

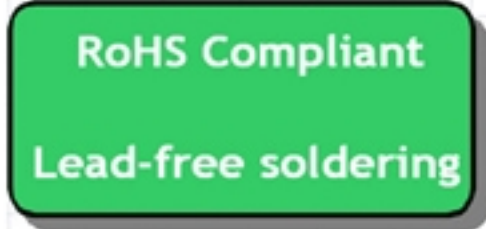
SAW Filter 806 MHz SMD 1.1X0.9 mm (BW=30 MHz)

MODEL NO.:TA2041A

REV.3.0

A. MAXIMUM RATING:

1. Operating temperature range: -20 °C to +85 °C
2. Storage temperature range: -40 °C to +100 °C
3. Input power : 10dBm
4. Maximum DC Voltage: +/-5 V
5. Moisture Sensitivity Level: Level 1 (MSL 1)
6. ESD 100V(MM) 200V(HBM)



Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Terminating source impedance : $Z_s = 50 \Omega$

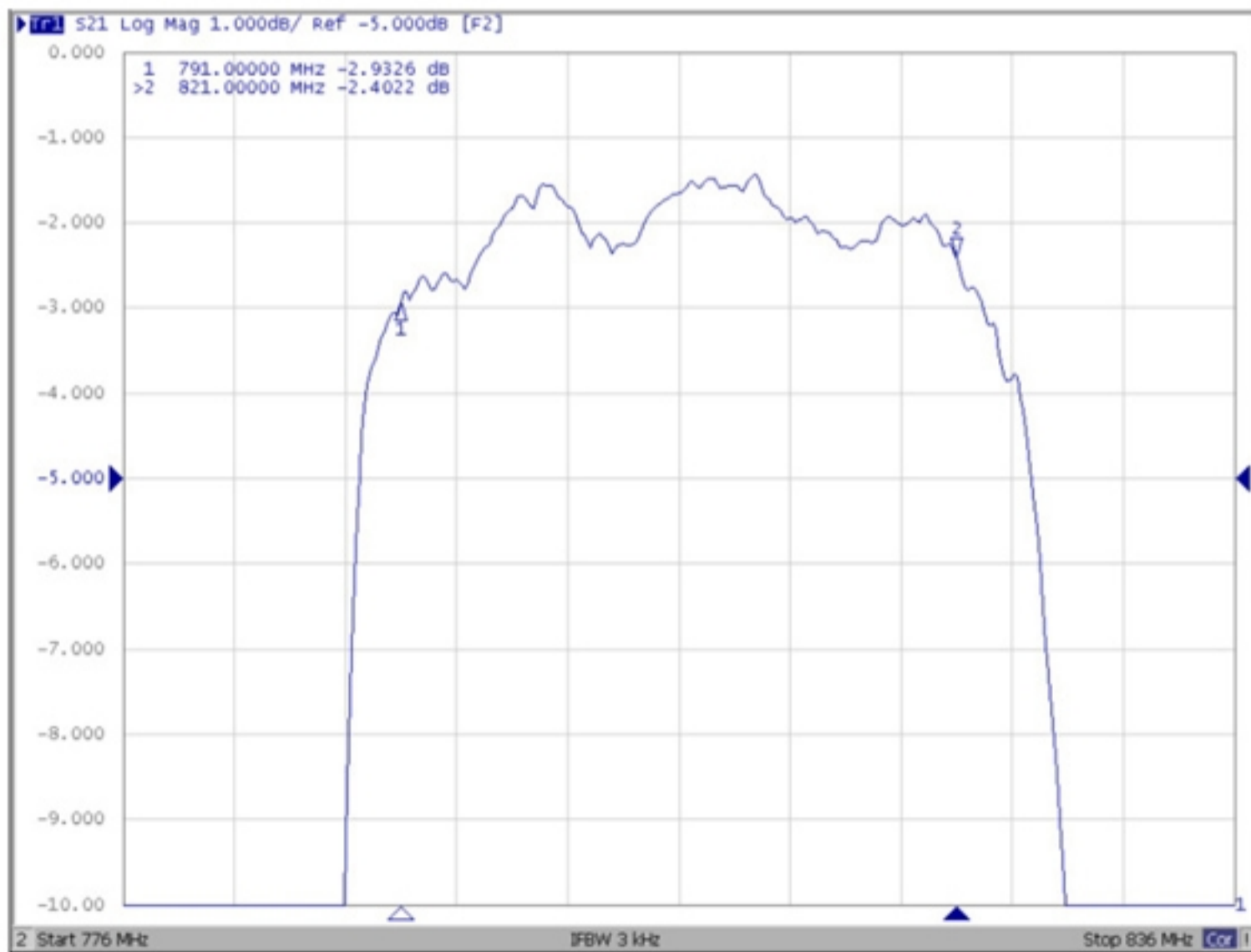
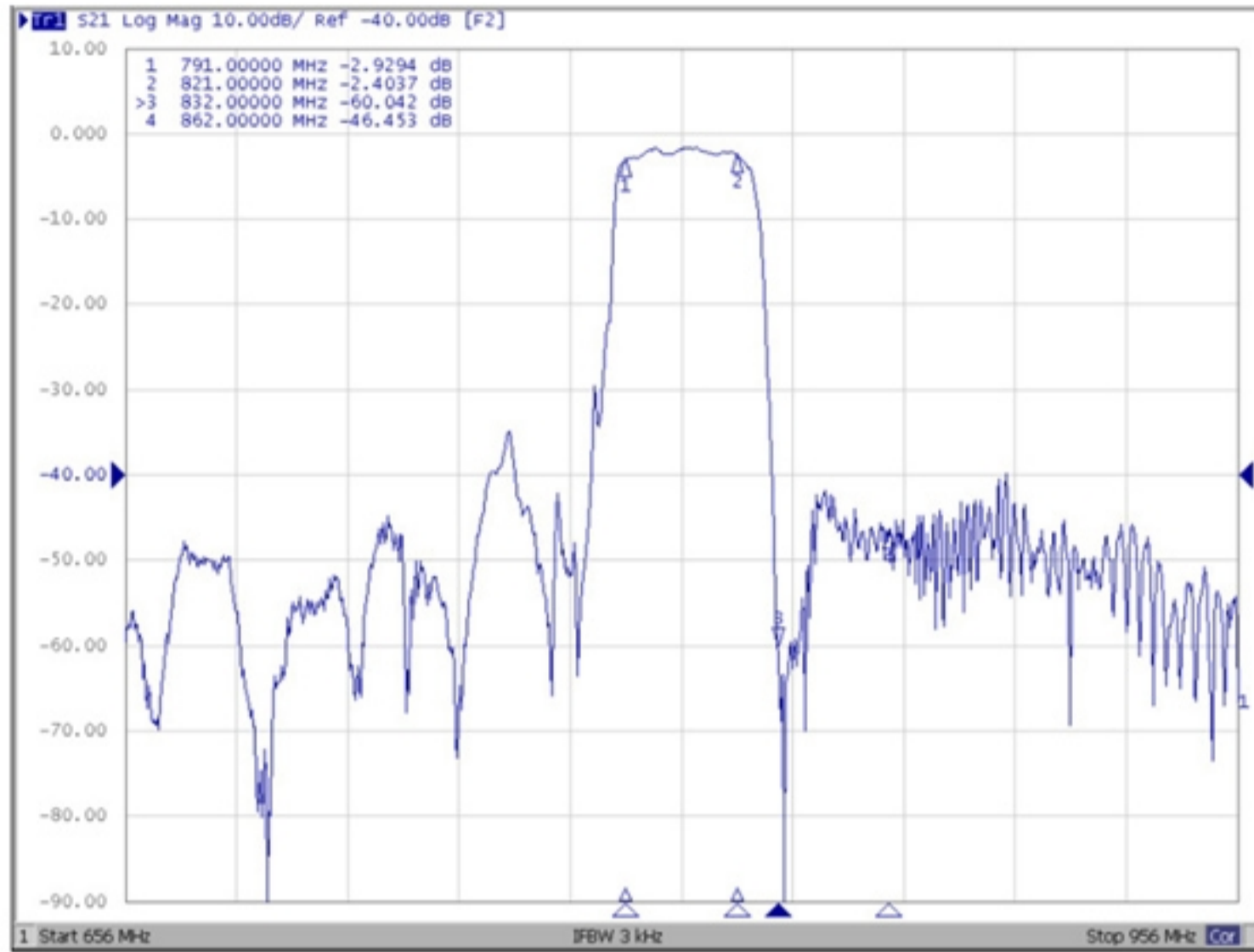
Terminating load impedance : $Z_L = 50 \Omega$

