



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 Rx Filter 2655MHz LTE Band 7 SMD 1109

TST Part No.: TA1847C

Customer Part No.: _____

| |
|-----------------------------|
| Customer signature required |
| Company: _____ |
| Division: _____ |
| Approved by : _____ |
| Date: _____ |

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2017, 04. 05

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 Rx Filter 2655MHz LTE Band 7 SMD 1109 (70MHz BW)

MODEL NO.: TA1847C

REV. NO.:2

A. MAXIMUM RATING:

1. Operating temperature range: -30 °C to +85 °C
2. Storage temperature range: -40 °C to +100 °C
3. Maximum Input Power: +10 dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 1
6. ESD 50V(MM) 100V(HBM)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

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

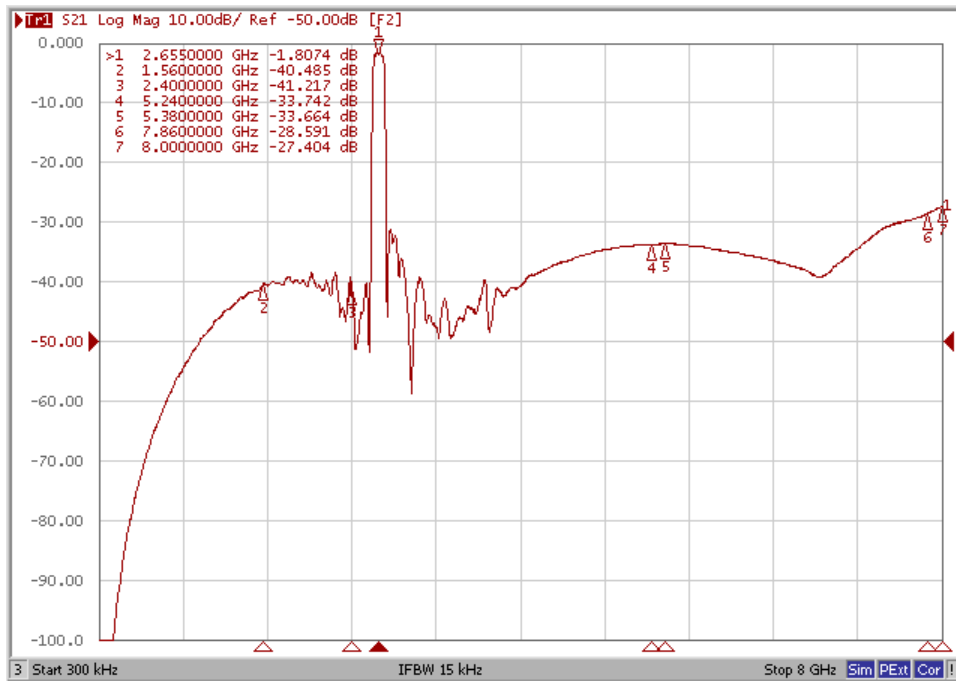
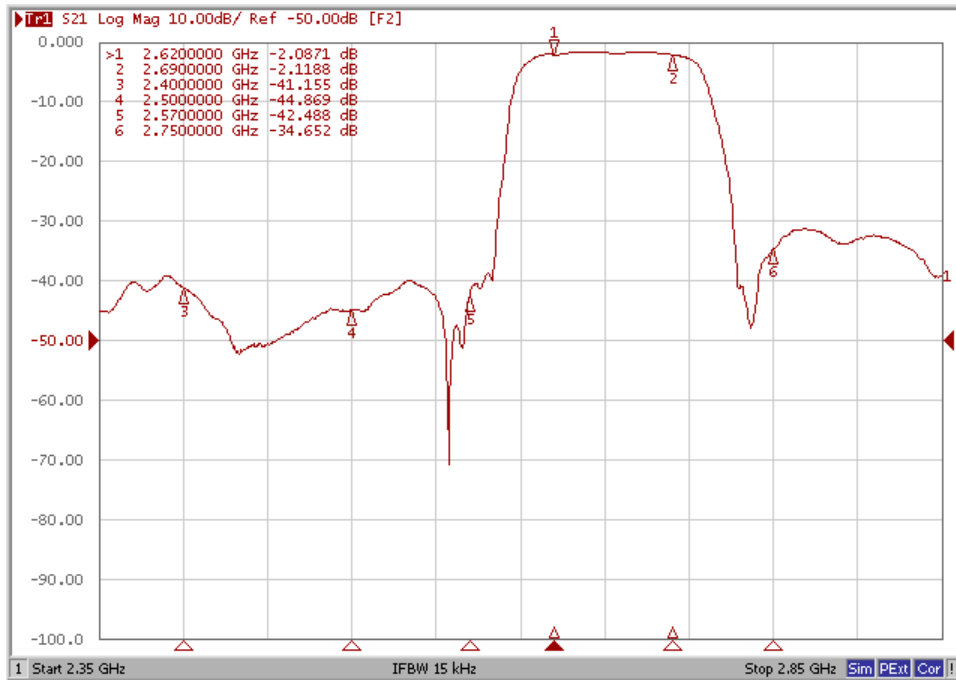
Terminating load impedance: $Z_L = 50//5.1nH \Omega$ (Single-ended)

