



TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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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.: TA1811B (This part is compliant by AEC-Q200)

Customer Part No.: _____

Customer signature required

Company: _____

Division: _____

Approved by : _____

Date: _____

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2020/03/31

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 881.5 MHz

MODEL NO.: TA1811B

REV. No.: 2.0

A. MAXIMUM RATING:

1. Maximum Input Power: 10 dBm
2. DC voltage: 0 V
3. Operating Temperature: -40 °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)

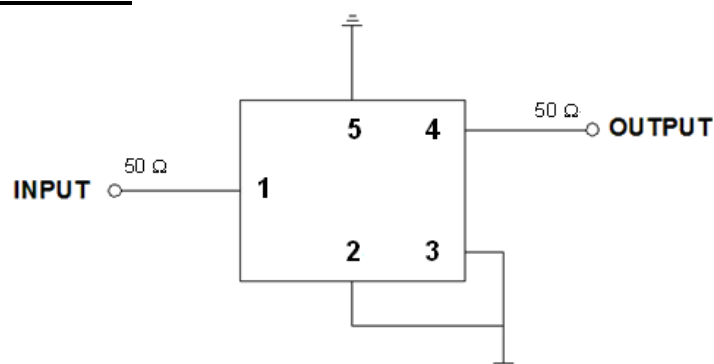
B. ELECTRICAL CHARACTERISTICS:

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

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

Parameters Description	Unit	Min.	Typ.	Max.
Center Frequency Fc	MHz	-	881.5	-
Insertion Loss (869~894 MHz) IL	dB	-	1.6	2.5
Amplitude Ripple (869~894 MHz)	dB _{p-p}	-	0.4	1.5
VSWR (869~894 MHz)	-	-	1.6	2.2
Attenuation (Reference level from 0 dB)				
DC ~ 824 MHz	dB	40	51	-
824 ~ 849 MHz	dB	38	46	-
914 ~ 970 MHz	dB	23	35	-
970 ~ 1049 MHz	dB	38	52	-
1049 ~ 2000 MHz	dB	33	43	-
2000 ~ 3000 MHz	dB	25	39	-
3000 ~ 6000 MHz	dB	20	36	-

