



PTC THERMISTOR

Positive Temperature Coefficient Resistor

ZnO VARISTOR

Zinc Oxide Nonlinear Resistor



[Http://www.hiel.co.kr](http://www.hiel.co.kr)



▶ ▶ ▶ A New Leader of Ceramic Electronic Parts!



CHRONOLOGY

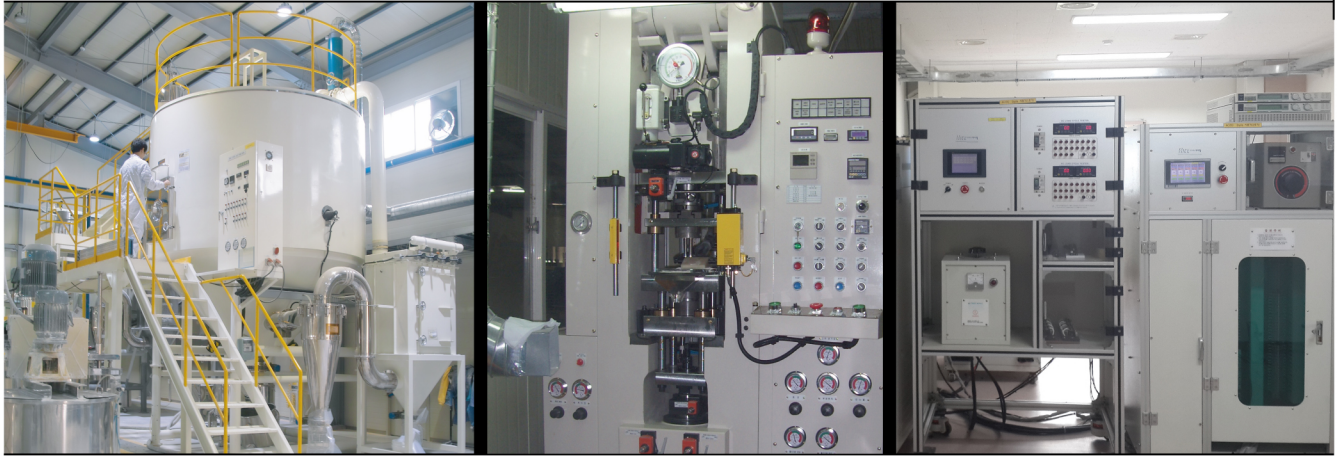
2000's

- 2015
 - Selected as "Venture business" by SBC
 - Selected as "Global excellent enterprise" by Jeonbuk
- 2014
 - Selected as "The leading company of the strategic industry" in Jeonbuk
 - Established Hiel's second factory
 - Selected as "Inno-Biz" by SMBA
- 2011
 - Selected as "Export promising firm" by Jeonbuk SME Export center
- 2010
 - Acquired a Patent for Pb Free Ceramic composite of PTC Thermistor and PTC Thermistor manufactured by the composites
 - Awarded "1 Million Dollars Exporter Tower" by The Korea International Trade Association
 - Selected as "New Exporter 300" by The Korea International Trade Association
- 2006
 - Acquired certification of ISO 14001
- 2005
 - Selected as Export oriented business (Jeonbuk SMBA)
- 2004
 - Selected as parts material expertise company (Ministry of Industry and Resource)
- 2003
 - Renamed to Hiel Co., Ltd.
- 2002
 - Selected as Clean Workplace (Ministry of Labor)
 - Selected as "Inno-Biz" by SMBA
- 2001
 - Attained approval of PTC THERMISTOR UL (FILE NO. E213419)
 - Acquired certification of VARISTOR VDE
- 2000
 - Selected as Promising SME in Jeollabukdo
 - Awarded Prime minister prize in good SME in the 2nd National SME Rally

1990's

- 1999
 - Established Corporate affiliated Laboratory
 - Awarded prize of Minister of Industry (Management and productivity improvement of venture business)
 - Selected as Export promising Firm by Small and Medium Business Corporation
- 1998
 - Acquired certification of ISO 9001
 - Selected as Venture Enterprise designated by SMBA
 - Acquired certification of VARISTOR UL (FILE NO. E188093)
- 1996
 - Performed technology development for PTC Thermistors Heater
- 1995
 - Acquired certification of VARISTOR UL 1449 (FILE NO 182771)
 - Acquired certification of VARISTOR CSA (FILE NO LR 103860-1)
 - Selected as Promising Small & Medium Sized Company
- 1994
 - Established Samyang Electronic Ceramics Co., Ltd
 - Varistors and PTC Thermistor produced

Be a partner with HIEL CORPORATION, and your products will be stronger!



