



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 Name: SAW Rx Filter 881.5 MHz LTE Band 5 SMD 1.1x0.9 mm (BW=25 MHz)

TST Parts No.: TA1811AA

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2020/11/11

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



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

SAW Filter 881.5 MHz

MODEL NO.: TA1811AA

REV. No.: 1.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage: +/-5 V
3. Operating Temperature: -30 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD: 100 V(MM), 200 V(HBM)

RoHS Compliant

Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

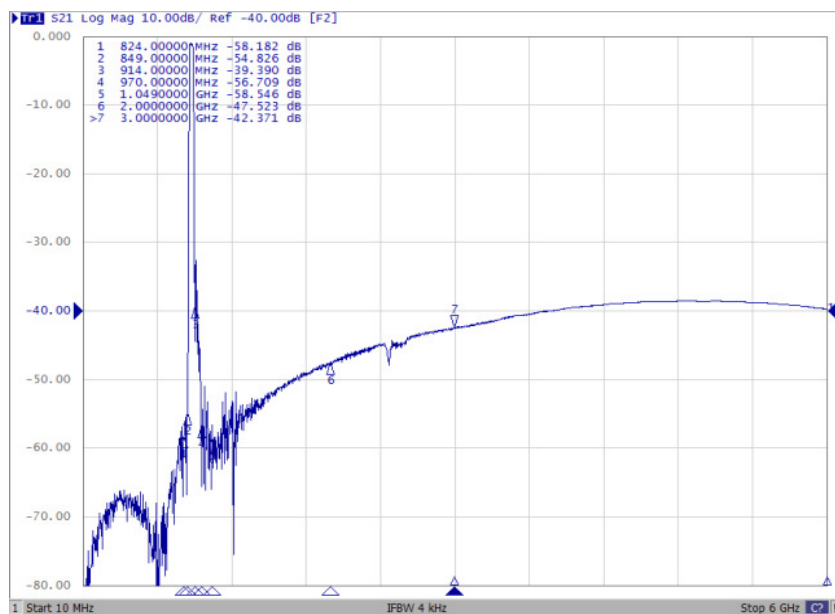
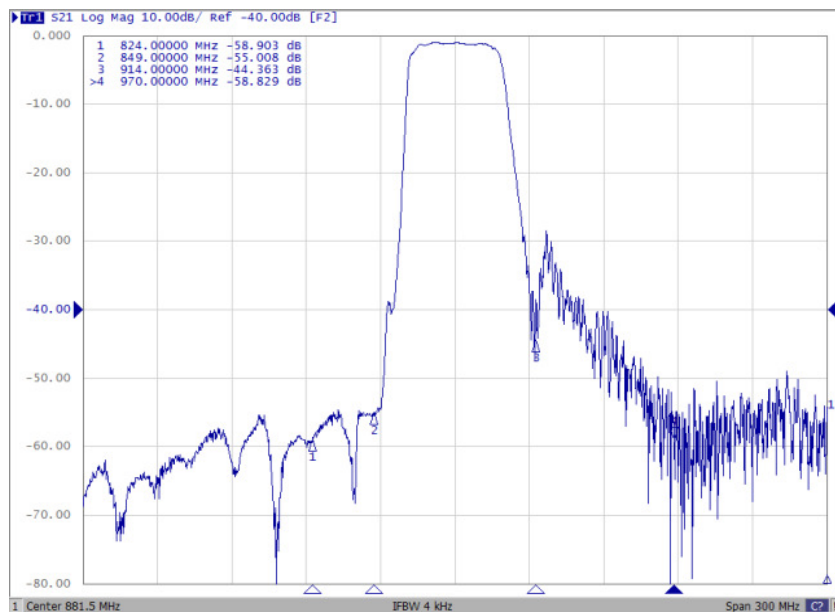
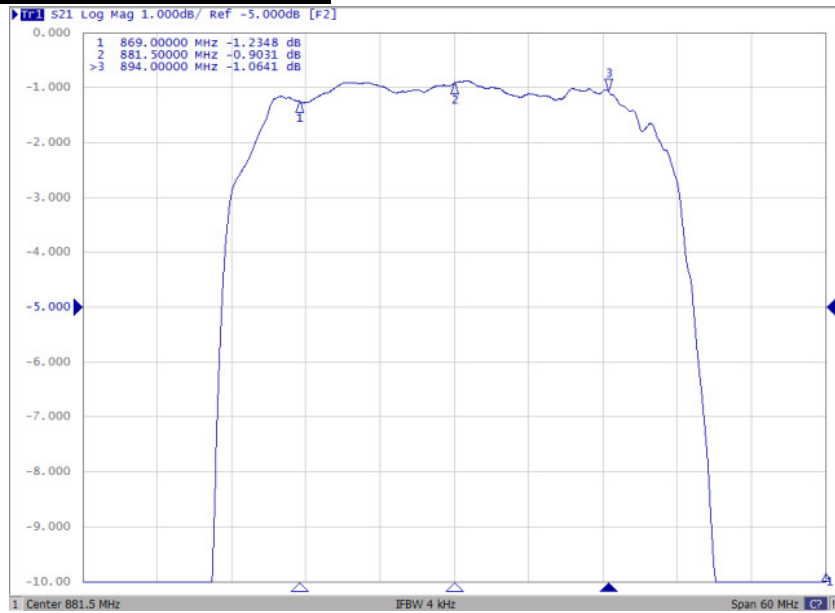
Terminating source impedance: $Z_s = 50 \Omega$ (Single-ended)

