

Общество с ограниченной ответственностью
«Научно-производственное предприятие «Техно-ПАРК»
(ООО «НПП «Техно-ПАРК»)

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Технические характеристики фильтра на ПАВ ТА1847В

Производитель: TAI-SAW TECHNOLOGY CO., LTD

Поставщик: ООО «НПП «Техно-ПАРК» - авторизованный дистрибьютор компании
TAI-SAW TECHNOLOGY CO., LTD

Научно-производственное предприятие ООО «НПП «Техно-ПАРК» разрабатывает и поставляет полосно-пропускающие радиочастотные фильтры на поверхностных акустических волнах (ПАВ) и устройства на их основе. «НПП «Техно-ПАРК» имеет собственную научную и производственную базу, а также является авторизованным дистрибьютором мирового лидера по производству фильтров на ПАВ компании TAI-SAW TECHNOLOGY CO., LTD

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TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,
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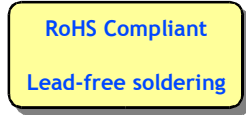
SAW Filter 2655 MHz

MODEL NO.: TA1847B

REV. NO.:1.0

A. MAXIMUM RATING:

1. Operating temperature range: -40 °C to +85 °C
2. Storage temperature range: -55 °C to +125 °C
3. Maximum Input Power: +10 dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 3 (MSL 3)
6. ESD 50V(MM) 100V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

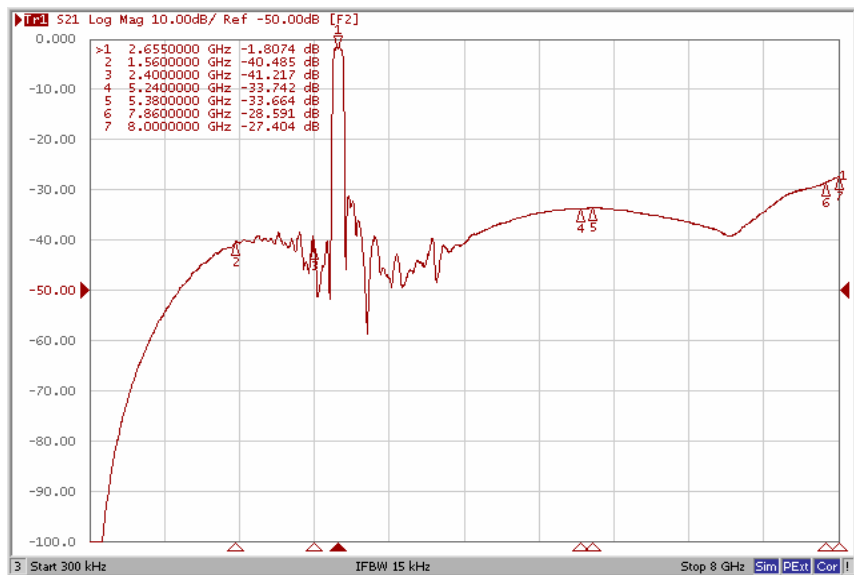
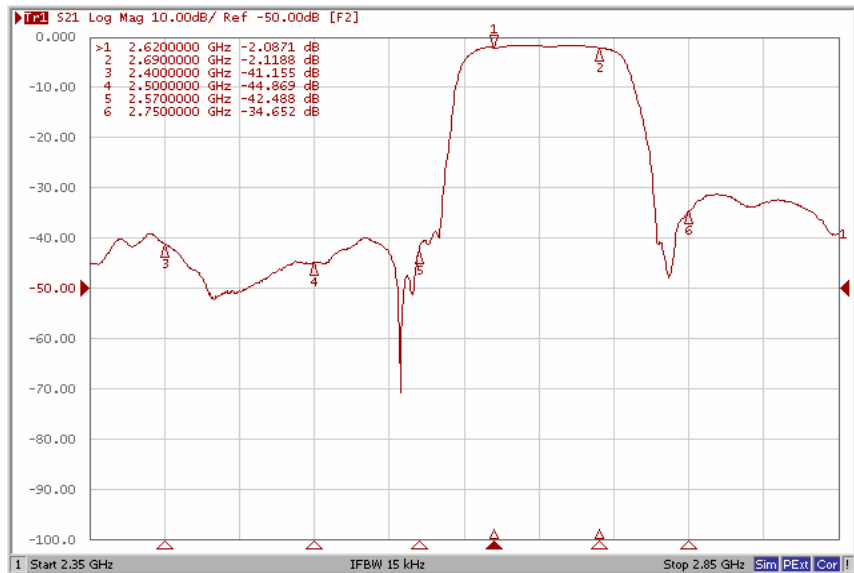
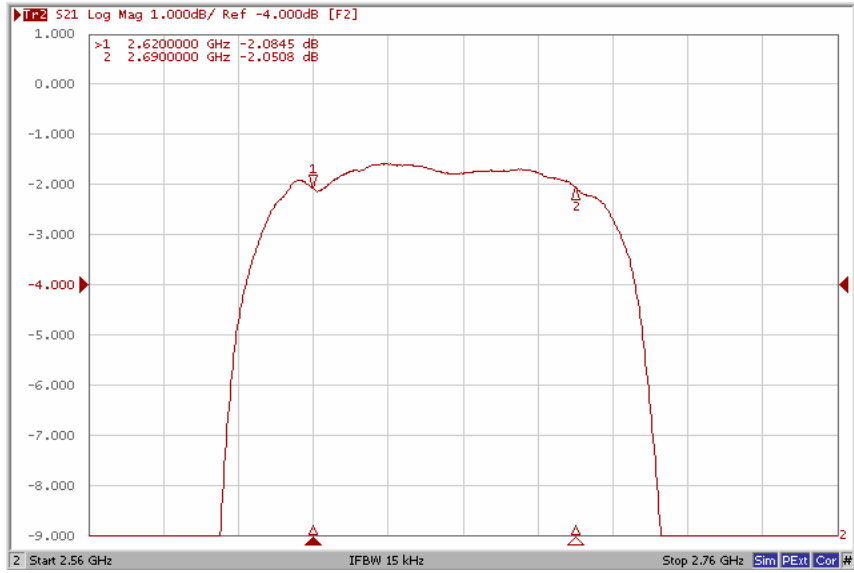
Terminating source impedance: $Z_s = 50//5.1\text{nH } \Omega$ (Single-ended)

