

PTCES Series SMD Inrush Current Limiting PTC Thermistors Increase Board-Level Efficiency to Lower Costs, Combine Energy Handling to 340 J With High Voltages to 1200 V_{DC} in Compact Package to Reduce Component Counts and Save Space

Product Benefits:

- Maximum energy handling to 340 J
- High maximum voltages of 1200 V_{DC}
- Compact package with a low 9.6 mm profile
- Self-protecting
- Withstand > 100 000 inrush power cycles
- AEC-Q200 qualified for shock and vibration
- Insulated housing up to 3 kV_{AC}
- RoHS-compliant and halogen-free



Market Applications:

- Inrush current limitation and overload protection in AC/DC and DC/DC converters; DC-Link, energy dump, and emergency discharge circuits; on-board chargers (OBC) and battery charging equipment; and motor drives

The News:

Vishay Intertechnology introduces a new series of insulated, surface-mount inrush current limiting positive temperature coefficient (PTC) thermistors. Designed to increase board-level efficiency and lower costs in automotive and industrial applications, Vishay BCcomponents PTCES series devices combine maximum energy handling to 340 J with high maximum voltages of 1200 V_{DC} in a compact package.

- Compared to competing devices, the PTC thermistors offer up to 260 % higher energy handling capabilities, allowing designers to utilize fewer components in their circuits to save board space and lower overall costs
- The PTCES series offers 20 % higher maximum voltages than competing devices to meet the requirements of a broader range of designs
- The devices' high resistance against shock and vibration eliminates the need for reinforced mounting adhesives
- The barium titanate thermistors consist of a solder-connected homogenous ceramic PTC encapsulated in a UL 94 V-0 compliant, self-extinguishing, washable plastic housing
- The devices can be automatically mounted by pick and place equipment to reduce placement costs



The Key Specifications:

Series	PTCES
R_{25} (Ω)	60 to 1000
R_{25} tolerance (%)	30
Max. AC voltage (V_{RMS})	350 to 800
Max. DC voltage (V_{DC})	500 to 1200
Maximum energy (J) @ 25 °C	240, 340
Heat capacity (J/K)	2.4, 2.6
Operating temperature (°C)	-40 to +105

Availability:

Samples and production quantities of the PTCES series thermistors are available now, with lead times of 10 weeks.

To access the product datasheet on the Vishay Website, go to <http://www.vishay.com/ppg?29242> (PTCES)

Contact Information:

THE AMERICAS

Joshua Pollema
joshua.pollema@vishay.com

Ramona Tritz
ramona.tritz@vishay.com

EUROPE

Resat Erunsal
resat.erunsal@vishay.com

ASIA/PACIFIC

Fabio Wang
fabio.wang@vishay.com

Terry Hu
terry.hu@vishay.com