

# Dielectric filter 663MHz size 11.4x10.75mm

MODEL NO.: TR0030A

REV. NO.:1

## A. MAXIMUM RATING:

1. Input Power Level: 1W max.
2. DC Voltage : 0 V
3. Operating Temperature: -40 °C to +85 °C
4. Storage Temperature:-40 °C to +85 °C
5. Input/output impedance: 50 Ω
6. Moisture Sensitive Level: Level 2a (MSL2a)

**Electrostatic Sensitive Device (ESD)**

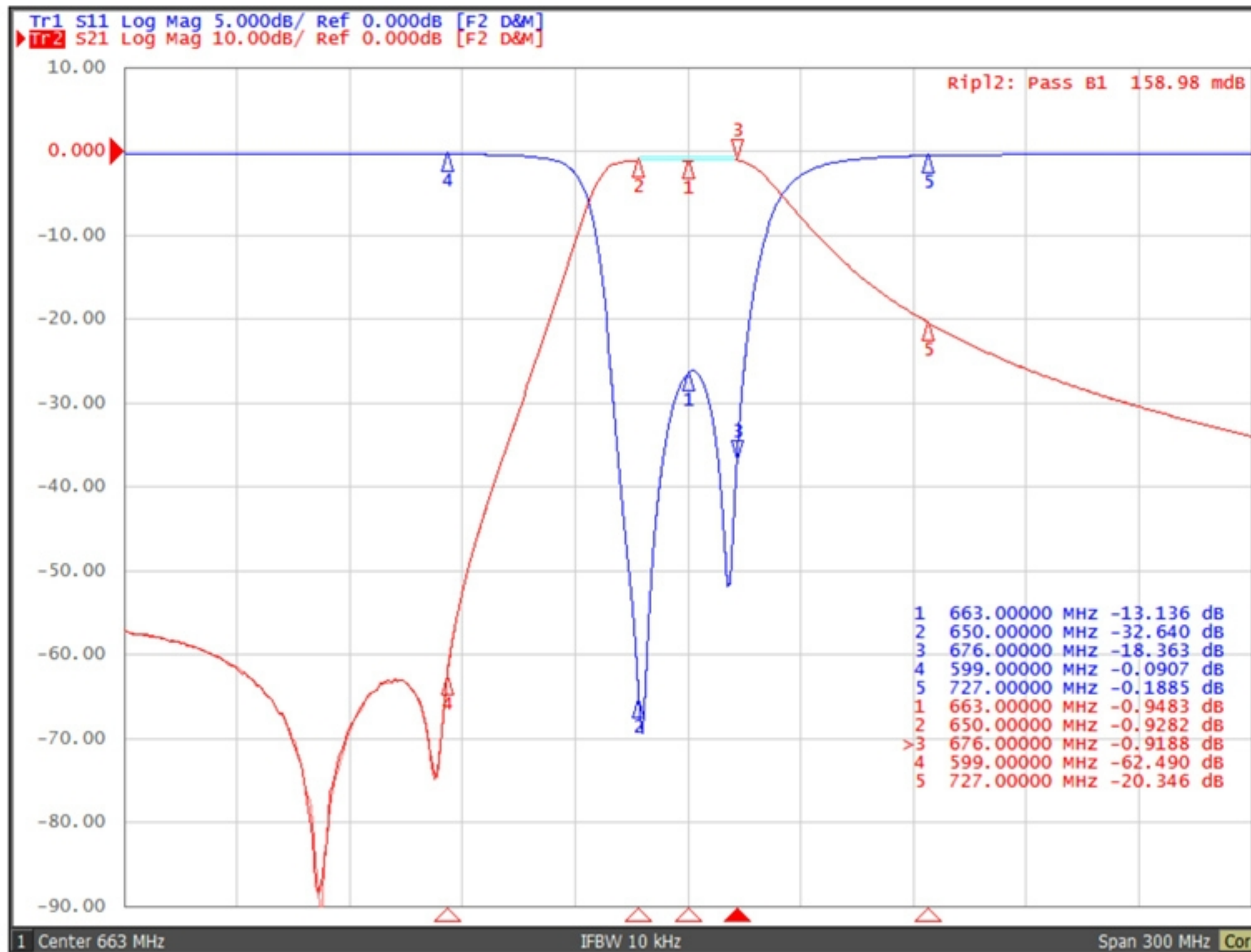
## B. ELECTRICAL CHARACTERISTICS:

| NO. | ITEM                     | SPECIFICATION |        |
|-----|--------------------------|---------------|--------|
|     |                          | Min           | Max    |
| 1   | CENTER FREQUENCY         | 663MHz        |        |
| 2   | PASS BAND WIDTH          | 650 ~ 676MHz  |        |
| 3   | PASS BAND INSERTION LOSS |               | 1.5 dB |
| 4   | PASS BAND RIPPLE         |               | 0.6 dB |
| 5   | PASS BAND RETURN LOSS    | 10 dB         |        |
| 6   | STOP-BAND<br>ATTENUATION | 599MHz        | 40 dB  |
|     |                          | 727MHz        | 15 Db  |

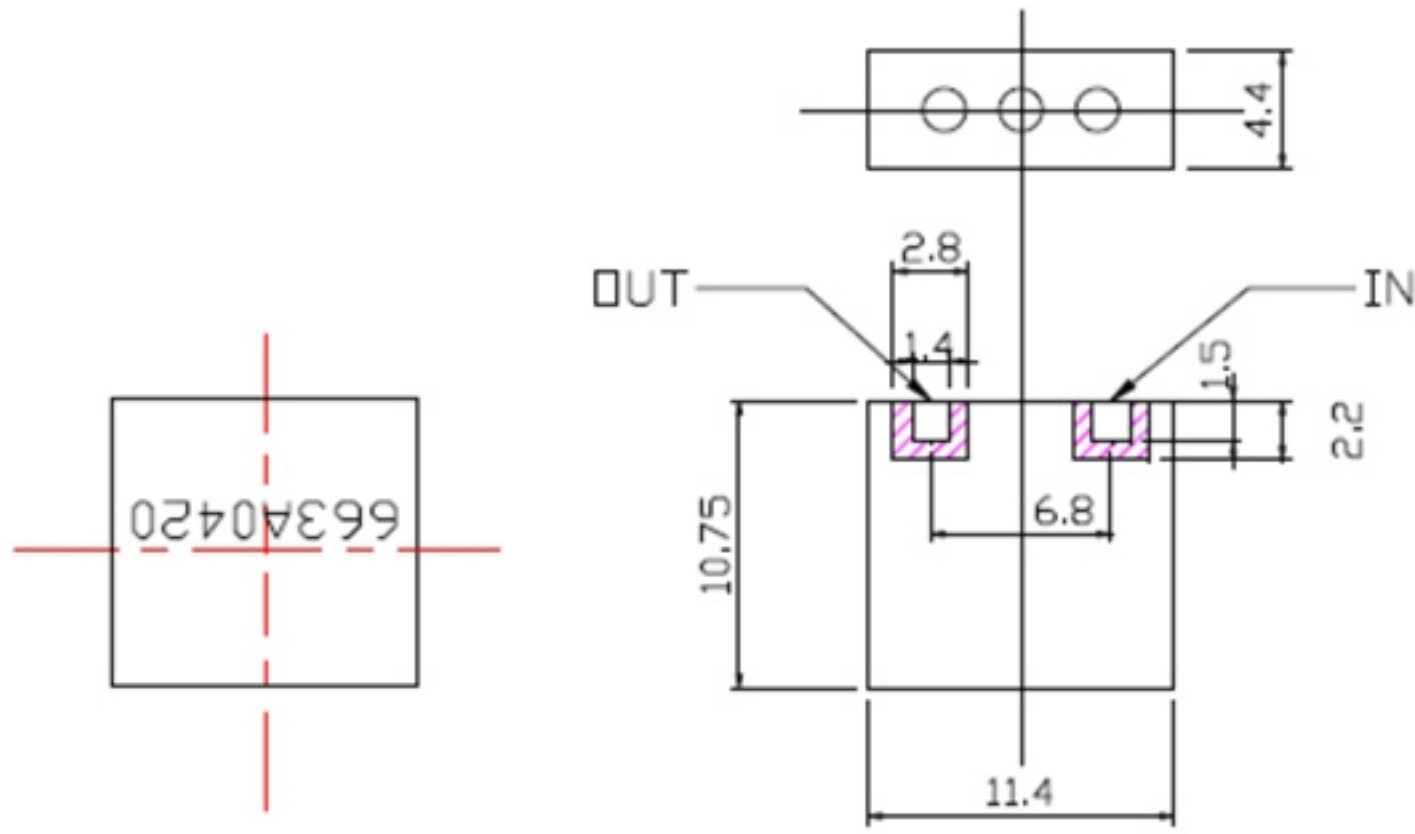
Item NO.6 specifies the absolute value of attenuation.

