PTC Thermistors, Inrush Current Limiters

FEATURES

RoHS COMPLIANT

- Short reset time
- High reliability and stability
- Compact and cost-effective solution
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

APPLICATIONS

- Limiting inrush current in the EV chargers, usually used to protect contractors in the chargers
- Temperature sensing
- Overcurrent protection
- Temperature compensation
- Motor starters
- Liquid level sensing
- Heating elements

DESCRIPTION

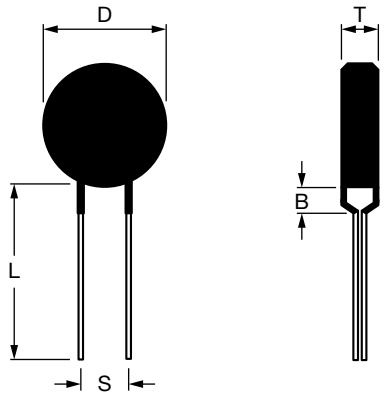
With its industry high voltage rating, Vishay Ametherm's inrush PTC thermistors can withstand hundreds of hits of maximum inrush current without degrading.

The device offers a short reset time, and as a PTC thermistor a quick reset will not result in a large inrush current, as its resistance is already at a high state. The result is extremely high reliability and stability in high voltage applications.

This solution provides designers with a more compact and cost-effective alternative to combining a power resistor, relay, and timer on one circuit to achieve the same functionality.

QUICK REFERENCE DATA		
PARAMETER	VALUE	UNIT
Resistance at 25 °C (R_{25})	9.4	Ω
Tolerance on R_{25} value	± 30	%
Transition temperature	100	°C
Maximum voltage rating	250	V_{RMS}
Switching temperature	92 to 108	°C
Operating temperature range	-50 to +150	°C
Switch current at 25 °C	0.26	A
Continuous current at 25 °C	0.13	A

MECHANICAL SPECIFICATIONS in millimeters



SYMBOL	CL109R4120
B	4.0 nom.
D	10.0 max.
L	7.0 nom.
S	5.0 ± 0.5
T	3.5 max.
Lead diameter	0.5 ± 0.1

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