

## PTC Thermistors for Heating Application



### FEATURES

- Ag-metalization suitable for clamping
- Self-regulating surface temperature at voltages from 90 V<sub>AC</sub> up to 265 V<sub>AC</sub>
- Self-protecting against over-heating due to PTC effect
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS**  
COMPLIANT

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

### DESCRIPTION

These directly heated thermistors are made from doped BaTiO<sub>3</sub> 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

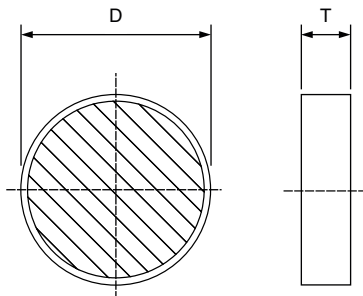
- Thermal actuators and valves
- Warming plates
- Vaporizers
- Heaters

ELECTRICAL DATA AND ORDERING INFORMATION			
R <sub>25</sub> (Ω)	T <sub>switch</sub> (°C)	T <sub>surf</sub> <sup>(1)</sup> at 230 V <sub>AC</sub> (°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

<sup>(1)</sup> 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

### DIMENSIONS in millimeters



D	T
11.8 ± 0.2	2.0 ± 0.2



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