| Parameters Description | | Unit | Min. | Typ.I | Max. | Remark |
|------------------------|--------|--------------|------|-------|------|--------|
| Center Frequency | | MHz | - | 2655 | - | |
| Insertion Loss(*1) | | 2620~2690MHz | dB | - | 2.5 | 3.0 |
| Amplitude Ripple | | 2620~2690MHz | dB | - | 0.8 | 1.5 |
| VSWR | Input | 2620~2690MHz | - | - | 1.6 | 2.0 |
| | Output | 2620~2690MHz | - | - | 1.8 | 2.2 |
| Attenuation: | | | | | | |
| 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 | - | |

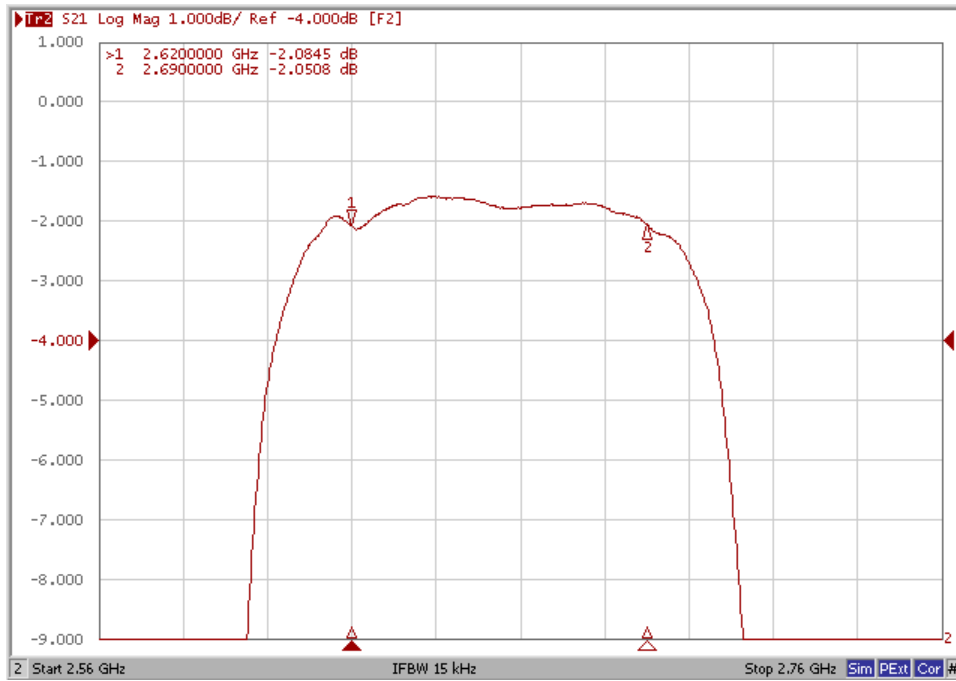
(*1) Specification of insertion loss includes loss that comes from the test board.