※Data is measured on Ciocomm EVB board

### C. FREQUENCY CHARACTERISTICS:



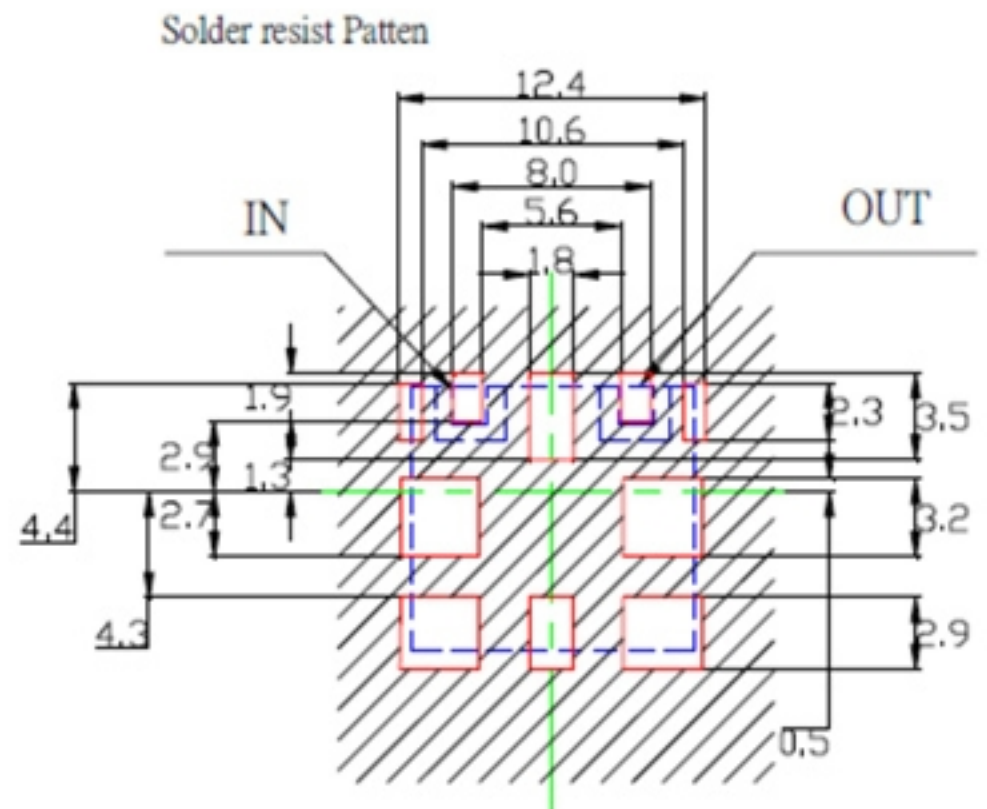
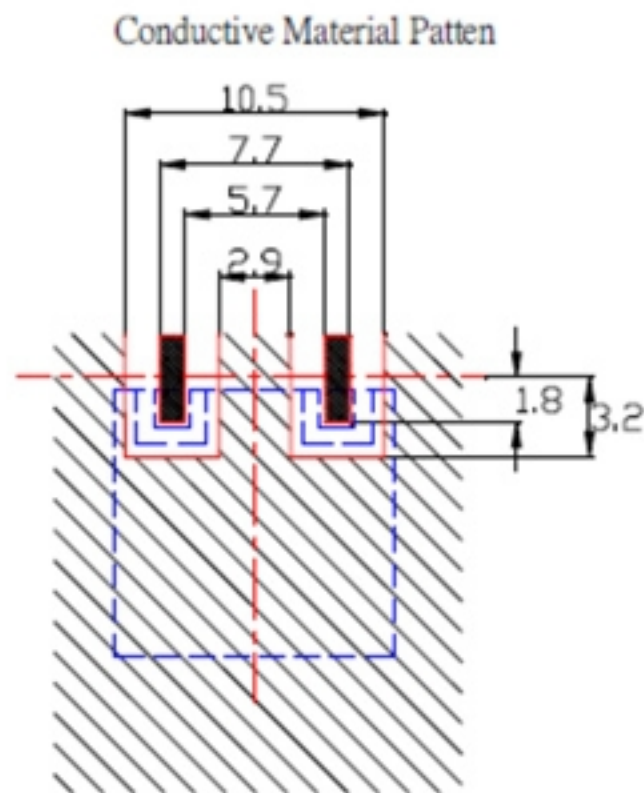
**D. DIMENSION:**





unit: mm  
Tolerance: ±0.3


663A : product name(J663A)  
04 : month  
20 : year (2020)