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

Item	Unit	Min.	Typ.	Max.
Center Frequency F_c	MHz	-	881.5	-
Insertion Loss (869~894 MHz) IL	dB(*1)	-	1.3	1.8
Amplitude Ripple (869~894 MHz)	dB	-	0.4	1.1
VSWR (869~894 MHz)	-	-	1.6	2.0
Attenuation (Reference level from 0 dB)				
10 ~ 824 MHz	dB	48	52	-
824 ~ 849 MHz	dB	46	51	-
849 ~ 854 MHz	dB	30	41	-
909 ~ 979 MHz	dB	20	28	-
1710 ~ 1910 MHz	dB	40	46	-
1920 ~ 2500 MHz	dB	35	43	-
2500 ~ 6000 MHz	dB	30	38	-

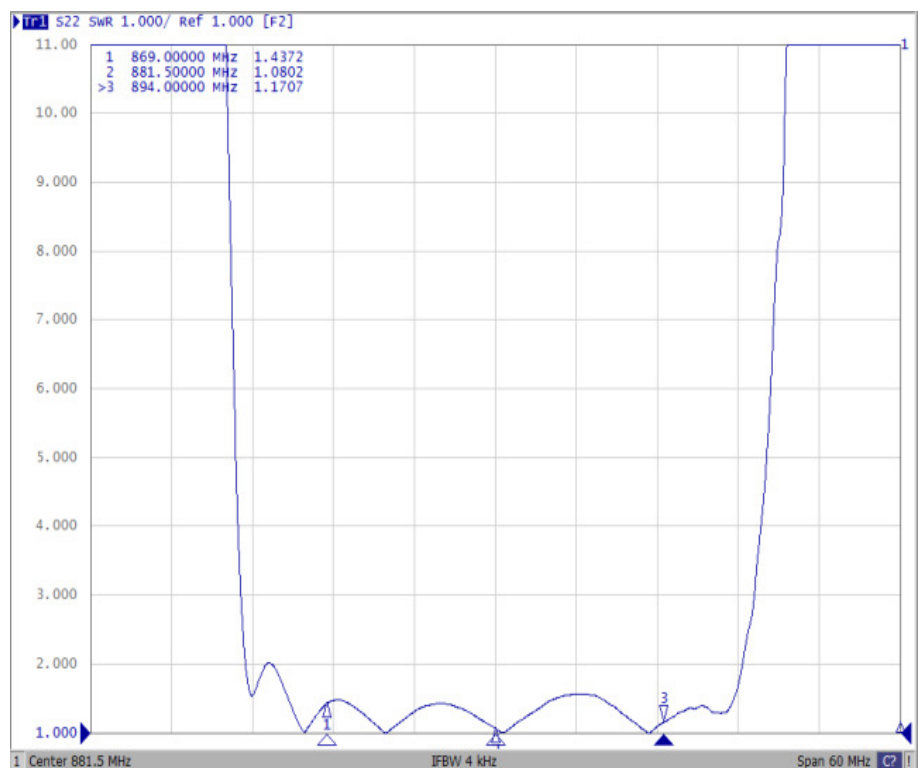
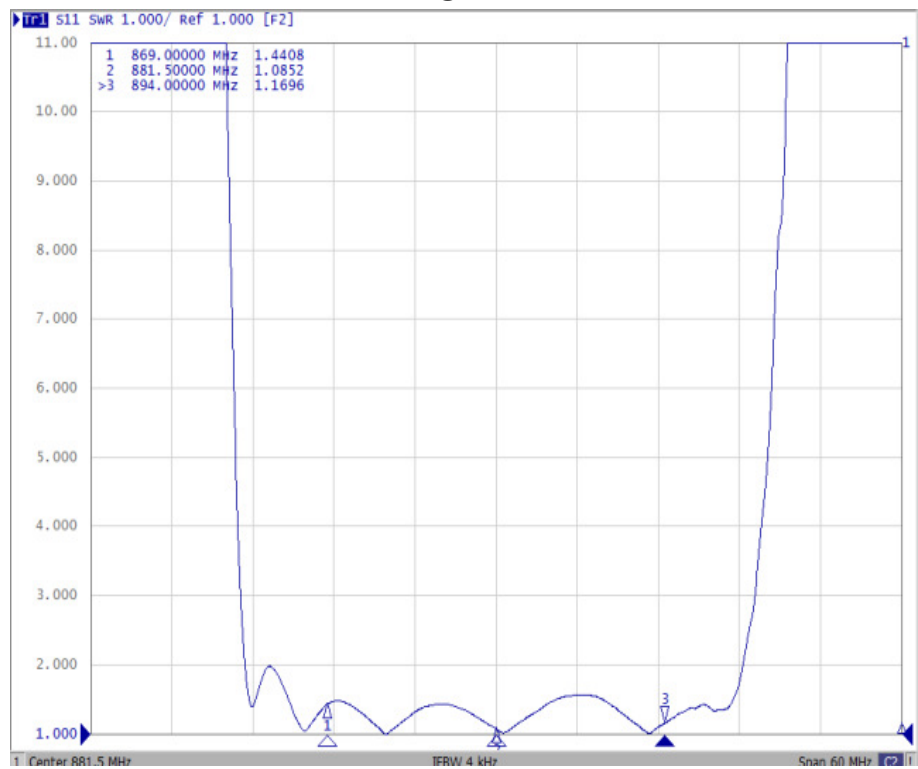
(*1) Specification of insertion loss excludes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:

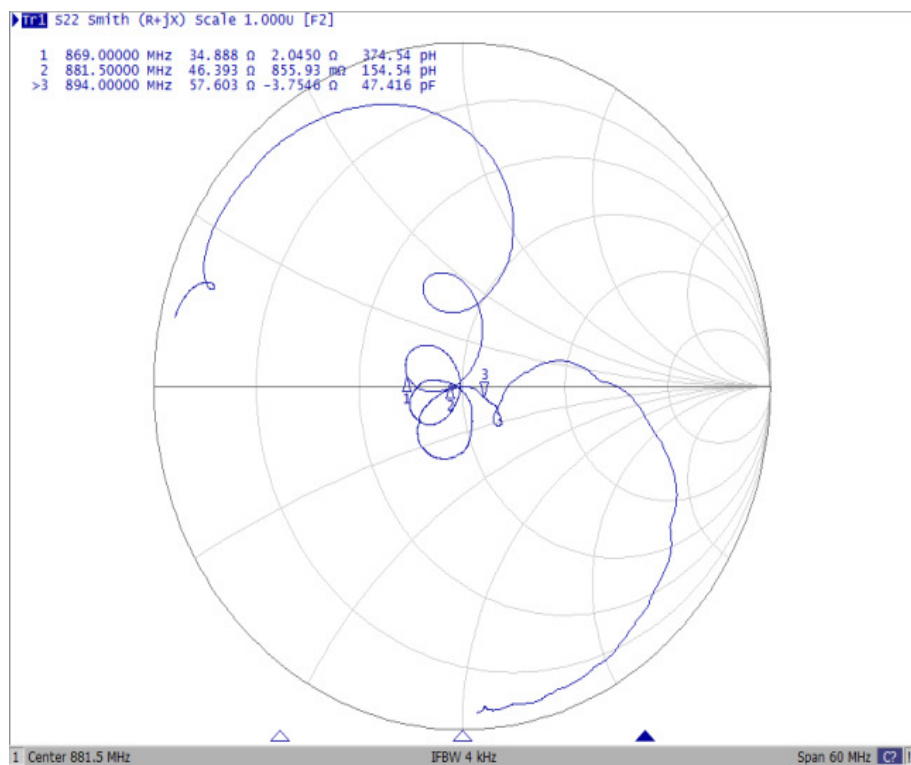
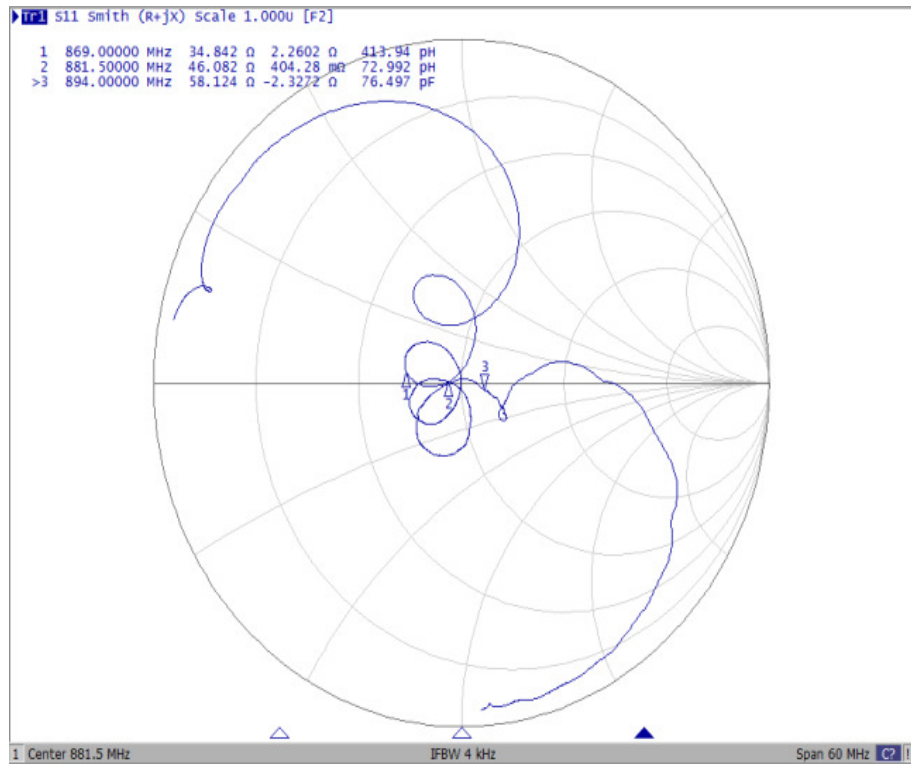


Reflection Functions:

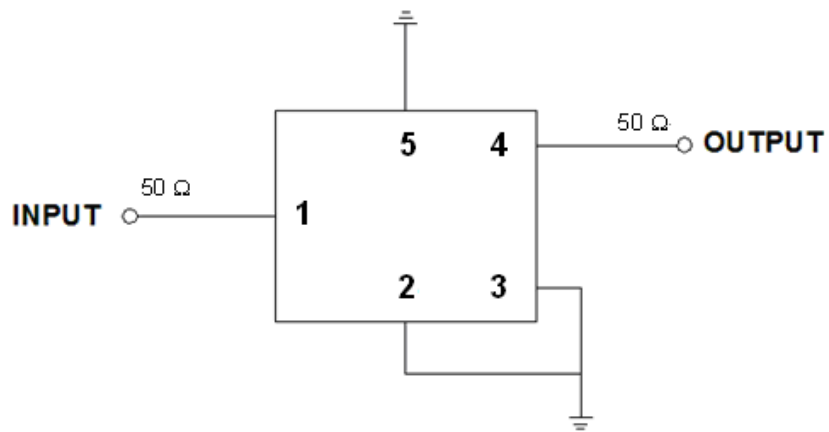
VSWR



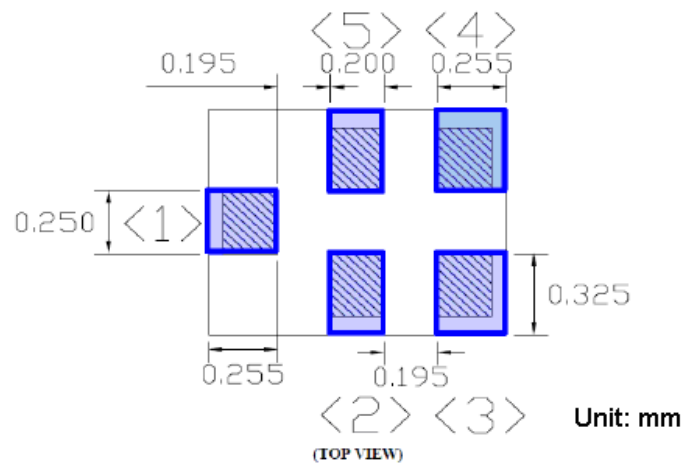
Smith Chart



D. MEASUREMENT CIRCUIT:

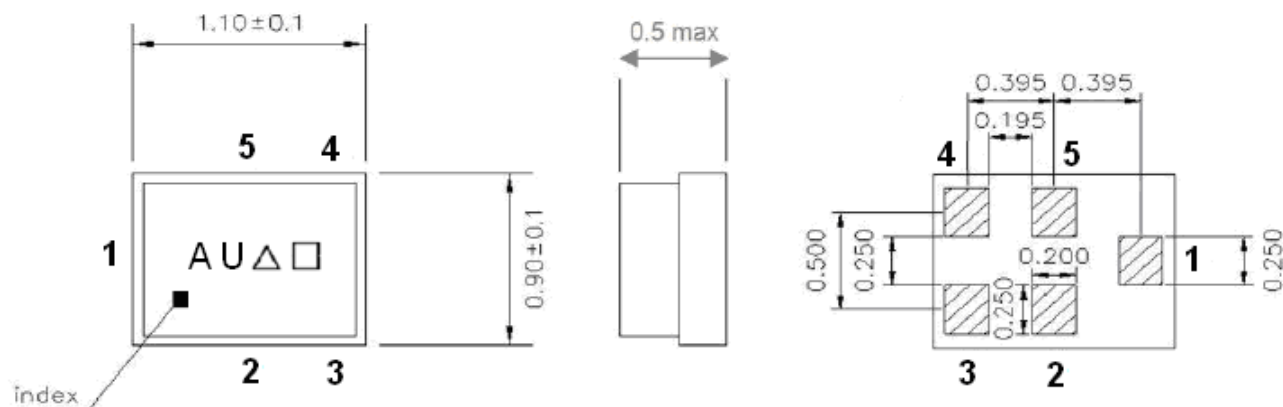


E. PCB FOOTPRINT:



F. OUTLINE DRAWING:

Device size: 1.1typ. x 0.9typ. x 0.5max.



All tolerances are +/-0.1 mm unless otherwise specified.

Unit: mm

