



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 1582.469 MHz Rx SMD 1.1x0.9 mm (BW=46.834 MHz)

TST Part No.: TA1804B (This part is compliant with AEC-Q200)

Customer Part No.: _____

Customer signature required

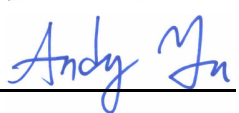
Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Anne Chen 

Approved by: _____ Andy Yu 

Date: _____ 01 . 10 . 2020

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 1582.469 MHz Rx SMD 1.1x0.9 mm (BW=46.834 MHz)

MODEL NO.: TA1804B

REV. NO.:1.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -40 °C to +105 °C
4. Storage Temperature: -40 °C to +105 °C
5. Moisture Sensitivity Level: Level 1
6. Maximum ESD: +/-50 V (Human body model)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

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

Terminating load impedance: $Z_L = 50 \Omega$ (Single-ended)

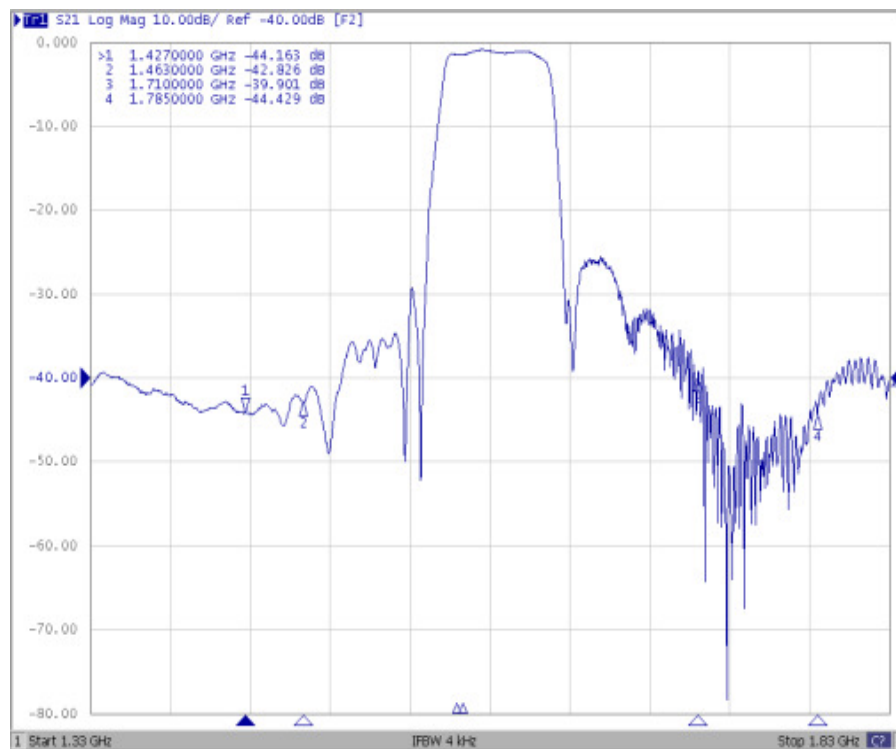
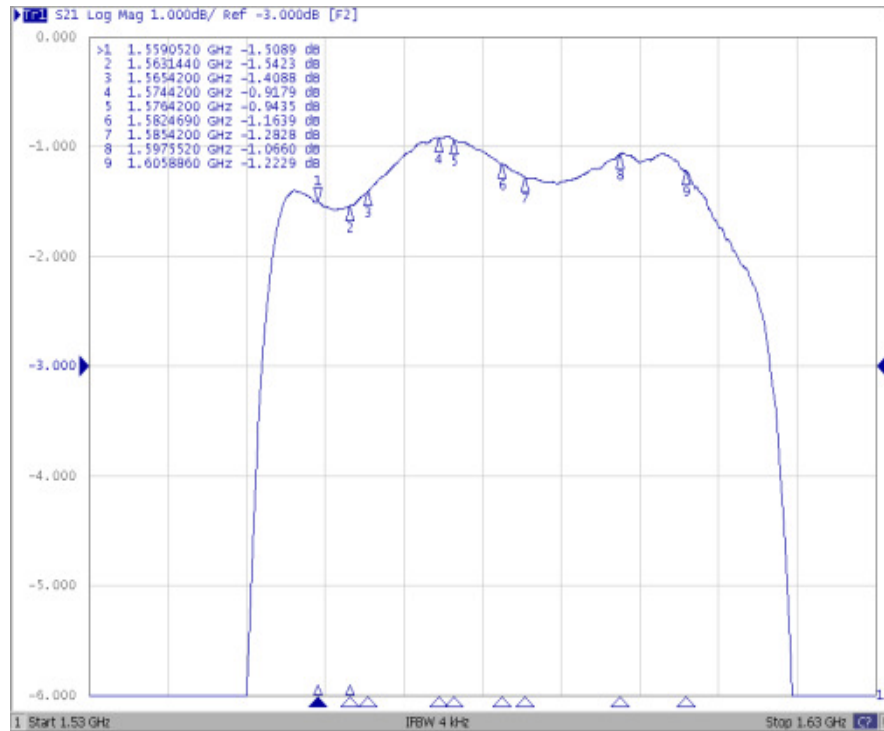
Parameters Description		Unit	Min.	Typ.	Max.
Center Frequency		MHz	-	1582.469	-
Insertion Loss	1574.42~1576.42 MHz	dB (*1)	-	0.95	1.5
	1565.42~1585.42 MHz	dB (*1)	-	1.5	2.0
	1597.552~1605.886 MHz	dB (*1)	-	1.4	2.3
	1559.052~1563.144 MHz	dB (*1)	-	1.7	2.8
VSWR(Input/Output)	1574.42~1576.42 MHz	-	-	1.3	2.0
	1565.42~1585.42 MHz	-	-	1.9	2.3
	1597.552~1605.886 MHz	-	-	1.5	2.5
	1559.052~1563.144 MHz	-	-	1.8	2.5
Attenuation (Reference level from 0 dB)					
50~925 MHz		dB	32	36	-
925~980 MHz		dB	32	36	-
1427~1463 MHz		dB	32	39	-
1710~1785 MHz		dB	32	39	-
1850~1910 MHz		dB	32	38	-
1920~1980 MHz		dB	32	37	-