C. FREQUENCY CHARACTERISTICS:

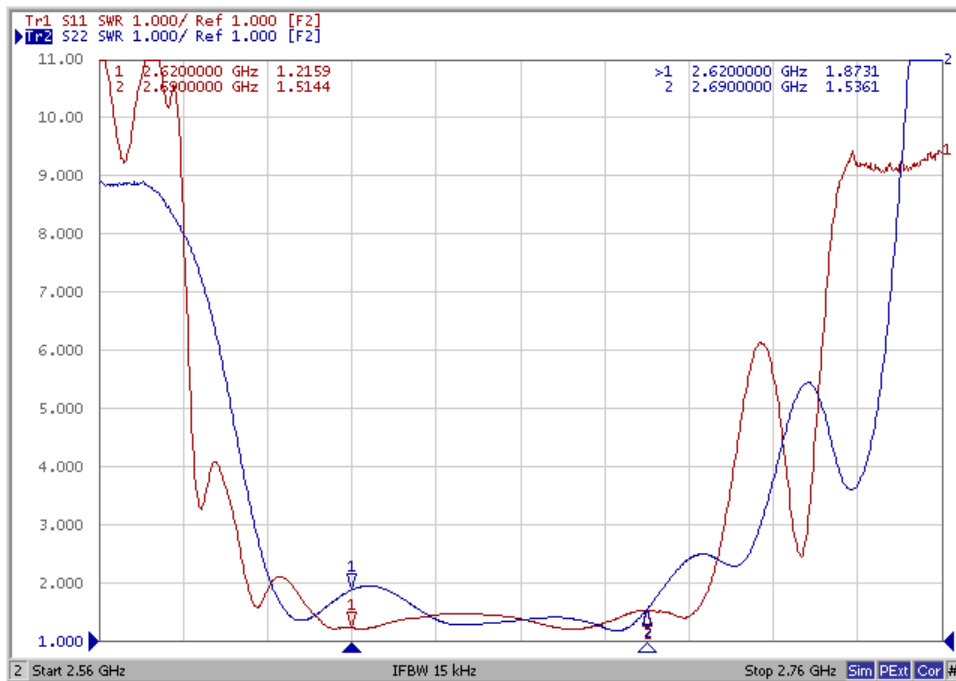
Frequency Response



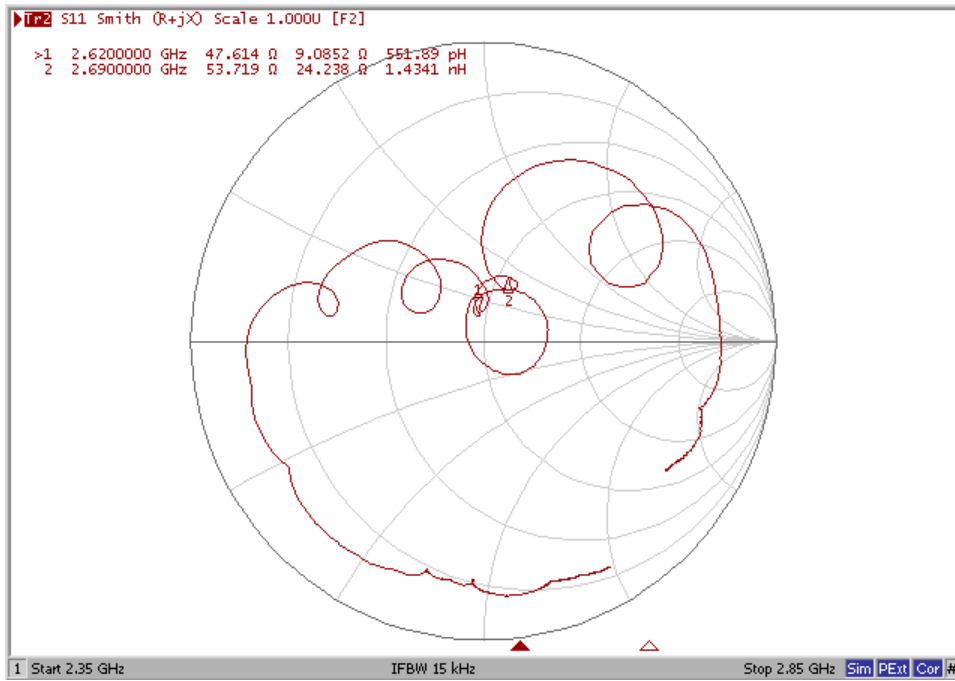
