

## Surge protection

# TDK introduces extremely compact StandarD series disk varistors

November 11, 2022

TDK Corporation (TSE:6762) presents the EPCOS B72307S0\* (StandarD S07 Compact Series) and B72310S0\* (StandarD S10 Compact Series) series of extremely compact, leaded disk varistors. The new varistors cover a wide voltage range from 115 V<sub>RMS</sub> to 460 V<sub>RMS</sub> in the StandarD S07 Compact series and from 130 V<sub>RMS</sub> to 680 V<sub>RMS</sub> in the StandarD S10 Compact series. The maximum surge current capability of a single pulse current (8/20 μs) is up to 1200 A for the StandarD S07 Compact types, and up to 2500 A for the StandarD S10 Compact types. They offer a multiple surge current capability of 500 A (StandarD S07 Compact) or 1500 A (StandarD S10 Compact), according to UL 1449, 4th edition, type 5 listed. The varistors can be operated up to an ambient temperature of 105 °C without derating.

Like the proven models of the classic StandarD S07 and S10 series, the optimized types also feature the same outstanding performance and long-term reliability. The reduced disc diameters of 8.5 mm in the StandarD S07 Compact series and 11 mm in the StandarD S10 Compact series allow even greater flexibility. The coating of the discs consists of a flame-retardant synthetic resin according to UL 94 V-0. The SIOV varistors are certified according to UL, CSA, VDE and IEC.

PSpice models are available for all products in the StandarD S07 and S10 Compact series.

The optimized compact design and excellent electrical characteristics enable the space-saving use of the S07 and S10 StandarD Compact types in numerous applications such as LED lighting, switching power supplies and household applications such as microwaves and refrigerators.

-----

### Main applications

- LED lighting
- Switching power supplies
- Household appliances

### Main features and benefits

- Wide voltage range from 115 V<sub>RMS</sub> to 460 V<sub>RMS</sub> (S07) resp. 130 V<sub>RMS</sub> to 680 V<sub>RMS</sub> (S10)
- Maximum surge current capability of single pulse: 1200 A (S07 Compact) resp. 2500 A (S10 Compact)
- No temperature derating up to 105 °C
- Long-term reliability
- Extremely compact dimensions: Diameter of 8.5 mm (S07) resp. 11 mm (S10)
- Flame retardant coating in accordance with UL 94 V-0
- Certifications: UL, CSA, VDE and IEC
- Available with PSpice simulation models

## About TDK Corporation

TDK Corporation is a world leader in electronic solutions for the smart society based in Tokyo, Japan. Built on a foundation of material sciences mastery, TDK welcomes societal transformation by resolutely remaining at the forefront of technological evolution and deliberately “Attracting Tomorrow.” It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK’s comprehensive, innovation-driven portfolio features passive components such as ceramic, aluminum electrolytic and film capacitors, as well as magnetics, high-frequency, and piezo and protection devices. The product spectrum also includes sensors and sensor systems such as temperature and pressure, magnetic, and MEMS sensors. In addition, TDK provides power supplies and energy devices, magnetic heads and more. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK focuses on demanding markets in automotive, industrial and consumer electronics, and information and communication technology. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2022, TDK posted total sales of USD 15.6 billion and employed about 117,000 people worldwide.

-----

You can download this text and associated images from <http://www.tdk-electronics.tdk.com/en/221111>. Further information on the products can be found under [www.tdk-electronics.tdk.com/en/varistors\\_leaded](http://www.tdk-electronics.tdk.com/en/varistors_leaded). Please forward reader inquiries to [marketing.communications@tdk-electronics.tdk.com](mailto:marketing.communications@tdk-electronics.tdk.com).

-----

## Contacts for regional media

Region	Contact	Phone	Mail
Europe	Mr. C. JEHLE TDK Electronics AG Munich, Germany	+49 89 54020 2441	<a href="mailto:christoph.jehle@tdk.com">christoph.jehle@tdk.com</a>
North America	Ms. D. MARTIN TDK Electronics Inc. Fountain Hills, AZ, USA	+1 480 836 4104	<a href="mailto:debbie.martin@tdk.com">debbie.martin@tdk.com</a>
South America	Mr. C. DALL'AGNOL TDK Electronics do Brasil Ltda., Gravataí, Brazil	+55 51 3484 7158	<a href="mailto:candido.dallagnol@tdk.com">candido.dallagnol@tdk.com</a>
India	Mr. H. BAGHEL TDK India Private Limited Noida, India	+91 12 04 50 58 42	<a href="mailto:himalaya.baghel@tdk.com">himalaya.baghel@tdk.com</a>
Greater China	Ms. S. SUEN TDK Electronics Hong Kong Limited, Hong Kong	+852 3669 8224	<a href="mailto:stella.suen@tdk.com">stella.suen@tdk.com</a>
Japan	Mr. Y. OSUGA TDK Corporation Tokyo, Japan	+813 6778 1055	<a href="mailto:pr@jp.tdk.com">pr@jp.tdk.com</a>