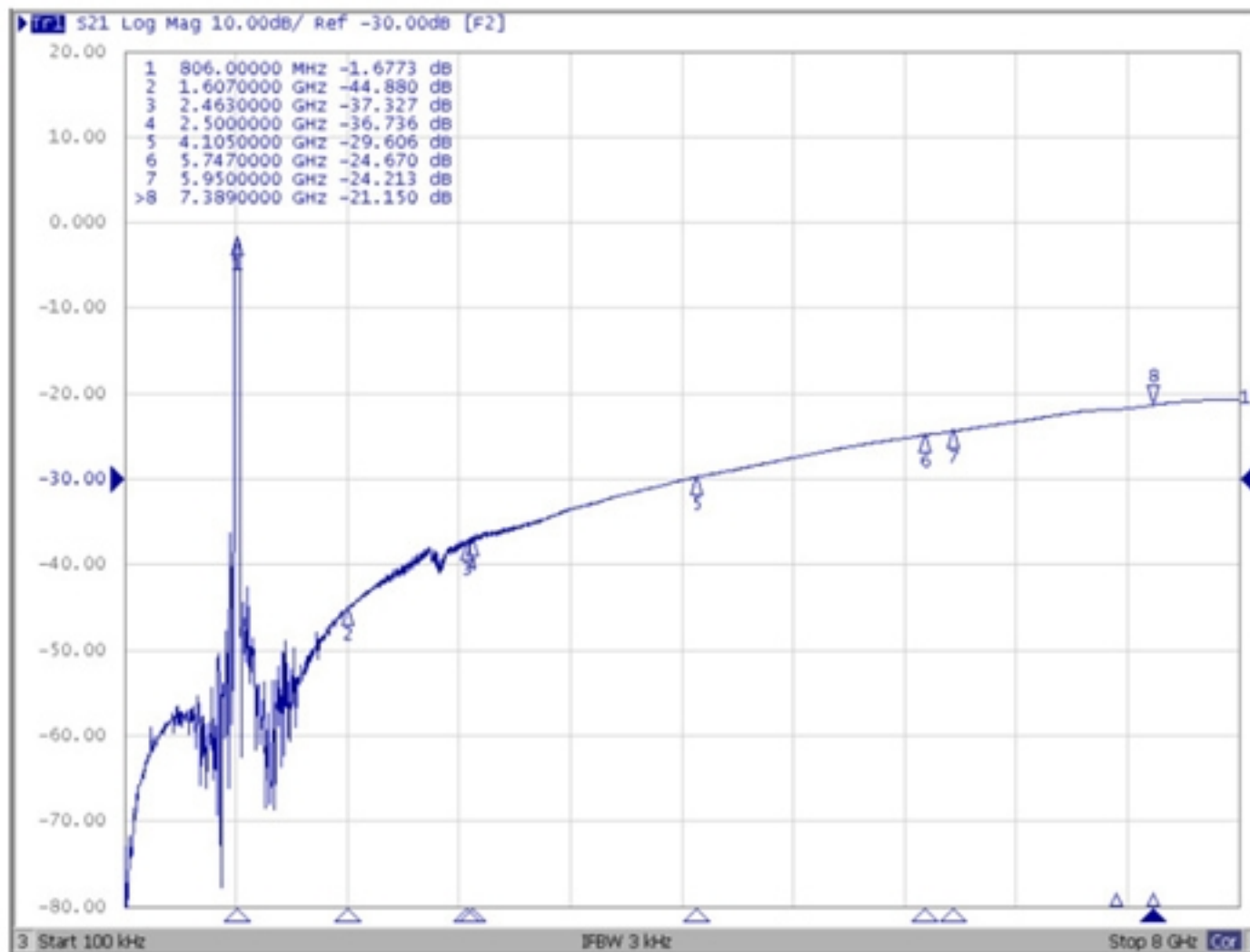
| Parameters Description | | Unit | Min | Typ | Max | Remarks | |
|------------------------|-------------|-------------|-----|-----|-----|--------------|--|
| Insertion Loss | 791~ 821MHz | Db(*1) | - | 2.7 | 3.8 | | |
| Amplitude ripple | 791~ 821MHz | dB | - | 1.4 | 2.6 | | |
| VSWR | Input | 791~ 821MHz | - | - | 2.1 | 2.4 | |
| | Output | 791~ 821MHz | - | - | 2.1 | 2.4 | |
| Attenuation: | | | | | | | |
| 832 ~ 862 MHz | | dB | 37 | 41 | - | | |
| 1559 ~ 1607 MHz | | dB | 40 | 45 | - | | |
| 1582 ~ 1642 MHz | | dB | 40 | 45 | - | | |
| 2373 ~ 2463 MHz | | dB | 30 | 37 | - | | |
| 2400 ~ 2500 MHz | | dB | 30 | 37 | - | | |
| 3164 ~ 3284 MHz | | dB | 25 | 34 | - | | |
| 3955 ~ 4105 MHz | | dB | 20 | 31 | - | | |
| 4746 ~ 4926 MHz | | dB | 20 | 29 | - | | |
| 4900 ~ 5950 MHz | | dB | 20 | 26 | - | | |
| 5537 ~ 5747 MHz | | dB | 20 | 27 | - | | |
| 6328 ~ 6568 MHz | | dB | 20 | 25 | - | | |
| 7119 ~ 7389 MHz | | dB | 15 | 23 | - | | |
| Input impedance | | Ω | 50 | | | single-ended | |
| Output impedance | | Ω | 50 | | | single-ended | |