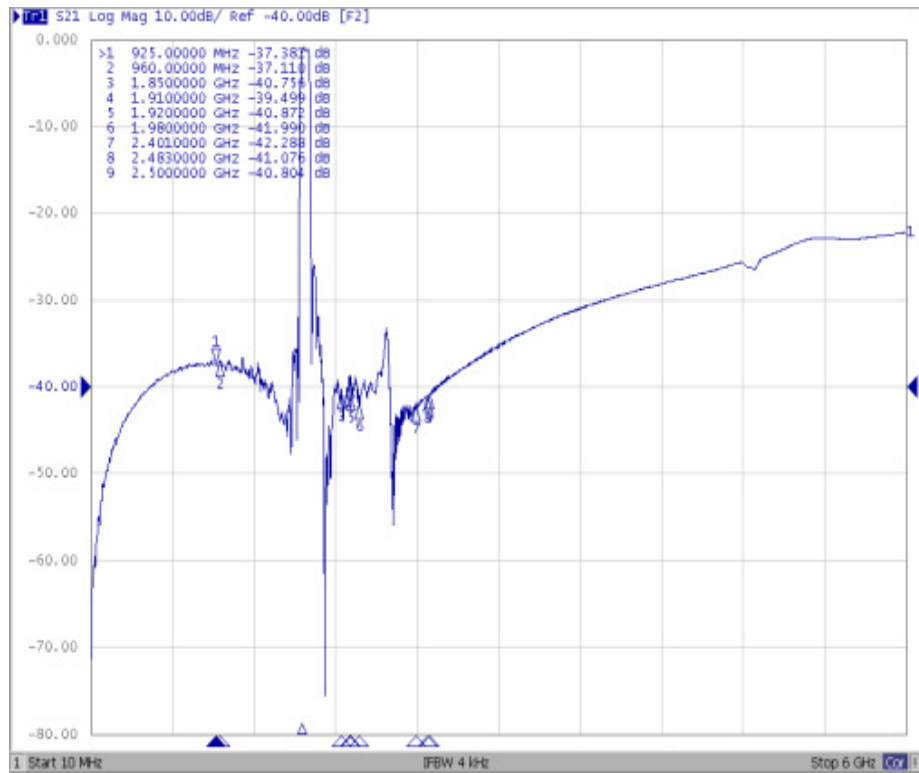
2401~2483 MHz	dB	32	39	
2500~2570 MHz	dB	31	38	
Temperature Coefficient of Frequency	ppm/°C	-36		

