



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: IF SAW Filter 575 MHz SMD 5.0X5.0 mm (BW=30 MHz)

TST Part No.: TB0759A

Customer Part No.: _____

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

Checked by: _____ Hayley Chou *Hayley Chou*

Approved by: _____ Andy Yu *Andy Yu*

Date: _____ 2019/08/06

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 575 MHz

MODEL NO.: TB0759A

REV. NO.: 2.0

A. MAXIMUM RATING:

1. Input Power Level: 10 dBm
2. DC Voltage : 3 V
3. Operating Temperature: -20 °C to +75 °C
4. Storage Temperature: -40 °C to +85 °C
5. Moisture Sensitive Level: Level 1 (MSL1)

RoHS Compliant
Lead free
Lead-free soldering

Electrostatic Sensitive Device (ESD)

B. ELECTRICAL CHARACTERISTICS:

Ambient Temperature: 25 °C

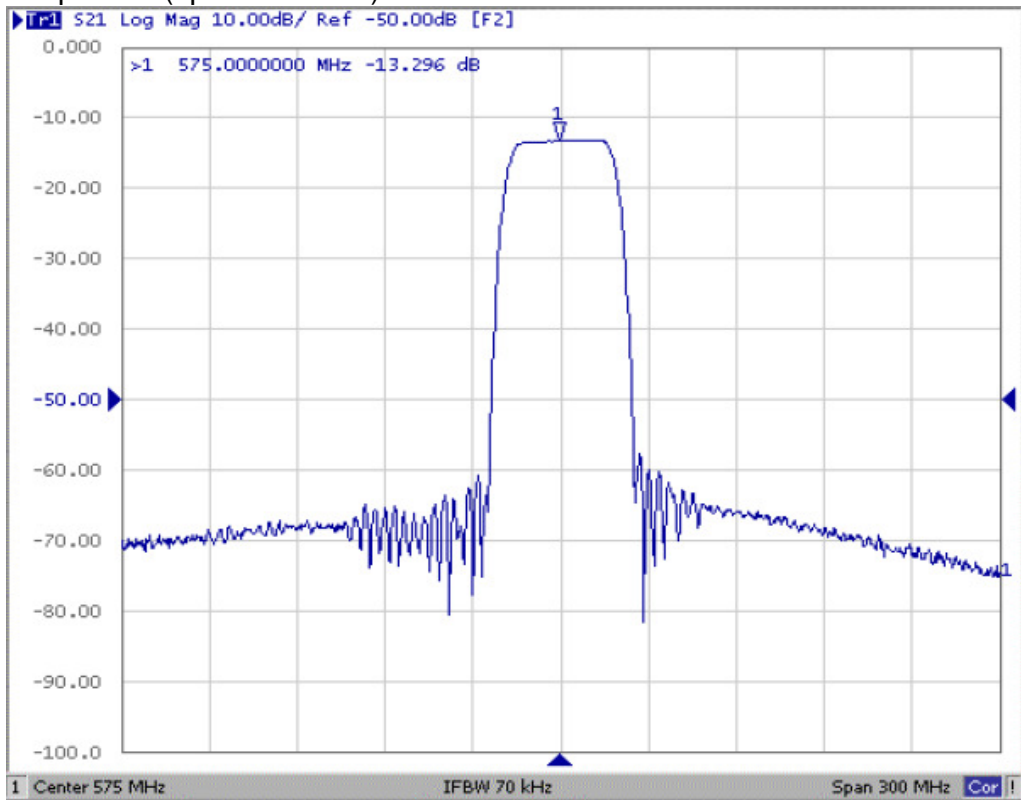
| Item | Unit | Min. | Typ. | Max. |
|--|-------|------|------|------|
| Center Frequency Fc | MHz | - | 575 | - |
| Minimum Insertion Loss IL | dB | - | 13.2 | 14.0 |
| Amplitude Ripple (560~590 MHz) | dB | - | 0.8 | 1.5 |
| Group Delay Variation (560~590 MHz) | ns | - | 10 | 45 |
| Absolute Group Delay (560~590 MHz) | ns | - | 290 | - |
| Attenuation (Reference level from 0 dB) | | | | |
| 0 ~ 506 MHz | dB | 50 | 65 | - |
| 506 ~ 536 MHz | dB | 50 | 62 | - |
| 536 ~ 548 MHz | dB | 45 | 60 | - |
| 638 ~ 656 MHz | dB | 45 | 65 | - |
| 717 ~ 1000 MHz | dB | 50 | 70 | - |
| 1000 ~1500 MHz | dB | 40 | 63 | - |
| Temperature Coefficient | ppm/K | -23 | | |

