



# TAI-SAW TECHNOLOGY CO., LTD.

No. 3, Industrial 2nd Rd., Ping-Chen Industrial District,  
Taoyuan, 324, Taiwan, R.O.C.

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## Product Specifications Approval Sheet

Product Description: SAW Filter 1516 MHz SMD 3.0x3.0 mm (BW=40 MHz)

TST Part No.: TA1445A

Customer Part No.: \_\_\_\_\_

Customer signature required

Company: \_\_\_\_\_

Division: \_\_\_\_\_

Approved by : \_\_\_\_\_

Date: \_\_\_\_\_

Checked by: \_\_\_\_\_ David Chang 張閔智

Approved by: \_\_\_\_\_ Francis Chen 

Date: \_\_\_\_\_ 2012/02/06

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 Filter 1516 MHz

MODEL NO.: TA1445A

REV. NO.:1

### A. MAXIMUM RATING:

1. Input Power Level: 10 dB<sub>m</sub>
2. DC voltage: 3 V
3. Operating Temperature: -40°C to 85°C
4. Storage Temperature: -50°C to +125°C

RoHS Compliant  
Lead free  
Lead-free soldering

Electrostatic Sensitive Device (ESD)

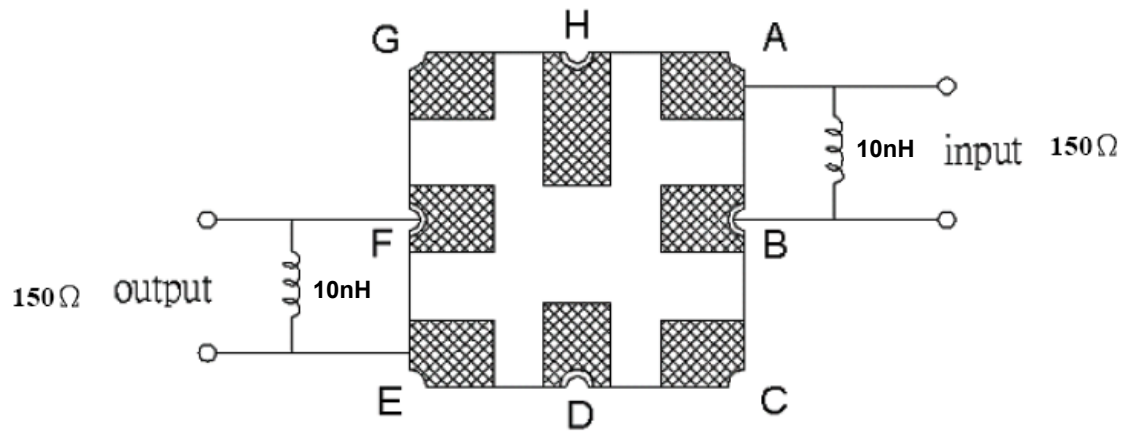
### B. CHARACTERISTICS:

Terminating source impedance (differential): Z<sub>s</sub>=150Ω // 10nH

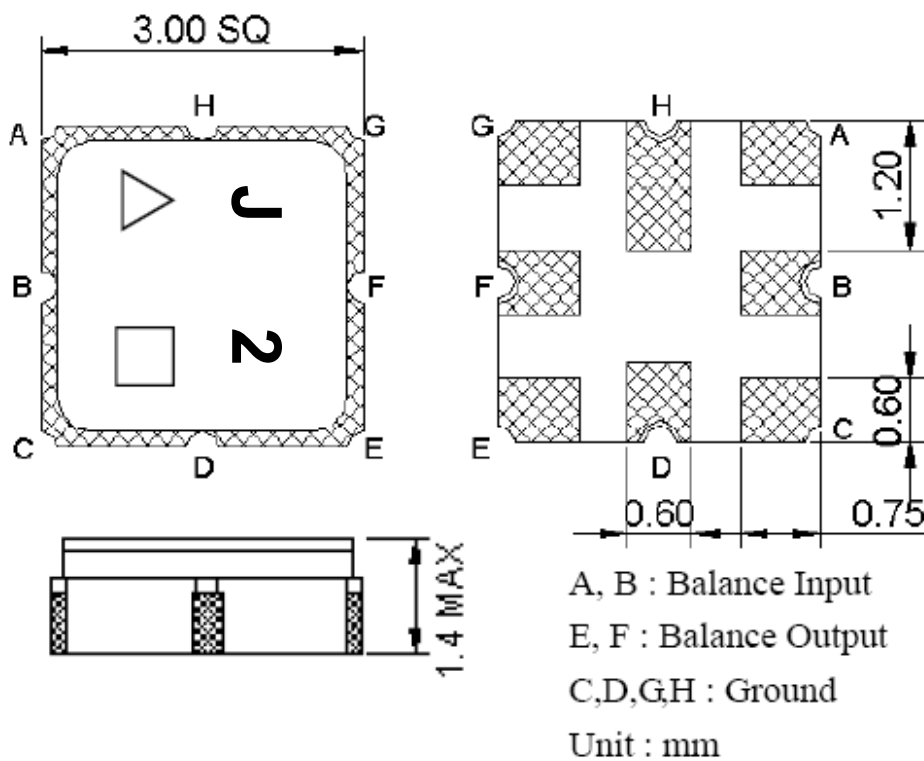
Terminating load impedance (differential): Z<sub>L</sub>=150Ω // 10nH

| Item                                     | Unit   | Min. | Typ. | Max. |
|------------------------------------------|--------|------|------|------|
| Center frequency <b>F<sub>c</sub></b>    | MHz    | -    | 1516 | -    |
| Insertion loss (1496~1536 MHz) <b>IL</b> | dB     | -    | 3.3  | 5    |
| Amplitude ripple (1496~1536 MHz)         | dB     | -    | 0.6  | 2    |
| VSWR (1496~1536 MHz)                     | -      | -    | 1.8  | 2.5  |
| Group delay ripple (1496~1536 MHz)       | ns     | -    | 9    | 25   |
| Attenuation (reference from 0dB)         |        |      |      |      |
| 10 ~ 860 MHz                             | dB     | 55   | 70   | -    |
| 860 ~ 1100 MHz                           | dB     | 46   | 70   | -    |
| 1100 ~ 1423.9 MHz                        | dB     | 40   | 56   | -    |
| 1608.4 ~ 1724.6 MHz                      | dB     | 33   | 39   | -    |
| 1724.6 ~ 2000 MHz                        | dB     | 40   | 54   | -    |
| 2000 ~ 2250 MHz                          | dB     | 36   | 52   | -    |
| 2250 ~ 6000 MHz                          | dB     | 15   | 20   | -    |
| Temperature Coefficient of Frequency     | Ppm/°C | -    | -36  | -    |

### C. MEASUREMENT CIRCUIT:



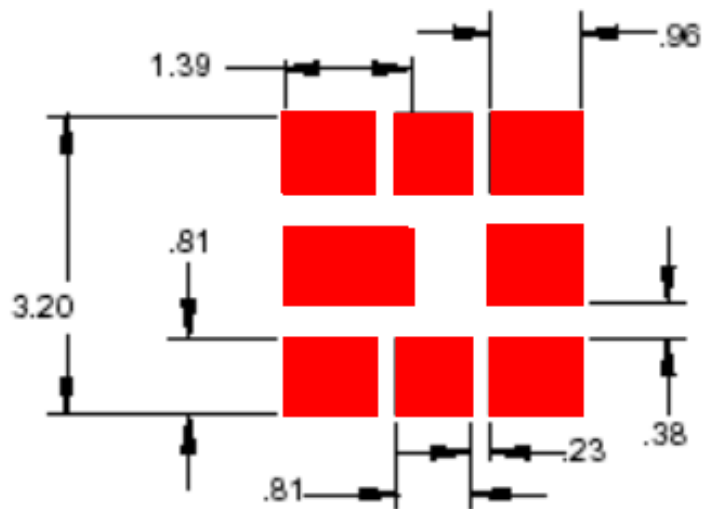
### D. OUTLINE DRAWING:



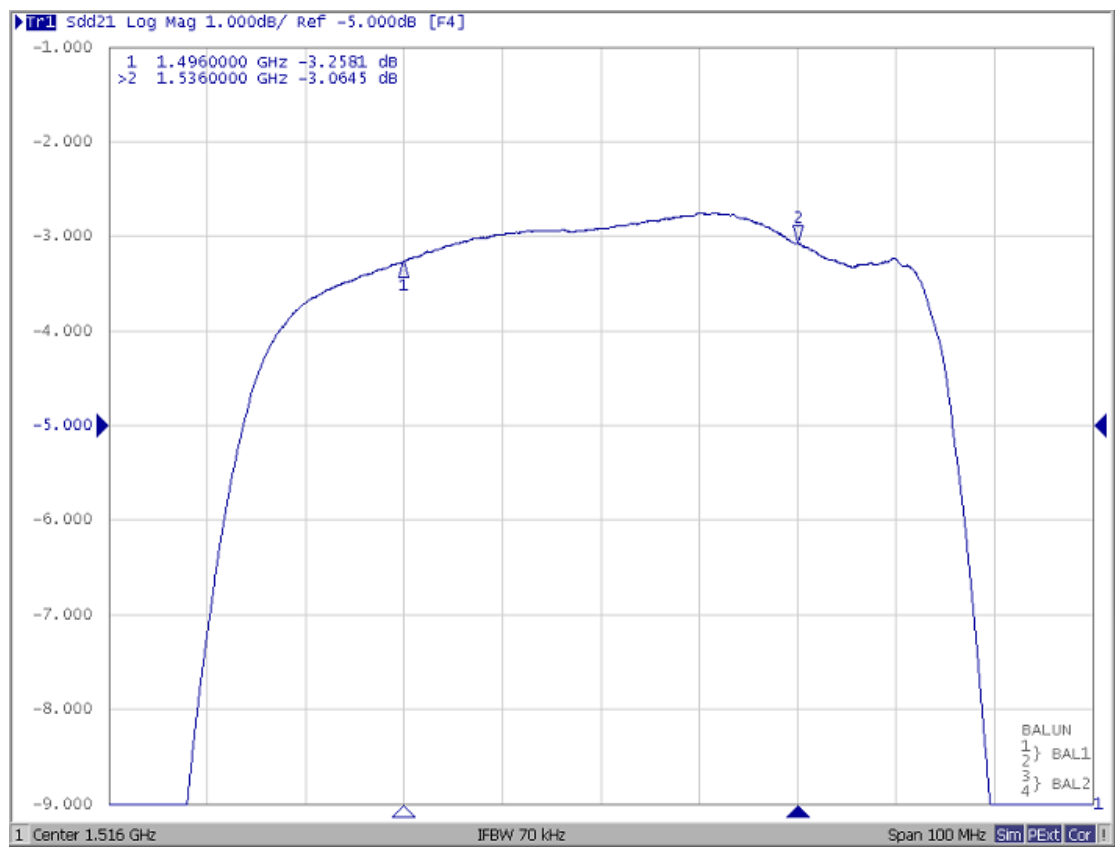
△: Year Code(2011->1,...,2020->0)