Ripple



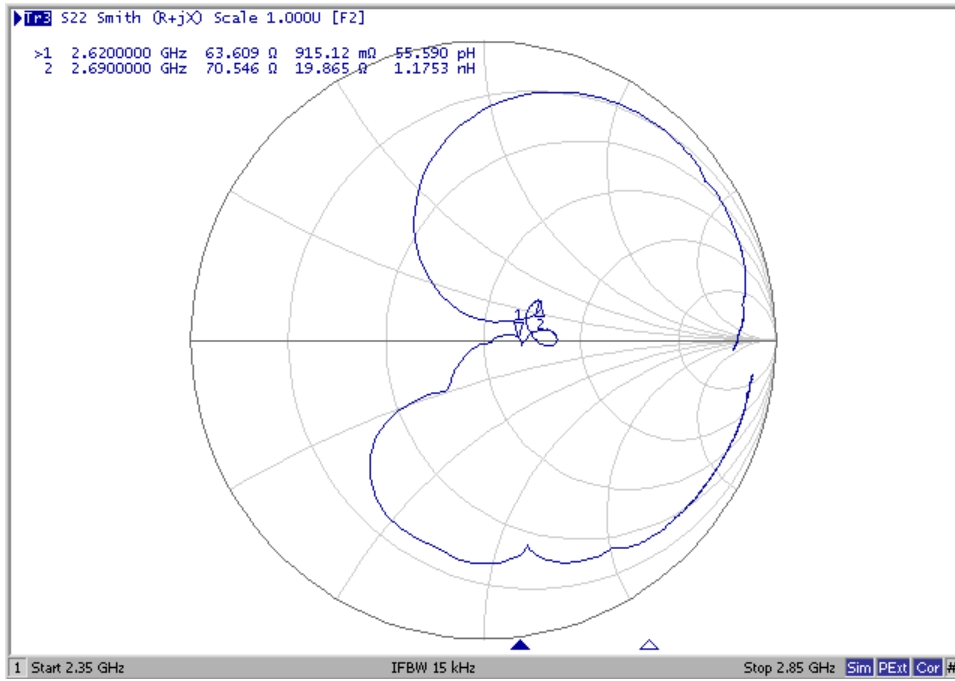
VSWR



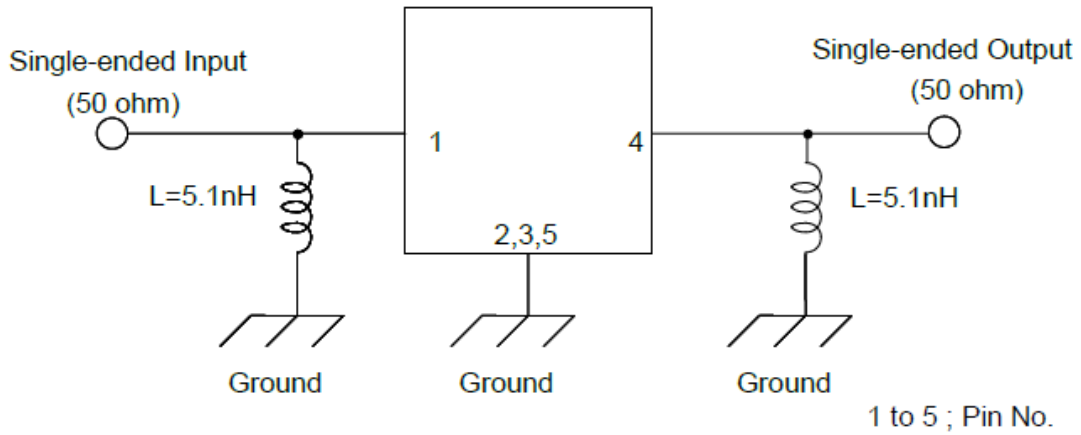
Smith Chart (S11)



