

# SAW Filter 670 MHz

MODEL NO.:TA1050B

REV. NO.:1

## A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitivity Level: Level 1(MSL1)

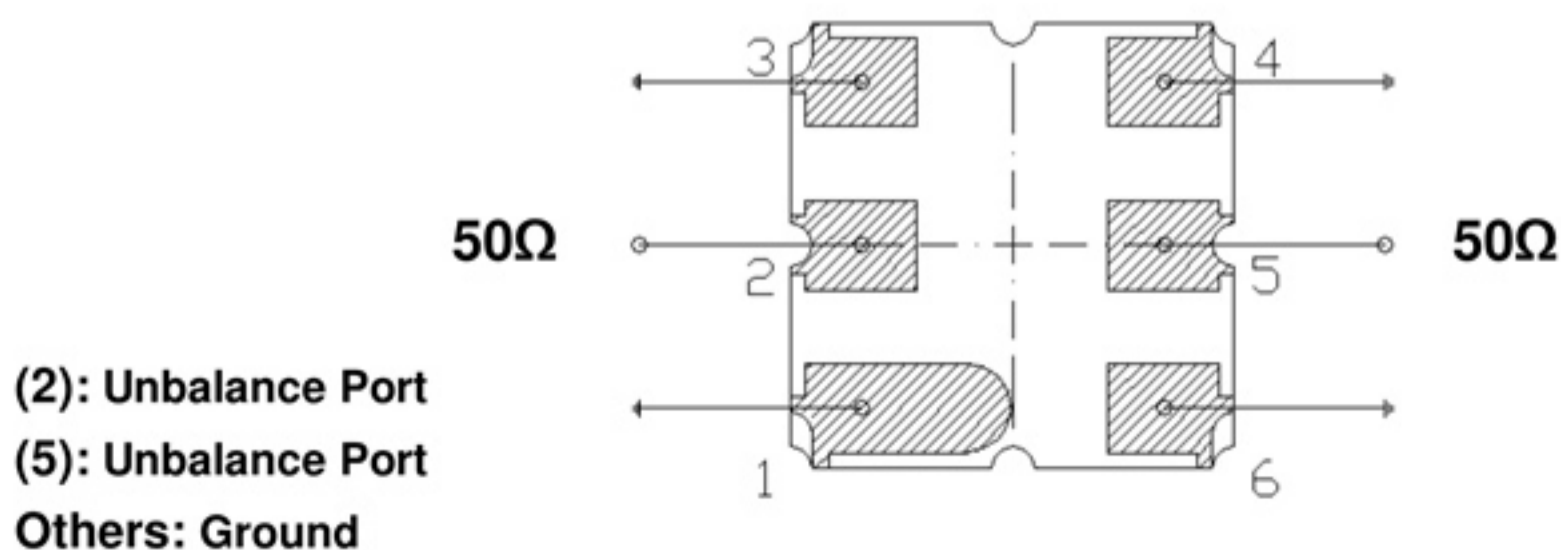
RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

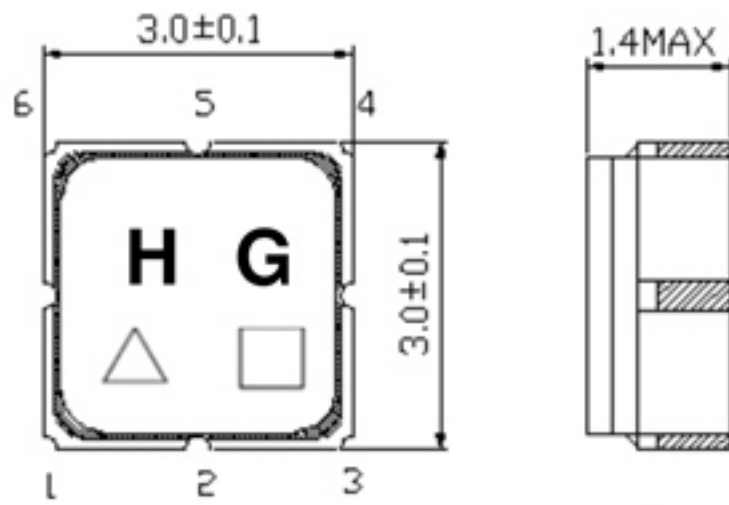
## B. ELECTRICAL CHARACTERISTICS:

| Item   | Unit | Min.  | Type. | Max. |     |
|--|------|-------|-------|------|-----|
| Center Frequency                               | Fc   | MHz   | -     | 670  | -   |
| Insertion Loss at Center Frequency             | ILc  | dB    | -     | 1.7  | 2.2 |
| Insertion Loss (660 ~ 680 MHz)                 |      | dB    | -     | 2.3  | 4.5 |
| Amplitude Ripple (660 ~ 680 MHz)               |      | dB    | -     | 0.8  | 2.8 |
| Bandwidth @ -2 dB                              |      | MHz   | 20    | 29   | -   |
| VSWR at Center Frequency                       |      | -     | -     | 1.4  | 2.0 |
| <b>Attenuation</b> (Reference level from 0 dB) |      |       |       |      |     |
| DC ~ 608 MHz                                   |      | dB    | 50    | 60   | -   |
| 608 ~ 614 MHz                                  |      | dB    | 30    | 60   | -   |
| 726 ~ 732 MHz                                  |      | dB    | 30    | 51   | -   |
| 1278 ~ 1402 MHz                                |      | dB    | 40    | 54   | -   |
| 1948 ~ 2072 MHz                                |      | dB    | 35    | 38   | -   |
| Temperature coefficient of frequency           |      | ppm/k | -     | -36  | -   |

## C. MEASUREMENT CIRCUIT:

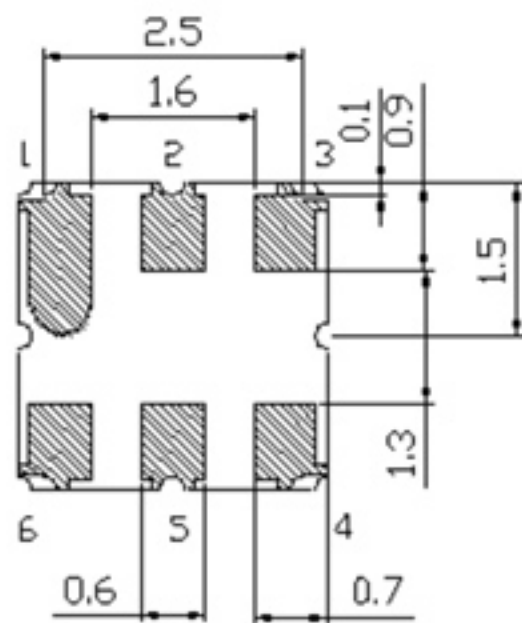
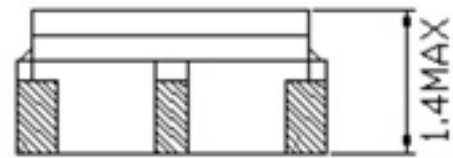


### D. OUTLINE DRAWING:



Unit : mm

Not Specified Tolerance : +/-0.15 mm



| Pin No. | Symbol | Function |
|---------|--------|----------|
| 1       | GND    | Ground   |
| 2       | IN     | Input    |
| 3       | GND    | Ground   |
| 4       | GND    | Ground   |
| 5       | OUT    | Output   |
| 6       | GND    | Ground   |