(*1) Specification of insertion loss excludes loss that comes from the test board.

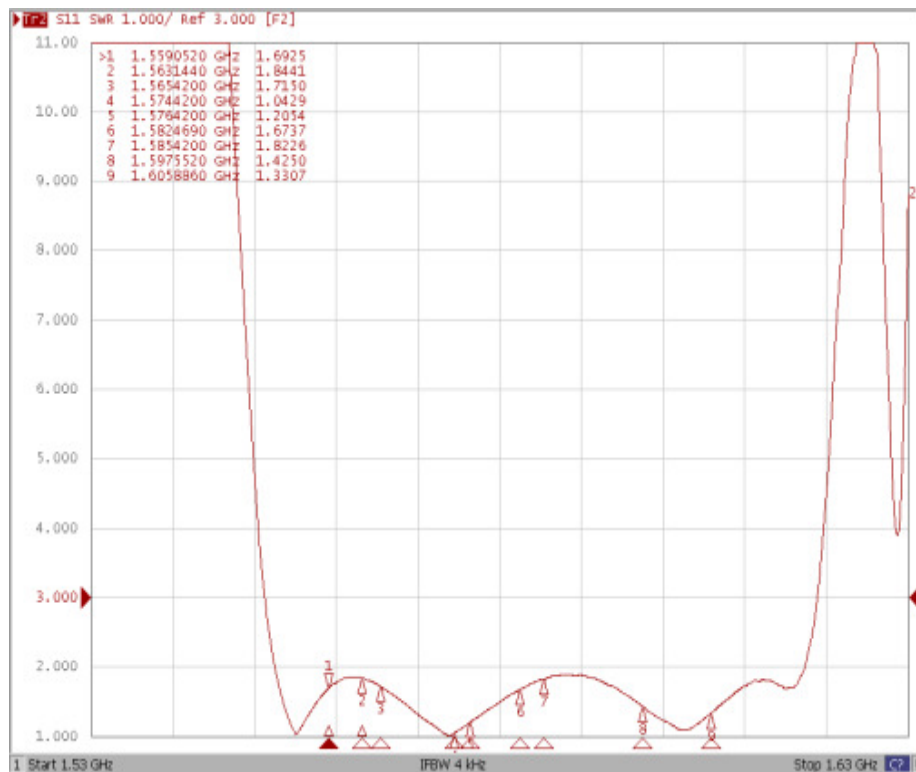
C. FREQUENCY CHARACTERISTIC:

Frequency Response

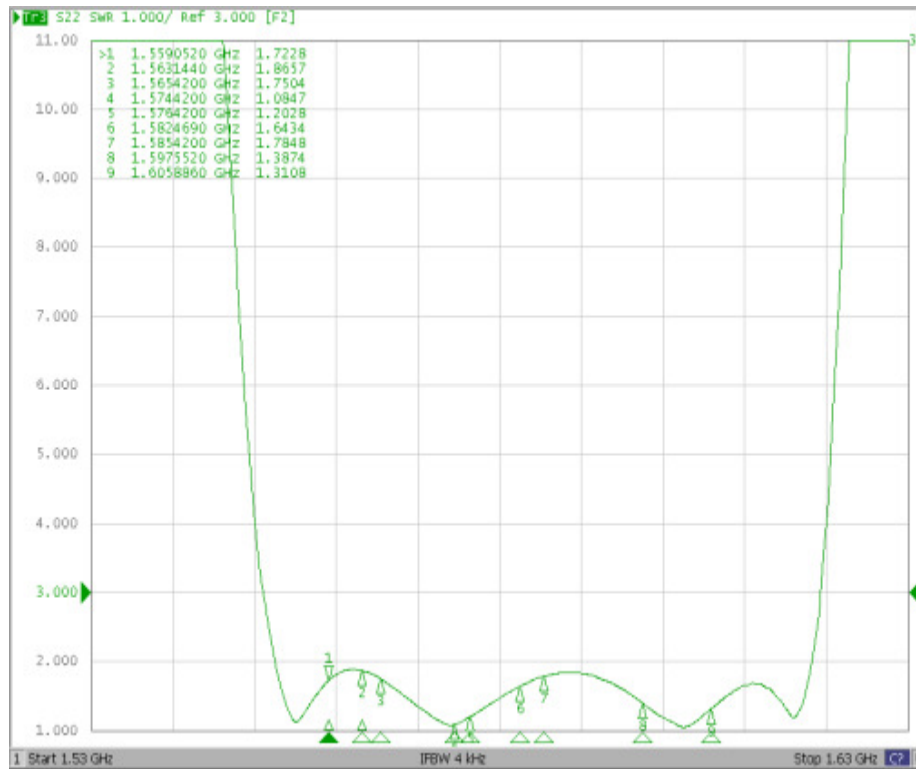




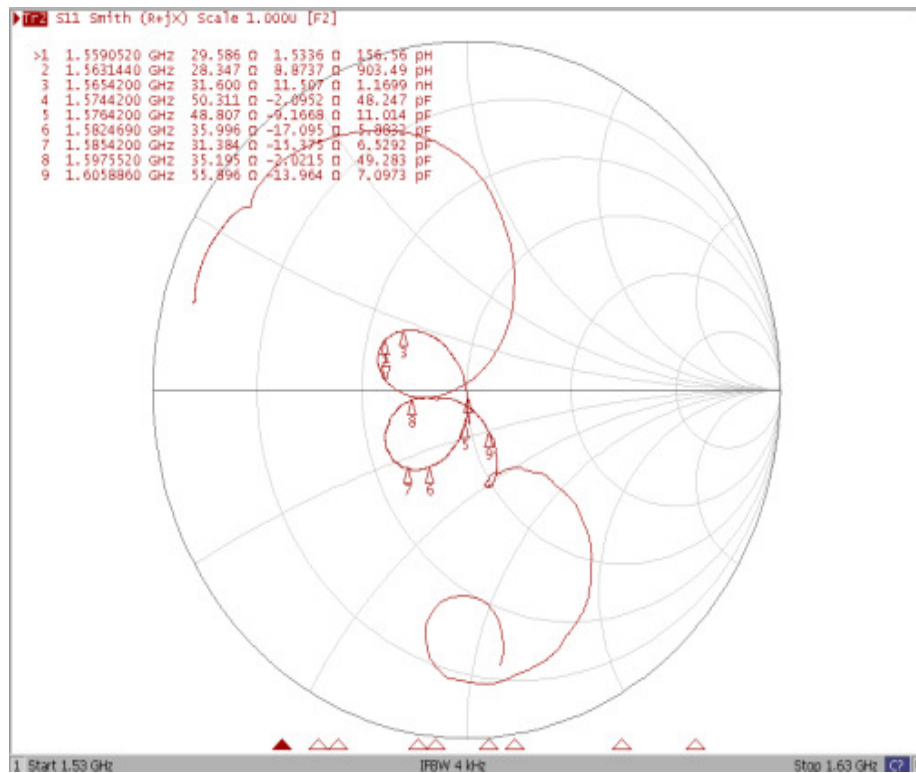
VSWR S11



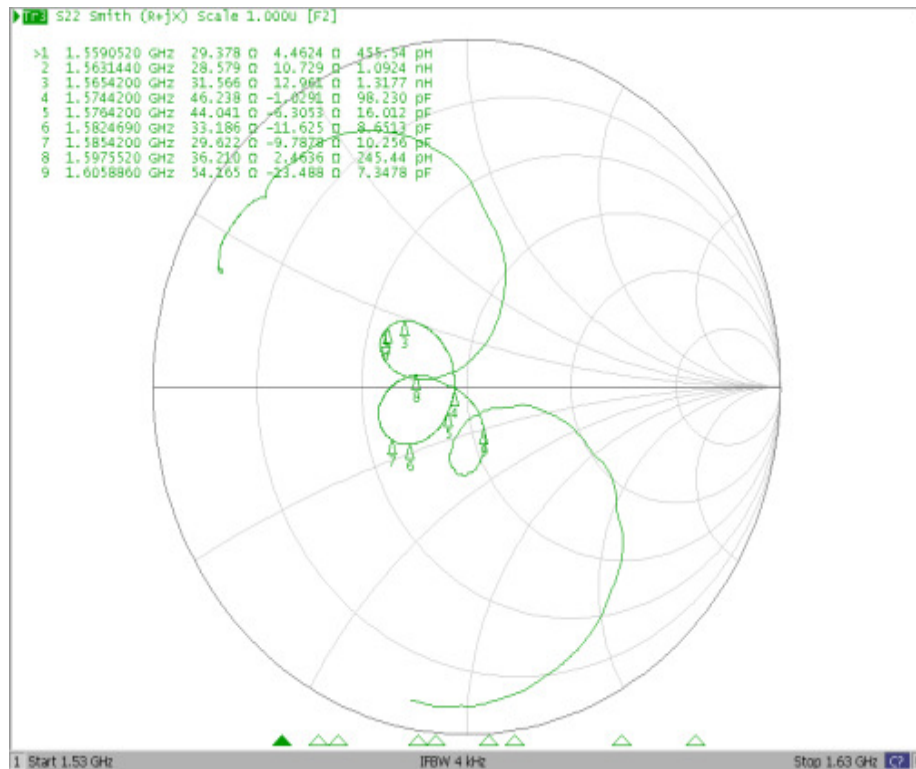
VSWR S22