Pin Configuration

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

△ : Date Code

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

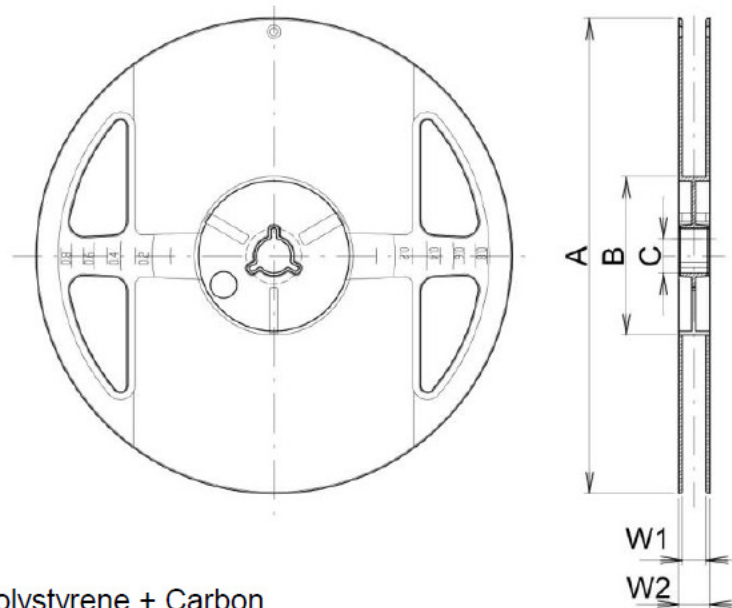
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2020	n	p	q	r	s	t	u	v	w	x	y	z
2021	A	B	C	Đ	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