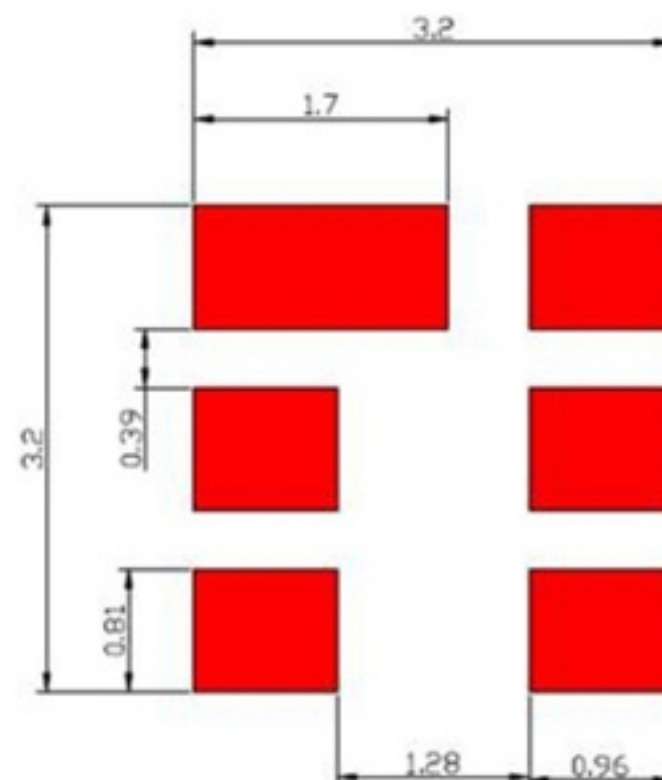
△ : Year Code (2011->1, 2012->2, ..., 2019->9, 2020->0)