Terminating load impedance: $Z_L = 50//5.1\text{nH } \Omega$ (Single-ended)

| Parameters Description | | Unit | Min. | Typ. | Max. | |
|---|------------------------|------|------|------|------|-----|
| Center Frequency | | Fc | MHz | - | 2655 | - |
| Insertion Loss(*1) (2620~2690 MHz) | | IL | dB | - | 2.5 | 3.0 |
| Amplitude Ripple (2620~2690 MHz) | | | dB | - | 0.8 | 1.5 |
| VSWR | Input (2620~2690 MHz) | | - | - | 1.6 | 2.0 |
| | Output (2620~2690 MHz) | | - | - | 1.8 | 2.2 |
| Attenuation (Reference level from 0 dB) | | | | | | |
| 1~2400 MHz | | | dB | 30 | 36 | - |
| 45 MHz | | | dB | 50 | 65 | - |
| 2400~2500 MHz | | | dB | 32 | 37 | - |
| 2500~2570 MHz | | | dB | 35 | 38 | - |
| 2570~2600 MHz | | | dB | 2 | 4 | - |
| 2775~6000 MHz | | | dB | 15 | 30 | - |
| 7620~7830 MHz | | | dB | 15 | 25 | - |
| 7860~8000 MHz | | | dB | 15 | 24 | - |

