# RF SAW Filter 748 MHz

MODEL NO.:TA1100A REV. NO.:2.0

## A. MAXIMUM RATING:

1. Input Power Level: 20 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40℃ to +85℃
4. Storage Temperature: -40℃ to +85℃
5. Moisture Sensitivity Level: Level 1(MSL1)

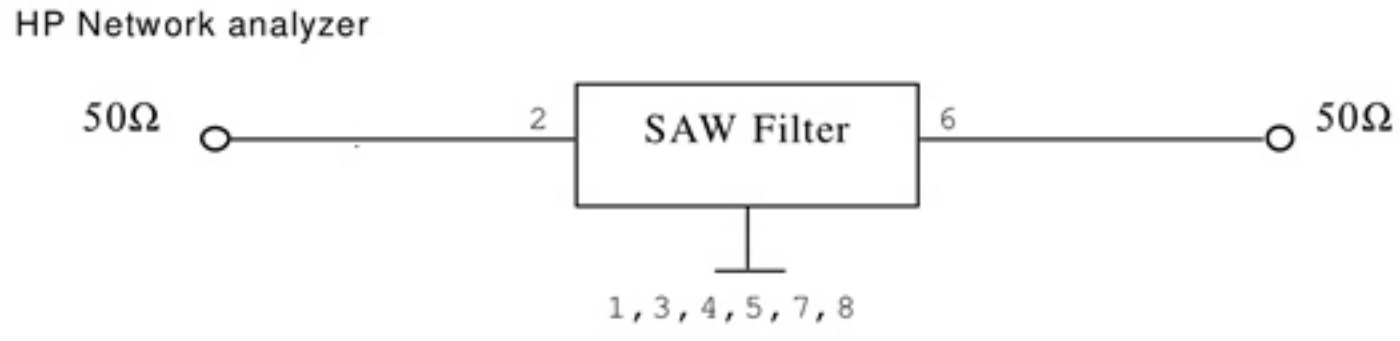
RoHS Compliant
Lead free
Lead-free soldering

**E**lectrostatic **S**ensitive **D**evice

## B. ELECTRICAL CHARACTERISTICS:

| Item | Unit | Min. | Typical | Max. |
|---|---|---|---|---|
| **Center Frequency** **Fc** | MHz | - | 748 | - |
| **Min. Insertion Loss** | dB | - | 3.2 | 4.0 |
| **Amplitude Ripple** (728 ~ 768 MHz) | dB | - | 1.2 | 2.0 |
| **I/O Return Loss** (728 ~ 768 MHz) | dB | - | 6.7 | - |
| **Group Delay Ripple** (728 ~ 768 MHz) | ns | - | 8.0 | 40 |
| **Phase Linearity** (728 ~ 768 MHz) | °rms | - | 2.8 | - |
| **Attenuation** (Reference level from 0 dB) | | | | |
| 100 ~ 658 MHz | dB | 38 | 45 | - |
| 658 ~ 703 MHz | dB | 28 | 35 | - |
| 793 ~ 838 MHz | dB | 17 | 26 | - |
| 838 ~ 2000 MHz | dB | 20 | 25 | - |
| **Temperature Coefficient of Frequency** | ppm/K | - | -80 | - |

## C. MEASUREMENT CIRCUIT:



## D. FREQUENCY CHARACTERISTICS:

(1) Wide band Response:(span 2000MHz)