G. PACKING: (Ref: WI-75M03)

1. REEL DIMENSION

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



Material : Polystyrene + Carbon

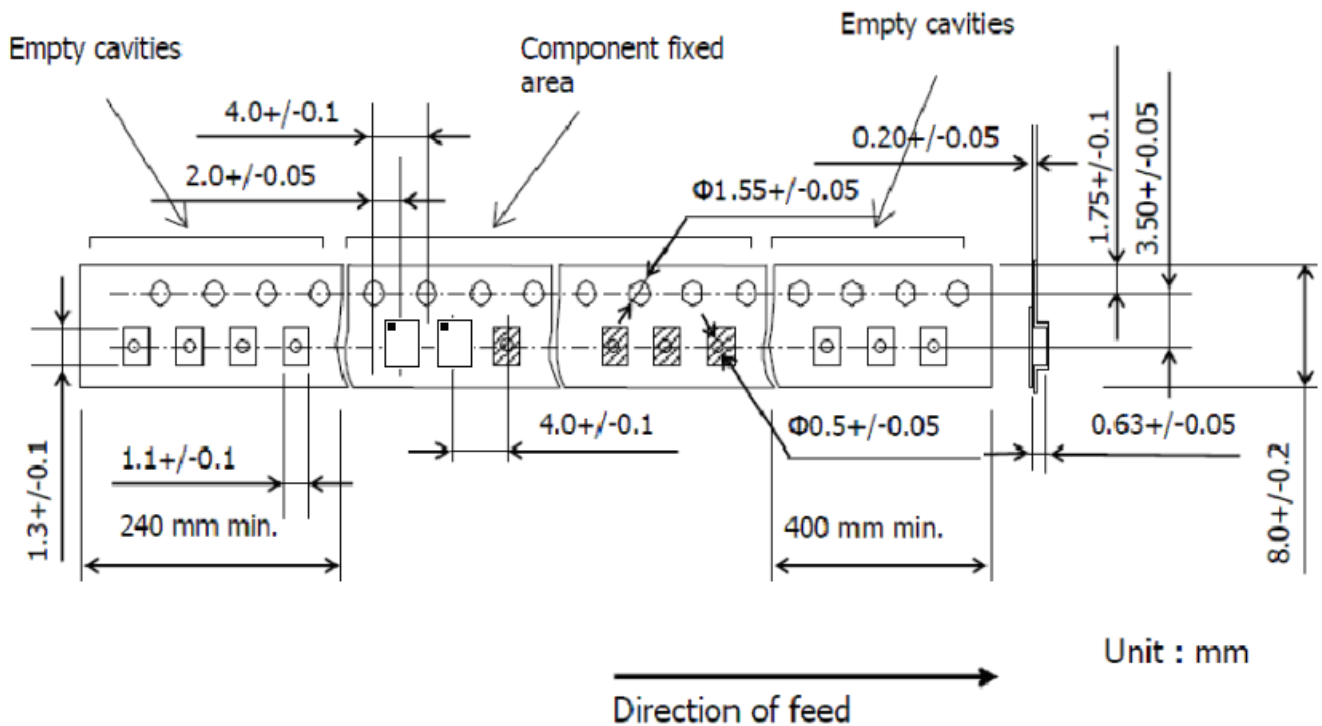
Color : Black

Surface resistance (reference value) : $10^9 \Omega/\text{sq max.}$

Unit : mm

A	B	C	W1	W2
180.0 $+0.0/-1.5$	60.0 $+1.0/-0.0$	13.0 ± 0.2	9.0 $+1.0/-0.0$	11.4 ± 1.0

2. TAPE DIMENSION



Unit : mm

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.