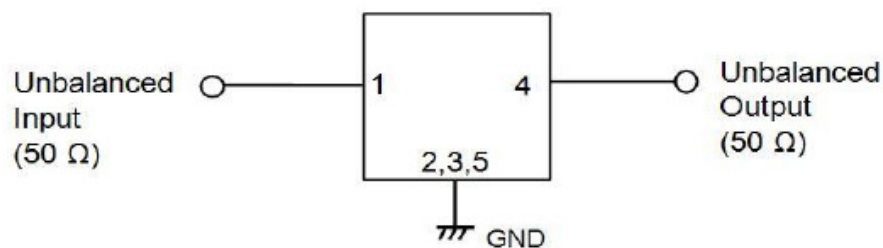
Smith Chart S11



Smith Chart S22

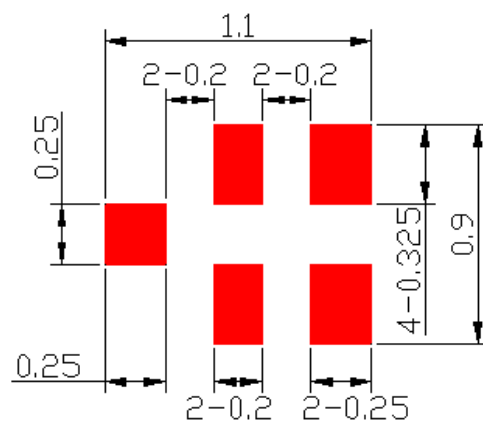


D. MEASUREMENT CIRCUIT:



1 to 5: Pin No.

