

## Positive Temperature Coefficient (PTC) Heater : Xiaomi SU7 Teardown Report



**Xiaomi SU7 (from Web info)**

<https://hu.motor1.com/news/703064/xiaomi-su7-onallo-parkolas-video/>



**Overview of PTC Heater**



**PCB**

### Overview

Xiaomi, a Chinese home appliance manufacturer, announced its first BEV (battery electric vehicle), the Xiaomi SU7, in March 2024.

Since BEV cannot use the exhaust heat from the engine, heater units such as PTC heaters and heat pump air conditioners are essential to heat the interior of the vehicle and prevent the battery from freezing in cold weather. With the growth of electric vehicles, PTC heaters are attracting attention from the perspective of their quick heating and safety.

This is a teardown report on the PTC heater (WOORY Industrial, South Korea) that is installed in the Xiaomi SU7 MAX.

### Product features

- Manufacturer: WOORY Industrial
- Heat source: Surface heating element (resistive printing method on heating plate)
- Control method: DUTY control (PWM)
- Communication: LIN communication, CAN communication
- Operating Voltage: DC200V ~ 900V (assuming operation with the on-board battery)
- Power capacity: 3000 ~ 10,000 W
- Protection function: Temperature, voltage, current protection function, cooling water flow rate, non-detection function
- Standard: ASPICE, ISO26262 ASIL-B

### Report Contents (25 pages)

- Product teardown, parts measurement (size & weight)
- Identification of key ICs on the PCB (including datasheet, if we found).

### Report price

**Delivery one week after order placement**

**Please contact us for report pricing**

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