

ABSTRACTLIQUID-TYPE TRANSFORMERLESS THERMAL
EVAPORATING DEVICE

A device body is equipped with a heater unit (3) and a thermal evaporating agent (9) is filled in a tank (6), and a leading end of a core (8) for sucking up the thermal evaporating agent which is inserted in the tank (6) is inserted into the heater unit (3). The heater unit (3) is in an annular shape and is incorporated with a transformerless exothermic body (10). The transformerless exothermic body (10) is a positive temperature thermistor and the voltage-current characteristic thereof has a region, over the range of at least 100V to 240V of applied voltage, which satisfies the conditions of

$$V_x + I_y = a \text{ (a is constant)}$$

in orthogonal coordinates in which a longitudinal axis is a voltage V_x and a lateral axis is a current I_y . Therefore, even though the applied voltages are 100 V and 240 V, the change of consumed current, $P=VI$ is small and there causes no difference in their exothermic temperatures in the range of the applied voltages of 100 V to 240 V. Thus, even though the applied voltage is 100 V or 240 V, there causes no difference in consuming time of the thermal evaporating agent. (Figure 3).

This Sheet Has Been Replaced