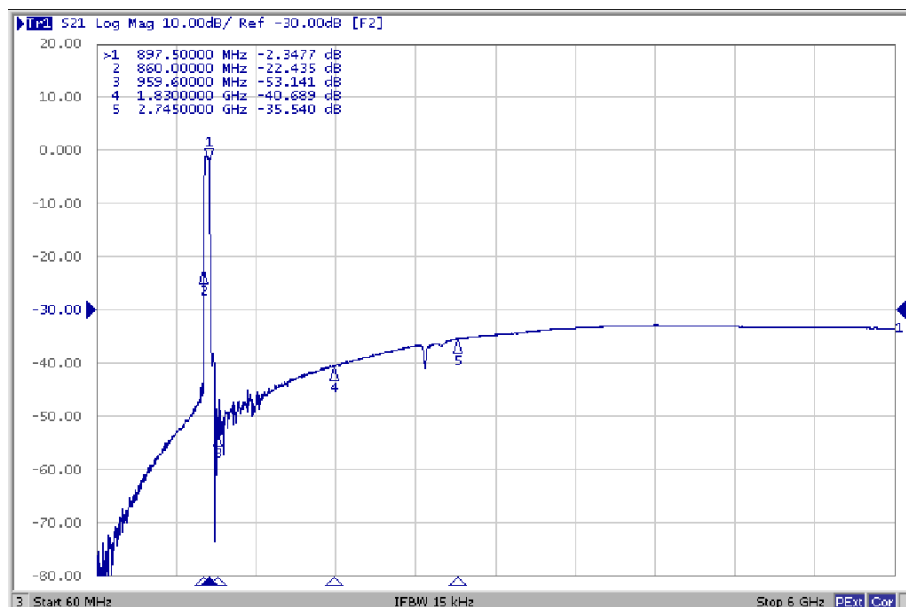
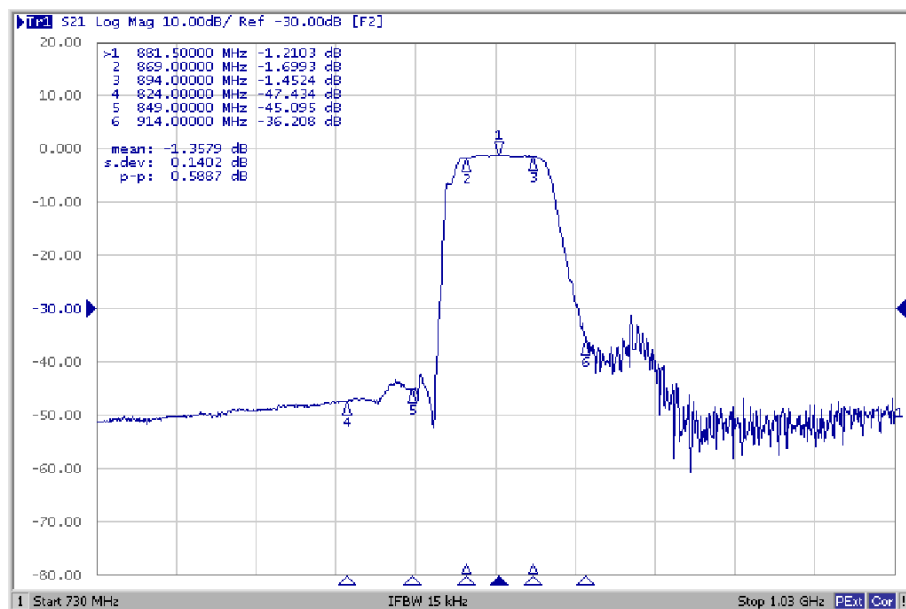
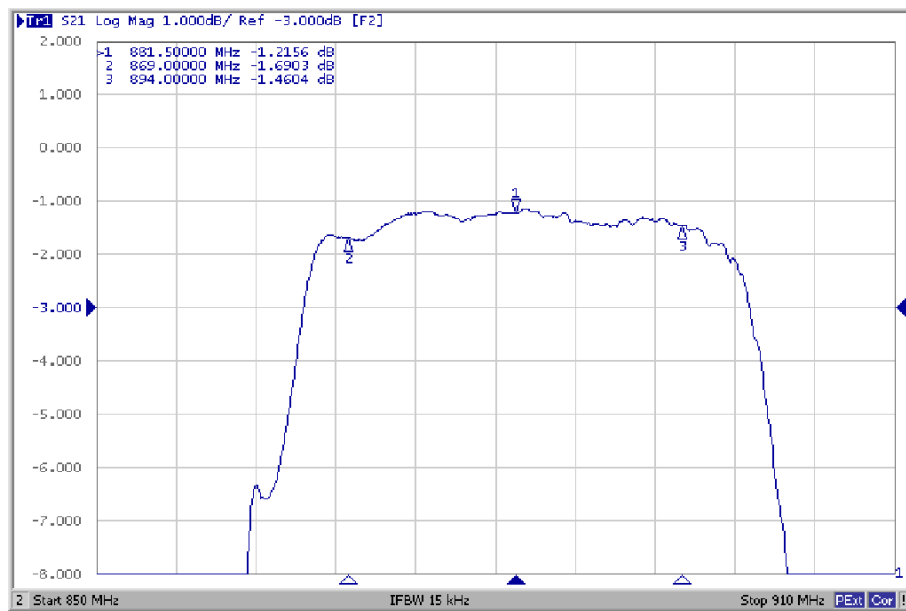
C. MEASUREMENT CIRCUIT:



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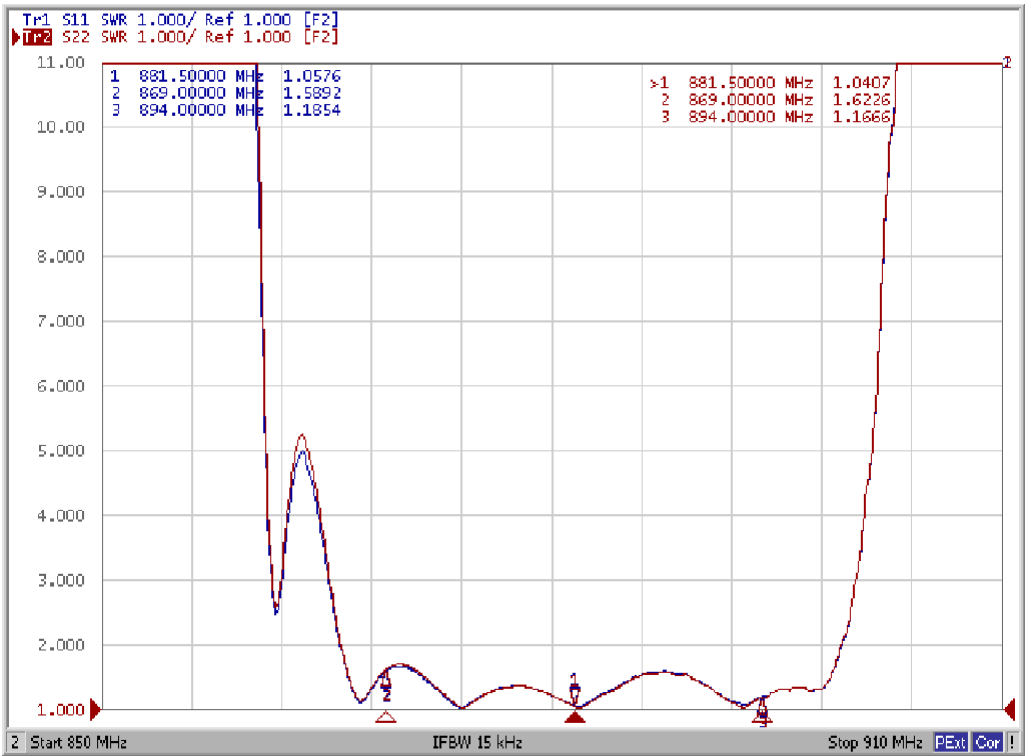
TST DCC
Release document