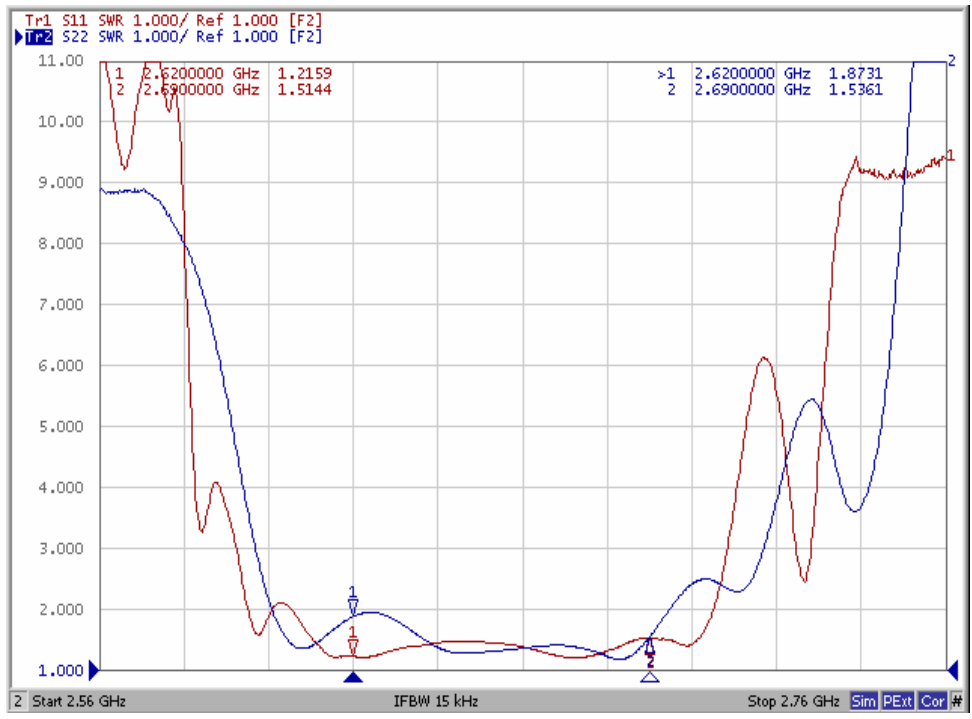
(*1) Specification of insertion loss includes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