We aim for the Top Quality in the world

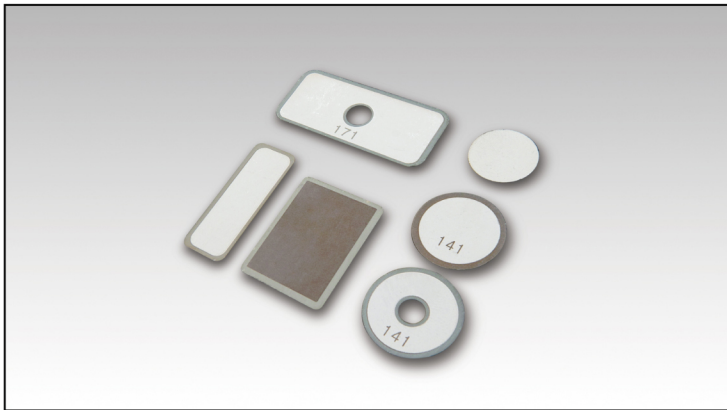


Certificate



PRODUCTS & APPLICATIONS

PTC THERMISTOR ► Heating Elements



Advantages

- Self-Regulating Heating
- High-Reliability
- Stability
- Permanently Available

Applications

Cabin Air Heater



Diesel Fuel heater



Hair Iron



Vaporizer



PTC THERMISTOR ► Over Current Protection



Advantages

- Inrush Current Limiter
- Circuit Protection
- Quick Response Time
- Self-Recovery

Applications

Washing Machine



Microwave Oven



TV

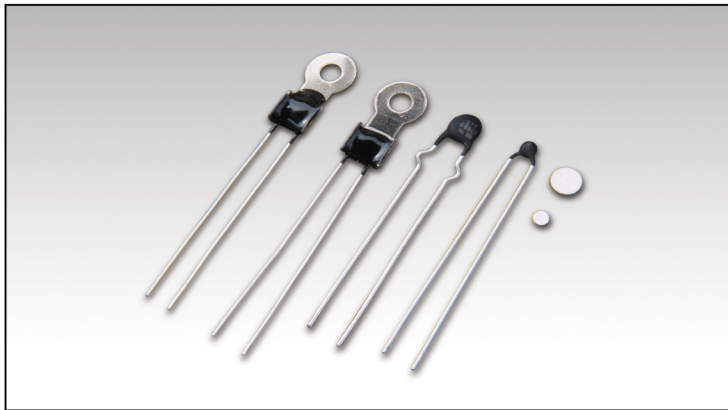


Air Conditioner





PTC THERMISTOR ▶ Over Temperature Protection



Advantages

- Small Size
- Quick Response Time
- Accurate and Automatic Temperature Management

Applications

PC Monitor



PC SMPS



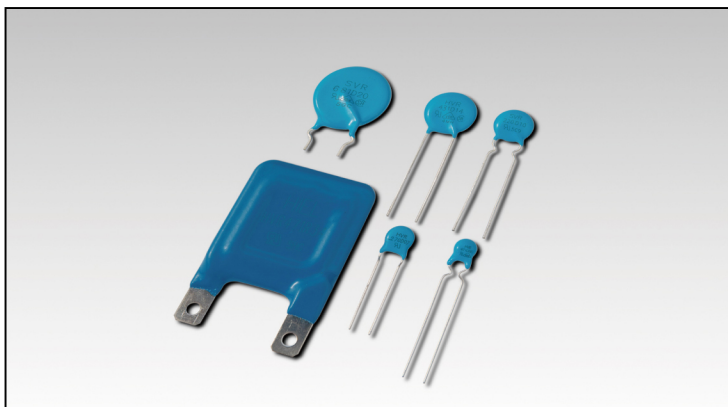
Adaptor



LED Light



ZnO VARISTOR ▶ Over Voltage Protection



Advantages

- Quick Response Time
- Lower Clamping Voltage
- Lower Leakage Current
- Safety Approvals

Applications

Car Head Lamp



Car Sunroof Motor

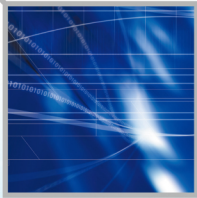


Refrigerator

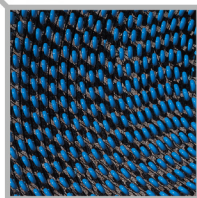


Vacuum Cleaner





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