



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: BAW Filter 2350 MHz LTE Band 40 SMD 1.4x1.1 mm (BW =100MHz)

TST Part No.: TA1963B(This part is compliant with AEC-Q200)

Customer Part No.: _____

Customer signature required

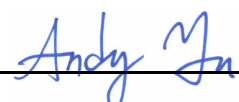
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Anne Chen 

Approved by: _____ Andy Yu 

Date: _____ 2019/12/13

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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BAW Filter 2350MHz LTE Band 40 SMD 1411(100MHz BW)

MODEL NO.:TA1963B

REV. NO.:2.0

A. MAXIMUM RATING:

1. Input Power Level: 29dBm((Ta=+50deg C,10000h,CW)
2. DC Voltage : 0V
3. Operating Temperature: -40C to +85°C
4. Storage Temperature: -55°C to +125°C
5. Moisture Sensitivity Level: Level 1
6. ESD 50V(MM) 100V(HBM)
7. Pre-aging condition to 150C / 8hrs

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

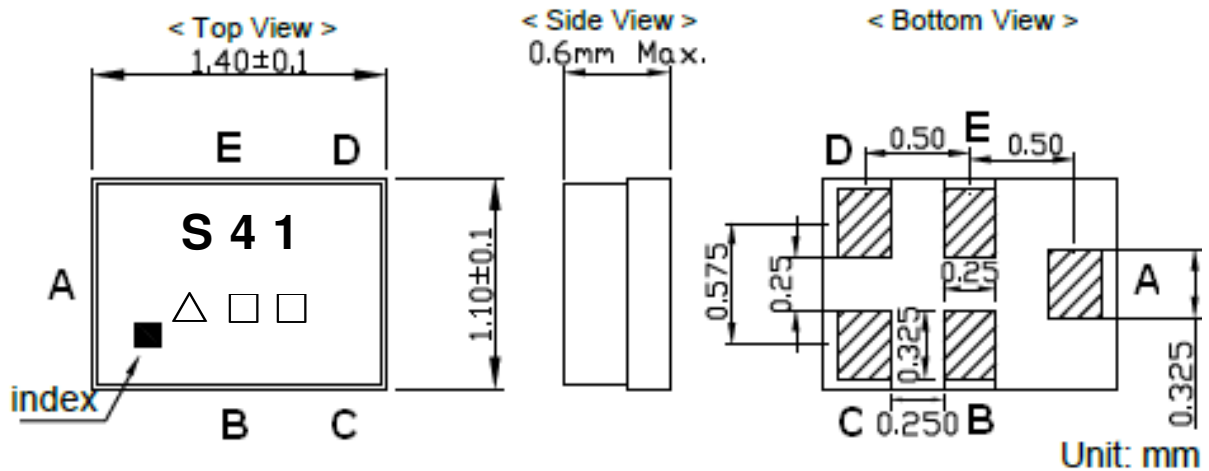
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega // 3.9nH\Omega$

Terminating load impedance : $Z_L = 50 \Omega // 4.0nH\Omega$

Item	Unit	Min.	Typ.	Max.	Note
Center Frequency Fc	MHz	-	2350	-	-
Insertion Loss (2300~2400 MHz) IL	dB	-	2.3	3.0	-
Amplitude ripple (2300~2400 MHz)	dBp-p	-	1.2	2.5	
VSWR (2300~2400 MHz)		-	1.8	2.4	-
Attenuation (reference level from 0 dB)					
10 ~ 1574 MHz	dB	28	30	-	-
1574 ~ 1577 MHz	dB	28	30		
2110 ~ 2170 MHz	dB	28	32	-	-
2420 ~ 2440 MHz	dB	2	8	-	-
2440 ~ 2460 MHz	dB	43	48	-	-
2460 ~ 2500 MHz	dB	37	48	-	-
4600 ~ 4800 MHz	dB	25	29		
6900 ~ 7000 MHz	dB	15	19		
Temperature Coefficient of Frequency	ppm/°C	-	-36	-	-

C.OUTLINE DRAWING:



Not Specified Tolerance : +/-0.1 mm

Pin Configuration

Pin No.	Symbol	Function
A	IN	Single-ended pin
B	GND	Ground
C	GND	Ground
D	OUT	Single-ended pin
E	GND	Ground

