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 Filter 2441.75 MHz SMD 1.4x1.1 mm (BW=83.5 MHz)

TST Parts No.: TA1834C (This part is compliant by AEC-Q200)

Customer Part No.:_____

Customer signature required

Company:_____

Division:_____

Approved by :_____

Date:_____

Checked by:_____ Hayley Chou _____

Approved by:_____ Andy Yu _____

Date:_____ 2018/12/13 _____

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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SAW Filter 2441.75 MHz

MODEL NO.:TA1834C REV. NO.:1.0

RoHS Compliant
Lead free
Lead-free soldering

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

A. MAXIMUM RATING:

1. Input Power Level: 23 dBm (in pass band)
2. DC Voltage : ±5V
3. Operating Temperature: -40℃ to +105℃
4. Storage Temperature: -40℃ to +105℃
5. Moisture Sensitive Level: Level 1 (MSL1)
6. ESD: 50 V(MM), 100 V(HBM)

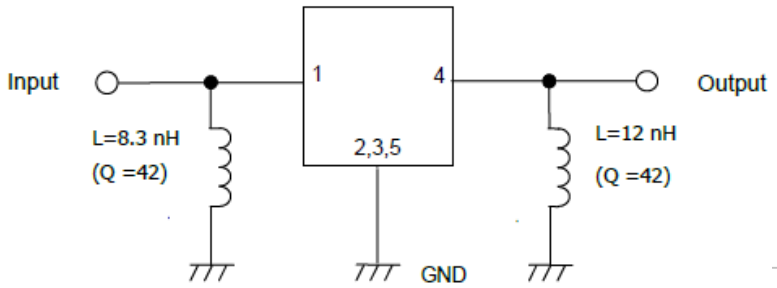
B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance: Zs = 50//8.3nH Ω

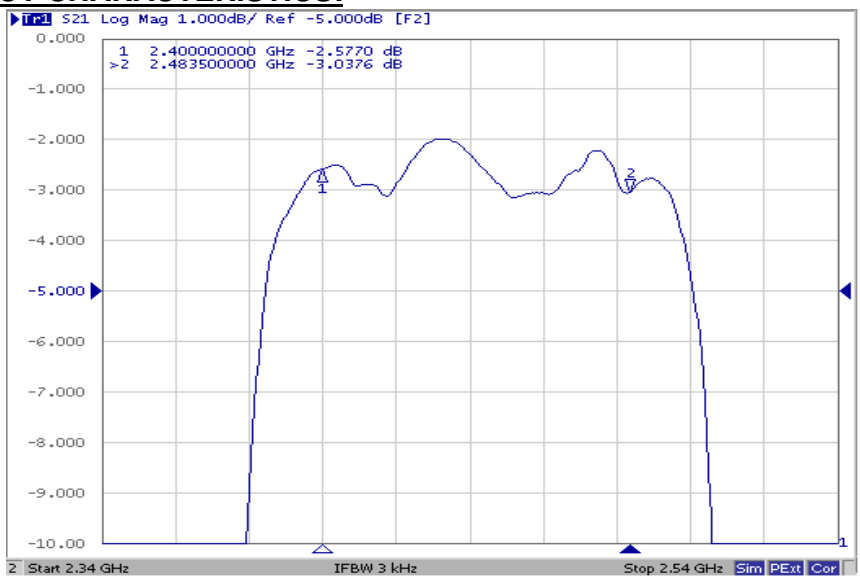
Terminating load impedance: Z_L = 50//12nH Ω

