



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 Filter 1581 MHz SMD 3.0x3.0 mm (BW=42 MHz)

TST Part No.: TA1553A

Customer Part No.: _____

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

Checked by: _____ Sam Lin *Sam Lin*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/06/17

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 1581 MHz SMD 3.0×3.0 mm (BW=42 MHz)

MODEL NO.:TA1553A

REV. NO.:2

A. MAXIMUM RATING:

1. Input Power Level: 20 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -20 °C to +70 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitive Level (MSL): Level 1

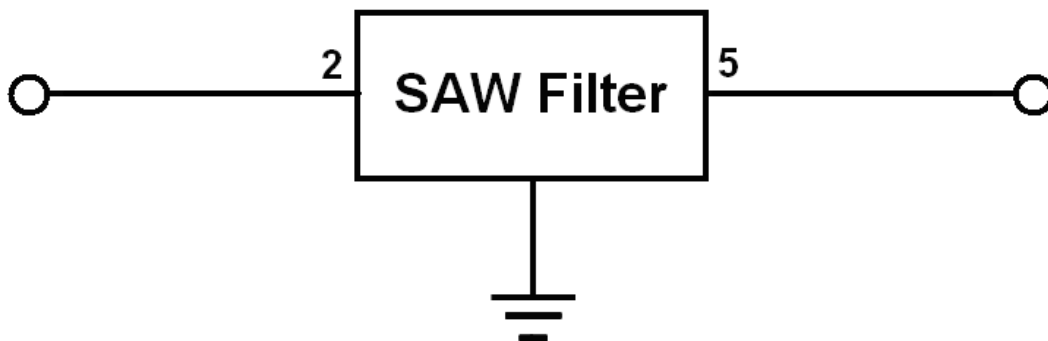
RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

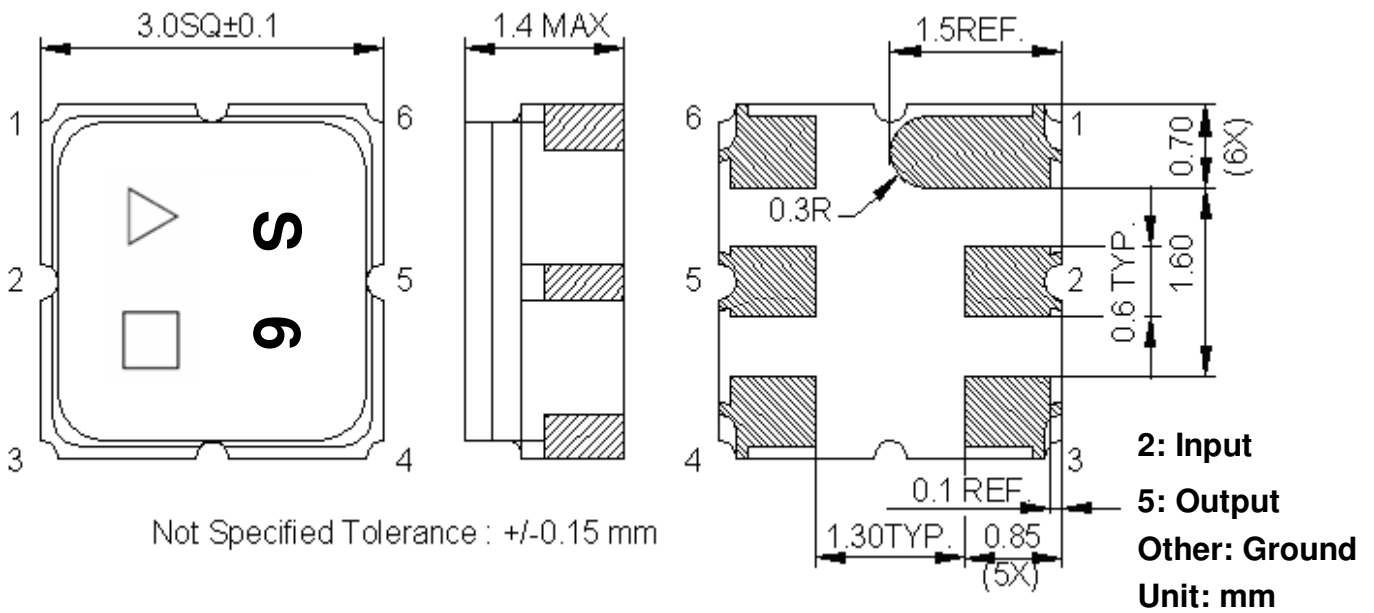
B. ELECTRICAL CHARACTERISTICS:

| Item | Unit | Min. | Typ. | Max. |
|------------------------------------------------|-------|------|------|------|
| Center frequency F_c | MHz | - | 1581 | - |
| Insertion Loss (1560~1602 MHz) IL | dB | - | 2.6 | 4.0 |
| Amplitude Ripple (1560~1602 MHz) | dB | - | 1.3 | 2.7 |
| VSWR (1560~1602 MHz) | - | - | 1.7 | 2.3 |
| Attenuation (Reference level from 0 dB) | | | | |
| D.C. ~ 600 MHz | dB | 30 | 36 | - |
| 600 ~ 1500 MHz | dB | 27 | 34 | - |
| 1500 ~ 1530 MHz | dB | 20 | 39 | - |
| 1630 ~ 1675 MHz | dB | 20 | 44 | - |
| 1675 ~ 3000 MHz | dB | 30 | 38 | - |
| Temperature coefficient of frequency | ppm/k | - | -36 | - |

C. MEASUREMENT CIRCUIT:



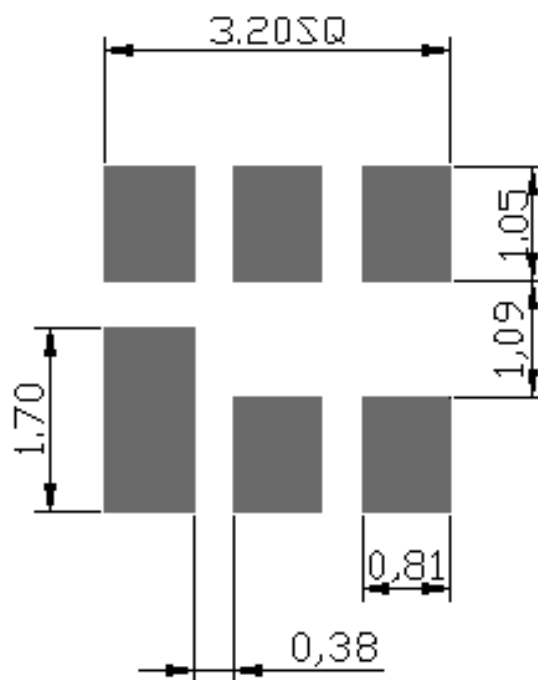
D. OUTLINE DRAWING:



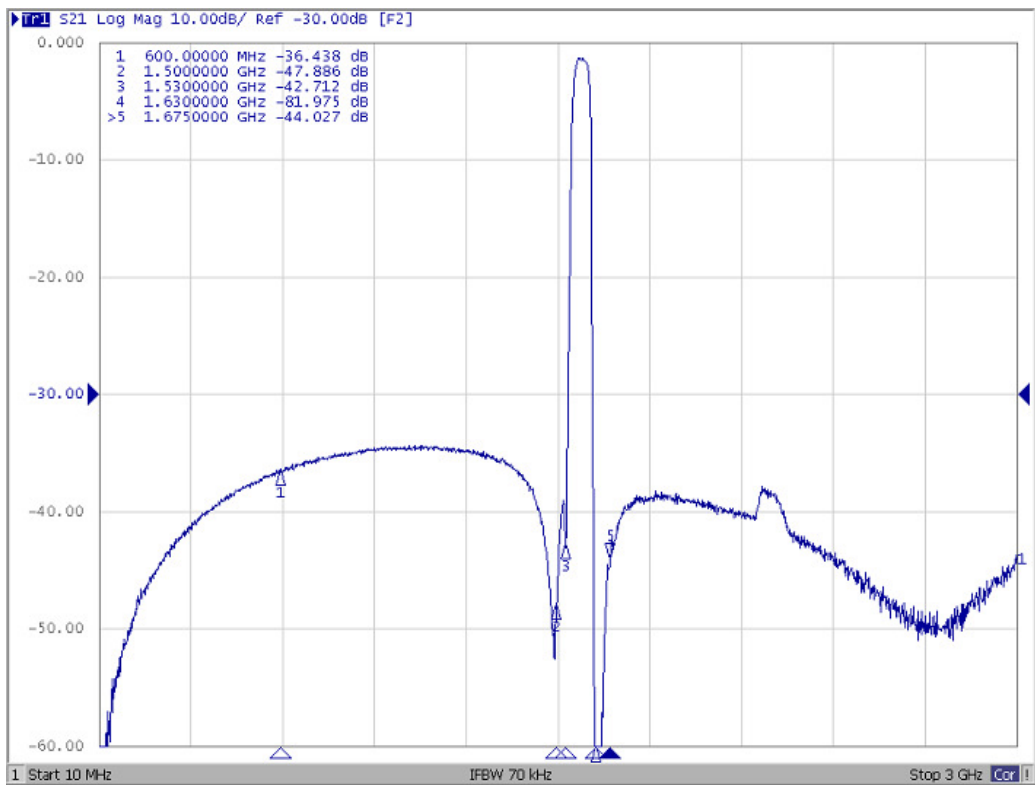
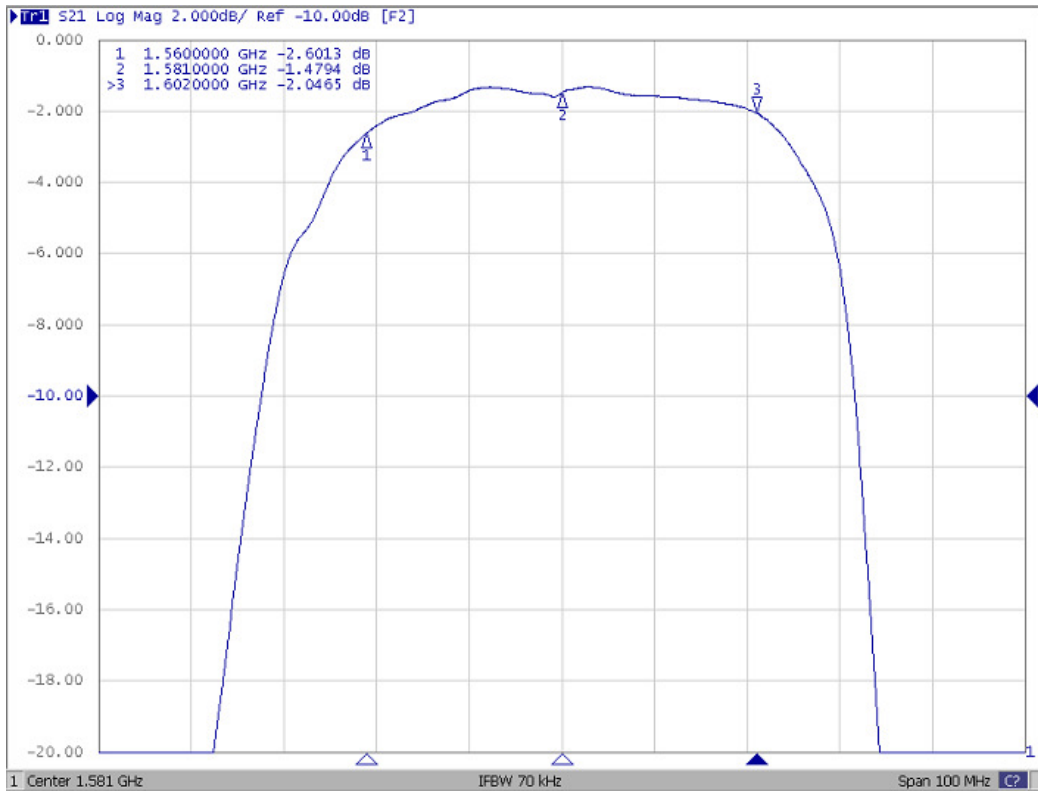
Date Code Table:

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
| WK27 | WK28 | WK29 | WK30 | WK31 | WK32 | WK33 | WK34 | WK35 | WK36 | WK37 | WK38 | WK39 |
| a | b | c | d | e | f | g | h | i | j | k | l | m |
| WK40 | WK41 | WK42 | WK43 | WK44 | WK45 | WK46 | WK47 | WK48 | WK49 | WK50 | WK51 | WK52 |
| n | o | p | q | r | s | t | u | v | w | x | y | z |

E. PCB Footprint:

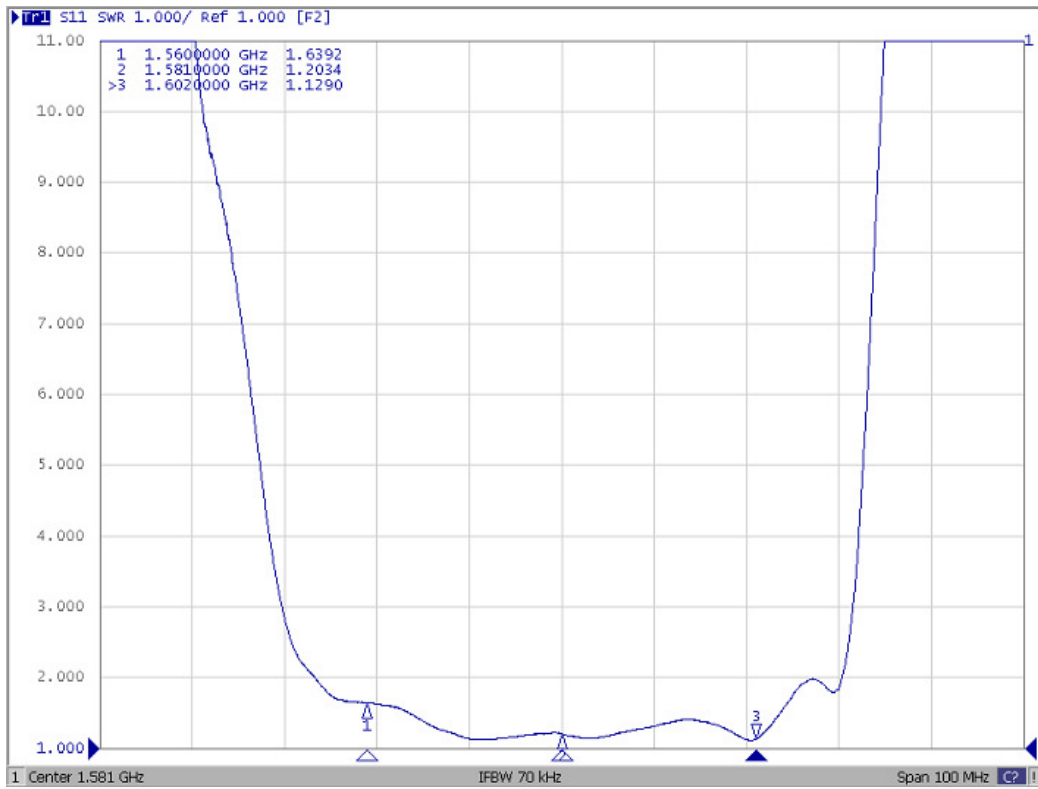


F. Frequency Characteristics:

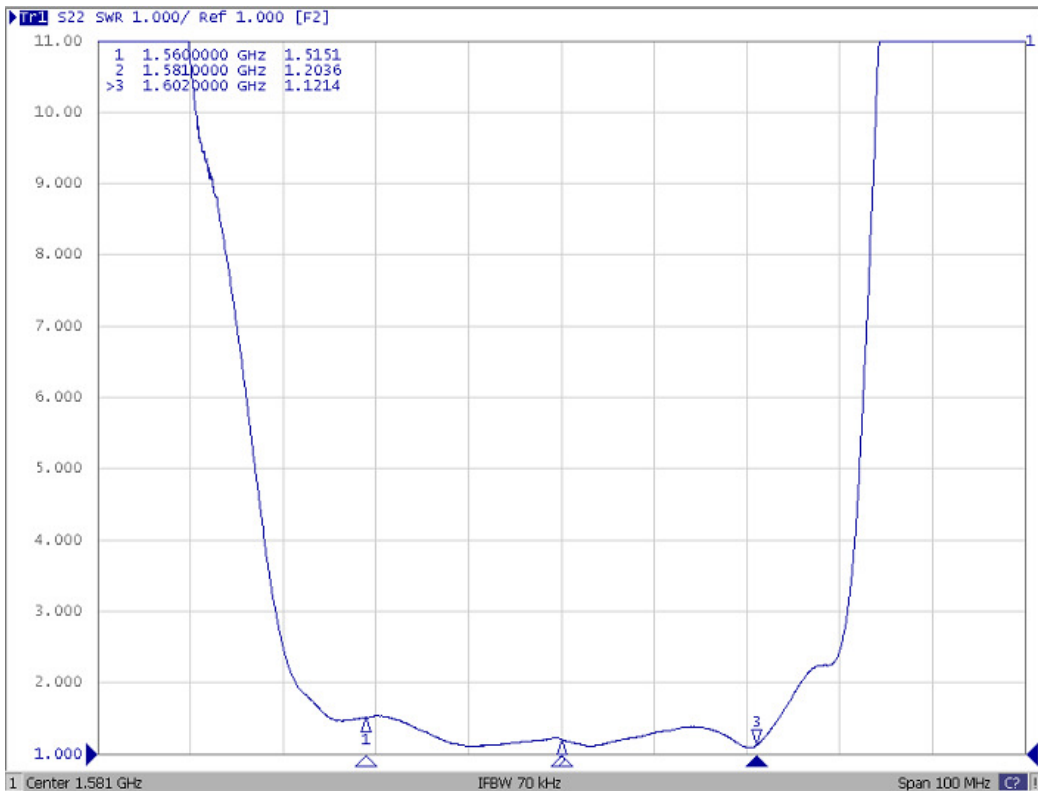


Reflection Functions:

S11



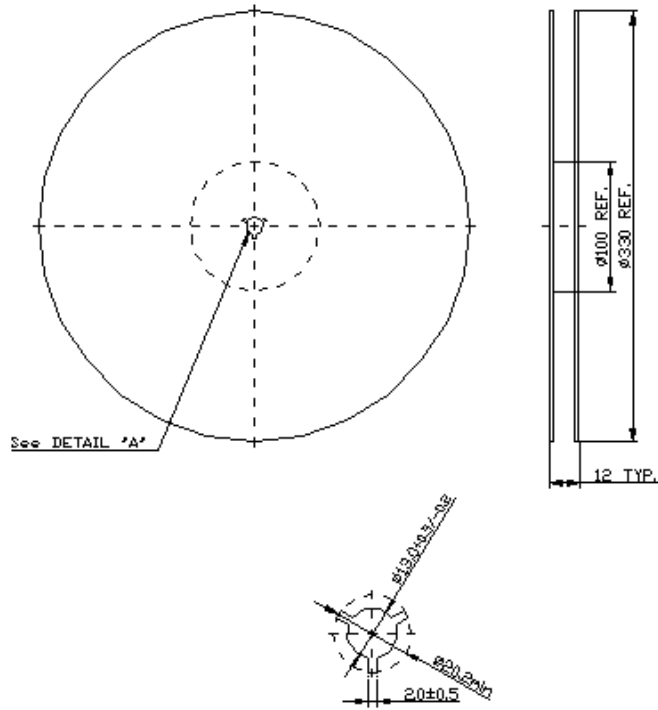
S22



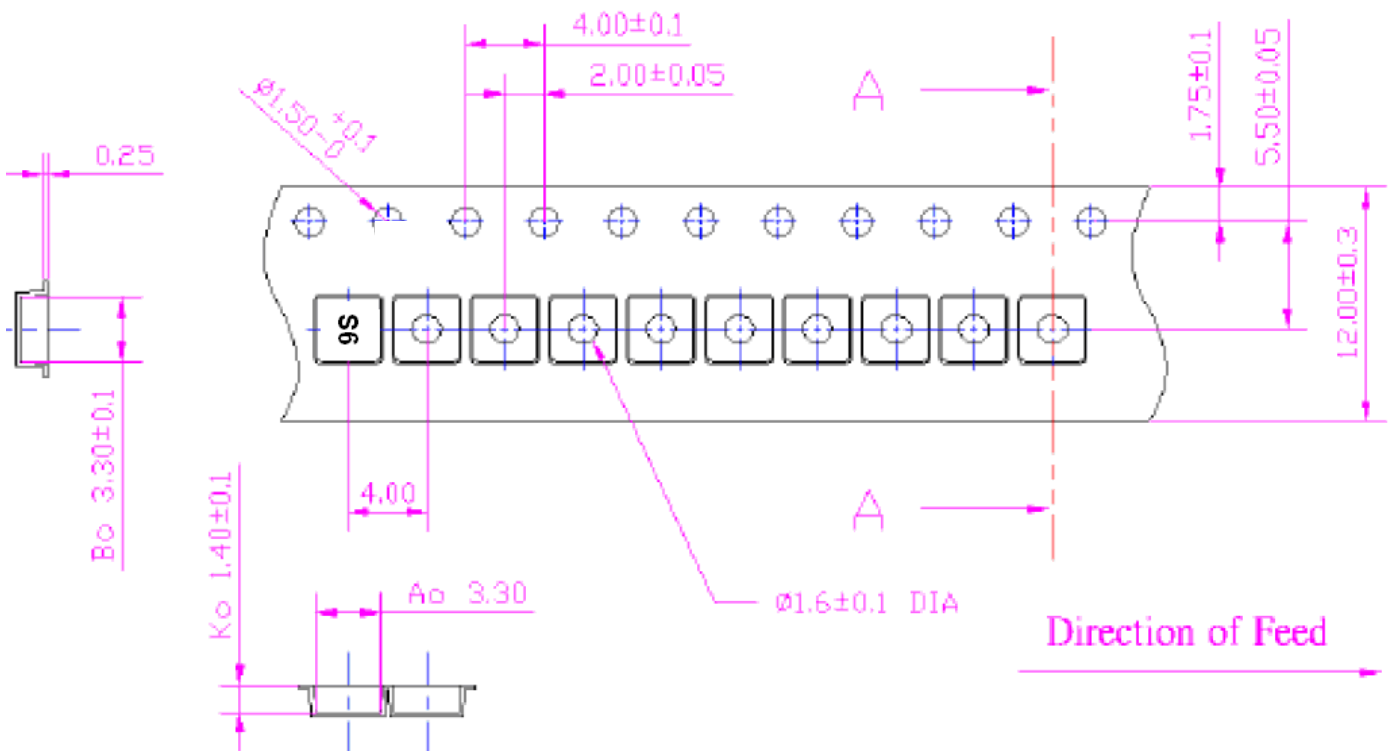
G. PACKING:

1. REEL DIMENSION

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



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.