D. FREQUENCY CHARACTERISTIC:

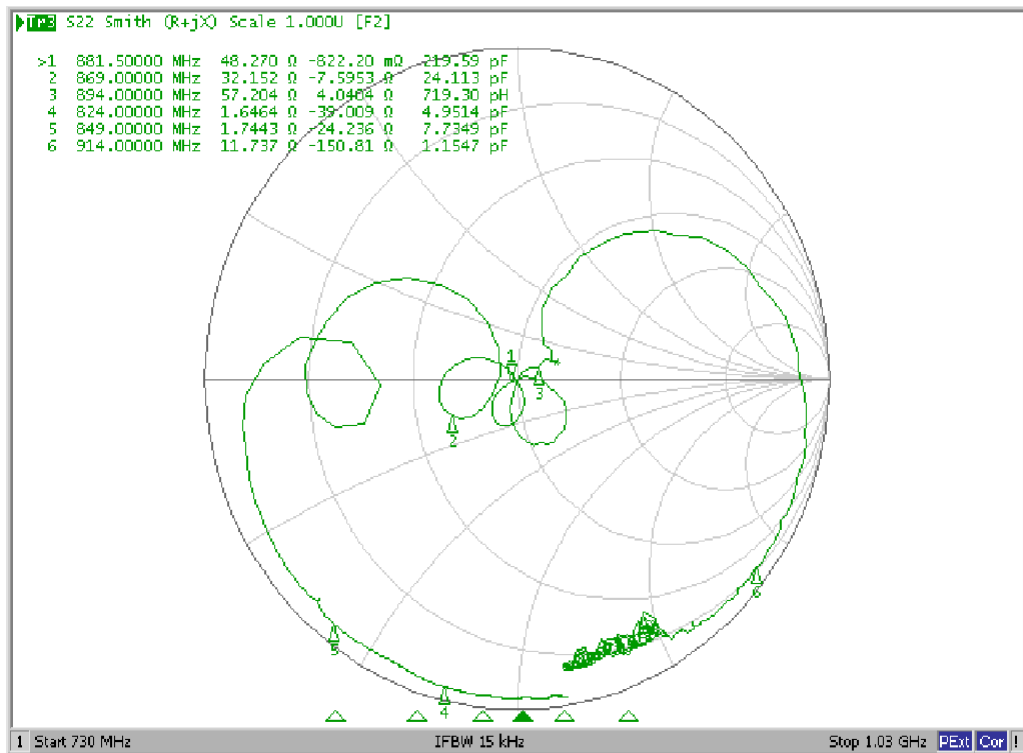
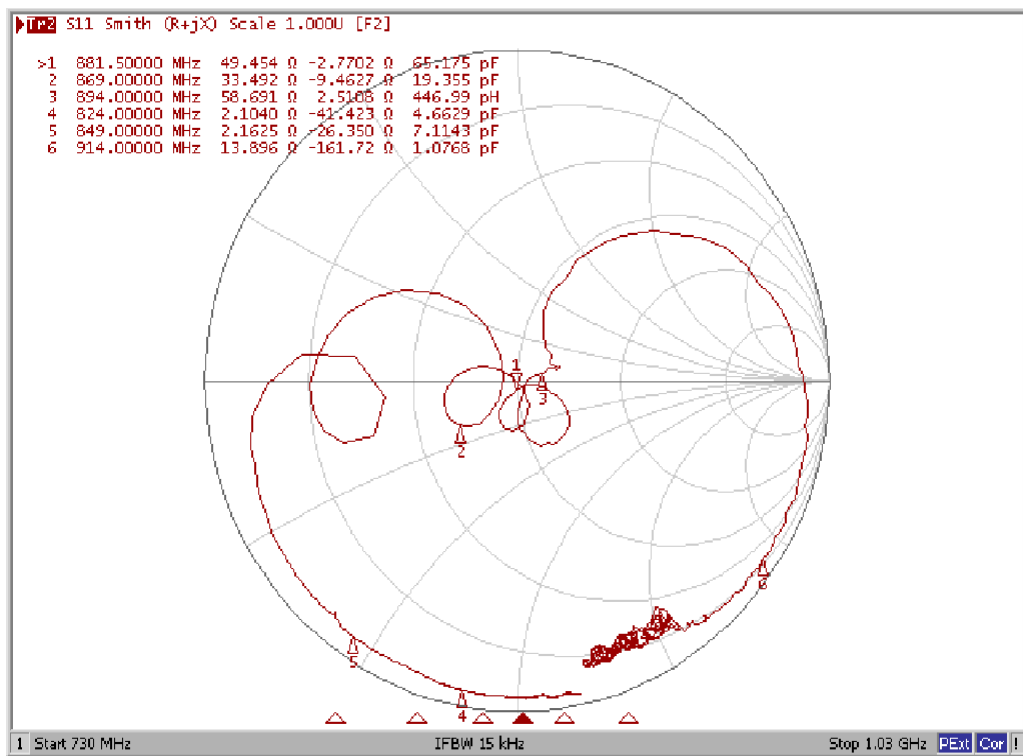


Reflection Functions:

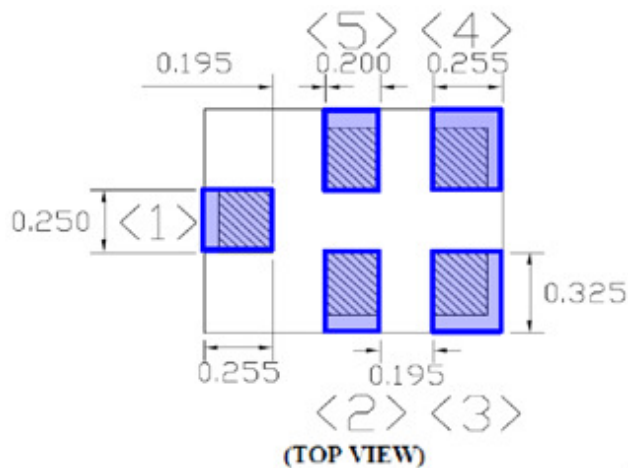
VSWR



Smith Chart

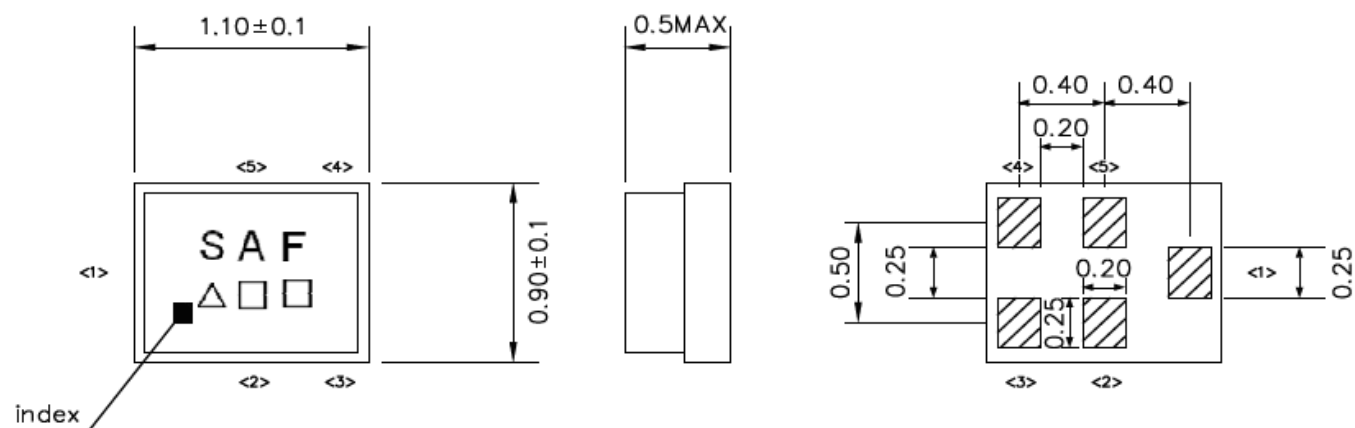


E. PCB Footprint:



F OUTLINE DRAWING (Mass Production):

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



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

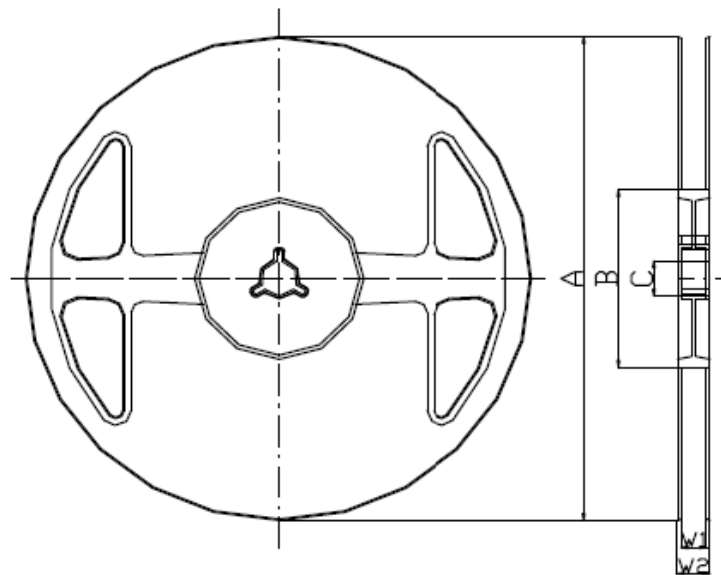
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