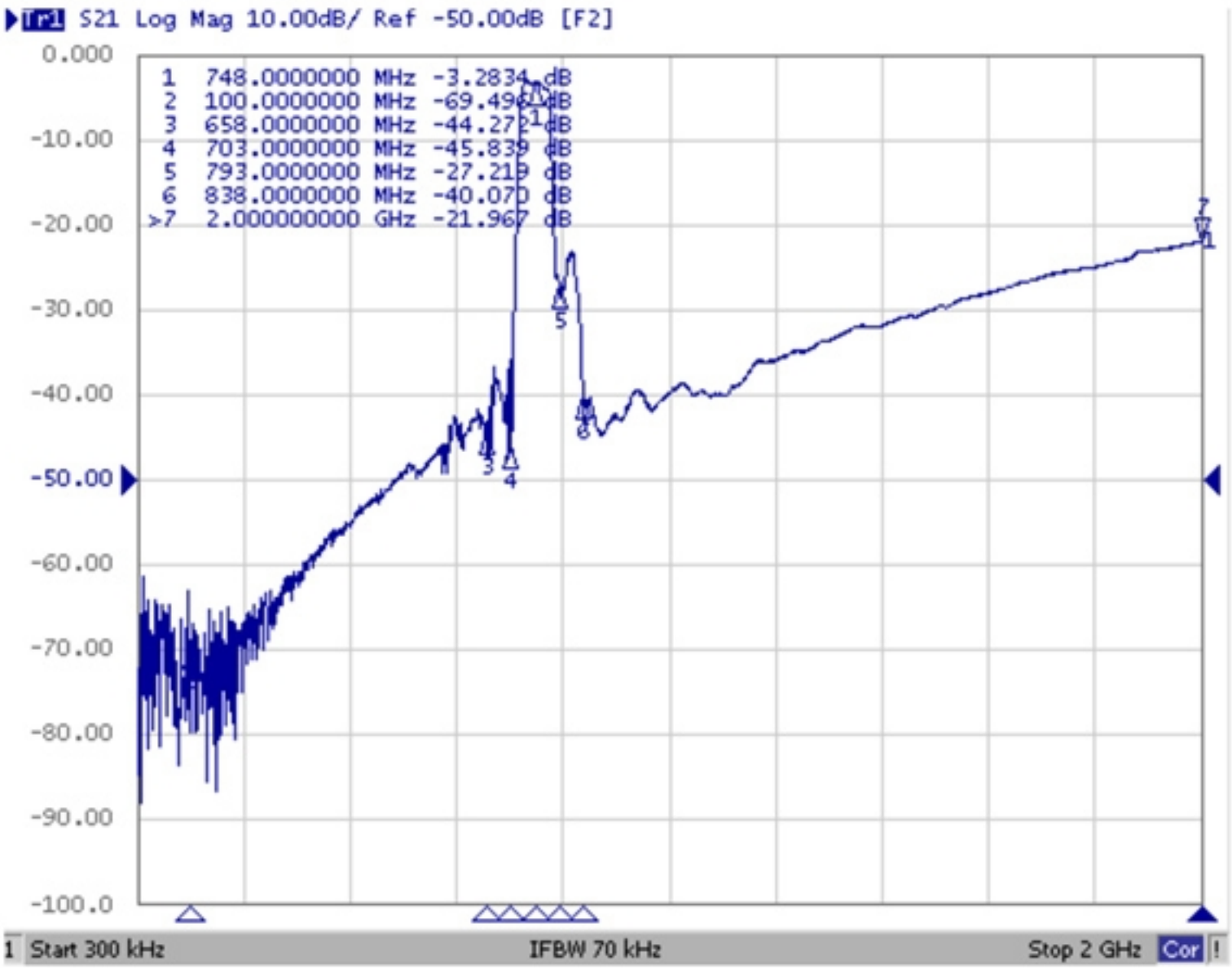



Fig1. Horizontal: 200MHz/Div Vertical: 10dB/Div

(2) Pass band Response and Group Time Delay response:

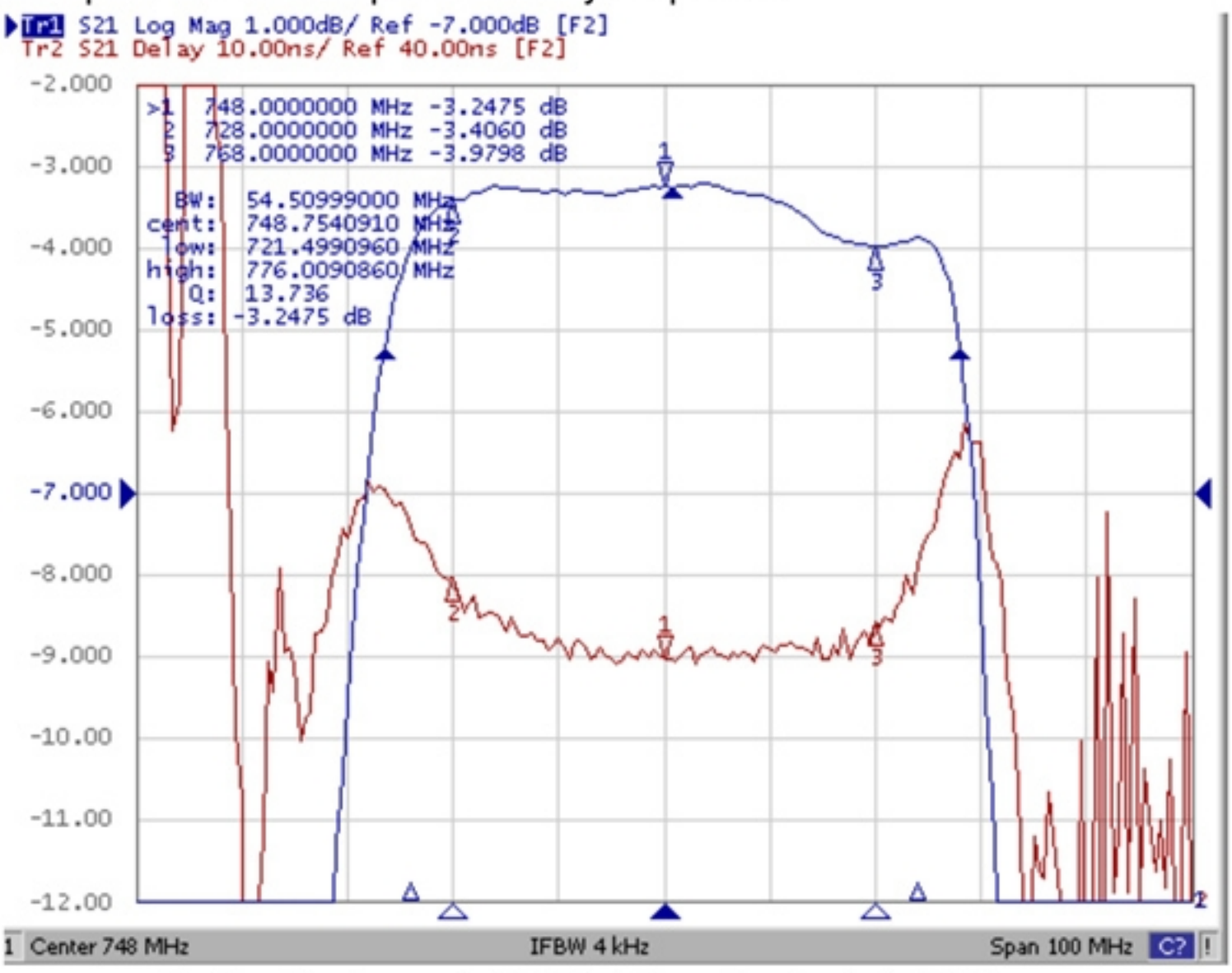


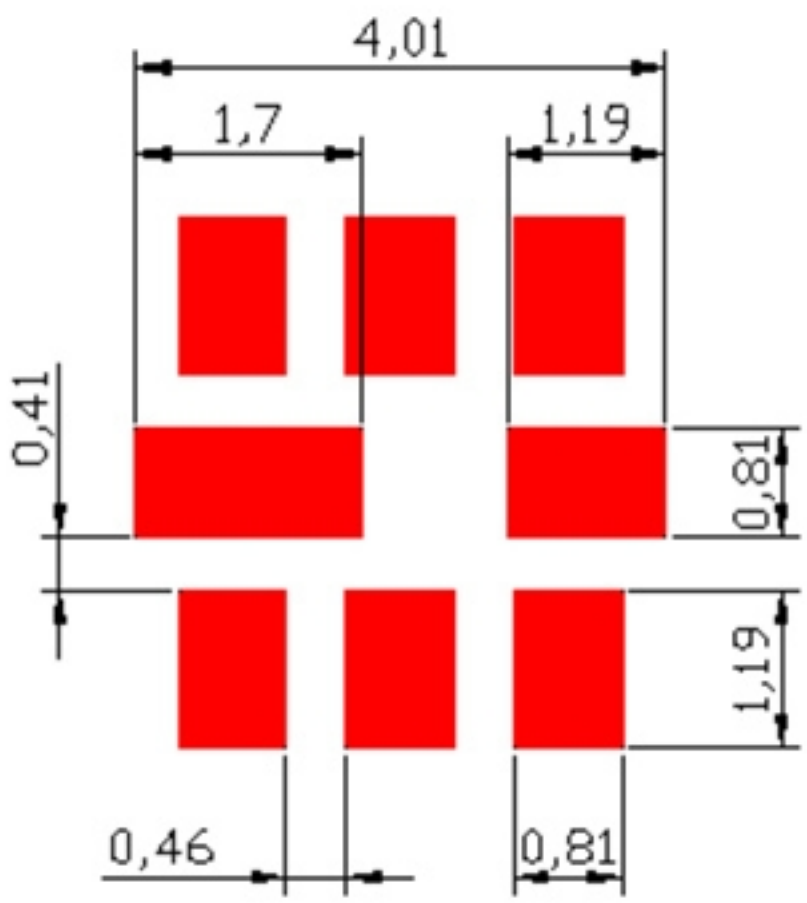

Fig2. Horizontal: 10MHz/Div Vertical: 1dB/Div

