

Power capacitors

TDK introduces new DC link capacitors with exceptionally low ESL

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TDK Corporation presents a new series of EPCOS power capacitors for DC link applications. The new capacitors are available for rated voltages of 700 V DC to 2000 V DC and cover a capacitance range of 20 μ F to 270 μ F. The current handling capacity can be up to 60 A at 65 °C with the ability to tolerate current peaks of up to 7.5 kA. The maximum permissible hot spot temperature is 85 °C.

The capacitors' extremely low ESL values can be as low as 13 nH, depending on the type. Thanks to this and the low ESR values of min. 0.9 m Ω , the capacitors of the B2563xE* series are suitable for inverter solutions with fast-switching power modules. The low ESR value remains stable even at high switching frequencies of 100 kHz, while the low parasitic coefficients prevent significant voltage overshoots even when high currents are switched off.

The capacitors' plastic cylindrical cases conform with UL 94 V0. Two connection types are available: M8 threaded bolts or M5 threaded holes. Typical applications include fast-switching converters and inverters for photovoltaic systems, traction in railway technology and inductive heating systems.

Main fields of application

- Fast-switching converters and inverters for photovoltaic systems, traction and inductive heating systems

Main features and benefits

- Rated voltage of 700 V DC to 2000 V DC
- Capacitance range from 20 μ F to 270 μ F
- Extremely low ESL of max. 13 nH, ESR of min. 0.9 m Ω

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 2021, TDK posted total sales of USD 13.3 billion and employed about 129,000 people worldwide.

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Please send reader questions to 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	christoph.jehle@tdk-electronics.tdk.com
North America	Ms. D. MARTIN	TDK Electronics Inc. Fountain Hills, AZ, USA	+1 480 836 4104	debbie.martin@tdk-electronics.tdk.com
South America	Mr. C. DALL'AGNOL	TDK Electronics do Brasil Ltda., Gravataí, Brazil	+55 51 3484 7158	candido.dallagnol@tdk-electronics.tdk.com
India	Mr. H. BAGHEL	TDK India Private Limited Noida, India	+91 12 04 50 58 42	himalaya.baghel@tdk-electronics.tdk.com
Greater China	Ms. S. SUEN	TDK Electronics Hong Kong Limited, Hong Kong	+852 3669 8224	stella.suen@tdk-electronics.tdk.com
Japan	Mr. Y. OSUGA	TDK Corporation Tokyo, Japan	+813 6778 1055	pr@jp.tdk.com