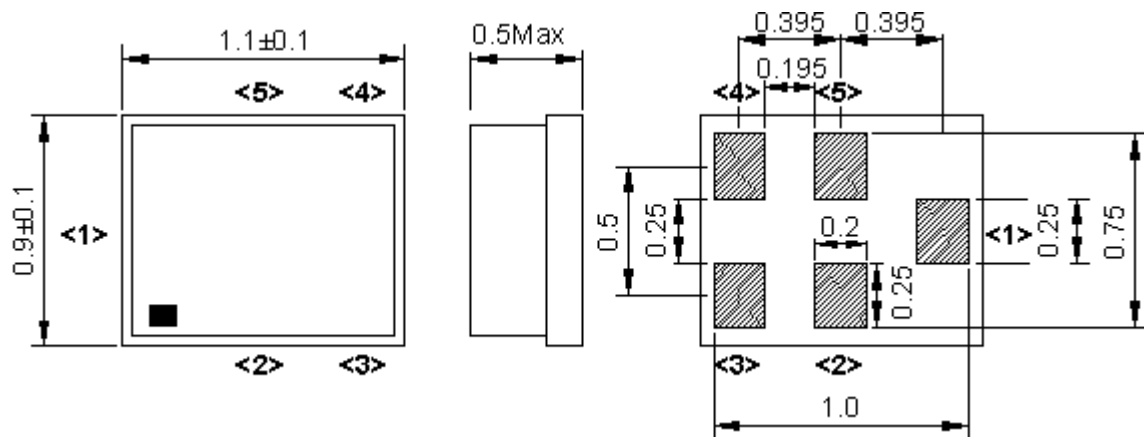
E. PCB Footprint:



: Land Pattern

Unit: mm

F. OUTLINE DRAWING:



Not Specified Tolerance : $\pm 0.1 \text{ mm}$
Unit : mm

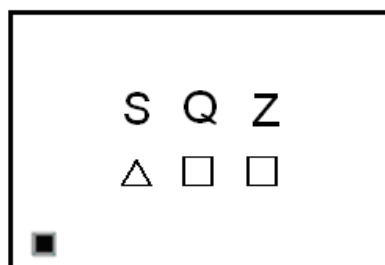
Pin Configuration

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

Top View (Sample Production):



Top View (Mass Production):



△ : Date Code

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

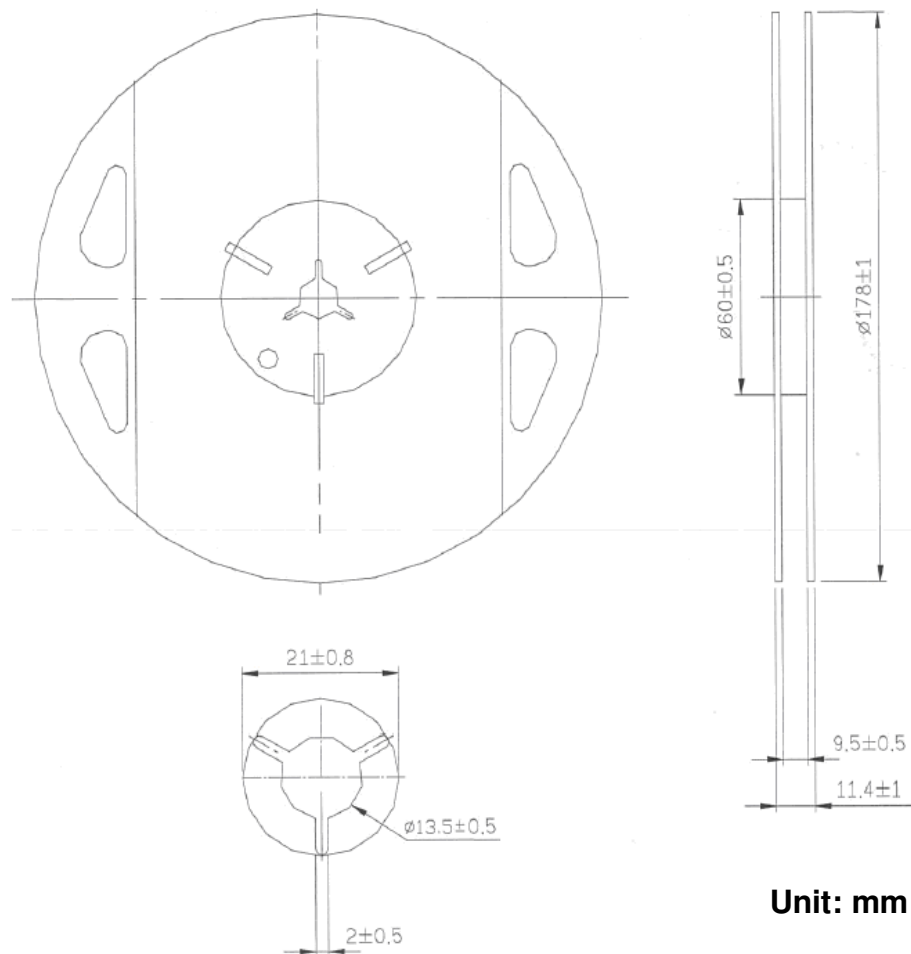
Date Code: Follow below table. (4-year cycle)