Smith Chart (S22)

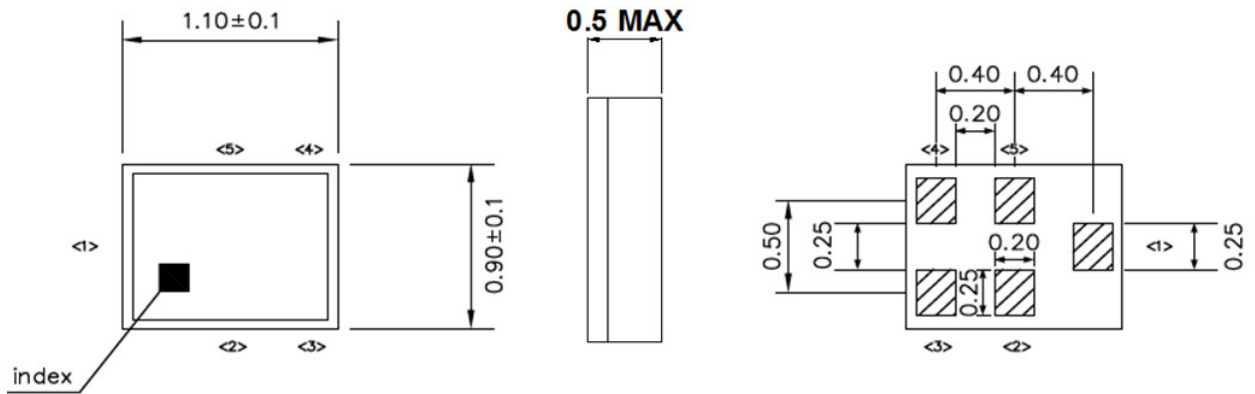


D. MEASUREMENT CIRCUIT:



E. OUTLINE DRAWING:

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

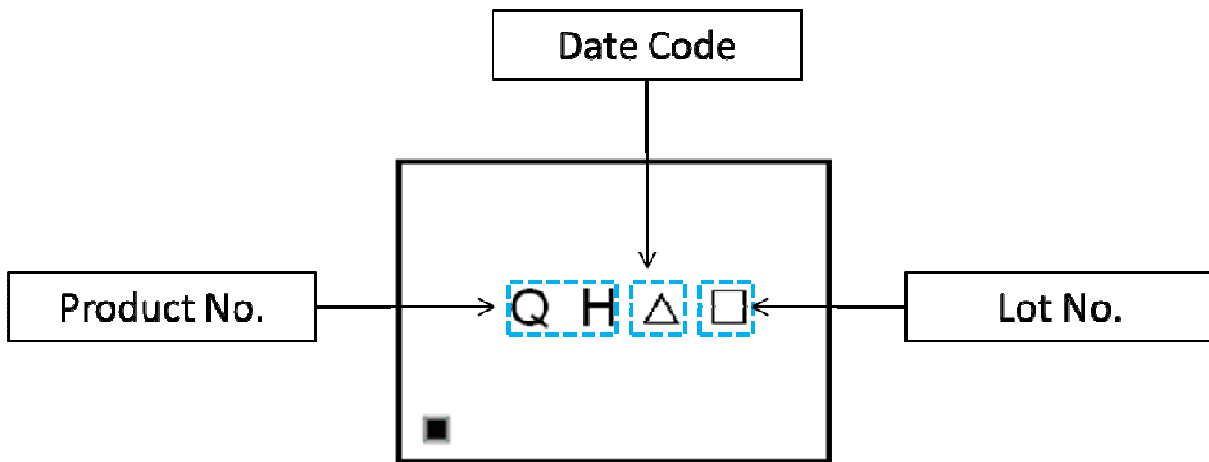