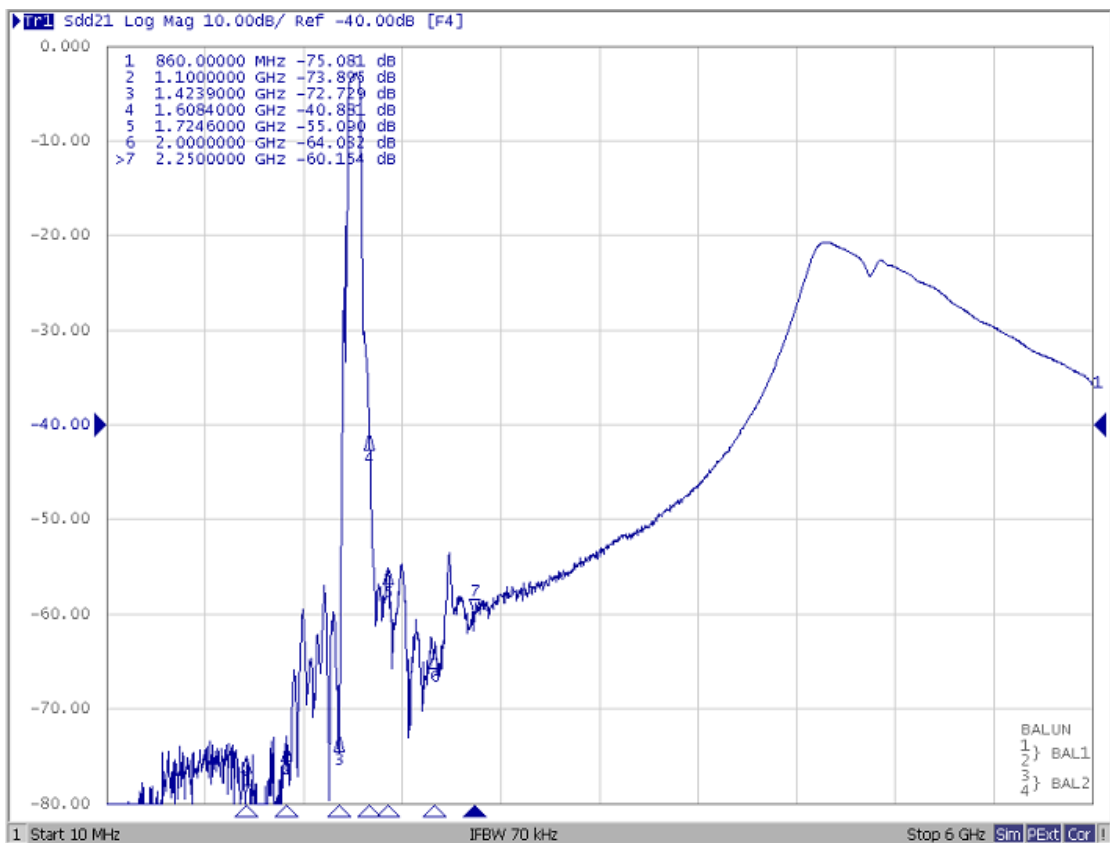
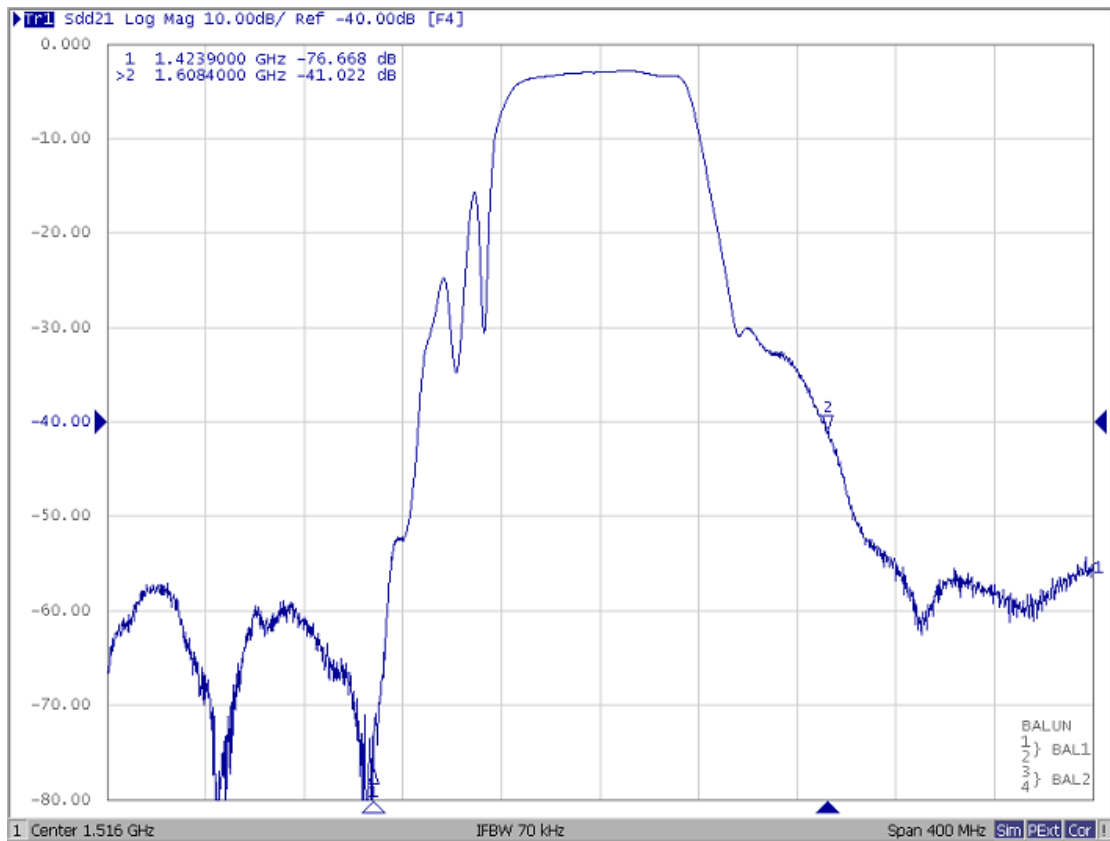
□: Date Code(W01->A, W02->B,..., W27->a, W52->z)