Vertical: 10ns/Div

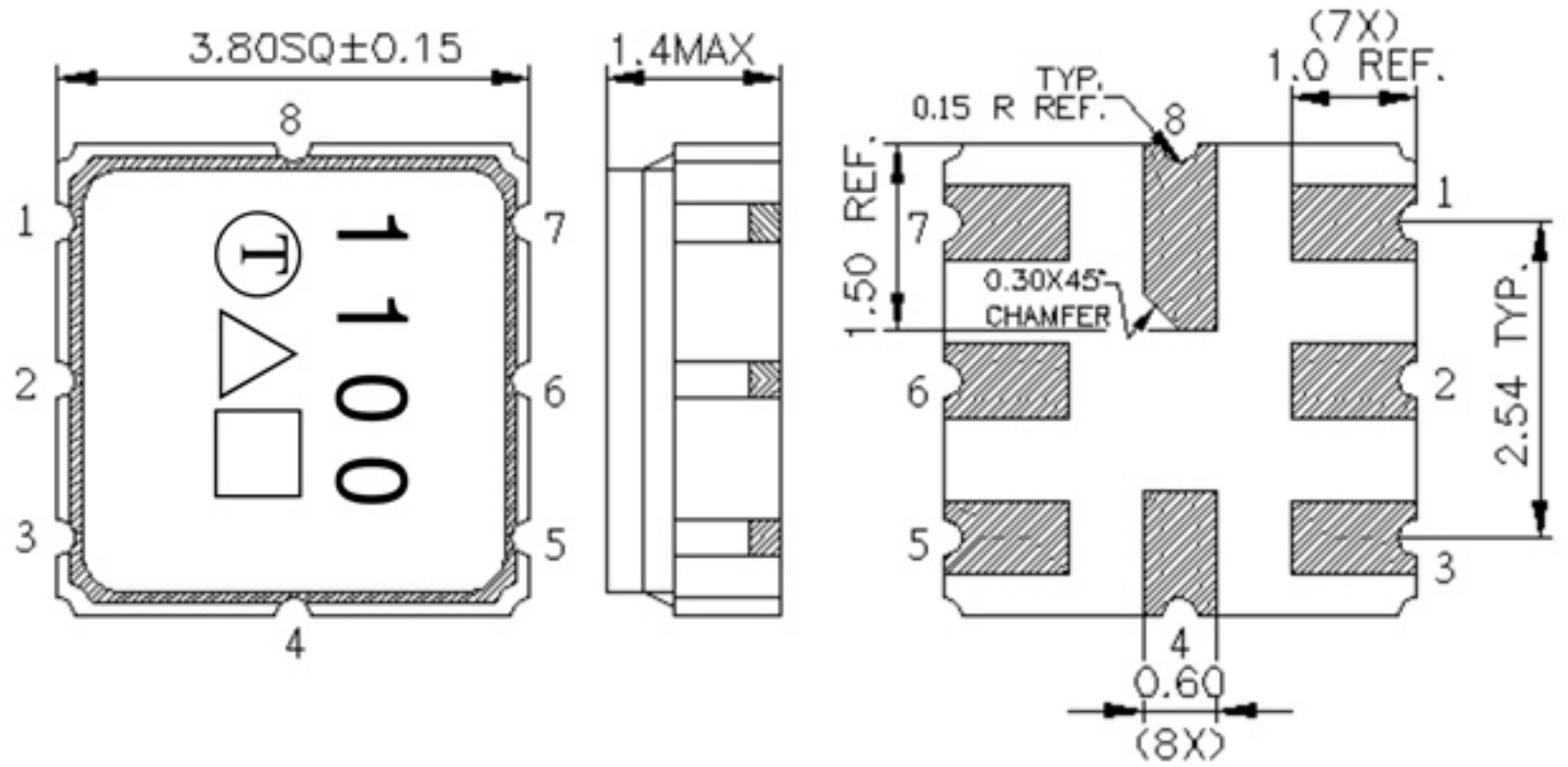
(3) Narrow band response(sapn 400MHz):