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



Materials of Reel

Material : Polystyrene + Carbon

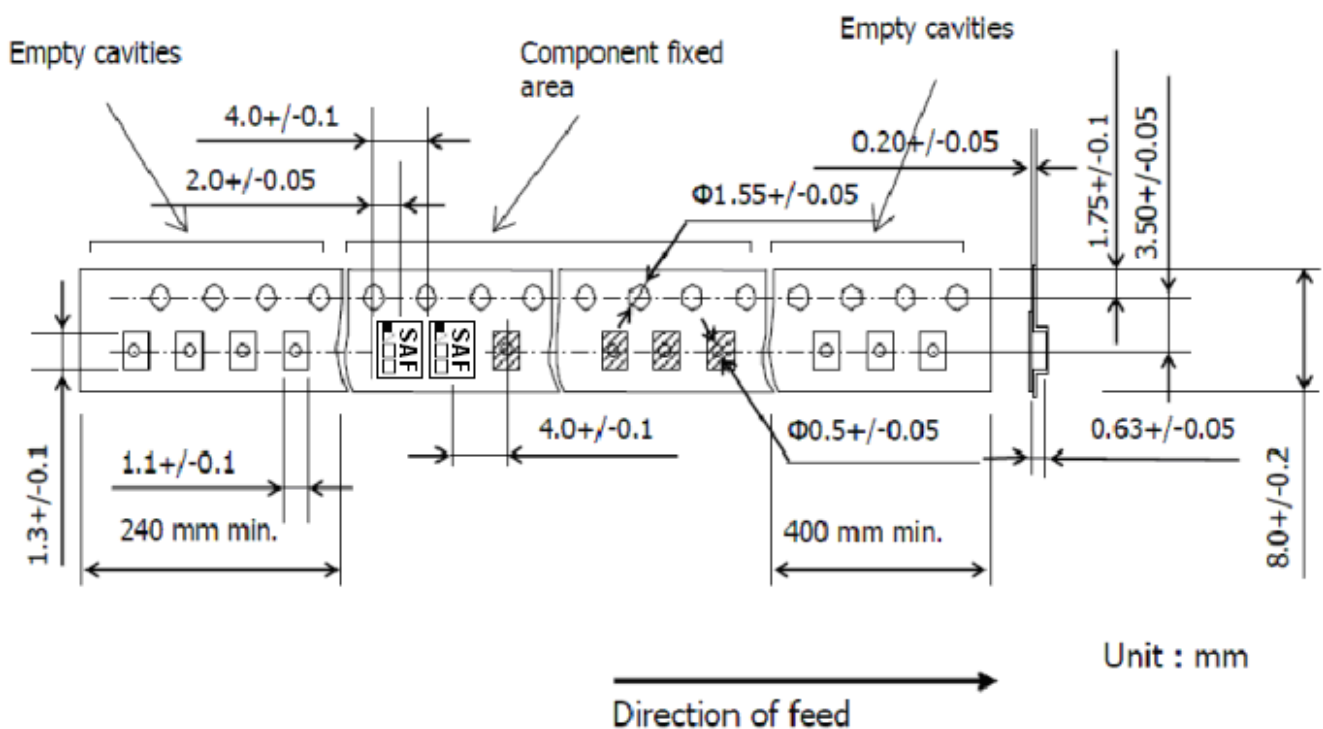
Color : Black

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

Unit : mm

A	B	C	W1	W2
$\phi 180.0 +0.0/-1.5$	$\phi 66.0 +/0.5$	$\phi 13.0 +/0.2$	$9.0 +1.0/-0.0$	$11.4 +/1.0$

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.