:

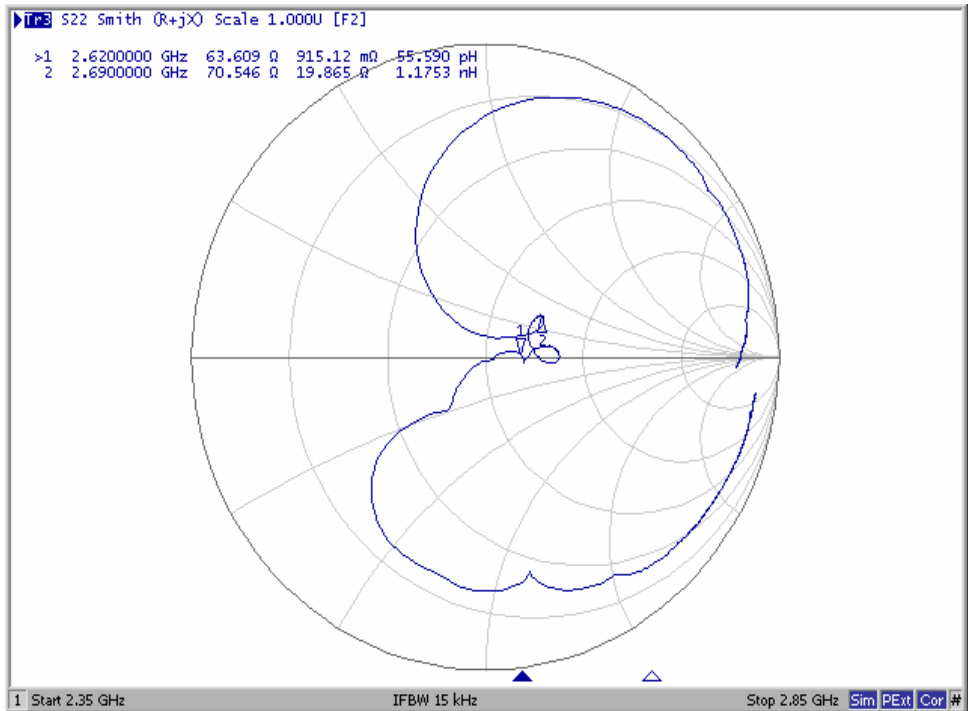
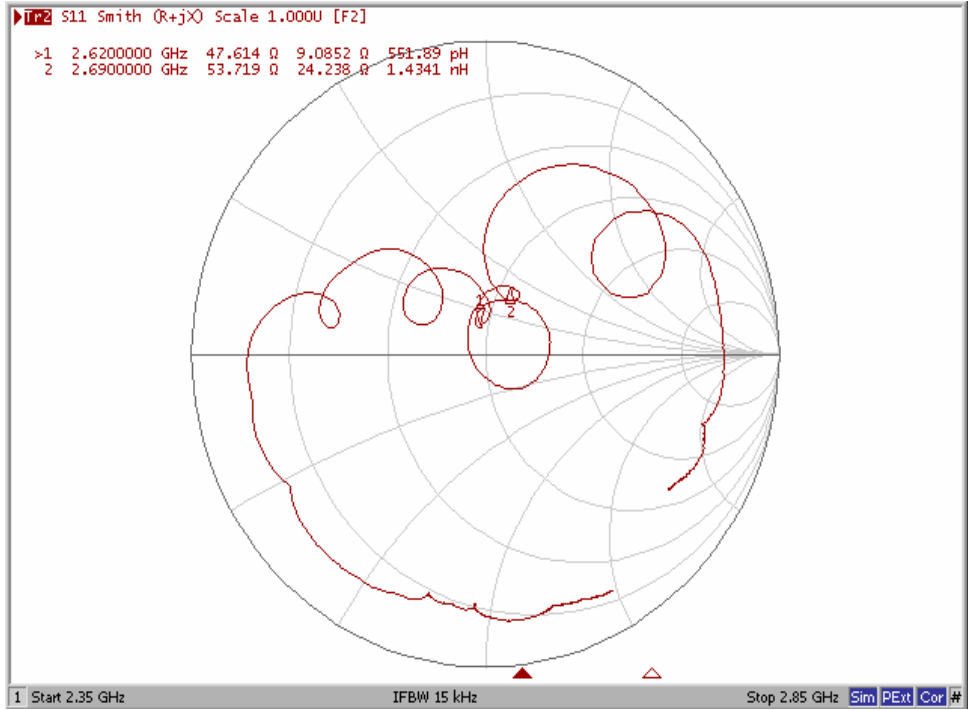