**E. PCB FOOTPRINT:**

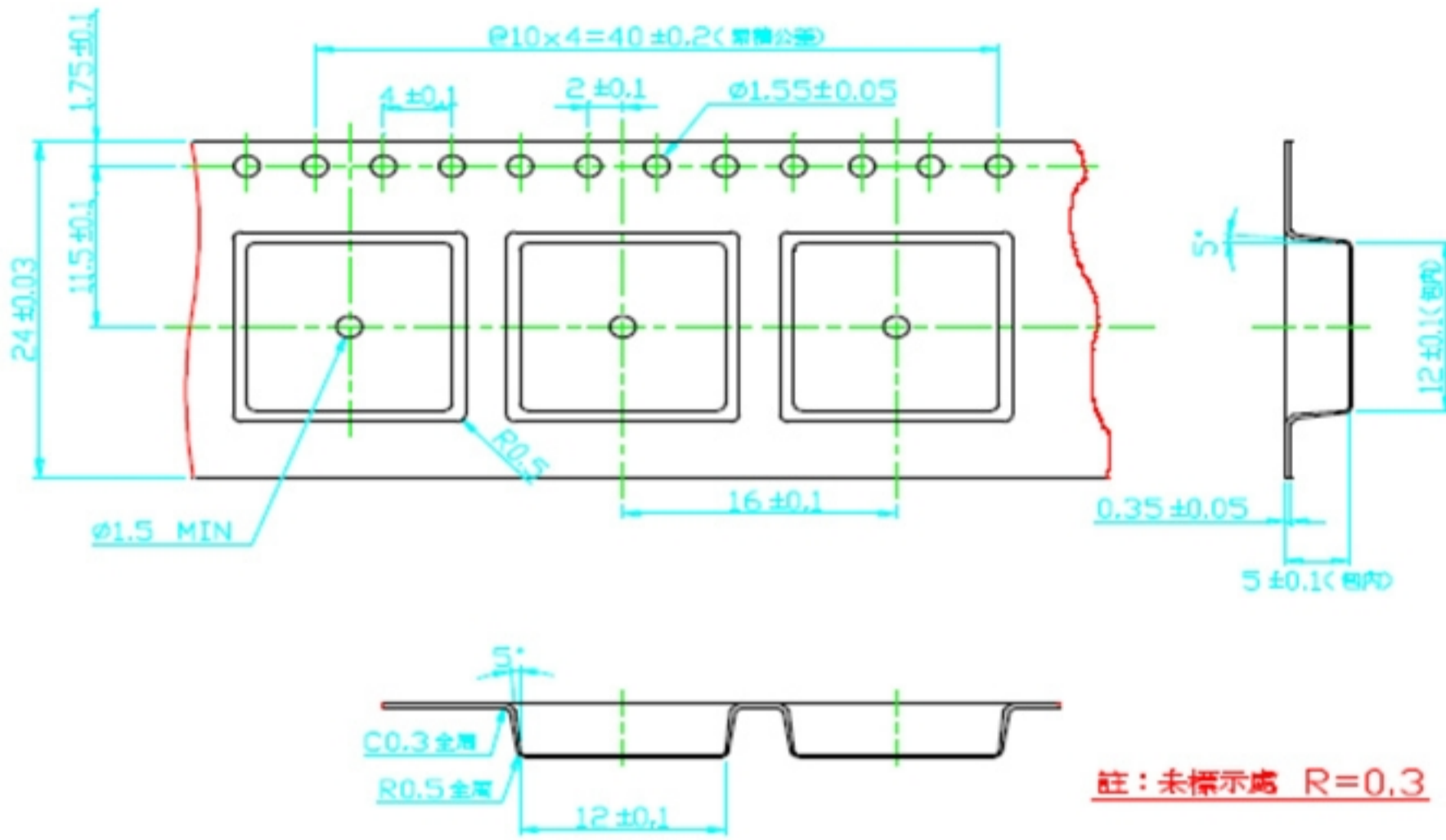


 Conductive Material:  
Ground, connected to lower ground diameter of 0.6mm and max.distance of 3.0 mm.  
 I/O Pads must be connected to lines with 50Ω impedance. in the application a termination of 50Ω must be realized.