Unit : mm

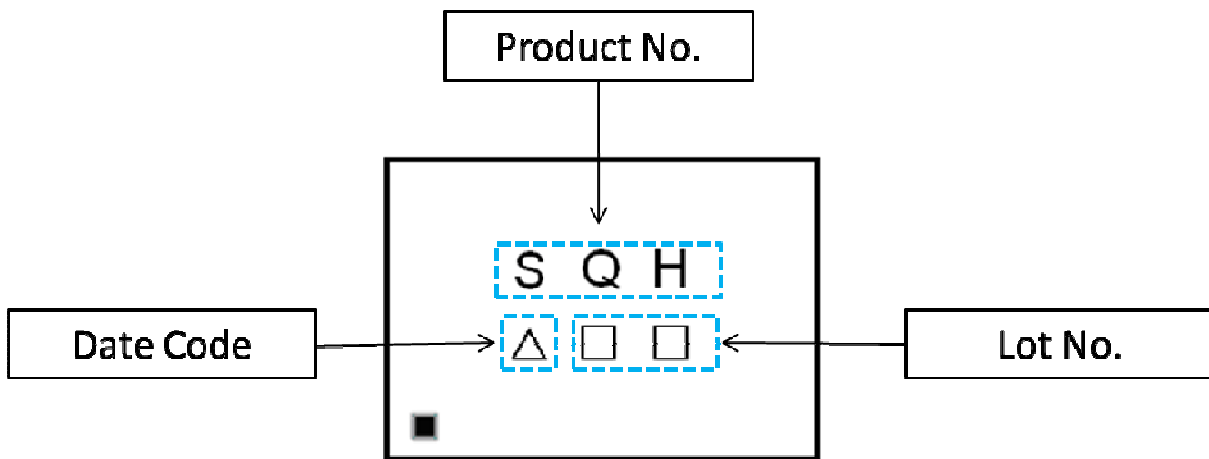
Pin Configuration

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

Top View (Sample Production):



Top View (Mass Production):