Matching:

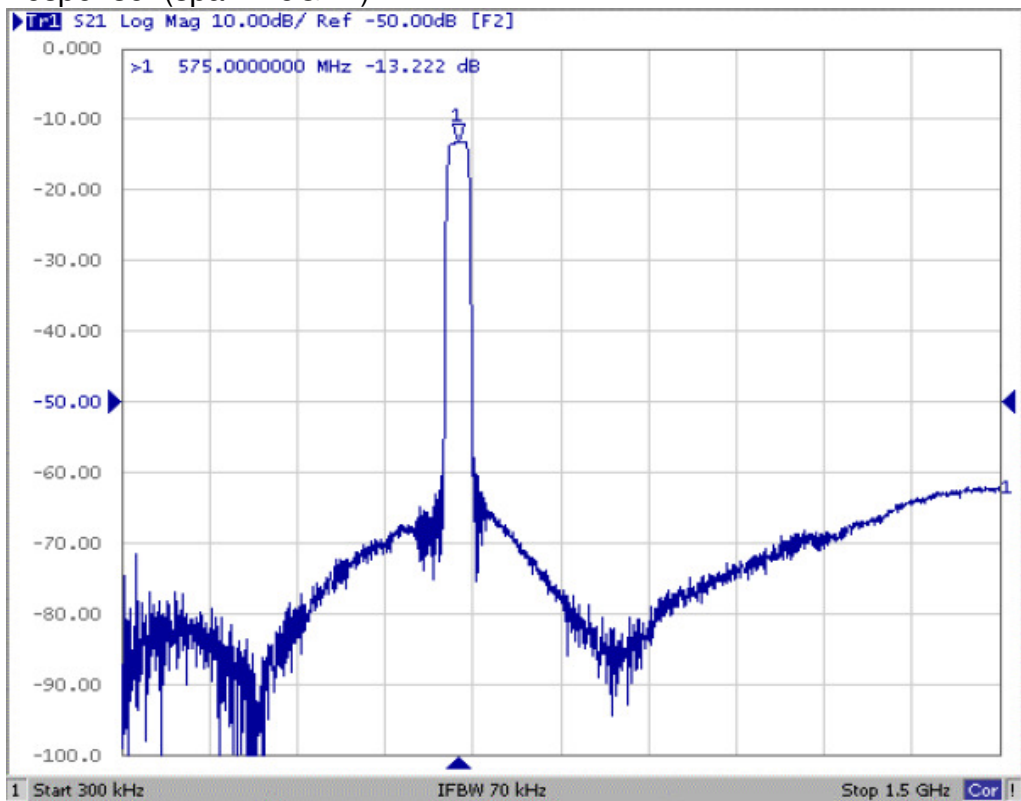
1. The input of the filter will be matched to 50 Ω.
2. The output of the filter will be matched to 50 Ω.