□ : Date Code

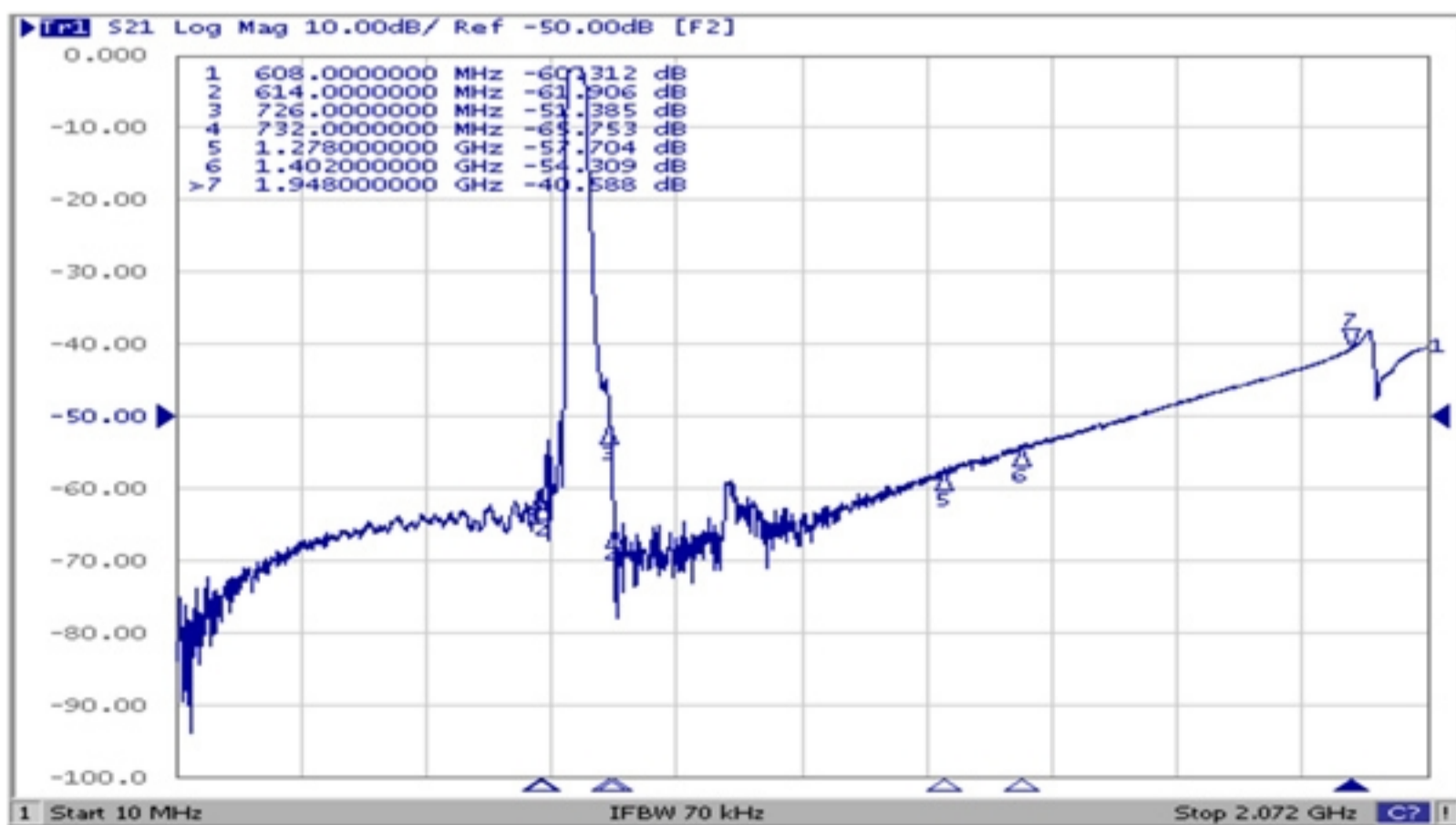