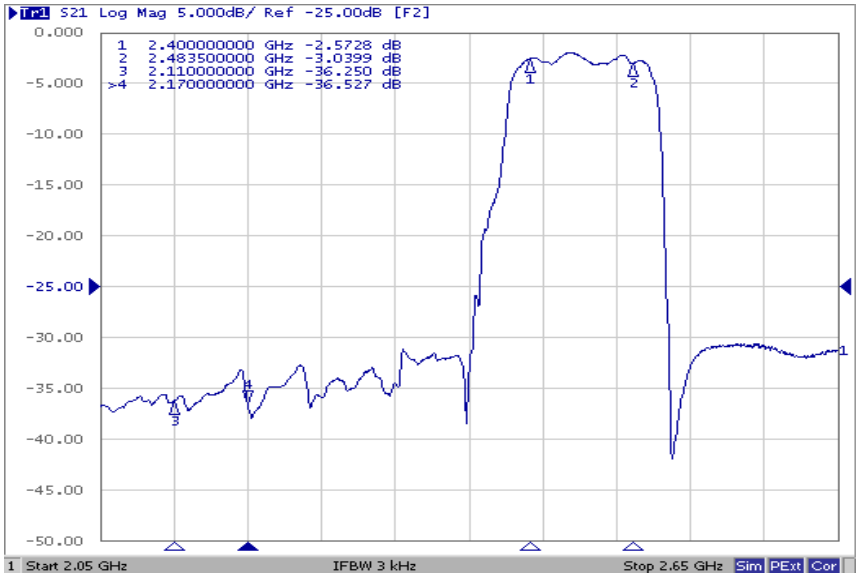
Item	Unit	Min.	Typ.	Max.
Center Frequency **Fc**	MHz	-	2441.75	-
Insertion Loss (2400~2483.5 MHz) **IL**	dB	-	3.0	3.9
Amplitude Ripple (2400~2483.5 MHz)	dB	-	1.2	2.3
VSWR within (2400~2483.5 MHz)	-	-	2.1	2.5
Attenuation (Reference level from 0 dB)				
DC ~ 1000 MHz	dB	40	49	-
1000 ~ 1570 MHz	dB	37	47	-
1570 ~ 1700 MHz	dB	35	44	-
1700 ~ 1880 MHz	dB	34	40	-
1880 ~ 1990 MHz	dB	33	37	-
1990 ~ 2170 MHz	dB	31	33	-
2700 ~ 4800 MHz	dB	19	24	-
4800 ~ 5000 MHz	dB	18	24	-

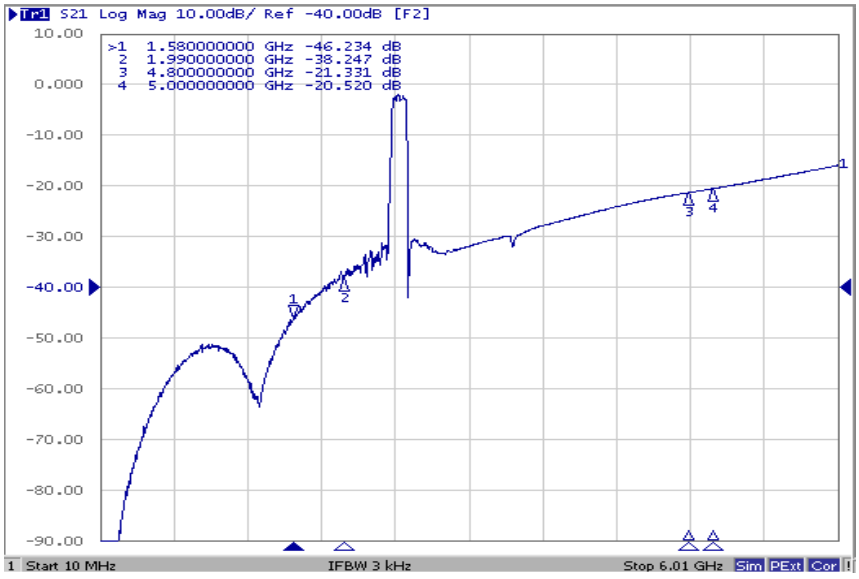
C. MEASUREMENT CIRCUIT:



D. FREQUENCY CHARACTERISTICS:

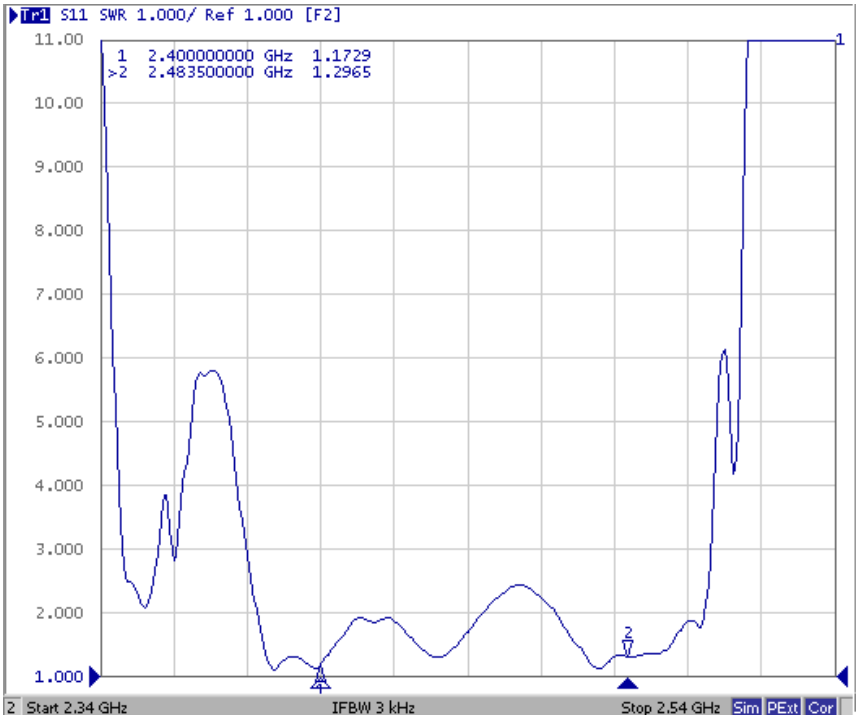


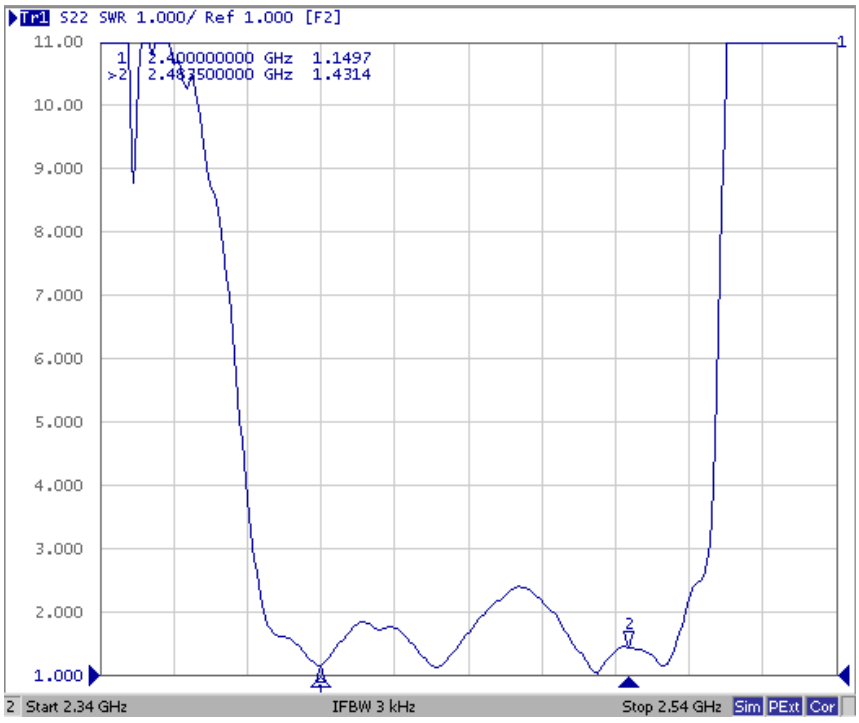




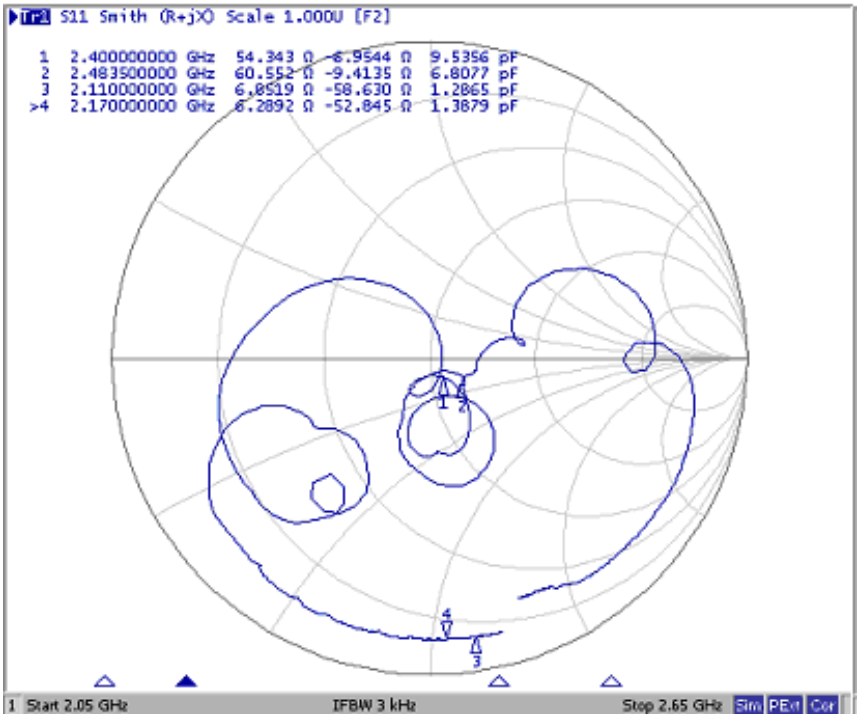
Reflection Functions:

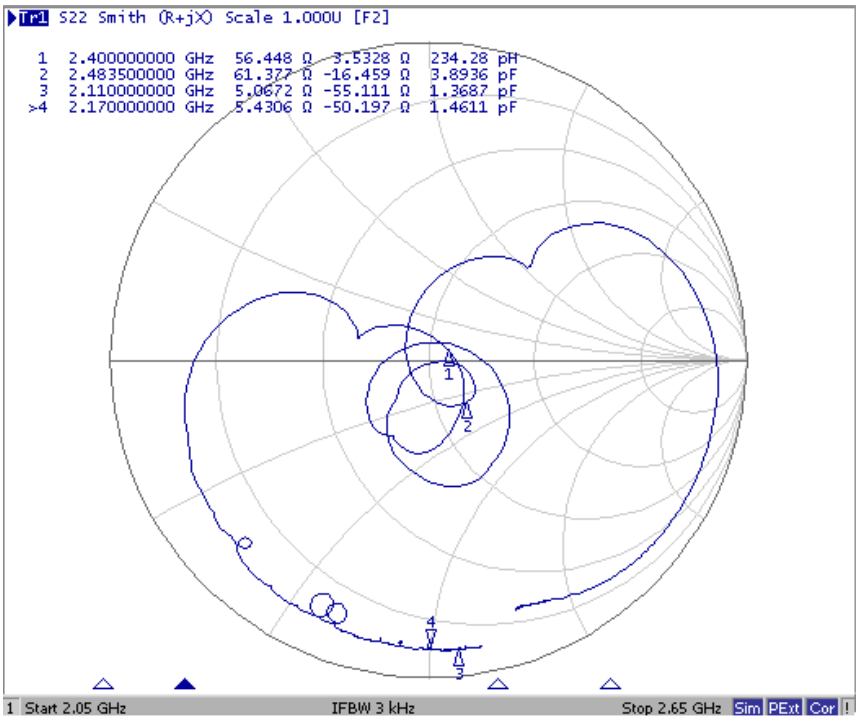
VSWR



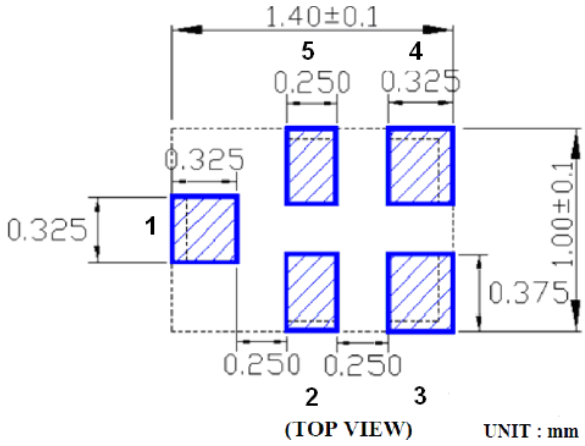


Smith Chart

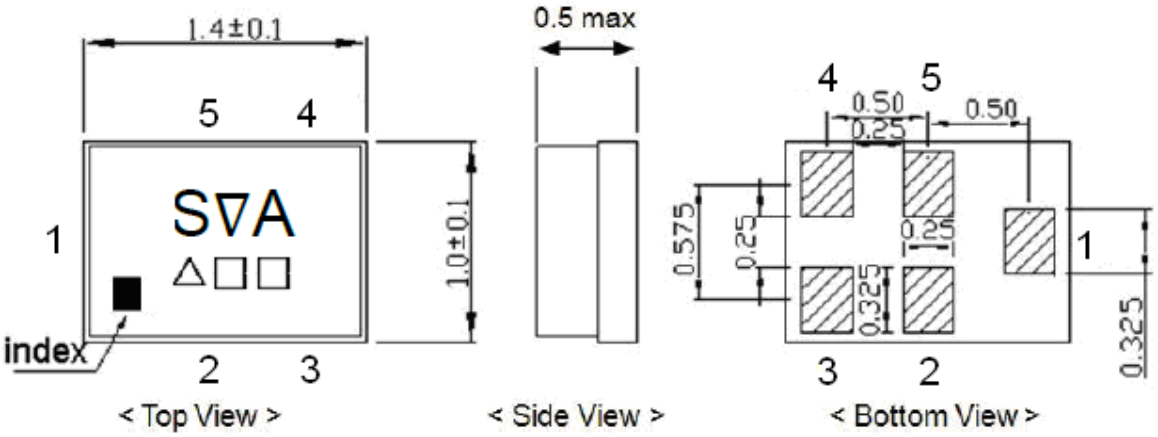

Tr1 S11 Smith (R+jX) Scale 1.000U [F2]
1 2.400000000 GHz 54.343 Ω -6.9544 Ω 9.5356 pF
2 2.483500000 GHz 60.552 Ω -9.4135 Ω 6.8077 pF
3 2.110000000 GHz 6.8519 Ω -58.630 Ω 1.2865 pF
>4 2.170000000 GHz 8.2892 Ω -52.845 Ω 1.3879 pF
1 Start 2.05 GHz
IFBW 3 kHz
Stop 2.65 GHz
Sim PExt Cor