Fig3. Horizontal: 40MHz/Div Vertical: 5dB/Div

**E. PCB FOOTPRINT:**



## F.OUTLINE DRAWING:




2: Input

6: Output

1,3,4,5,7,8: Ground

□ : Date Code (W01->A, W02->B,…W52->z)

△ : Product / Year Code

Unit: mm

Product / Year Code- 2year cycle

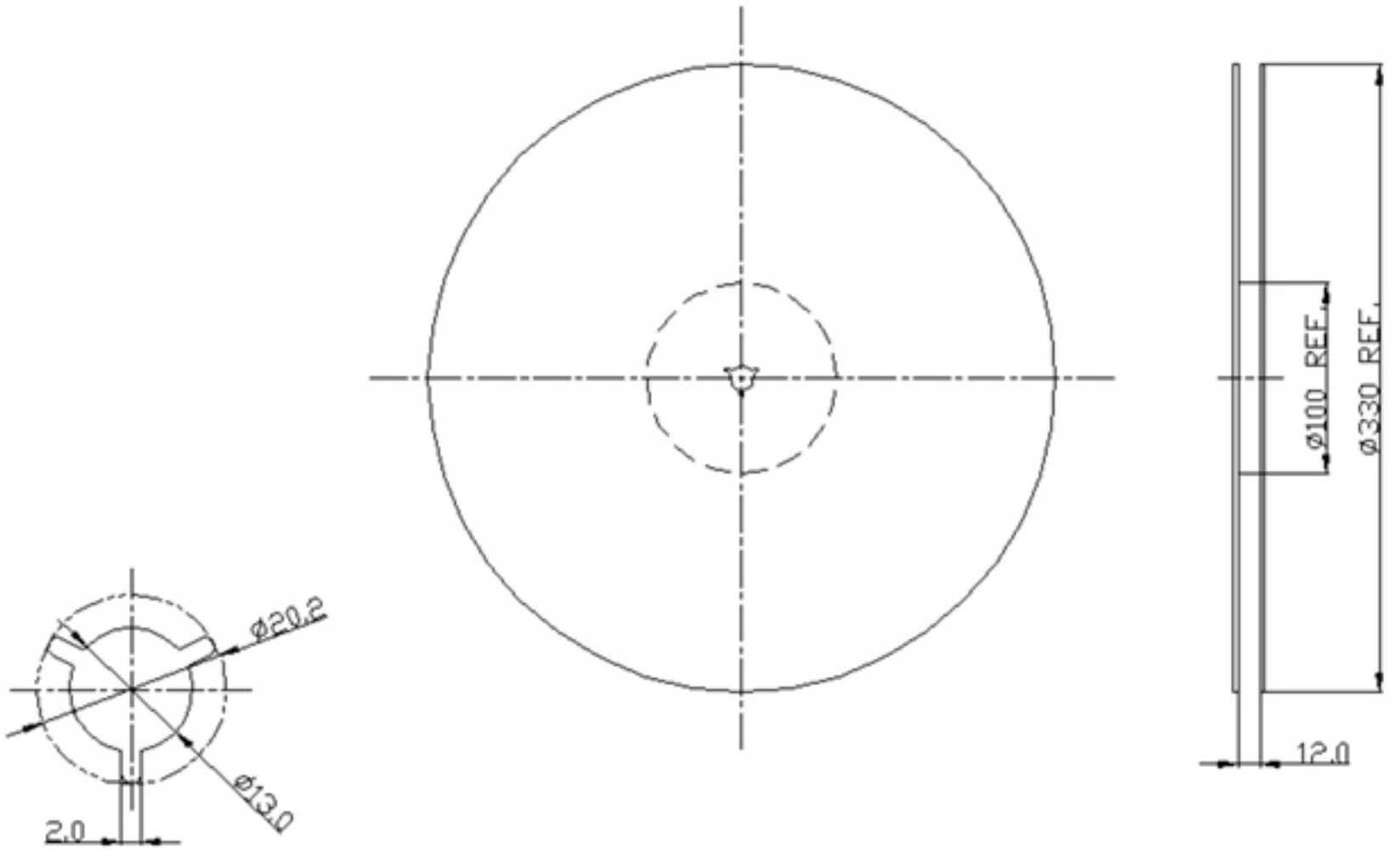
| Year | 2019<br>2021 | 2020<br>2022 |
|---|---|---|
| Product Code | A | a |