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

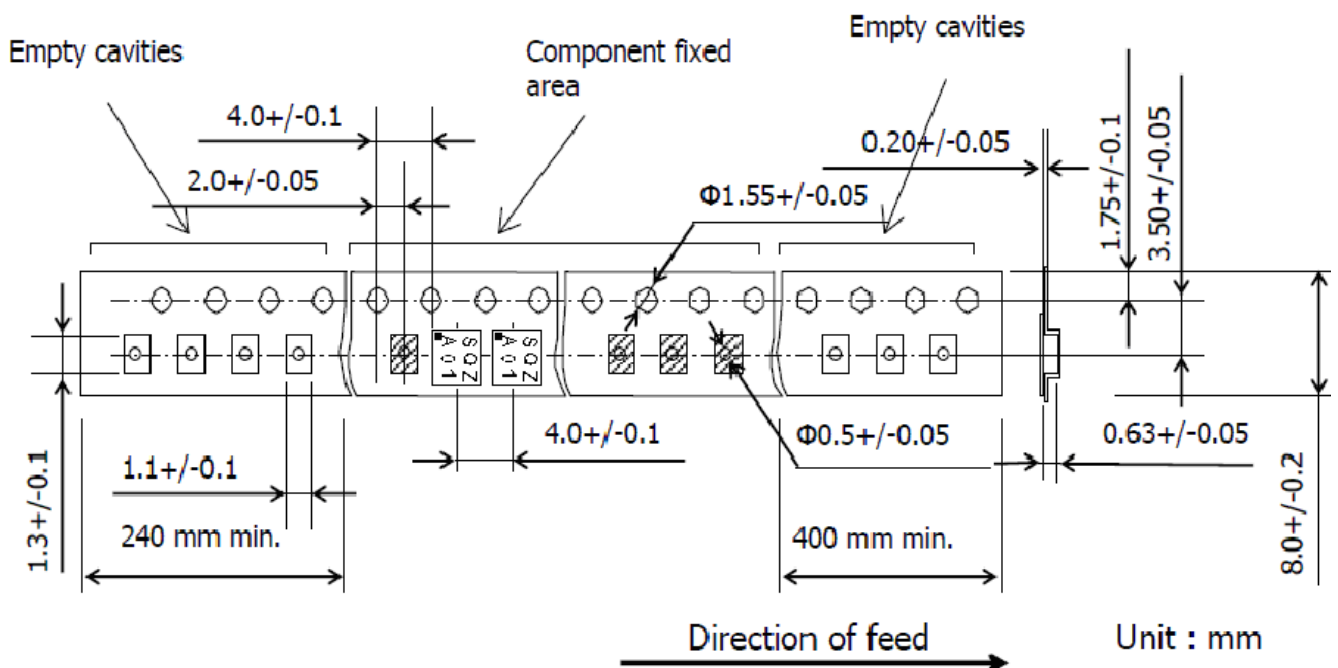
G. PACKING:

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