Marking Descriptions

Marking name : **S41**

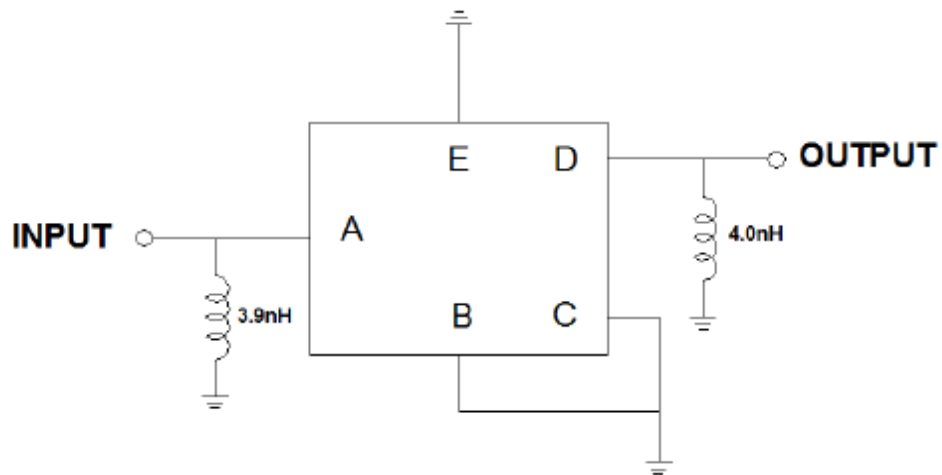
△: Date code

□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code. Follow below table. (4-year cycle)

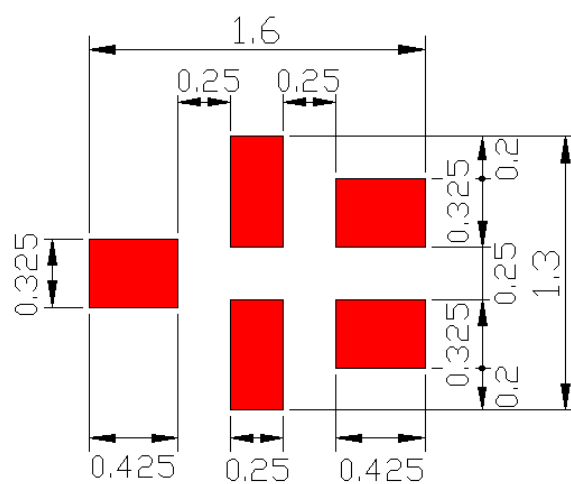
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2019 / 2023	a	b	c	d	e	f	g	h	j	k	l	m
2020 / 2024	n	p	q	r	s	t	u	v	w	x	y	z
2021 / 2025	A	B	C	D	E	F	G	H	J	K	L	M
2022 / 2026	N	P	Q	R	S	T	U	V	W	X	Y	Z