Week Code Table

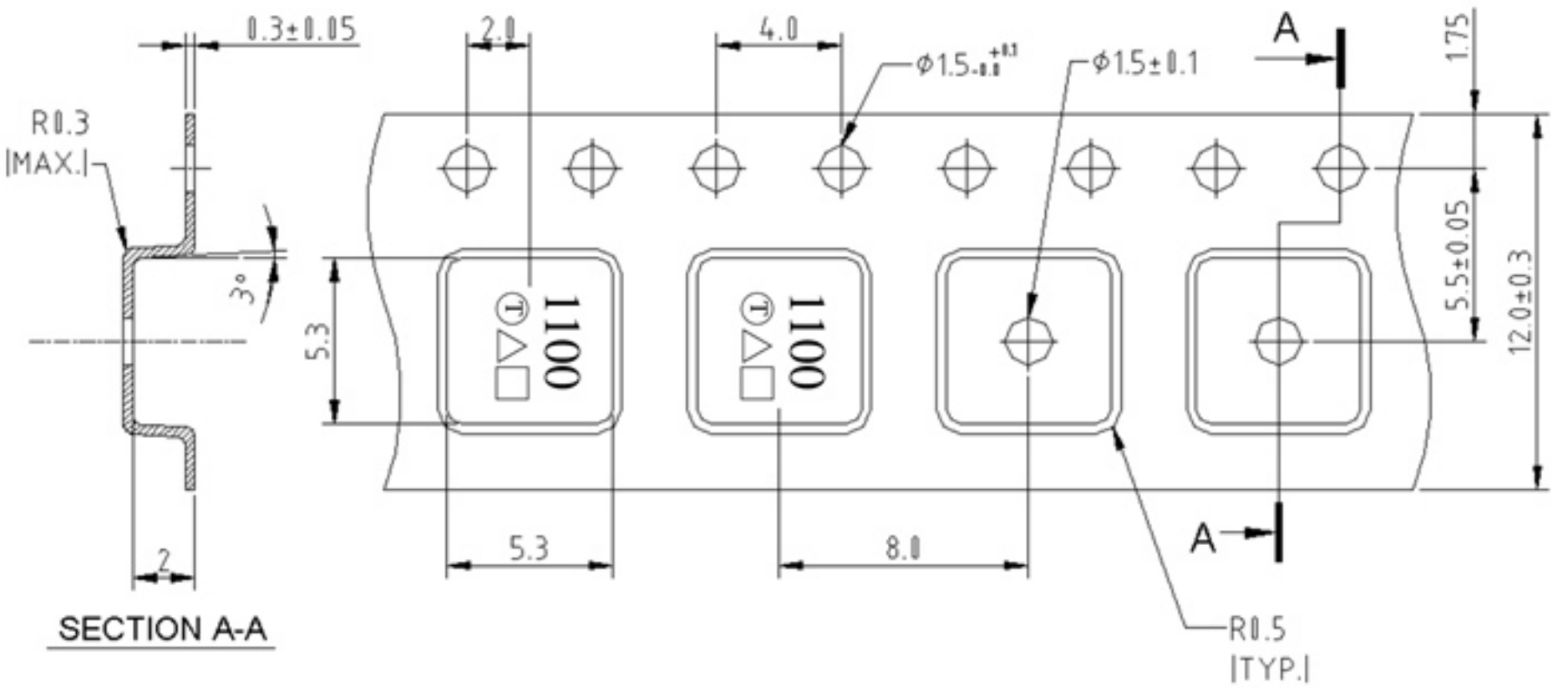
| WK01 | WK02 | WK03 | WK04 | WK05 | WK06 | WK07 | WK08 | WK09 | WK10 | WK11 | WK12 | WK13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | C | D | E | F | G | H | I | J | K | L | M |
| WK14 | WK15 | WK16 | WK17 | WK18 | WK19 | WK20 | WK21 | WK22 | WK23 | WK24 | WK25 | WK26 |
| N | O | 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 |

## G. PACKING:

1. REEL DIMENSION: (Please refer to FR-75D10 for packing quantity)




2. TAPE DIMENSION




**Direction of Feed**

## H. RECOMMENDED REFLOW PROFILE:

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.