PTC Thermistors for Heating Application

FEATURES

- Ag-metalization suitable for clamping
- Self-regulating surface temperature at voltages from 90 V_{AC} up to 265 V_{AC}
- Self-protecting against over-heating due to PTC effect
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

RoHS COMPLIANT

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	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 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

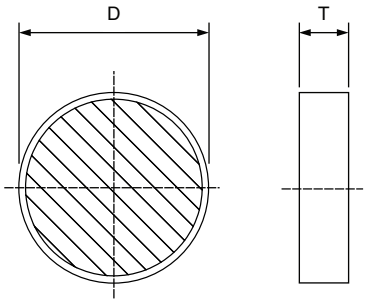
ELECTRICAL DATA AND ORDERING INFORMATION

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

[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

DIMENSIONS in millimeters



D	T
11.8 ± 0.2	2.0 ± 0.2

For technical questions, contact: nlr@vishay.com

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