D. MEASUREMENT CIRCUIT:



Source & Load Impedance: 50 Ω

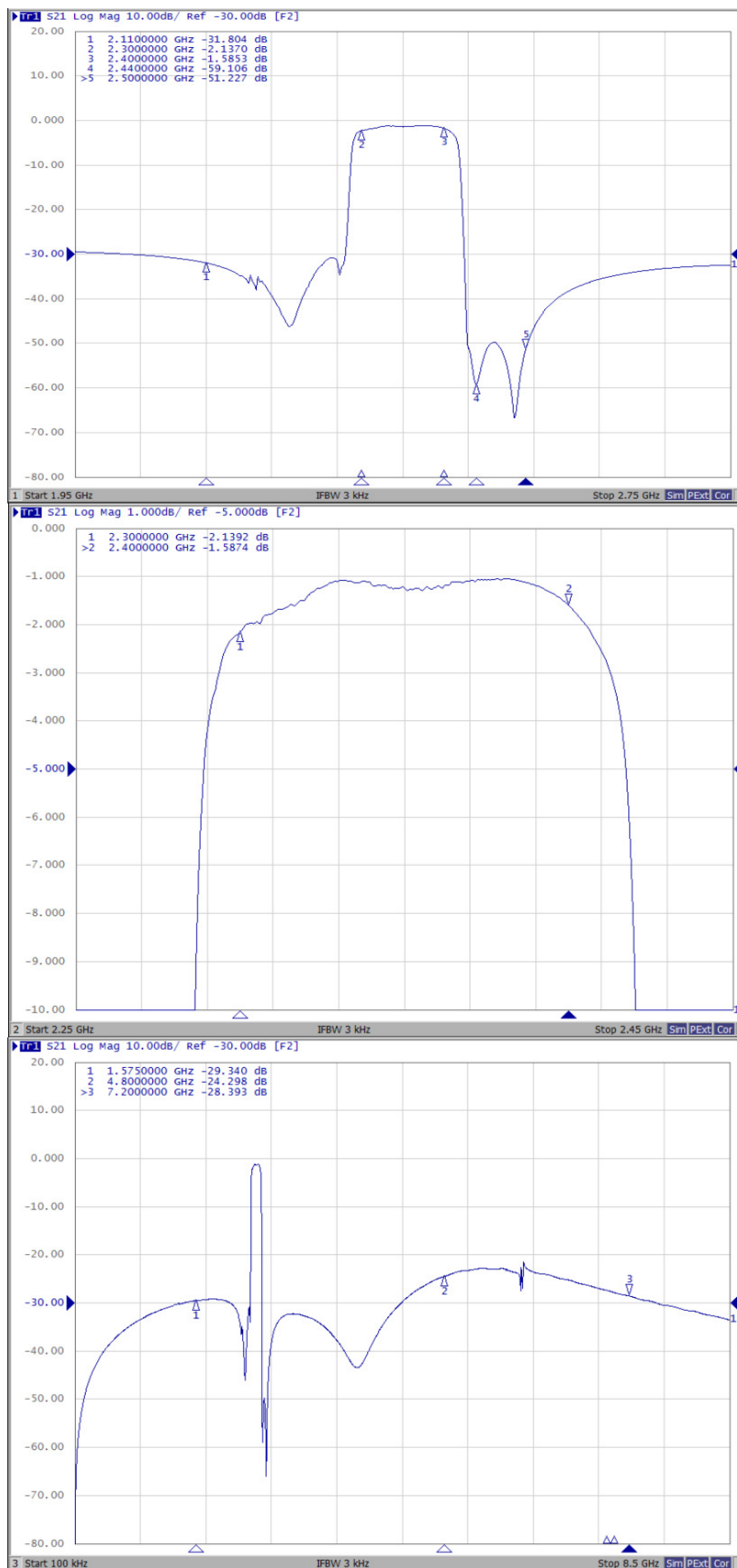
E. PCB Footprint :



 : Land Pattern
Unit: mm

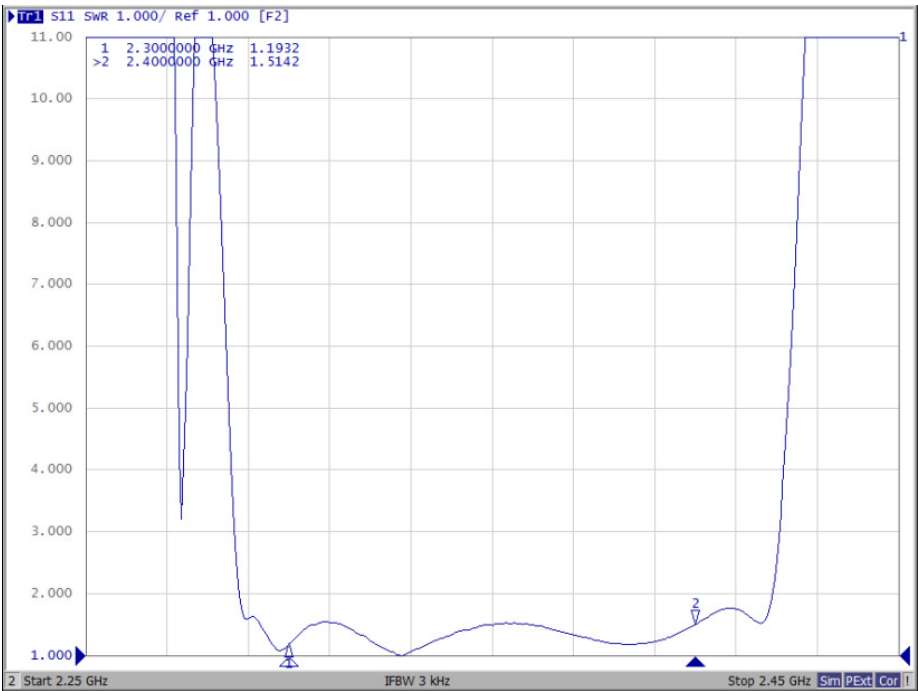
F. Frequency Characteristics :