E. PCB FOOTPRINT:



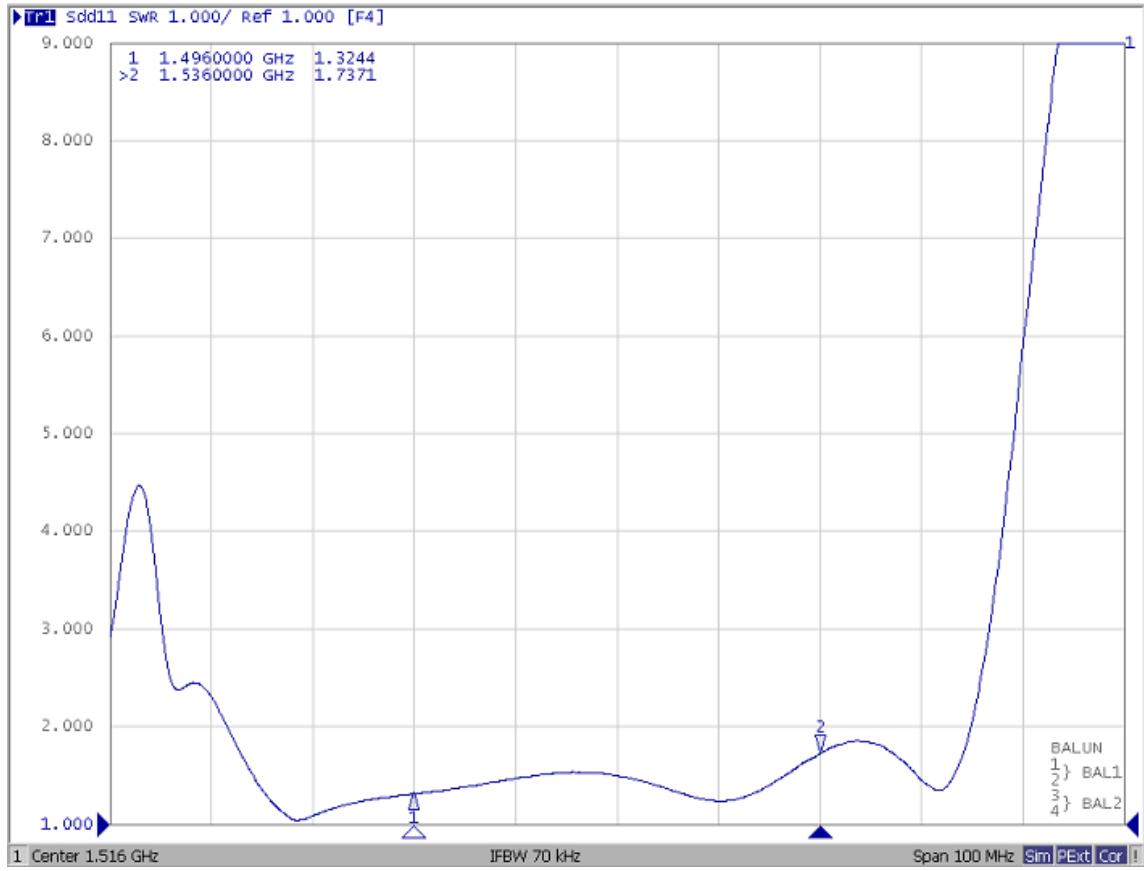
F. Frequency Characteristics:



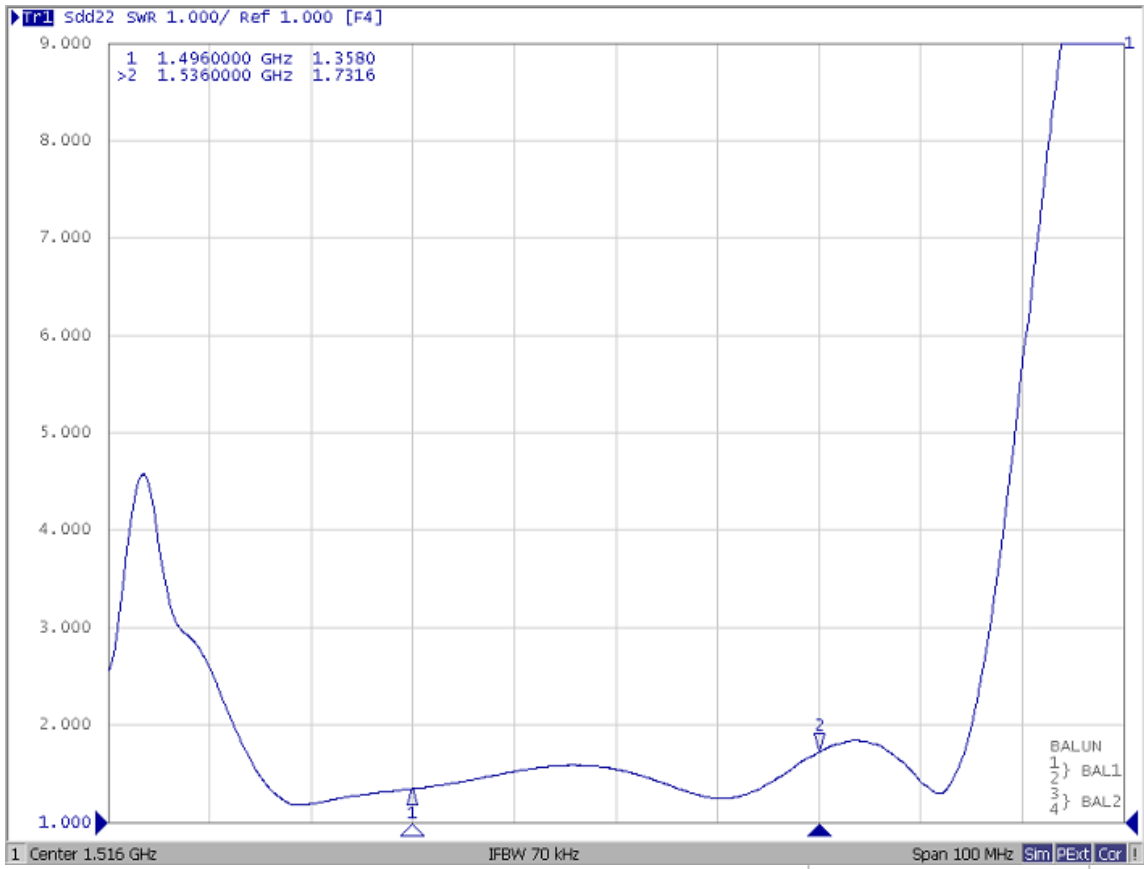


Reflection Functions:

S11

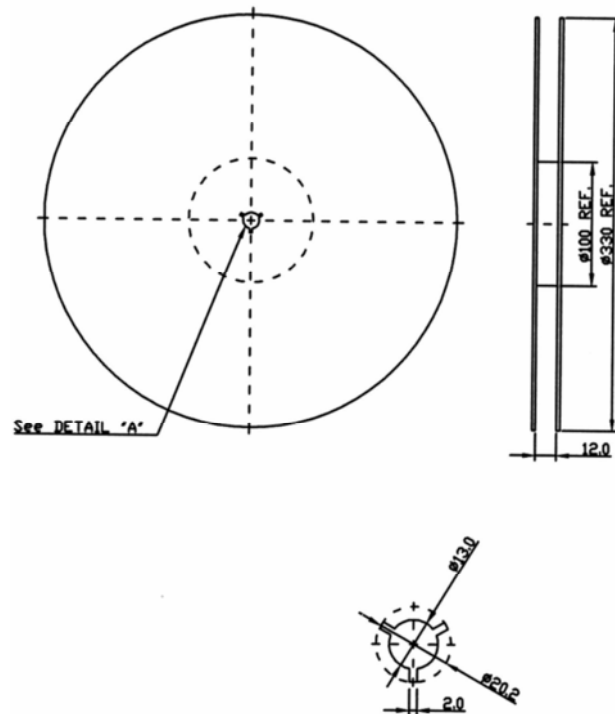


S22

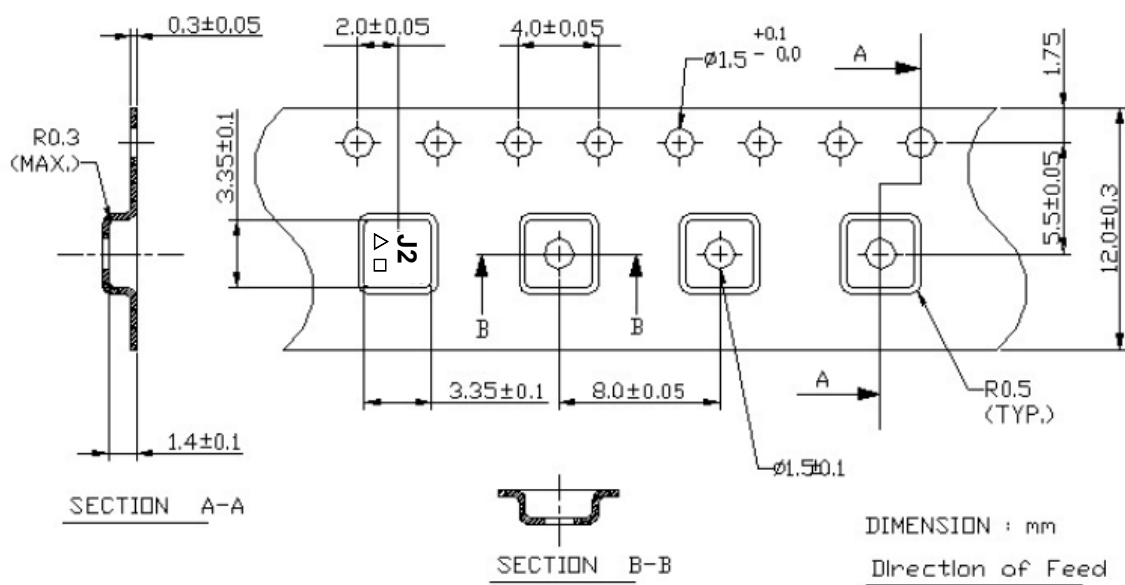


## G. PACKING:

### 1. REEL DIMENSION



### 2. TAPE DIMENSION



**H. RECOMMENDED REFLOW PROFILE:**

