

# H540 S, High-Temperature Pt Heater based on DIN EN IEC 60751

Temperature range -25 °C to +800 °C, temporary up to +850 °C

- Large operation window up to 850 °C
- Consistent heat distribution
- Optimized for welding and brazing

The heater H540 S is a platinum thin film heater that combines excellent long term stability with a wide operating temperature range, from -25 °C to +800 °C. These features, combined with small size, enables the heating of liquids, gases and solids with high precision, short heating time, and accurate control.

Nominal Resistance R₀ [Ω]	Tolerance Class	Order Number	Packaging
Pt12	+/- 0.5 ohm at 0 °C	5084080	Slide blister

#### **Temperature Range of Tolerance Class**

Characteristics based on DIN EN 60751. -25 °C to +800 °C (temporary use up to 850 °C possible)

#### Temperature Coefficient

TCR = 3850 ppm/K

#### Long-Term Stability

Max. R<sub>0</sub>-drift +/-0.5 Ohm after each: 1,000 hours at 700 °C, 3 W 10,000 cycles 40 s on/off (room temperature to 700 °C)

#### **Heating Current**

Max. 1000 mA

## **Heating Voltage**

Max. 24 V (consider temperature dependent resistance)

#### **Maximum Temperature**

1 hour at 850 °C

#### **Heating Time**

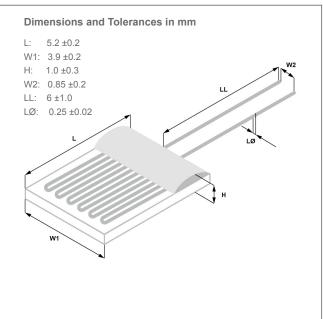
≥ 12 sec from 25 °C to 700 °C Test conditions: Not installed in still air at room temperature

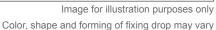
## Lead Type

Platinum

#### **Connection Technology**

Welding, Brazing







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### Packaging

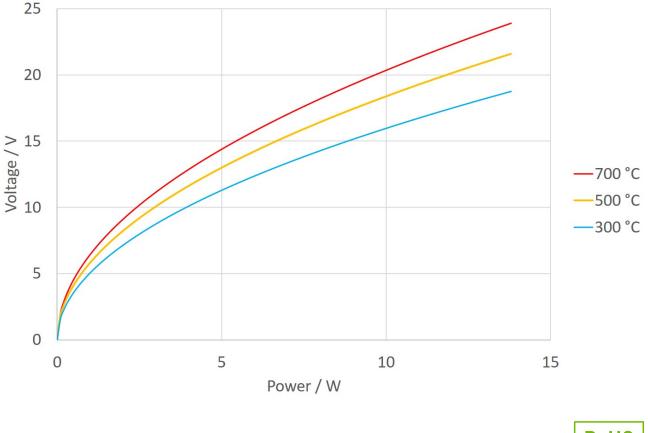
Slide blister

Other tolerances, values of resistance and wire lengths are available on request.

#### Note

The heater must be protected from the effects of liquids and moisture by an appropriate housing. In the case of using the temperature dependent heater resistance for monitoring, steering or control, an individual heater calibration is recommended in order to ensure accuracy.

Due to random sample measurements, a bending of connection wires may occur (called V-shape). This bending is batchdependent and has no influence on the functionality of the platinum measuring resistor.



RoHS compliant

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YAGEO Nexensos GmbH, Reinhard-Heraeus-Ring 23, 63801 Kleinostheim, Germany

YAGEO Nexensos GmbH, Germany Web: www.yageo-nexensos.com Contact: nexensos.america@yageo.com

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