Passband

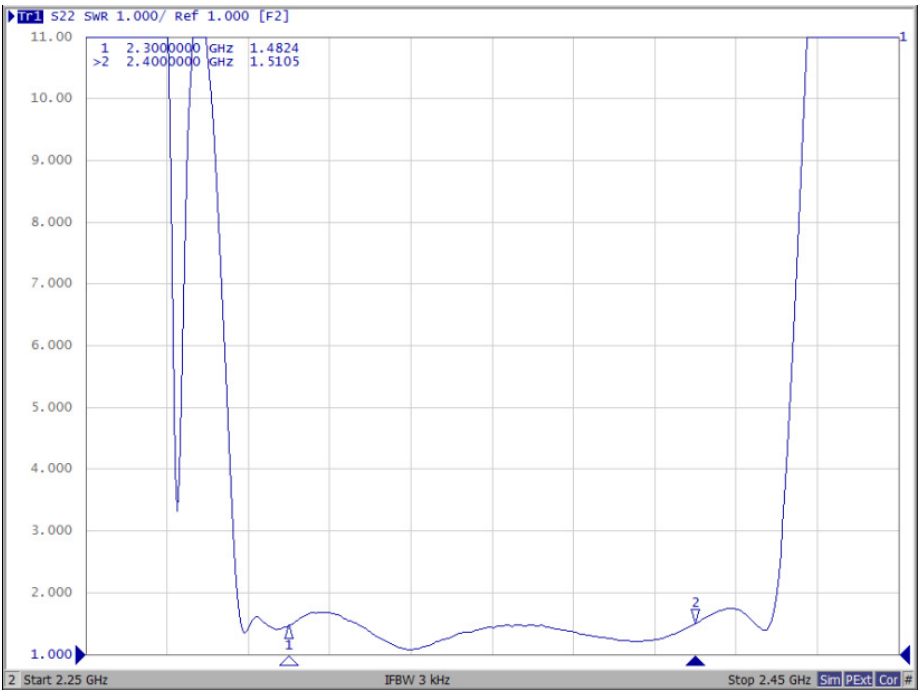


Reflection Functions :