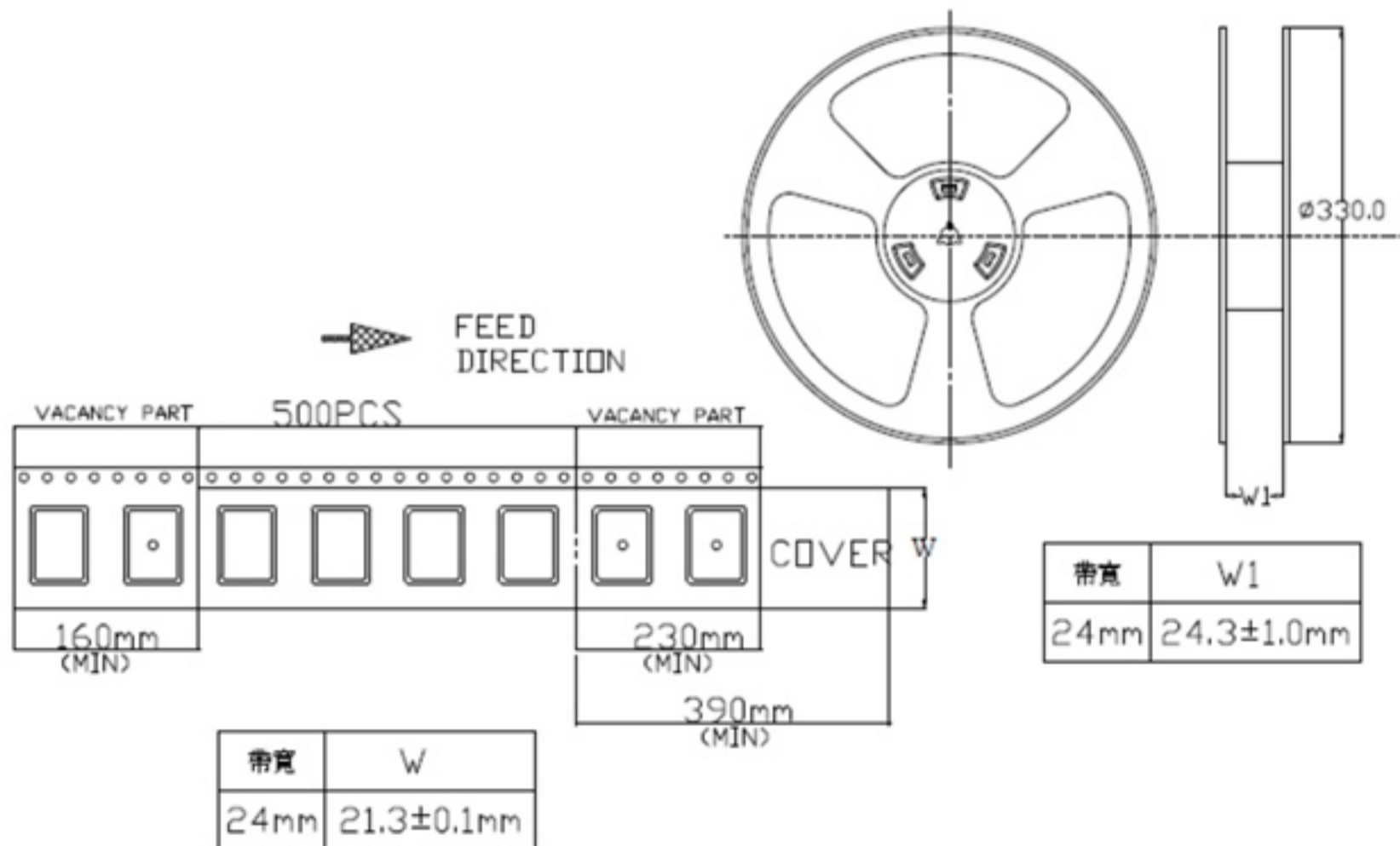
unit : mm  
Tolerance: ±0.1

 covered with solder resist.

