

H540 S, High-Temperature Pt Heater based on DIN EN 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 R ₀ [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. R₀-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

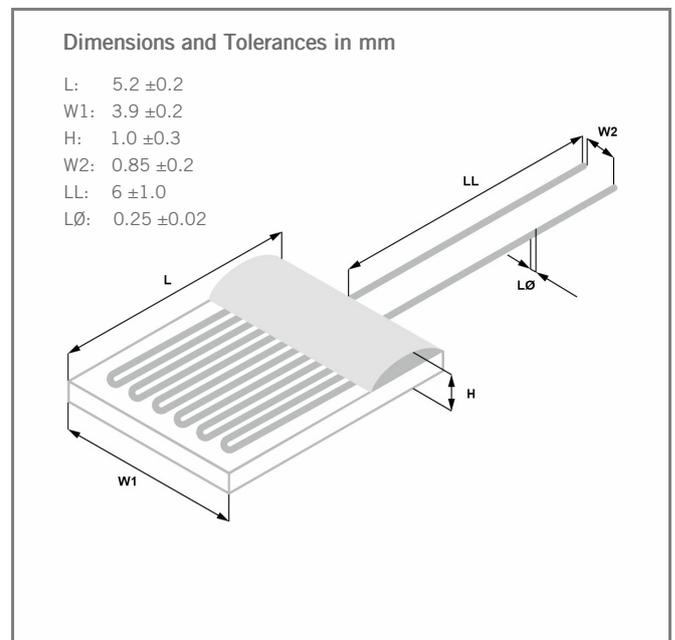


Image for illustration purposes only
Color, shape and forming of fixing drop may vary

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

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

Packaging

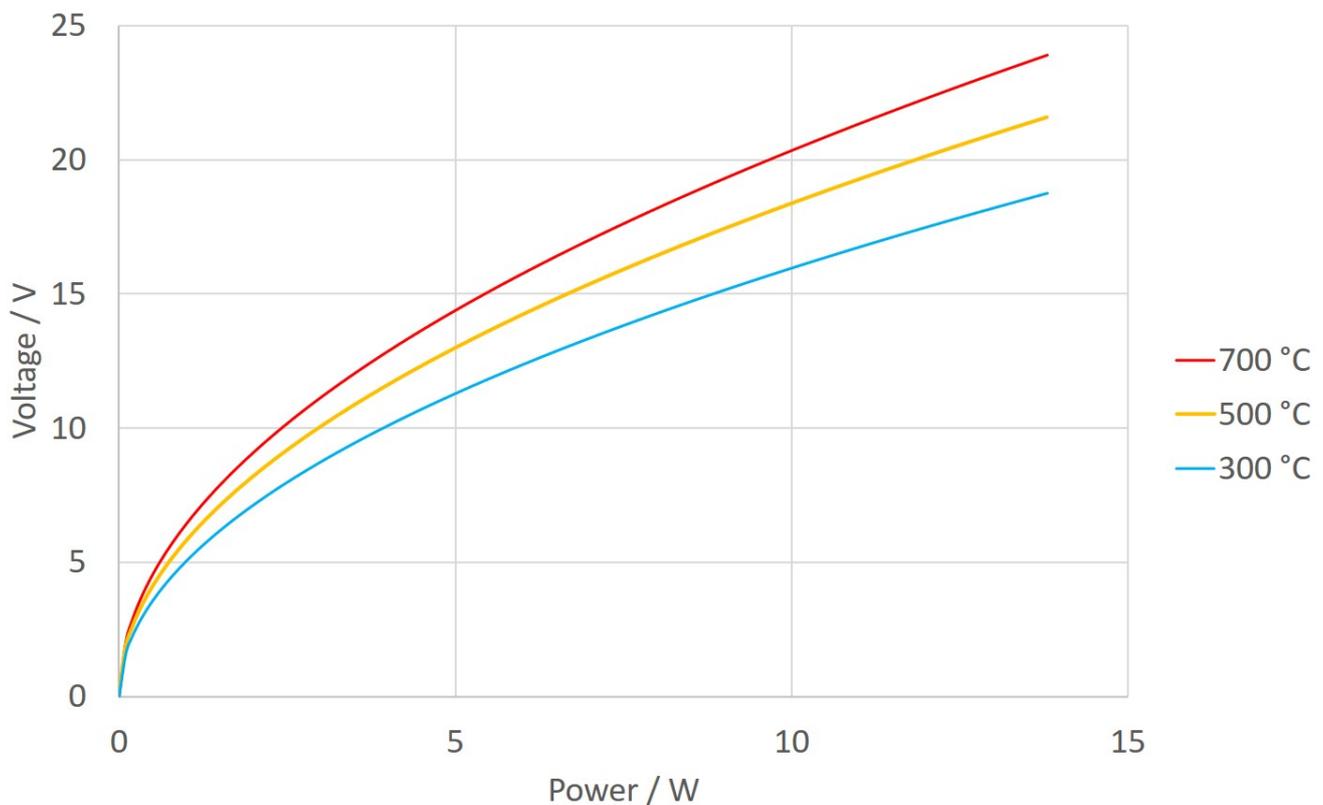
Slide blister

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 batch-dependent and has no influence on the functionality of the platinum measuring resistor.



The information provided in this data sheet describes certain technical characteristics of the product, but shall not be qualified or construed as quality guarantee (Beschaffenheitsgarantie) in the meaning of sections 443 and 444 German Civil Code. The information provided in this data sheet regarding measurement values (including, but not limited to, response time, long-term stability, vibration and shock resistance, insulation resistance and self-heating) are average values that have been obtained under laboratory conditions in tests of large numbers of the product. Product results or measurements achieved by customer or any other person in any production, test, or other environment may vary depending on the specific conditions of use.

The customer is solely responsible to determine whether the product is suited for the customer's intended use; in this respect YAGEO Nexensos cannot assume any liability. The sale of any products by YAGEO Nexensos is exclusively subject to the General Terms of Sale and Delivery of YAGEO Nexensos in their current version at the time of purchase, which is available under www.yageo-nexensos.com/tc or may be furnished upon request. This data sheet is subject to changes without prior notice.

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