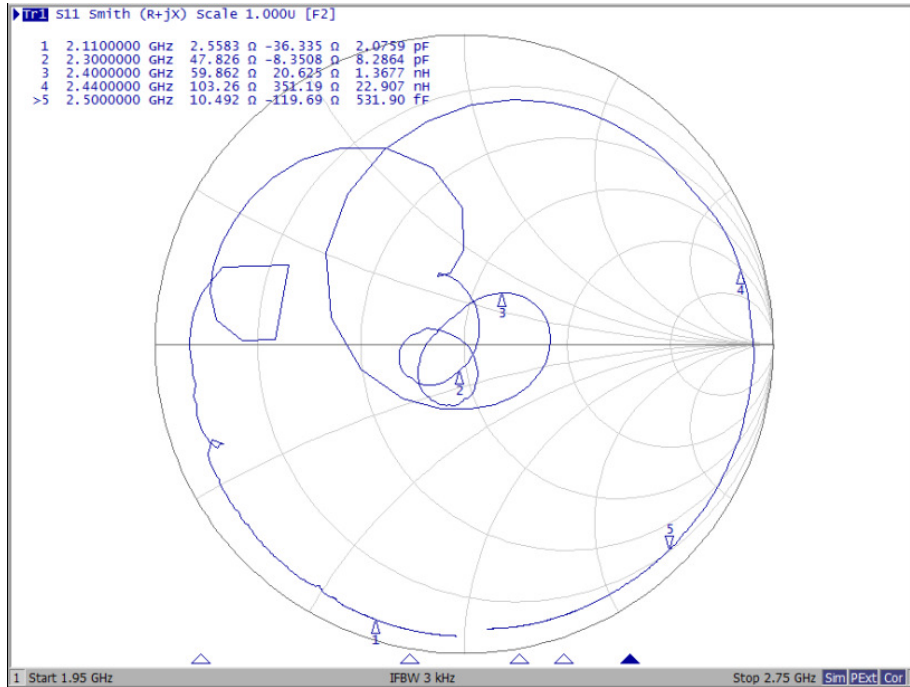
S11 VSWR



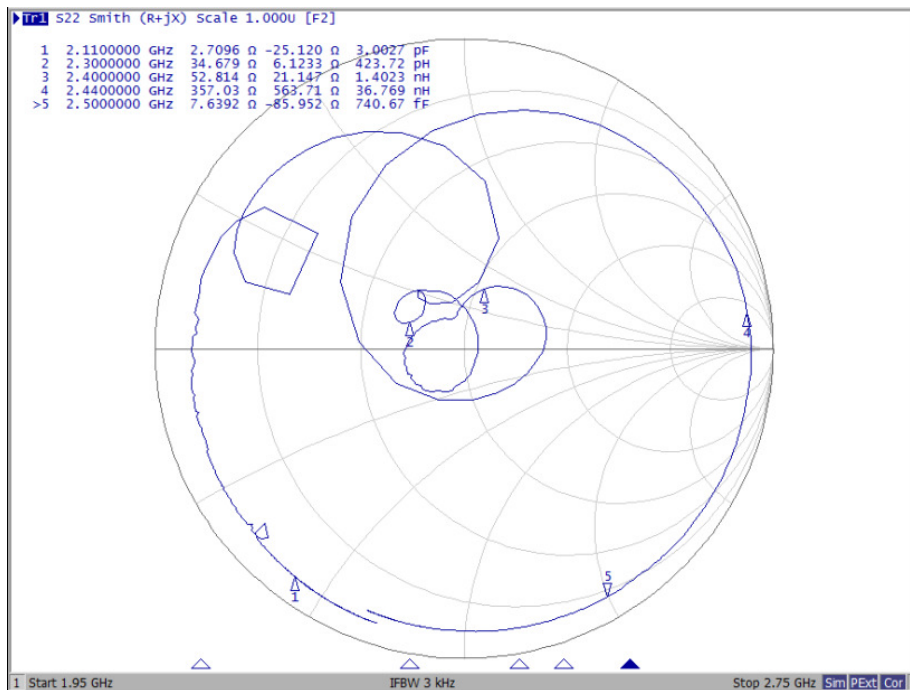
S22 VSWR



S11 Smith Chart



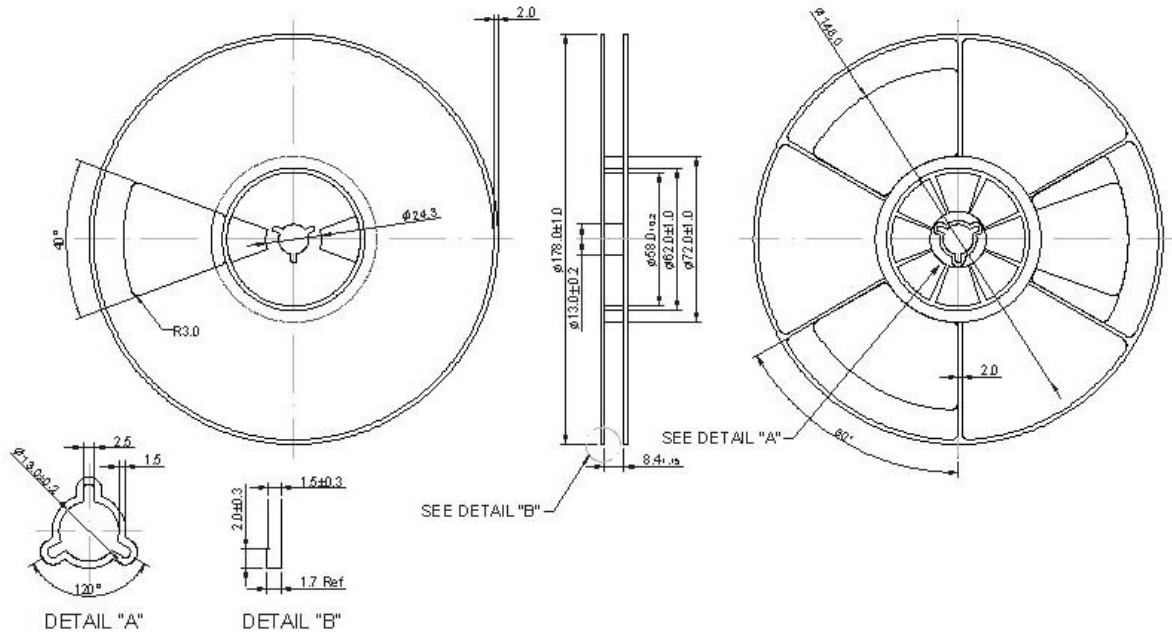