**F. PACKING:**



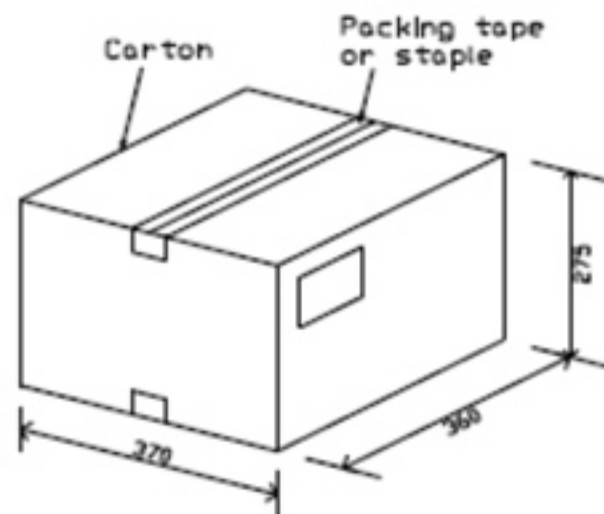
**Reel**



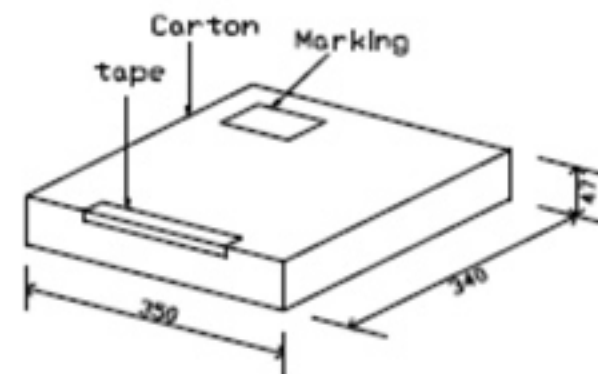
## Package style

Moisture Sensitivity Level: Level 2a (MSL2a)