C. FREQUENCY CHARACTERISTIC:

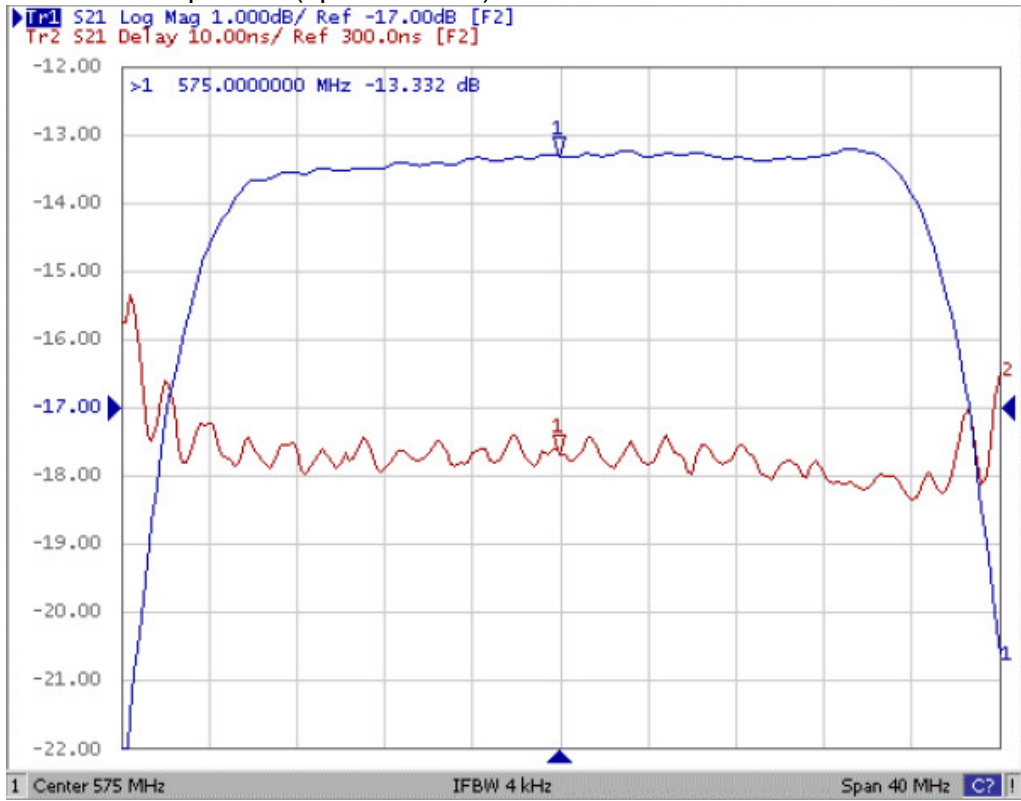
(1) S21 Response: (span 300MHz)



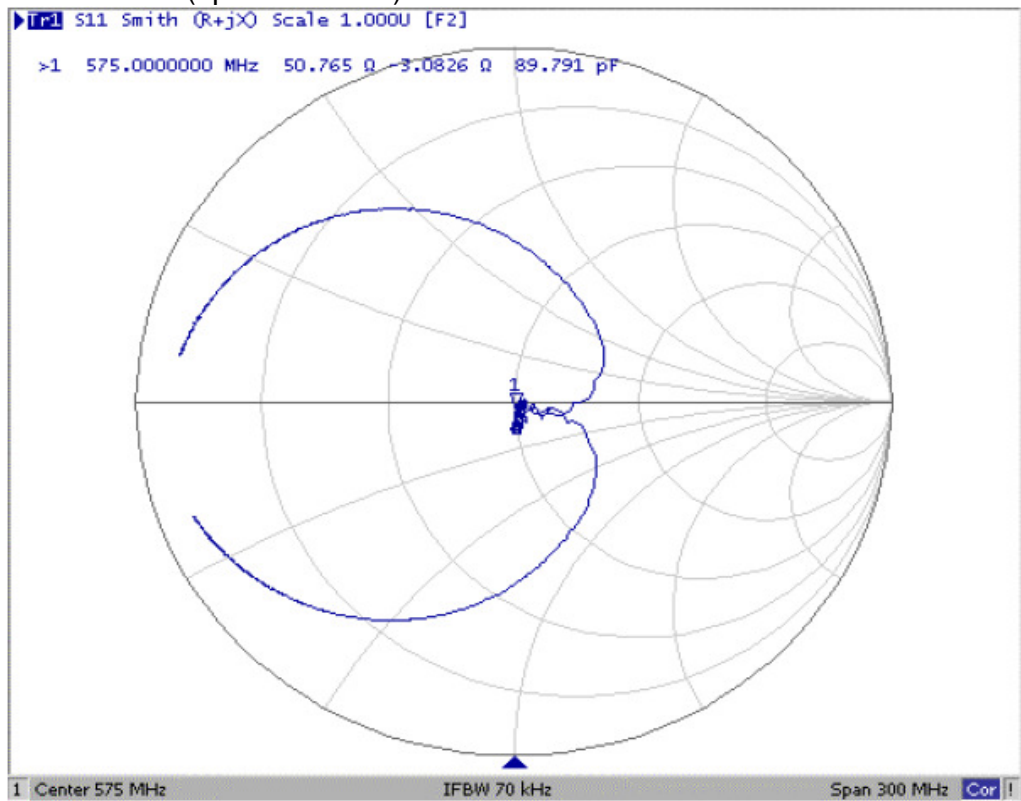
(2) S21 Response: (span 1.5GHz)



