

Inductors

Compact multilayer power inductors boost energy efficiency

- Power conversion efficiency of power supply circuits increased by up to 6 percent
- Higher rated current

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TDK-EPC Corporation, a group company of TDK Corporation, presents the TDK MLP2012V series of low-profile and energy efficient multilayer power inductors that help to reduce power dissipation in portable devices such as smartphones, mobile phones and digital cameras. Production begins in July 2011.

The new inductors profit primarily from TDK's advanced materials technology. The low-loss ferrite material used reduces core losses. When used as the power inductors in power supply circuits, they improve power conversion efficiency by up to 6 percent compared to the existing MLP2012S series. In addition, the DC superposition characteristics of the component are enhanced, thus raising rated current. The new series is available with inductance values of 0.47 and 1.0 μ H and current capabilities of 900 and 1100 mA.

The new inductors are offered in the compact 2012 case size and feature an insertion height of just 1.0 mm. Together with the 2520 size components, TDK-EPC now offers an even greater selection of power inductors for a wide range of portable devices.

The TDK MLP2012-V series is designed for use in the power supply circuits of portable electronic devices, which are equipped with increasingly diverse functions. Their continuous use under high load, for example for gaming or as cameras, can result in rapid battery drain. The TDK MLP2012-V series helps to lower power consumption by boosting the conversion efficiency of power supply circuits.

Glossary

- Power inductor: a type of inductor used for energy storage, EMI suppression and smoothing in the power supply circuits of devices such as DC-DC converters.

Main applications

- Integrated power supplies in portable devices such as mobile phones and digital cameras.

Main features and benefits

- Increases power supply circuit efficiency by up to 6 percent.
- Low resistance and high rated current for a wide range of applications.

Key data

Type	Inductance [μH]	DC resistance [Ω]	Rated current [mA]
MLP2012-V-M	0.47 to 1.0	0.11 to 0.20	900 to 1100
MLP2012VR47M	0.47	0.11	1100
MLP2012V1R0M	1.0	0.20	900

About TDK-EPC Corporation

TDK-EPC Corporation (TDK-EPC), a TDK group company, is a leading manufacturer of electronic components, modules and systems headquartered in Tokyo, Japan. TDK-EPC has emerged from the combination of the electronic components business of TDK and the EPCOS Group and markets its products under the product brands, TDK and EPCOS.

The product portfolio includes ceramic, aluminum electrolytic and film capacitors, ferrites and inductors, high-frequency components such as surface acoustic wave (SAW) filter products and modules, piezo and protection components, and sensors. With this product spectrum TDK-EPC offers a broad range of products and solutions of outstanding value from a single source and focuses on demanding markets in the areas of information and communication technology and automotive, industrial and consumer electronics. The company has design and manufacturing locations and sales offices in Asia, Europe, and in North and South America.

You can download this text and associated images from www.global.tdk.com/news_center/press/aah35400.htm.

Further information on the products can be found under www.tdk.co.jp/tefe02/e533_mlp.pdf.

Contacts for regional media

Region	Contact	Phone	Mail
Japan	Mr. Yoichi OSUGA TDK Corporation Tokyo/ Japan	+813 5201-7102	pr@jp.tdk.com
ASEAN	Ms. Tomoko KAMEDA TDK Singapore (Pte) Ltd. Singapore	+65 6273 5022	asean.inquiry@sg.tdk.com
Greater China	Ms. Clover XU TDK China Co., Ltd. Shanghai/ China	+86 21 61962307	pr@cn.tdk.com
Europe	Mr. Frank TRAMPNAU TDK Electronics Europe GmbH Dusseldorf/ Germany	+49 211 9077 127	trampnau@eu.tdk.com
America	Ms. Sara M. REYNOSO TDK Corporation of America Irving, TX/ USA	+1 972-409-4519	sreynoso@tdktca.com