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

C. FREQUENCY CHARACTERISTICS:

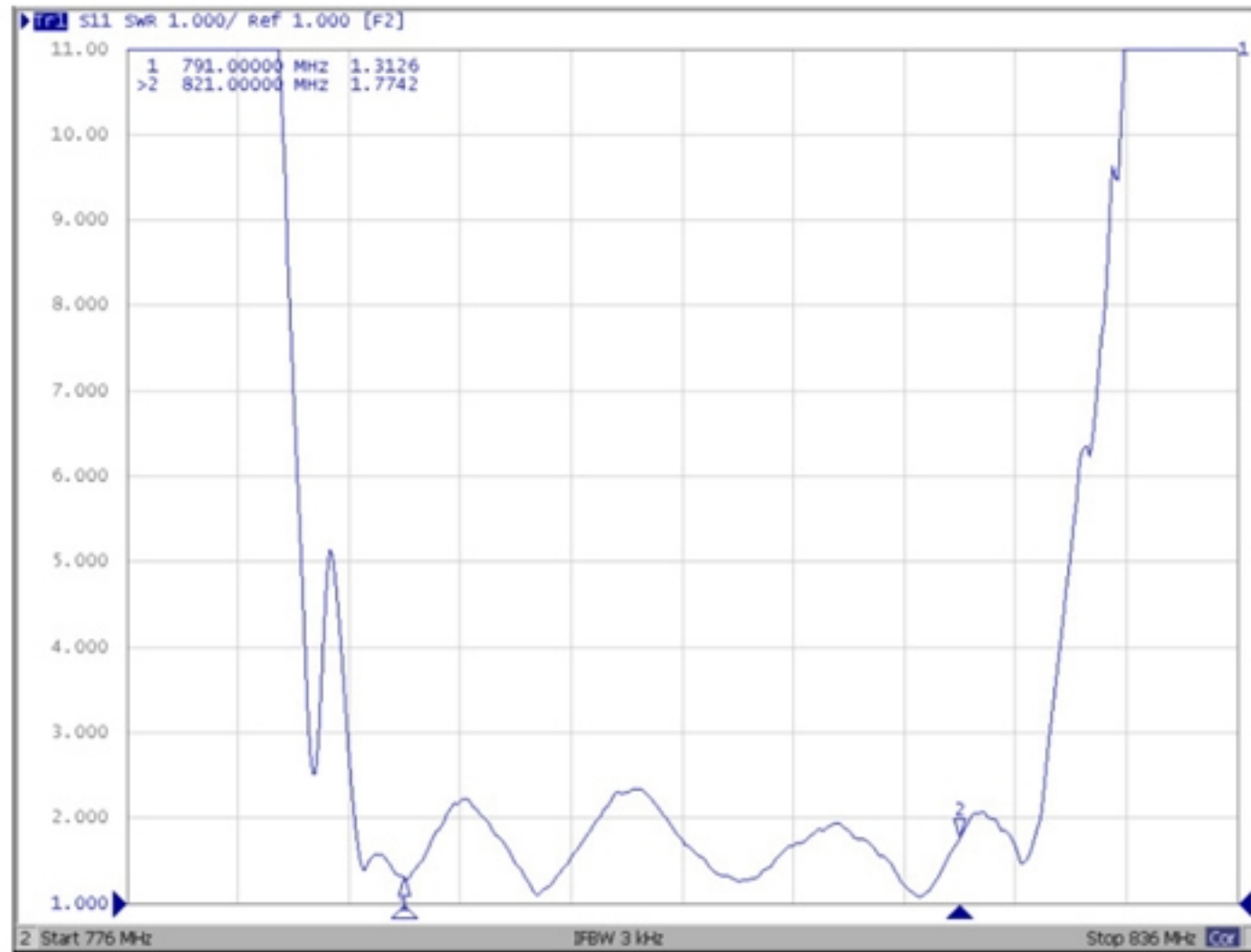
Passband



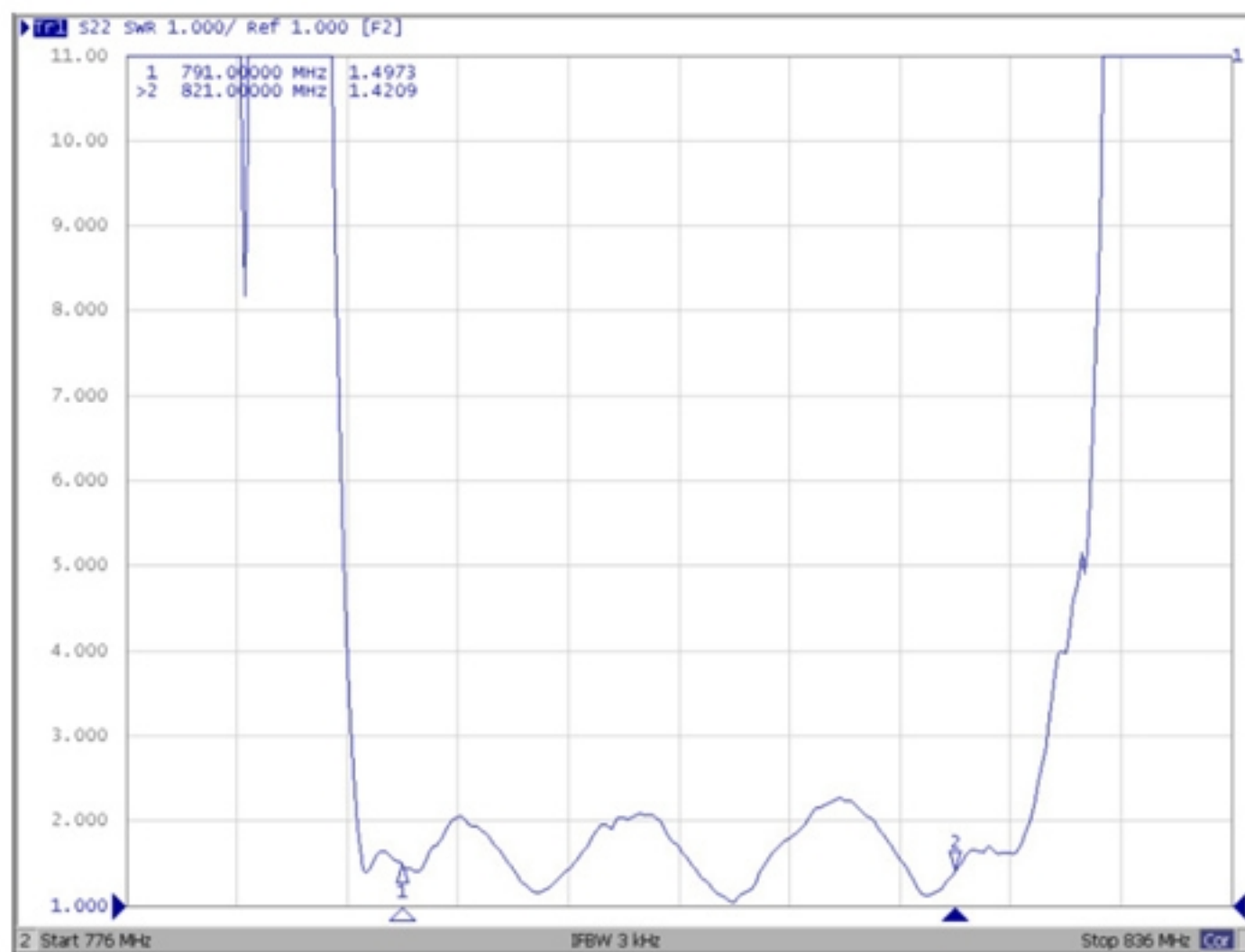


Reflection functions :