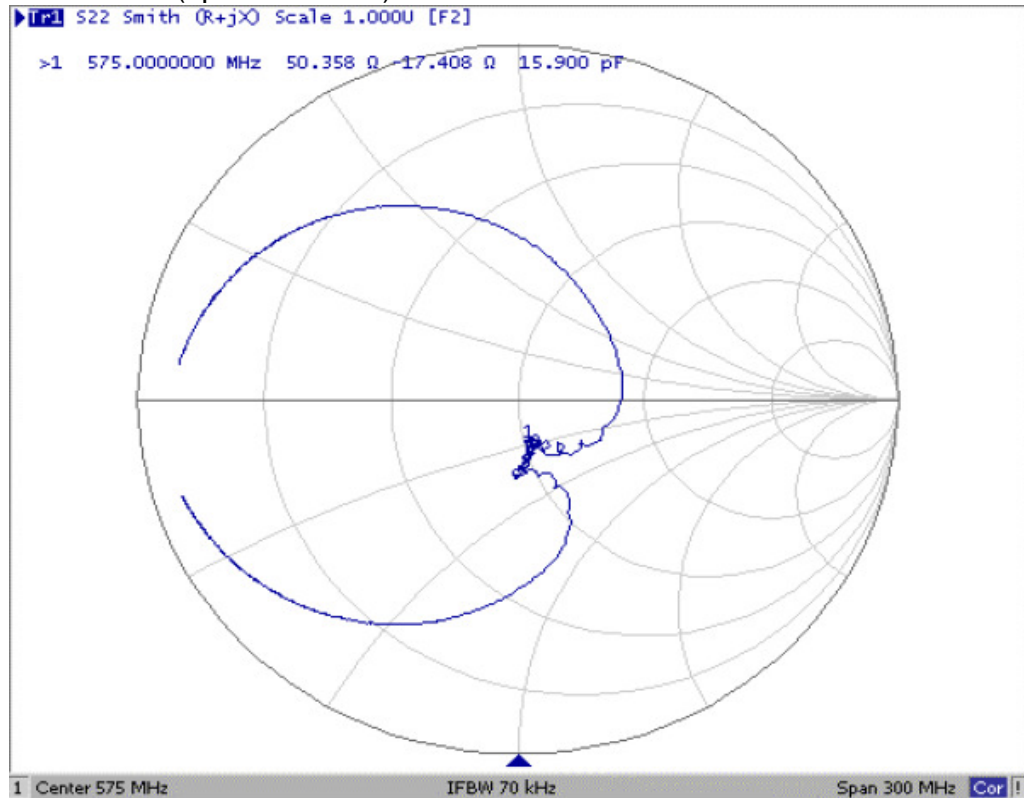
(3) Pass band of Response: (span 40MHz)



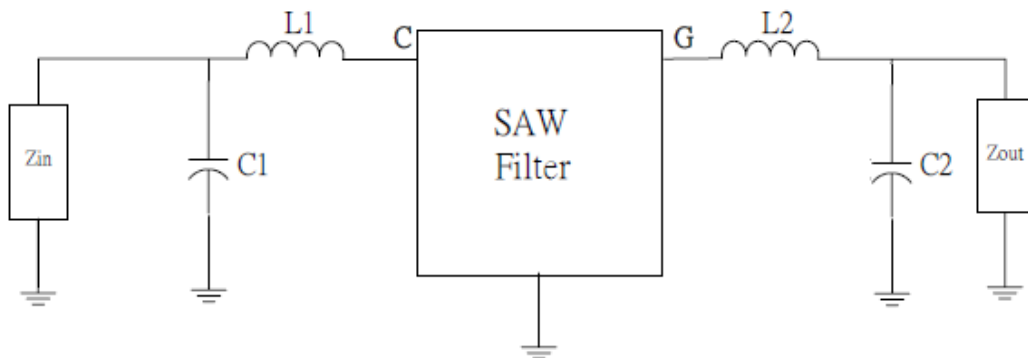
(4) S11 Smith Chart: (span 300MHz)