Tr1 S22 Smith (R+jX) Scale 1.000U [F2]
1 2.400000000 GHz 56.448 Ω 3.5328 Ω 234.28 pH
2 2.483500000 GHz 61.377 Ω -16.459 Ω 3.8936 pF
3 2.110000000 GHz 5.0672 Ω -55.111 Ω 1.3687 pF
>4 2.170000000 GHz 5.4306 Ω -50.197 Ω 1.4611 pF
1 Start 2.05 GHz
IFBW 3 kHz
Stop 2.65 GHz
Sim PExt Cor

E. PCB Footprint:



F. OUTLINE DRAWING (Mass Production):



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)

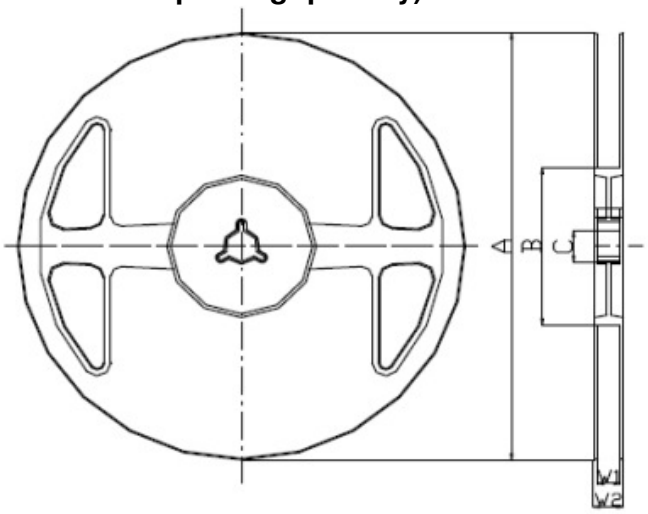
Date Code:

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
2017	A	B	C	D	E	F	G	H	J	K	L	M
2018	N	P	Q	R	S	T	U	V	W	X	Y	Z
2019	a	b	c	d	e	f	g	h	j	k	l	m
2020	n	p	q	r	s	t	u	v	w	x	y	z

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

1. REEL DIMENSION

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



Materials of Reel

Material : Polystyrene + Carbon

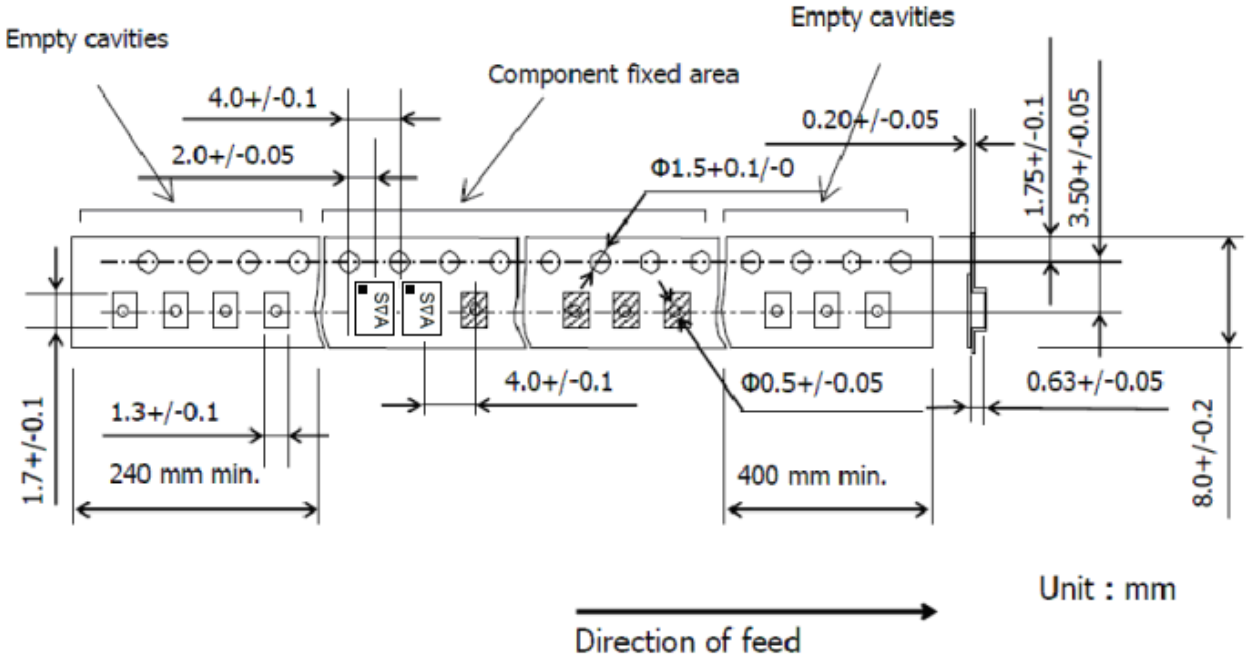
Color : Black

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

Unit : mm

Code	Quantity	A	B	C	W1	W2
Z	3,000 pcs	ϕ 180.0 +0.0/-1.5	ϕ 66.0 +/-0.5	ϕ 13.0 +/-0.2	9.0 +1.0/-0.0	11.4 +/-1.0

2. TAPE DIMENSION



H. <u>Recommended Reflow Profile:</u>

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.

