

Ferrites Low losses at high frequencies

November 21, 2017

TDK Corporation presents the new MnZn-based PC200 ferrite material, which is characterized by low losses at high frequencies. It was developed specifically for power supplies and frequency converters that operate with fast-switching power semiconductors on a GaN basis. The new material is optimized for a frequency range from 700 kHz to 4 MHz. Its maximum transmissible power is reached at a switching frequency of 1.8 MHz to 2 MHz and an operating temperature of 100 °C. The ferrite material's Curie temperature is in excess of 250 °C.

The PC200 ferrite material is particularly suitable for transformers based on ring core or planar topologies. The new material is available in ER, EFD, ELP, EQ, I and RM cores. The outstanding properties of this material will enable considerably more compact power supplies to be designed in future. At the same time, its efficiency is improved due to the low losses of the ferrite material, which is why the use of PC200 contributes to significantly greater energy savings.

Main applications

- Transformers in power supplies and converters that operate with fast-switching power semiconductors on a GaN basis

Main features and benefits

- Low power dissipation in the frequency range from 700 kHz to 4 MHz; maximum transmissible power at 1.8 MHz to 2 MHz

About TDK Corporation

TDK Corporation is a leading electronics company based in Tokyo, Japan. It was established in 1935 to commercialize ferrite, a key material in electronic and magnetic products. TDK's portfolio includes passive components, such as ceramic, aluminum electrolytic and film capacitors, ferrites and inductors, high-frequency products, and piezo and protection components, as well as sensors and sensor systems and power supplies. These products are marketed under the product brands TDK, EPCOS, InvenSense, Micronas, Tronics and TDK-Lambda. TDK's further main product groups include magnetic application products, energy devices, and flash memory application devices. TDK focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has a network of design and manufacturing locations and sales offices in Asia, Europe, and in North and South America. In fiscal 2017, TDK posted total sales of USD 10.5 billion and employed about 100,000 people worldwide.

You can download this text and associated images from www.epcos.com/pressreleases.

Further information on the products can be found under www.epcos.com/ferrites.

Please forward reader inquiries to marketing.communications@epcos.com.

Contacts for regional media

Region	Contact		Phone	Mail
ASEAN	Mr. K. UNTERWEGER	EPCOS PTE LTD SINGAPORE	+65 6597 0618	klaus.unterweger@epcos.com
Greater China	Ms. S. SUEN	EPCOS LTD HONG KONG	+852 3669 8224	stella.suen@epcos.com
Europe	Mr. C. JEHLE	EPCOS Munich, GERMANY	+49 89 54020 2441	christoph.jehle@epcos.com
India	Mr. G. DALVI	EPCOS India Private Ltd. Mumbai, INDIA	+91 22 2575 0804	girish.dalvi@epcos.com
Japan	Mr. Y. OSUGA	TDK Corporation Tokyo, Japan	+813 6852 7102	pr@jp.tdk.com
North America	Ms. D. MARTIN	EPCOS Inc. Fountain Hills AZ, USA	+1 480 836 4104	debbie.martin@epcos.com
South America	Mr. C. DALL'AGNOL	EPCOS do Brasil Ltda. Gravataí, BRAZIL	+55 51 3484 7158	candido.dallagnol@epcos.com