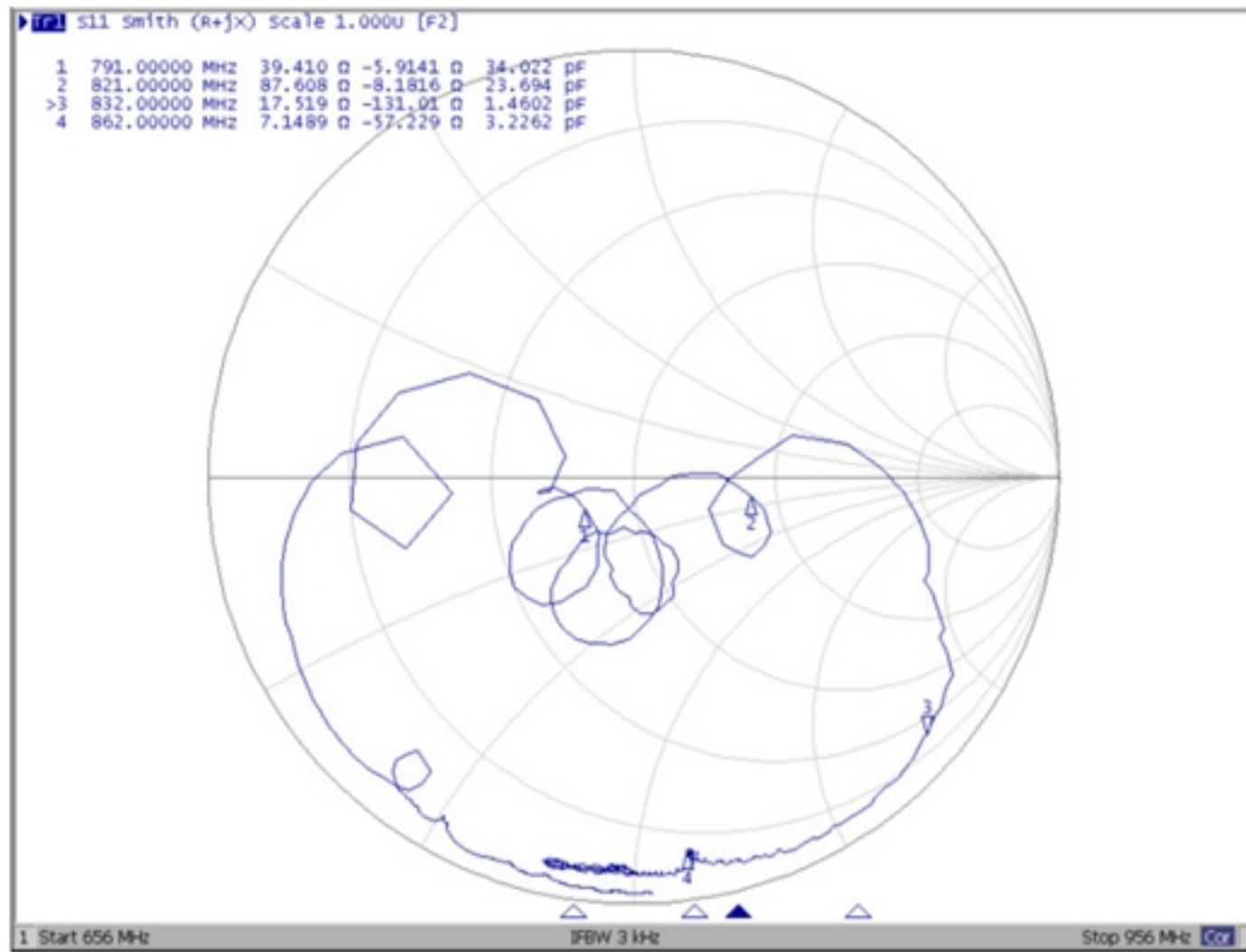
S11 VSWR



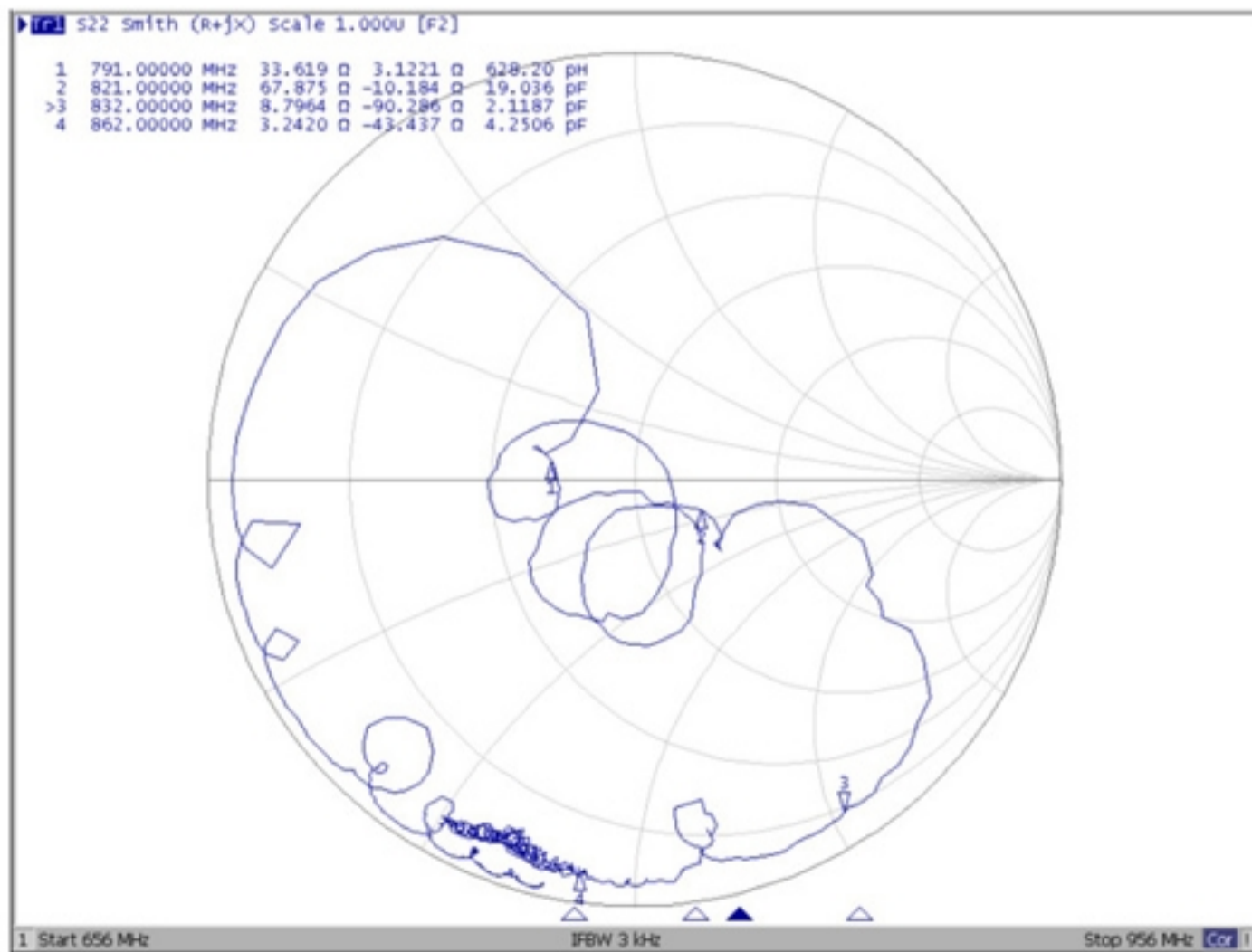
S22 VSWR



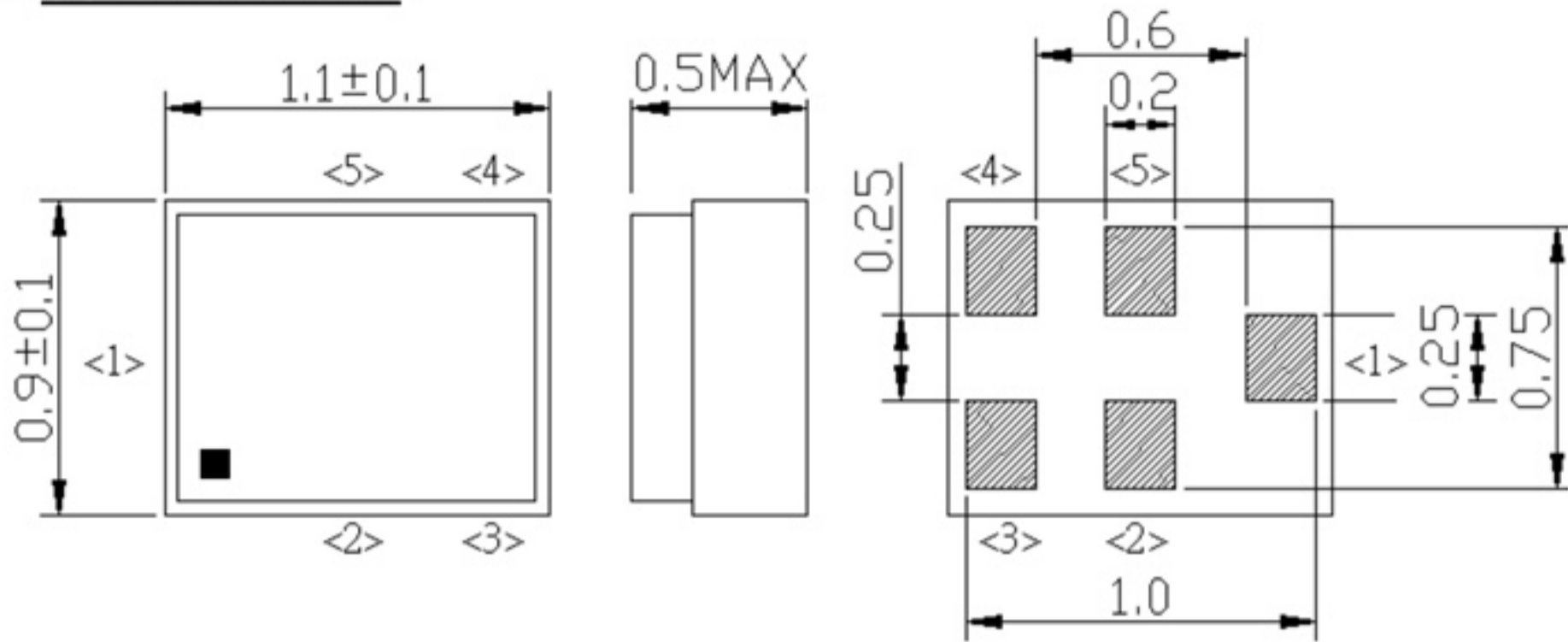
S11 Smith Chart



S22 Smith Chart



D.OUTLINE DRAWIN:



Unit: mm

Not Specified Tolerance : +/-0.1 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):