(5) S22 Smith Chart: (span 300MHz)

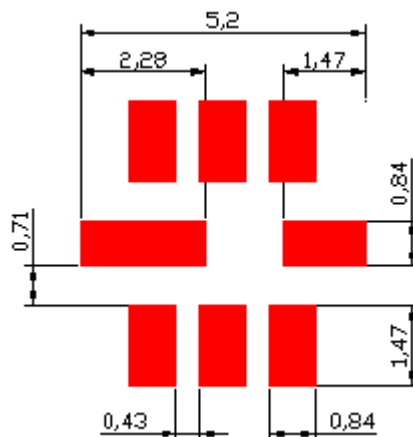


D. MEASUREMENT CIRCUIT:



Zin and Zout are $50\ \Omega$
 $L1=6.8\text{nH}$, $C1=12\text{pF}$, $L2=10\text{nH}$, $C2=12\text{pF}$

E. PCB Footprint:

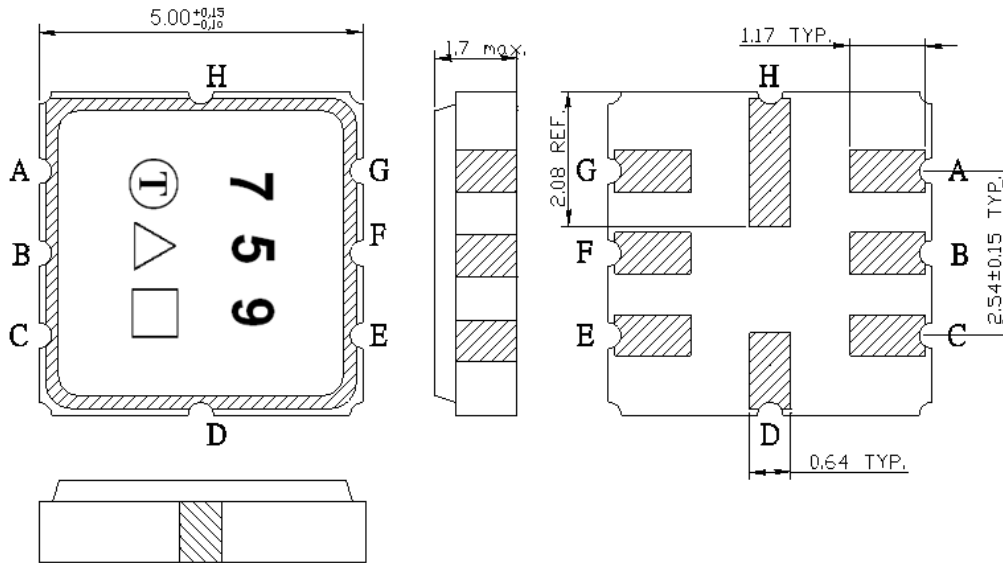


■ : Land Pattern
 Unit: mm

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TST DCC
 Release document

F. OUTLINE DRAWING:



Pin C: RF input

Pin G: RF output

Pin H,D: Case Ground

Pin A, B, E, F: Ground

□: Week Code (Follow the table from planner each year)

Unit: mm

△ : Product / Year Code

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| Year | 2005 2009 | 2006 2010 | 2007 2011 | 2008 2012 |
| Product Code | B | b | <u>B</u> | <u>b</u> |