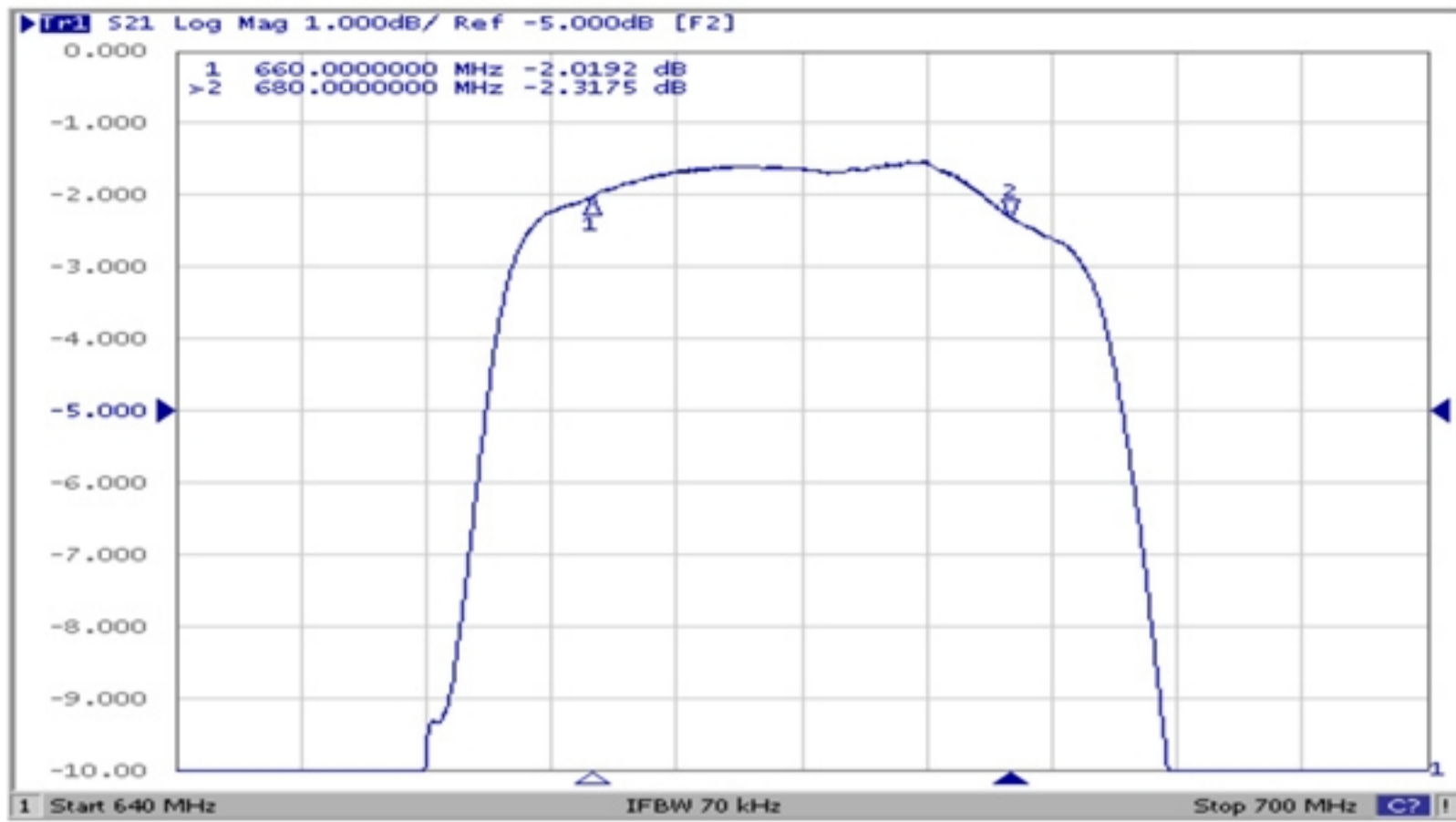
Date Code Table:

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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:

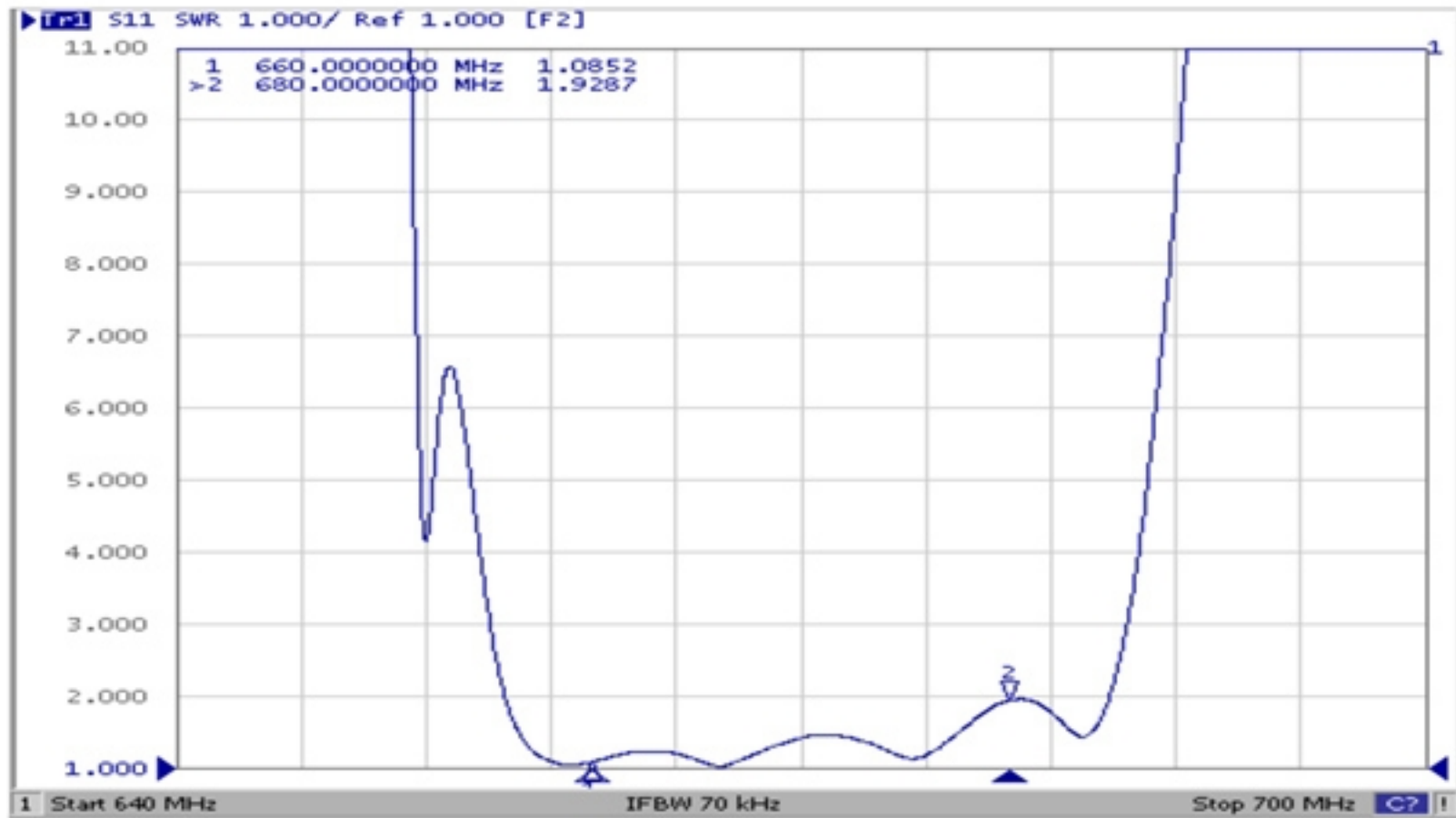


### F. Frequency Characteristics:

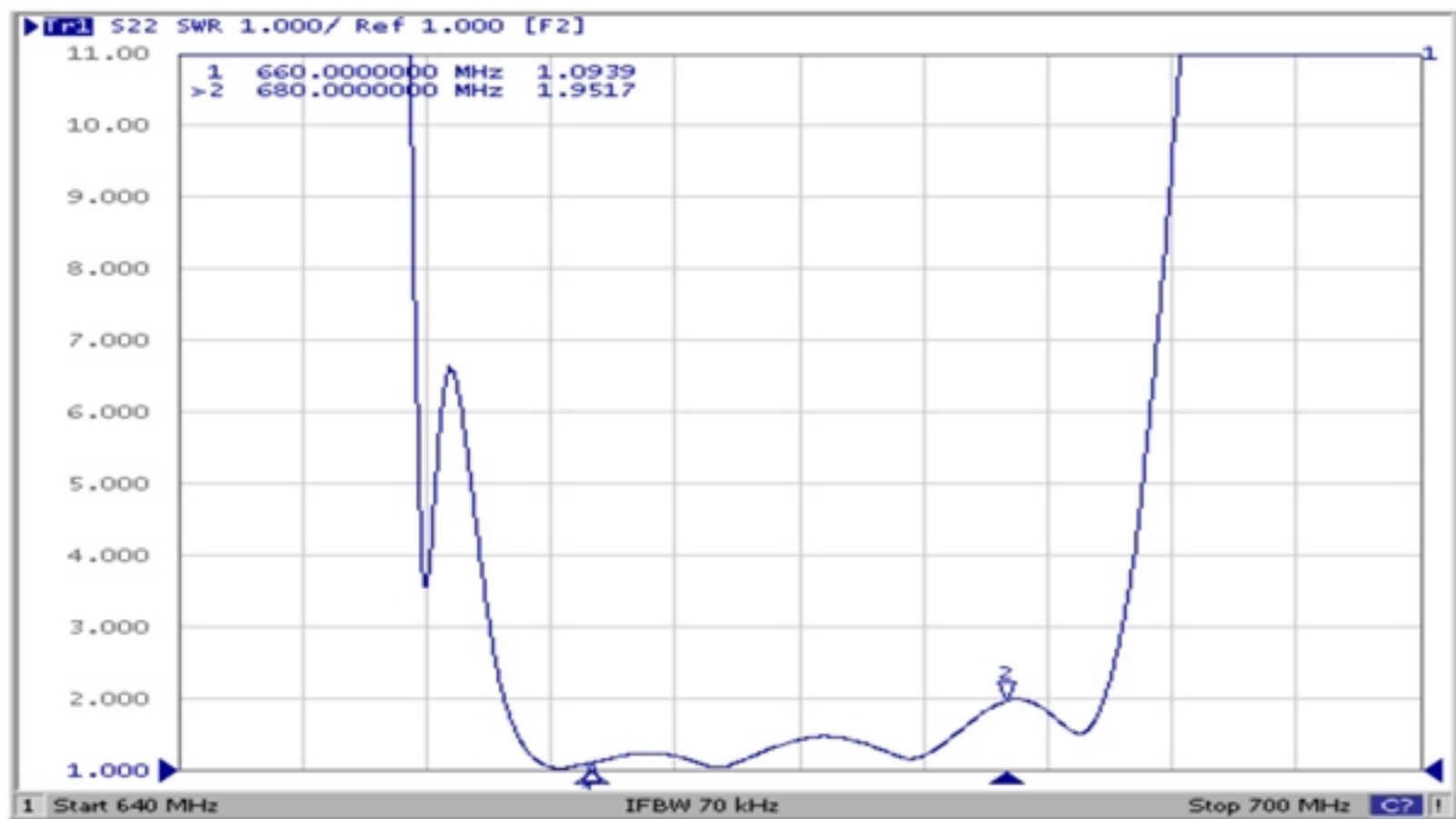


Reflection Functions:

## S11



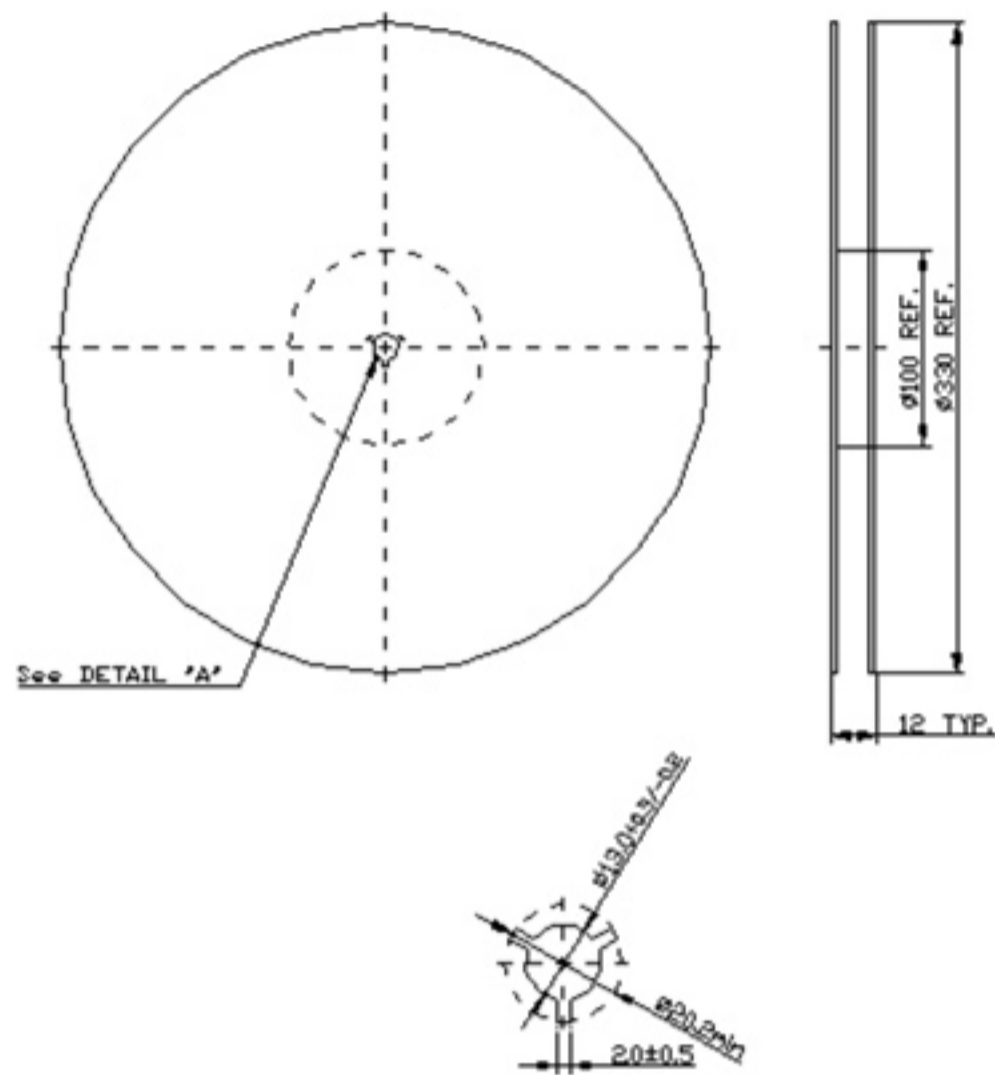
## S22



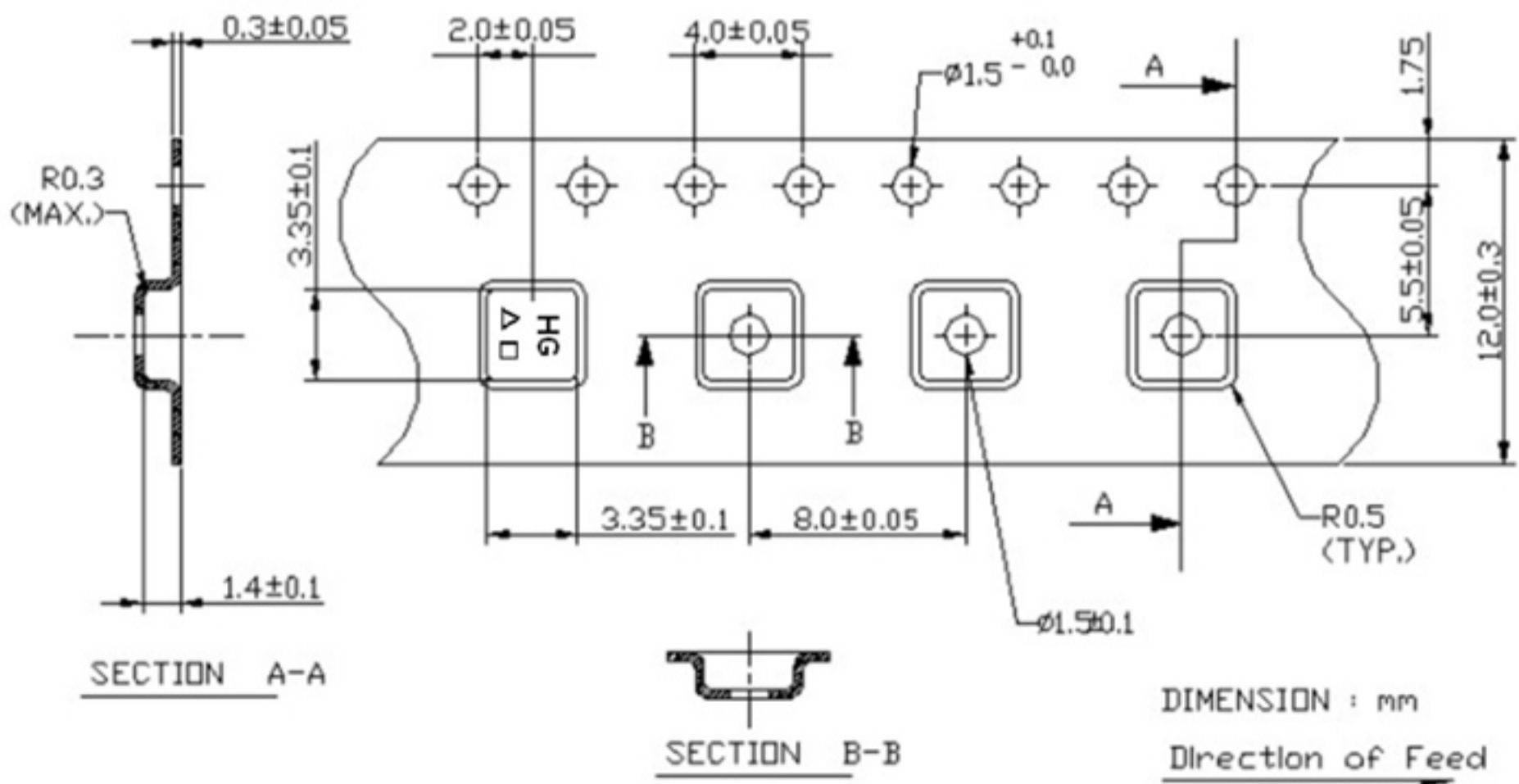
### G. PACKING: (Ref. WI-75M03)

#### 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.