S22 Smith Chart



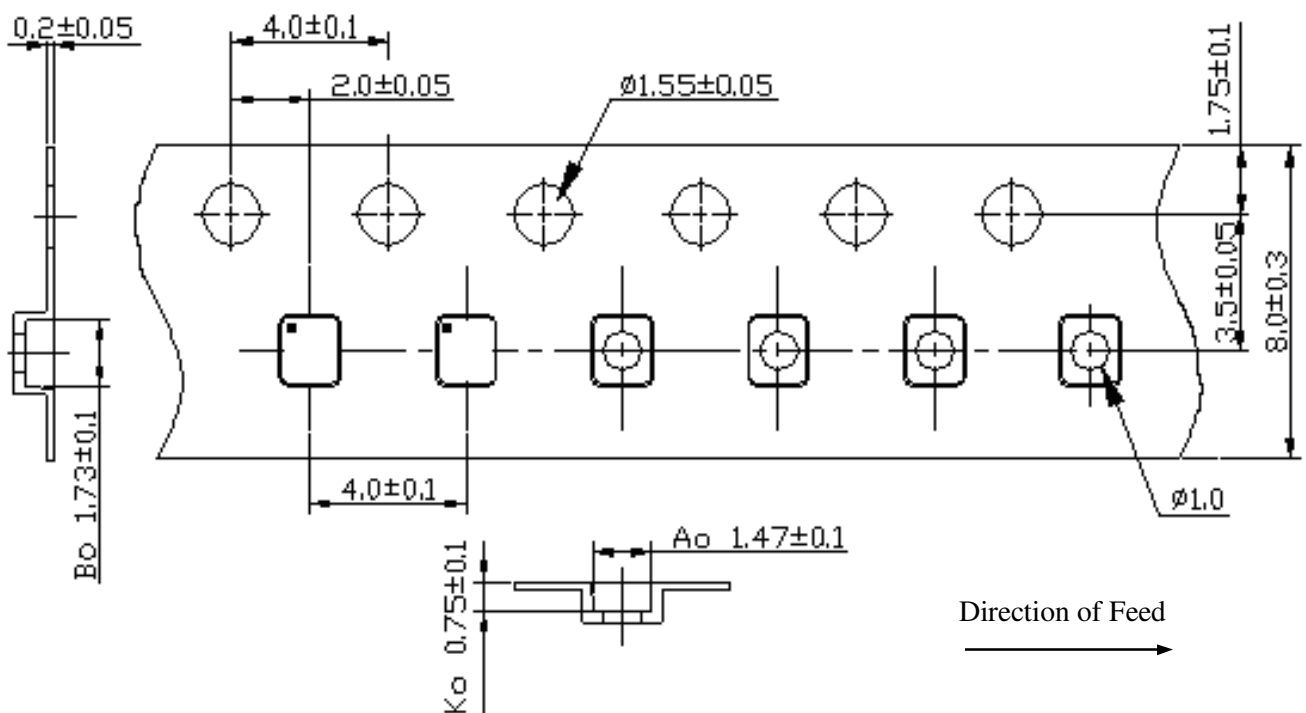
G. PACKING:

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 245~260°C peak (min. 10sec).
4. Time : 2 times.