Reflection Functions:

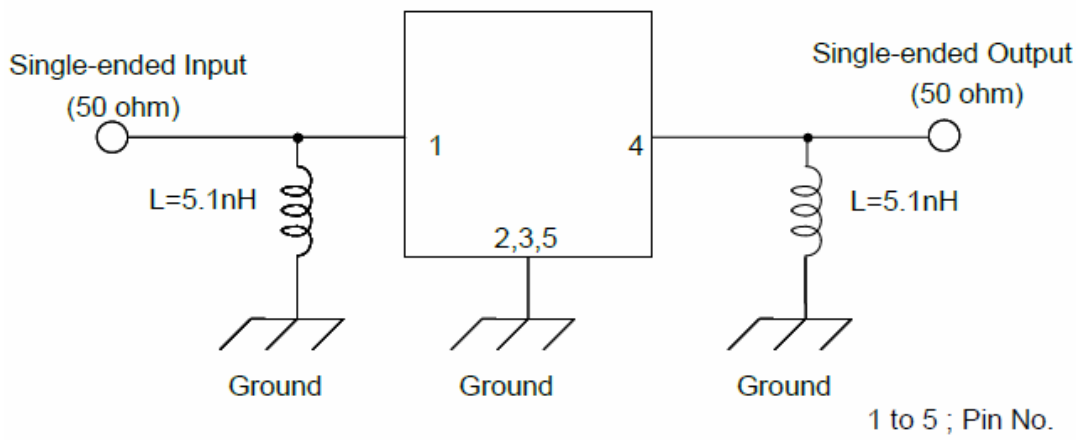
VSWR



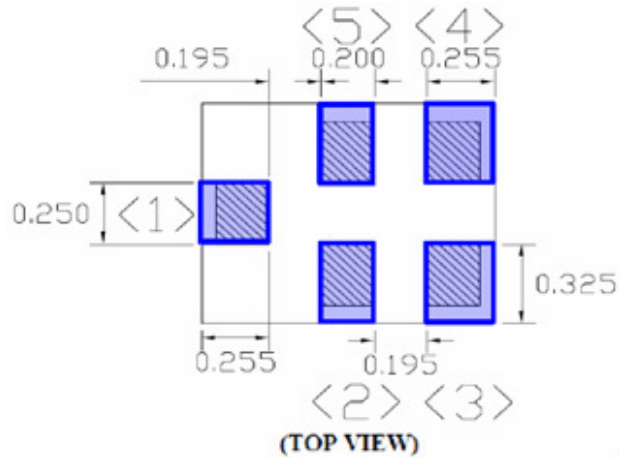
Smith Chart



D. MEASUREMENT CIRCUIT:

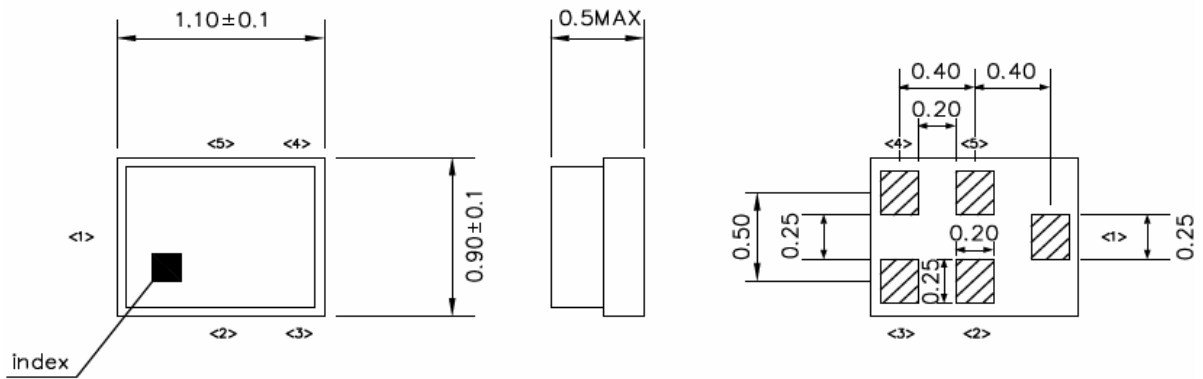


E. PCB Footprint:



F OUTLINE DRAWING:

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

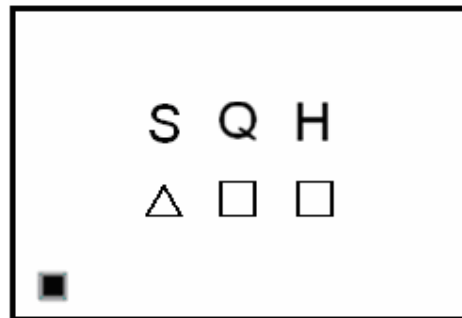


Unit : mm

Pin Configuration

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

Top View (Mass Production):



△ : Date Code

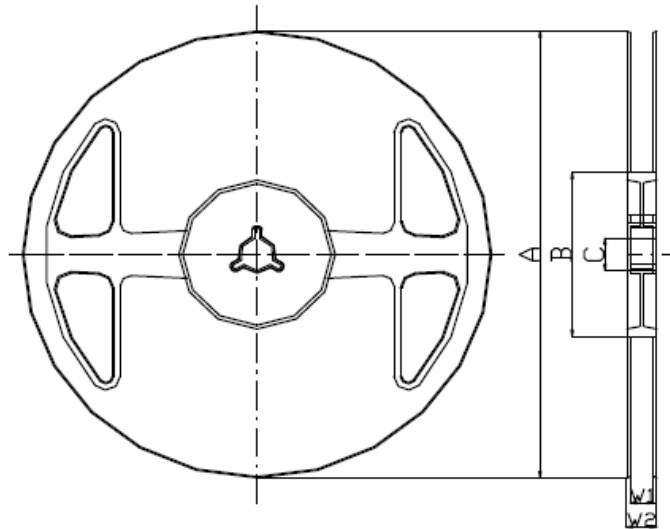
□ : Lot No. (Indicated by 0~9 or A to Z and a to z, except I, O, i, o and l)

