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Vishay BCcomponents

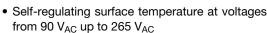
PTC Thermistors for Heating Application



| QUICK REFERENCE DATA | | | | |
|------------------------------|------------|------|--|--|
| PARAMETER | VALUE | UNIT | | |
| Resistance value at 25 °C | 1200 | Ω | | |
| Tolerance on R ₂₅ | ± 35 | % | | |
| Maximum voltage (RMS or DC) | 265 | V | | |
| Maximum inrush current | 1 | Α | | |
| Switching temperature | 50 to 150 | | | |
| Operating temperature range | -40 to 85 | °C | | |
| Storage temperature | -40 to 155 | | | |

FEATURES







 Self-protecting against over-heating due to PTC effect

ROHS

 Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

DESCRIPTION

These directly heated thermistors are made from doped BaTiO3 ceramic material with a large positive temperature coefficient in a defined temperature range. The silver metalized surfaces will stabilize at a specific temperature less dependent on applied voltage or thermal loading.

MOUNTING

Can be mounted by force clamping, single side loaded or dual sided. Soldering on the surfaces is not recommended.

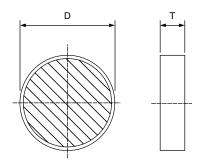
APPLICATIONS

- · Thermal actuators and valves
- Warming plates
- Vaporizers
- Heaters

| ELECTRICAL DATA AND ORDERING INFORMATION | | | | |
|--|-----------------------------|--|-----------------------|--|
| R ₂₅ (Ω) | T _{switch} (°C) | T _{surf} ⁽¹⁾ at 230 V _{AC} (°C) | ORDERING PART NUMBERS | |
| 1200 | 50 | 100 | PTCHP12S050HYE | |
| 1200 | 90 | 125 | PTCHP12S090HYE | |
| 1200 | 110 | 140 | PTCHP12S110HYE | |
| 1200 | 130 | 160 | PTCHP12S130HYE | |
| 1200 | 150 | 180 | PTCHP12S150HYE | |

Note

DIMENSIONS in millimeters



| D | Т |
|------------|-----------|
| 11.8 ± 0.2 | 2.0 ± 0.2 |

⁽¹⁾ Measured in a low thermal load set-up with the ceramic clamped between a 4 mm diameter stainless steel surface temperature probe on one side in the center of the metallized surface and 4 mm spring loaded round contact at the other side



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