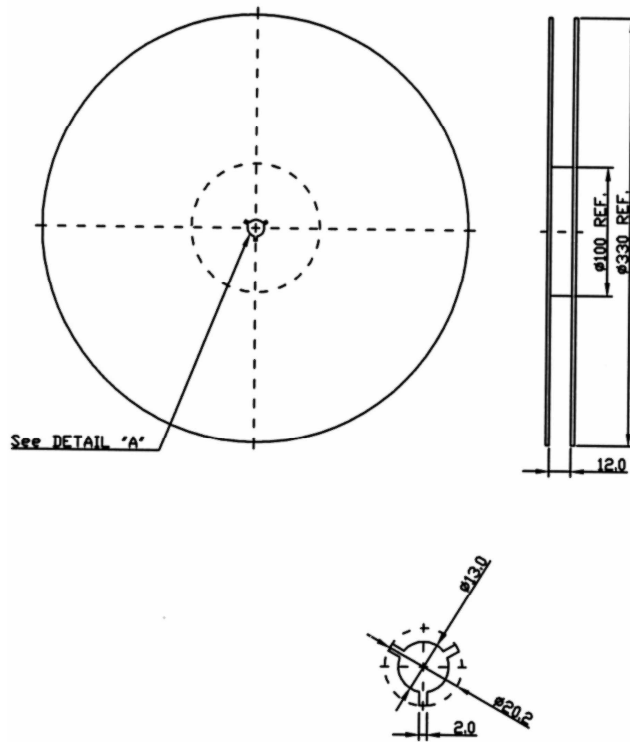
Week Code Table

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 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 |

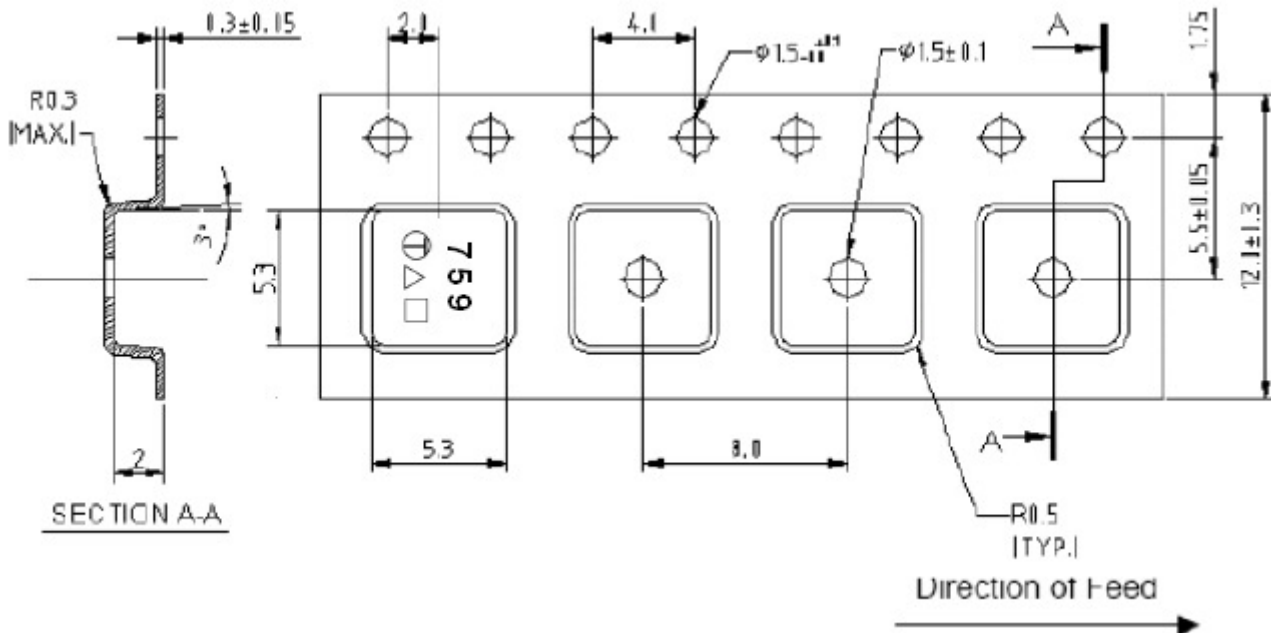
G. PACKING: (Ref: WI-75M03)

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.