Date Code:

| Year | Jan. | Feb. | Mar. | Apr. | May | Jun. | Jul. | Aug. | Sep. | Oct. | Nov. | Dec. |
|------|------|------|------|------|-----|------|------|------|------|------|------|------|
| 2017 | A | B | C | Đ | E | F | G | H | J | K | L | M |
| 2018 | N | P | Q | R | S | T | U | ∇ | 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



Materials of Reel

Material : Polystyrene + Carbon

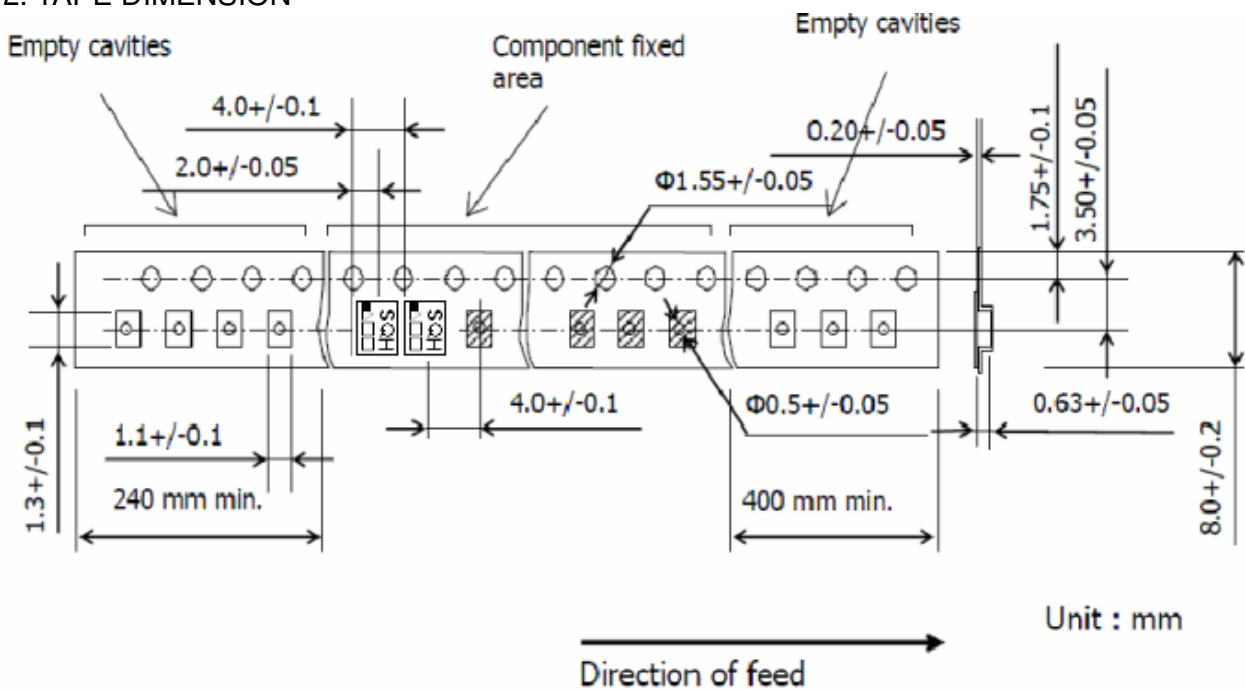
Color : Black

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

Unit : mm

| Code | Quantity | A | B | C | W1 | W2 |
|------|-----------|------------------------|--------------------|--------------------|-----------------|---------------|
| J | 5,000 pcs | $\phi 180.0 +0.0/-1.5$ | $\phi 66.0 +/-0.5$ | $\phi 13.0 +/-0.2$ | $9.0 +1.0/-0.0$ | $11.4 +/-1.0$ |

2. TAPE DIMENSION



Unit : mm

H. RECOMMENDED REFLOW PROFILE:

1. Preheating shall be fixed at $150\sim 180^{\circ}\text{C}$ for $60\sim 90$ seconds.
2. Ascending time to preheating temperature 150°C shall be 30 seconds min.
3. Heating shall be fixed at 220°C for $50\sim 80$ seconds and at $260^{\circ}\text{C} + 0/-5^{\circ}\text{C}$ peak ($20\sim 40$ sec).
4. Time: 2 times.