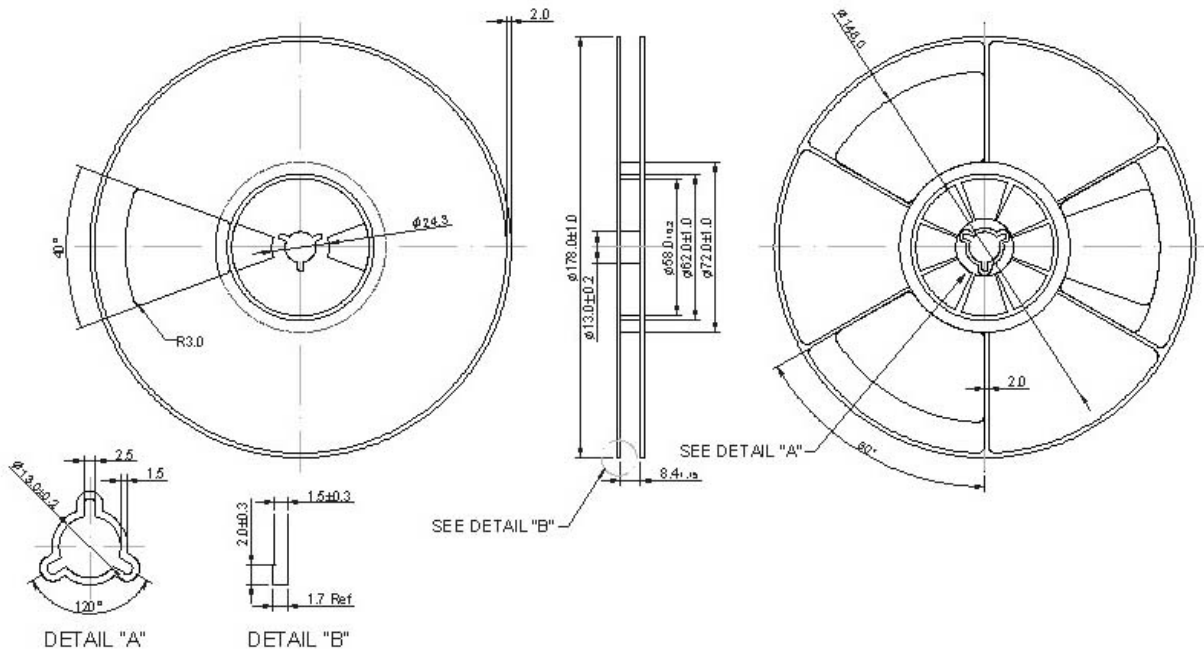
△ : Date Code

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

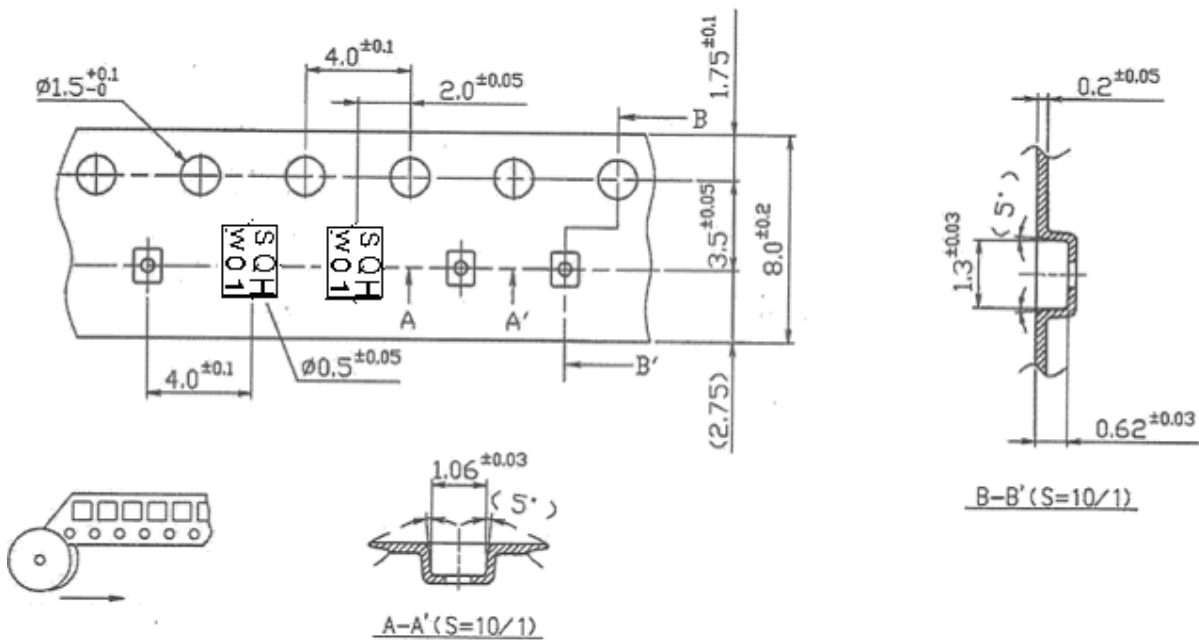
Product date Code (EIAJ)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2015 | a | b | c | d | e | f | g | h | j | k | l | m |
| 2016 | n | p | q | r | s | t | u | v | w | x | y | z |
| 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 |

F. PACKING:
1. REEL DIMENSION



2. TAPE DIMENSION



G. 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.

