

## Semiconductor Device(100TQFP) Dehumidifying Property

### 1. Purpose:

The graphic shows semiconductor device dehumidifying property.

### 2. Device:

The device is called 100TQFP.

### 3. Experiment

The experiment is divided by two steps.( Humidifying and Dehumidifying)

Before you read the graphic, You need to know what is the **Absorption Ration?**

#### First step:(Humidifying)

When we do any experiment, We must set one point as 0.0Wt%. Under the experiment.

#### Test Condition:

A: Baking process performed on the device of 100TQFP for 120□-60 hours, counted as 0.0Wt%.

B: Humidifying experiment

Humidifying Condition of 33□-87% for 168 hours, the volume weight weighing at daily basis, to check absorption ration of: Wt%.

In fact, The humidifying experiment is a preceding term.

Maybe you will ask why we let the humidifying condition of 33□-87% for168 hours.

The reason that the condition was the best that we can arrive at that time. If we can, we also can set the condition of 98%RH, 33.

**The purpose to set the condition to let humidity in device saturately.**

#### Second Step( dehumidifying)

Then, We moves device with humidity to our cabinets to check their absorption performances.

#### Test Condition:

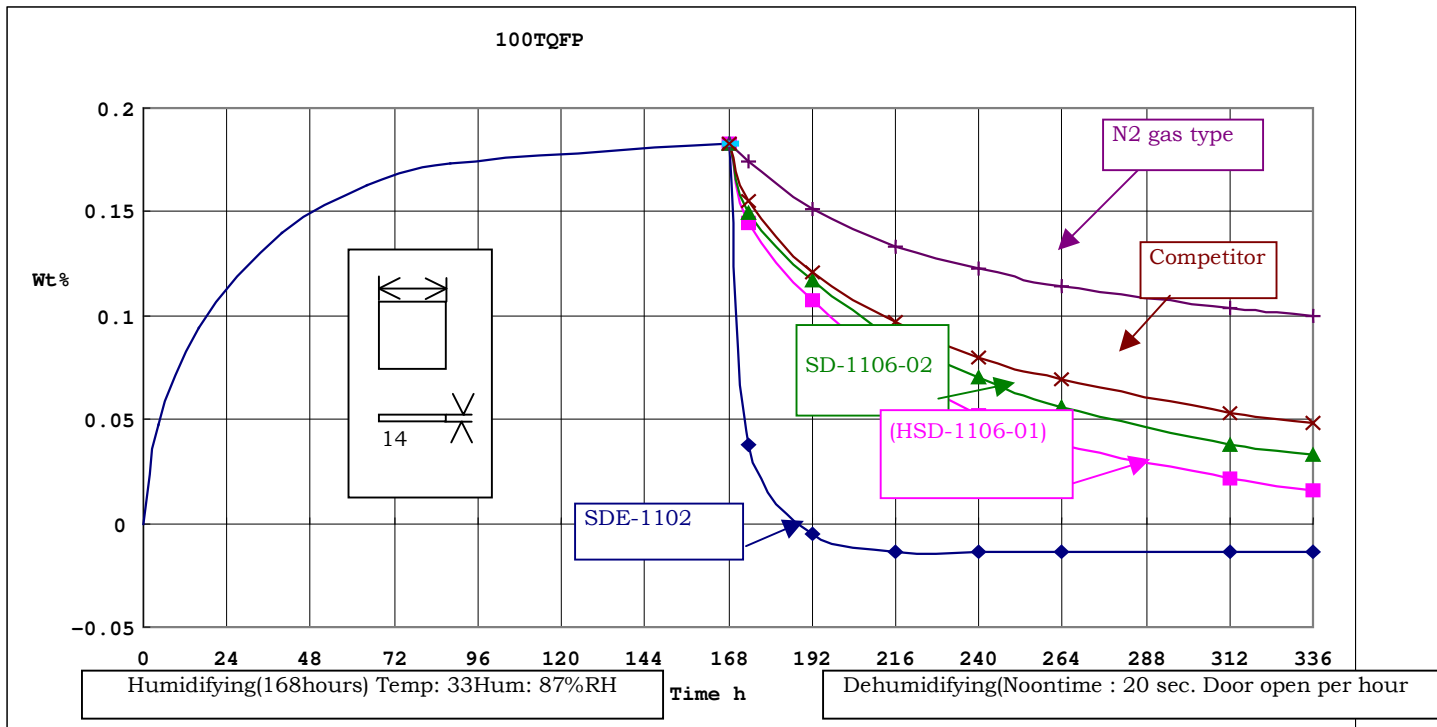
C. The openings of the cabinet door: 20 second by every hour per day for continuous 7 days, the volume weight will be weighed every day for getting absorption ratio of wt%.

D: Using our HSD-1106-01,SD-1106-02, SDE-1002

Setting points for HSD-1106-01: 1%RH, 25.

Setting points for SD-1106-02: 2%RH, 25.

Setting points for SDE-1002: 3%RH, 60.



**Conclusion:**

Different from the general baking system, Due to no heating stress on the devices at all, no defective products can be observed in use of cabinets.