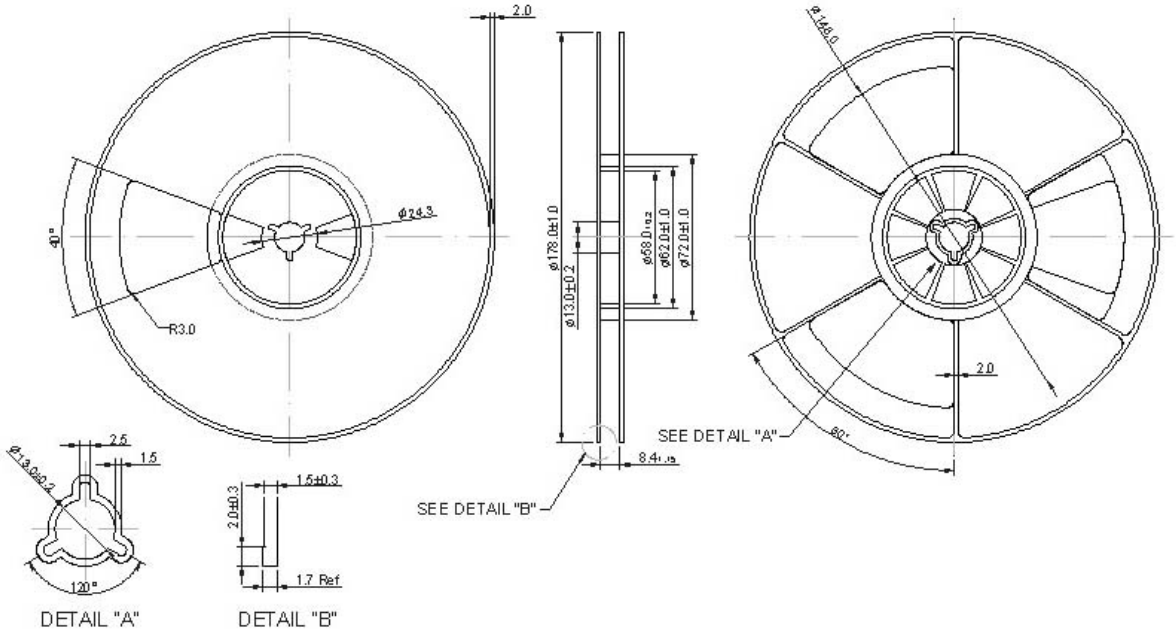
F. PCB Footprint:



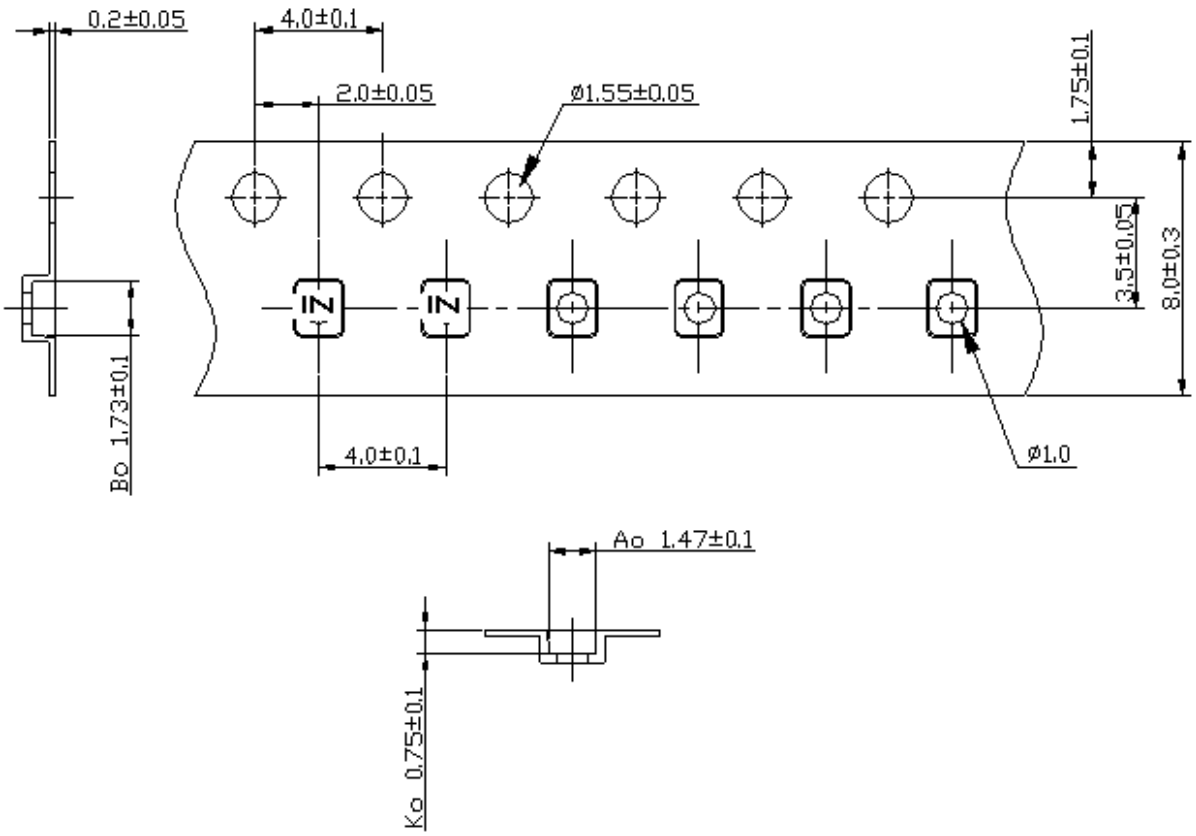
G. PACKING:

1. REEL DIMENSION

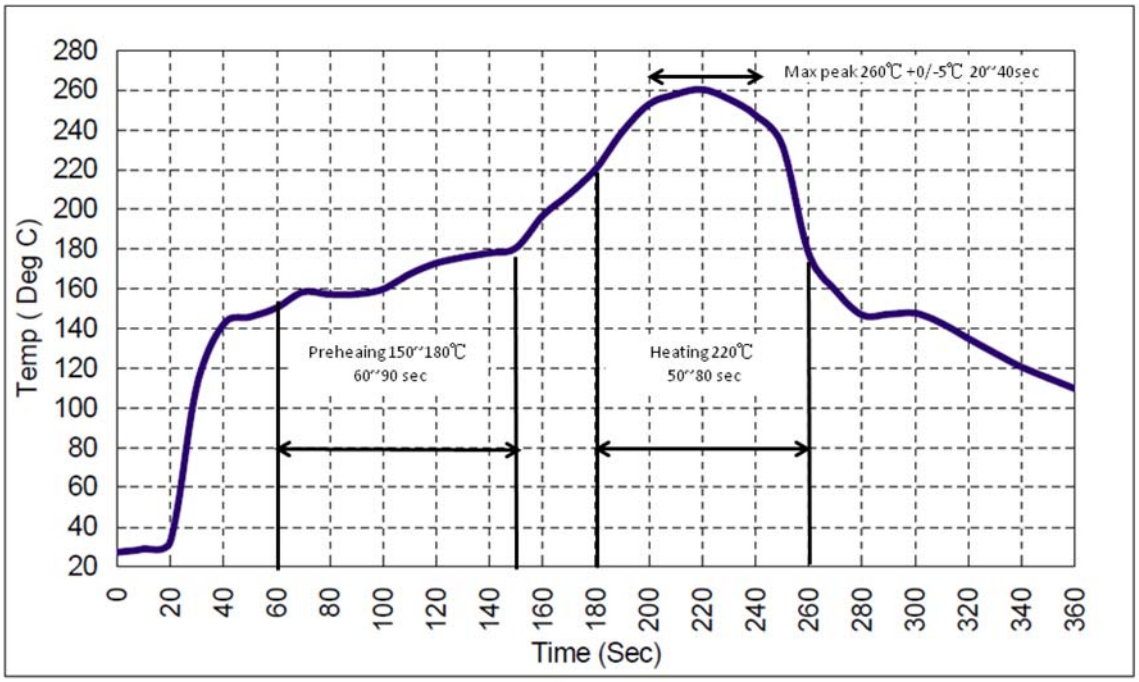
(Please refer to FR-75D10 for packing quantity)



2. TAPE DIMENSION



Direction of Feed

H. Recommended Reflow Profile:

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.