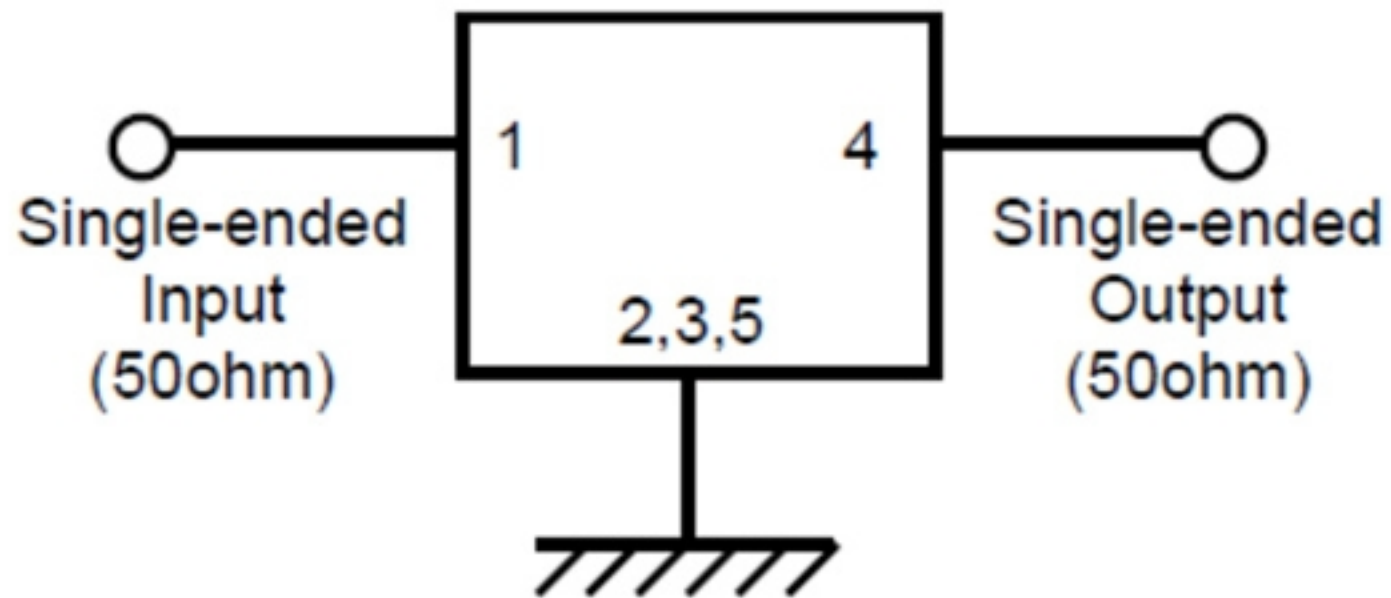
Δ : Date Code

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

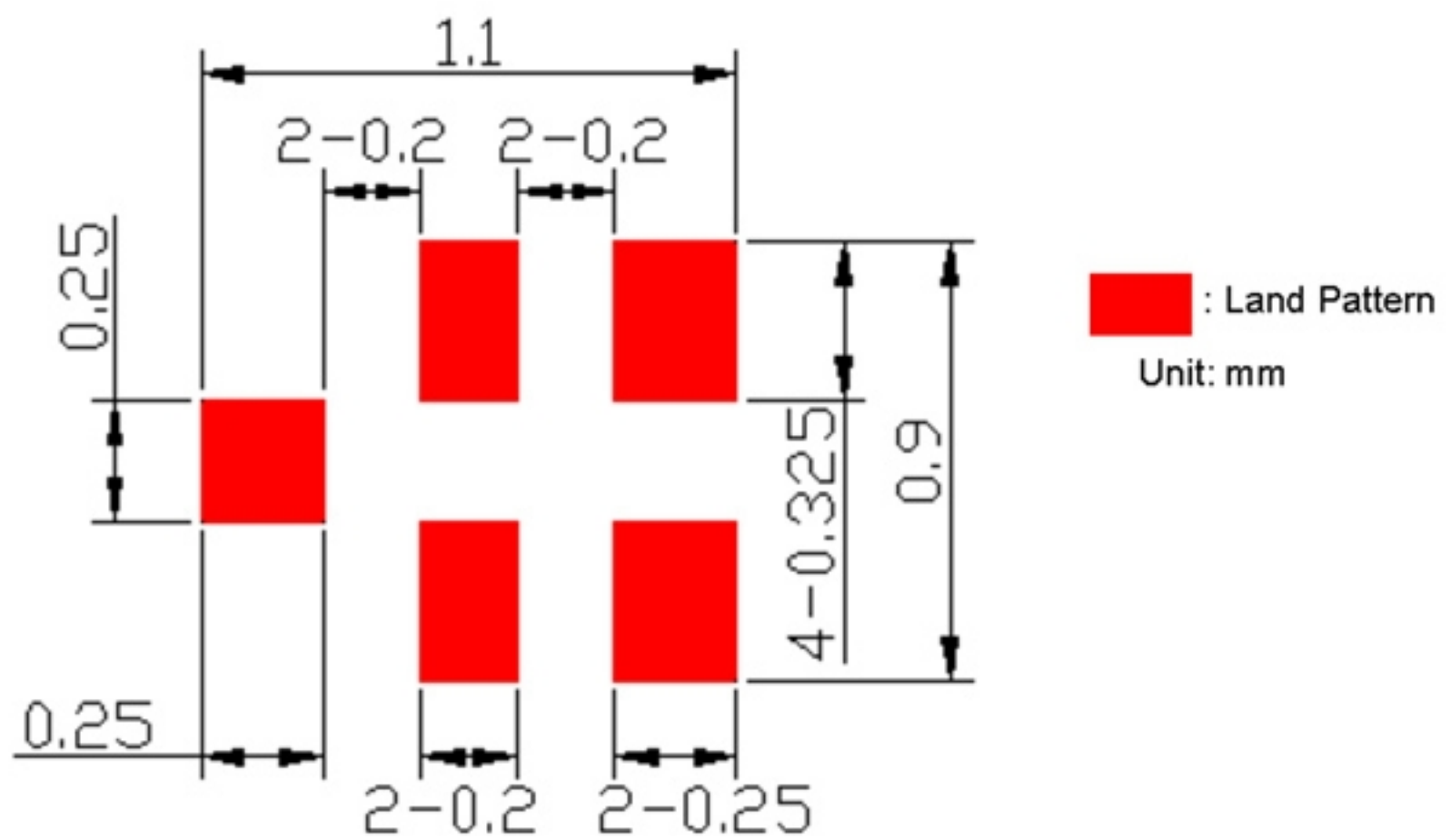
Date Code: Follow below table. (4-year cycle)

| Year | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|-------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2019 / 2023 | a | b | c | d | e | f | g | h | j | k | l | m |
| 2020 / 2024 | n | p | q | r | s | t | u | v | w | x | y | z |
| 2021 / 2025 | A | B | C | D | E | F | G | H | J | K | L | M |
| 2022 / 2026 | N | P | Q | R | S | T | U | V | W | X | Y | Z |

E.Evaluation Circuit



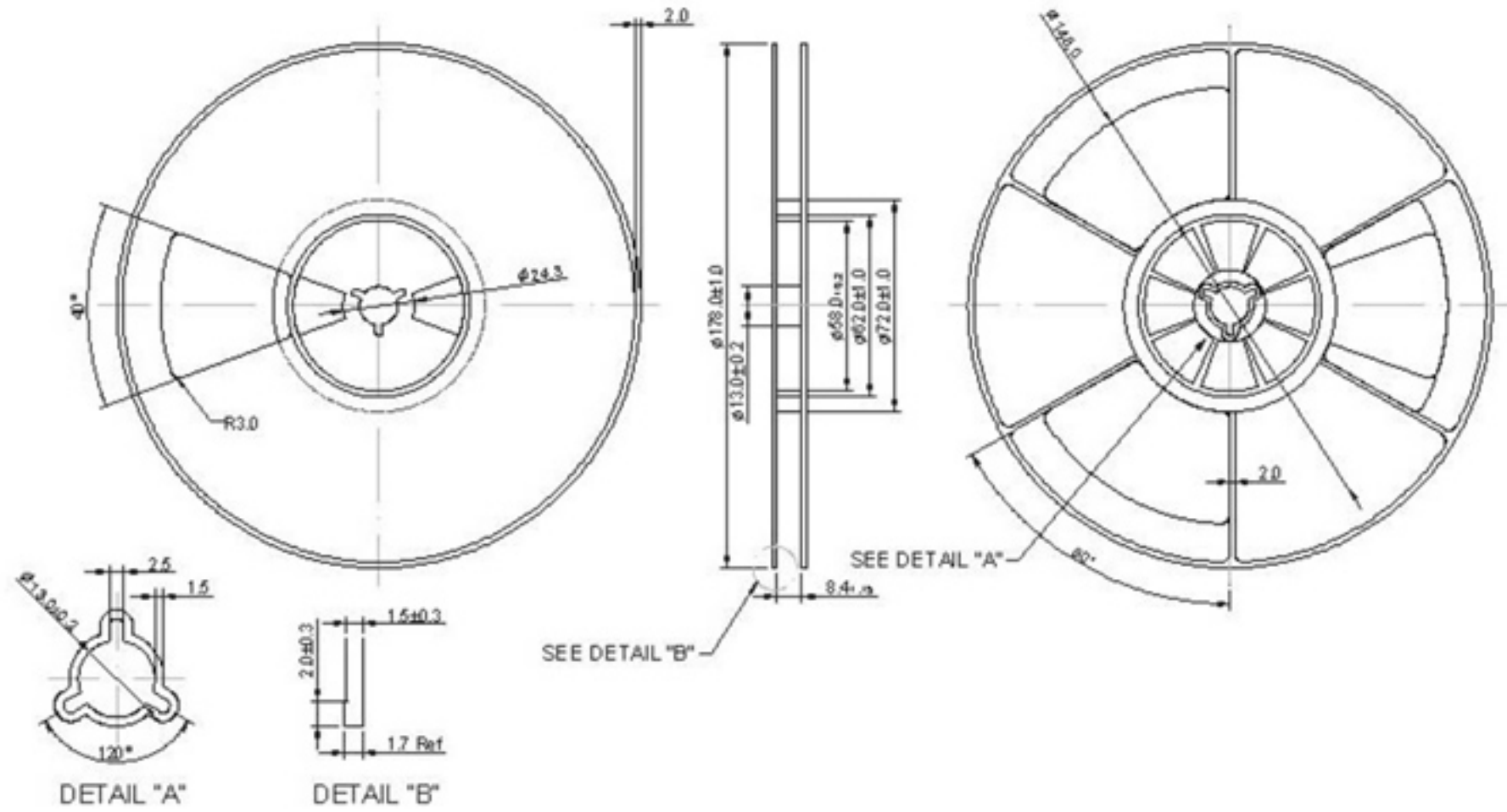
F. PCB Footprint :



