# NSIII-U1 thermistor



## Heat resistance of 500°C achieved

The world's first thermistor operating at 500°C has been achieved by full review of thermistor chip manufacturing methods and all material compositions. The NSIII-U1 has proven results for over 20 years in measuring engine exhaust gases and for heaters.

#### Features

- Composed of special materials for use under high temperatures
- Heat resistance of 500°C
- Reinforced glass end with high strength ceramics

Reduced damage to the glass during stress-giving processing

- Improved reliability against oxide scale secured with enough creepage distance between the lead wires
- Long-term stability in resistance
- High-volume supply in high quality by integrated automatic production

#### Applications

- Suitable for equipment for high temperature detection
- Exhaust gases from automobiles (EGR systems) Microwave ovens
- Fan heaters (kerosene vaporizers) Sensors for use under harsh conditions at high temperatures

Max. operating temperature	500°C	Reliability data
Thermal time constant	Approx. 18 sec.	୍ଥି 6 at 500°C
Dissipation constant	Approx. 1.5mW/°C	Besistance drift rate (%) at 200°C 5 2 6 5 7 7 7 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
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Heat resistance test

(average of n = 10)







Damp heat test





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