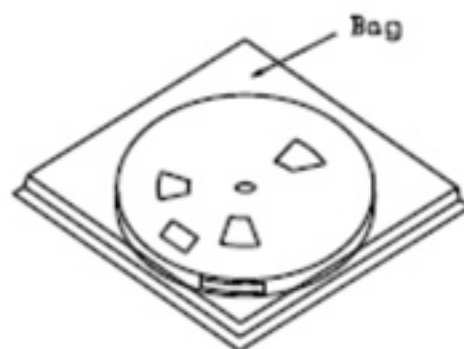
1. Outer Carton  
Quanylty:2500PCS



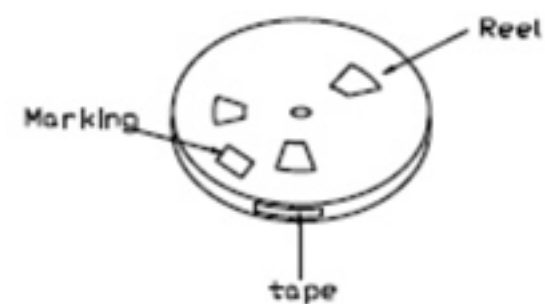
2. Inner Carton  
Quanylty:500PCS



3. Bag  
Quanylty:500PCS



4. Taping  
Quanylty:500PCS



Unit:mm

## G. RECOMMENDED REFLOW PROFILE:

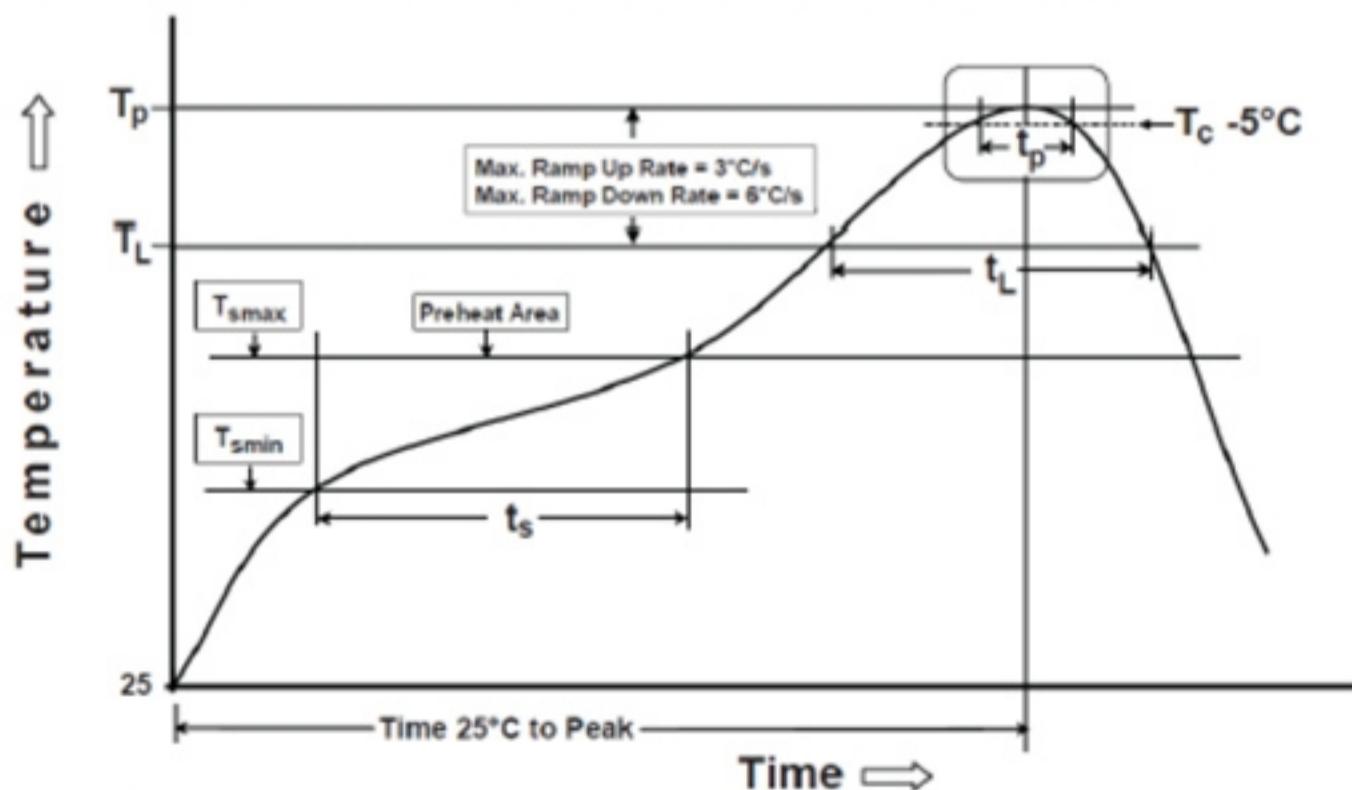
### Recommended Reflow Soldering Profile

Cirocomm products can be assembled following Pb-free assembly. According to the Standard IPC/JEDEC J-STD-020C, the temperature profile suggested is as follow:

| Phase                              | Profile features   | Pb-Free Assembly (SnAgCu)        |
|------------------------------------|--|----------------------------------|
| PREHEAT                            | -Temperature Min( $T_{smin}$ )<br>-Temperature Max( $T_{smax}$ )<br>-Time( $t_s$ ) form ( $T_{smin}$ to $T_{smax}$ ) | 150°C<br>200°C<br>60-120 seconds |
| RAMP-UP                            | Avg. Ramp-up Rate ( $T_{smax}$ to TP)  | 3°C/second(max)                  |
| REFLOW                             | -Temperature( $T_L$ )<br>-Total Time above $T_L$ ( $t_L$ )   | 217°C<br>30-100 seconds          |
| PEAK                               | -Temperature( $T_P$ )<br>-Time( $t_p$ )  | 260°C<br>3 second                |
| RAMP-DOWN                          | Rate   | 6°C / second max.                |
| Time from 25°C to Peak Temperature |  | 8 minutes max.                   |
| Composition of solder paste        |  | 96.5Sn/3Ag/0.5Cu                 |
| Solder Paste Model                 |  | SHENMAO PF606-P26                |

Note : All the temperature measure point is on top surface of the component, if temperature over recommend, it will make component surface peeling or damage.

The graphic shows temperature profile for component assembly process in reflow ovens



### Soldering With Iron:

Soldering condition : Soldering iron temperature  $270 \pm 10^\circ\text{C}$ .

Apply preheating at  $120^\circ\text{C}$  for 2-3 minutes. Finish soldering for each terminal within 3 seconds, if soldering iron over temperature  $270 \pm 10^\circ\text{C}$  or 3 seconds, it will make component surface peeling or damage. Soldering iron can not leakage of electricity.