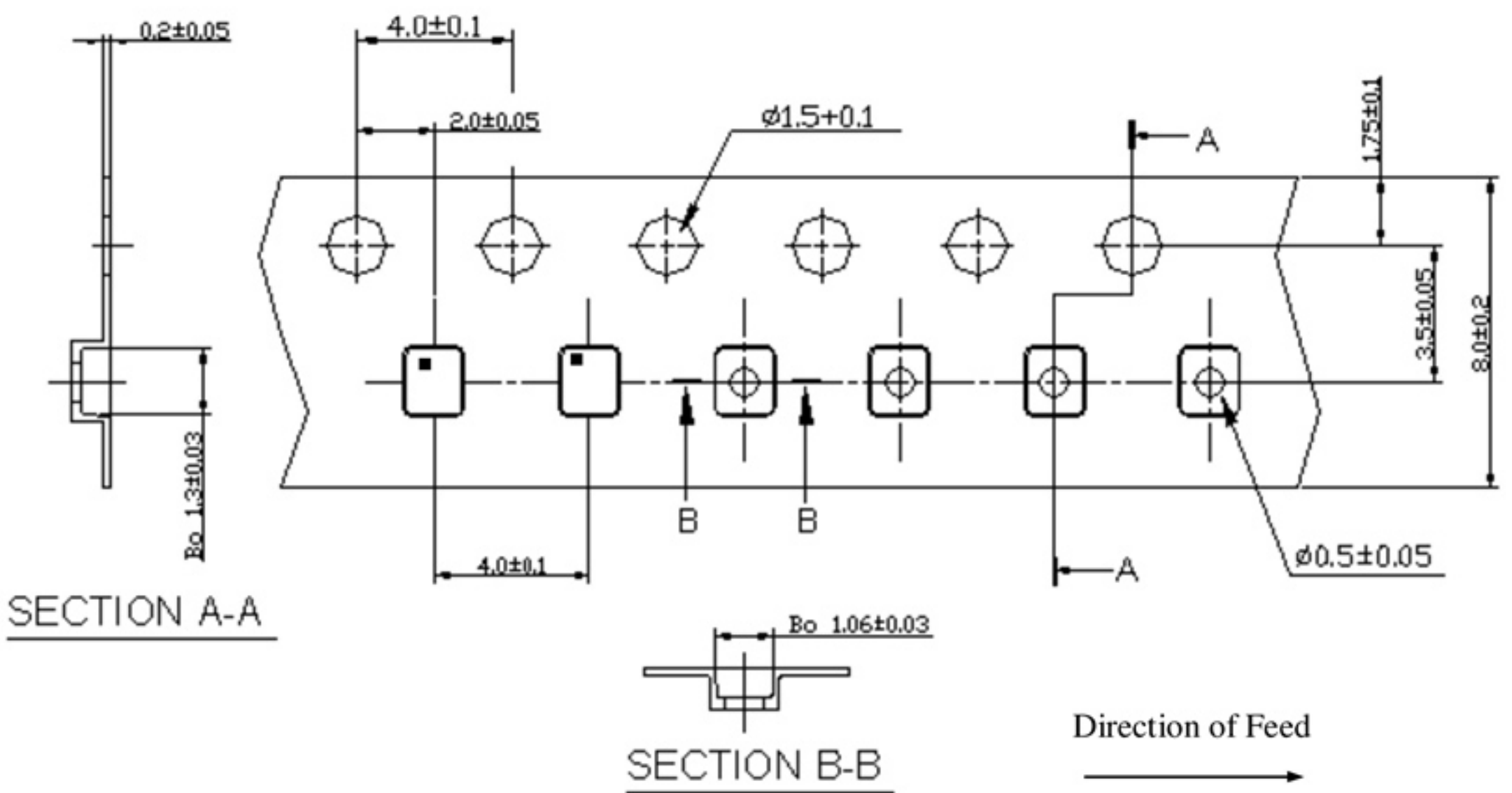
G. PACKING:

1. REEL DIMENSION

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



2. TAPE DIMENSION



H . RECOMMENDED REFLOW PROFILE :

1. Preheating shall be fixed at $150\sim 180^{\circ}\text{C}$ 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 $245\sim 260^{\circ}\text{C}$ peak (min. 10sec).
4. Time : 2 times.

