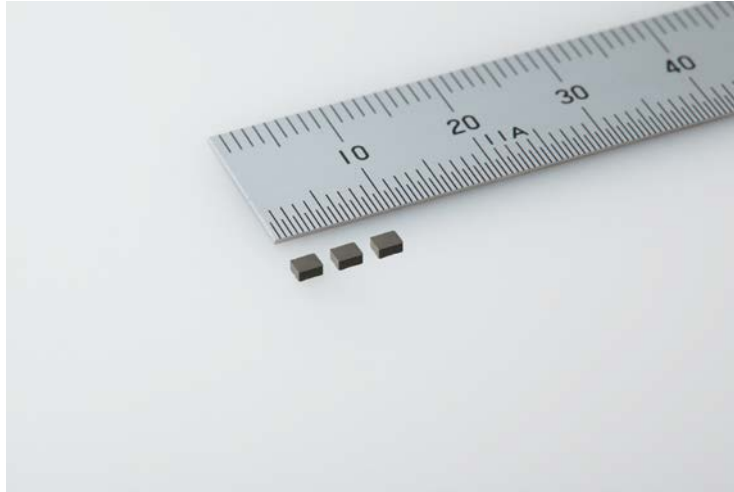


For Immediate Release

TAIYO YUDEN Adds ME Series to Its Metal Power Inductor MCOIL™

Five Series to Meet Diverse Needs Such As Improved Performance and Smaller, Thinner Size



TOKYO, September 30, 2015 - TAIYO YUDEN CO., LTD. announced today the commercialization of "MEKK2016" (2.0 x 1.6 x 1.0 mm, the maximum height value), belonging to the metal power inductor MCOIL™ product family, in which next-generation materials are used to simultaneously achieve the world's top-class low DC resistance and high DC bias characteristics. The product is a power inductor suitable for choke coil applications and developed for use in power supply circuits used in digital devices such as smartphones and wearable devices in response to the increasing trend of smaller, thinner size and improved performance.

With the MCOIL™ ME series, use of next-generation materials together with the sophistication applied to the process technology nurtured through the development of the metal power inductor MCOIL™ series has achieved even greater improved efficiency by reducing core loss that occurs in inductors, while maintaining the high DC bias characteristics of conventional products. This contributes to the realization of small and thin digital devices typified by smartphones with lower power consumption and improved performance.

Production of MEKK2016 commenced at our subsidiary company, FUKUSHIMA TAIYO YUDEN CO., LTD. (Date-City, Fukushima Prefecture, Japan) in September 2015, with a sample price of 50 yen per unit.

Technology Background

Mobile devices, typified by smartphones, have taken on the trend of using high-speed-driven multi-core application processors to simultaneously achieve improved performance and higher efficiency. Such processors require a high-current capable power supply circuit to be loaded for each core. At the same time, in order to make devices smaller and thinner, there have been increasing demands for smaller, lower-profile parts for mounting. As a result, small and thin power inductors that can supply high current with low loss are required for choke coils used in power supply circuits.

To address this market need, TAIYO YUDEN reappraised its metal power inductor MCOIL™, in which metal magnetic materials with superior DC bias characteristics are used, at the material level to

commercialize the metal wire-wound chip power inductor MCOIL™ ME series based on next-generation materials that are able to reduce core loss and achieve high DC bias characteristics, and then commenced with production of the products.

TAIYO YUDEN commercialized the metal power inductor MCOIL™ for the first time in 2012, and started production of the world's first multilayer-type metal power inductor in 2014, seeking expansion of the MCOIL™ series and the construction of a production system to meet diverse customer needs and strong demand. On this occasion, the MCOIL™ ME series, which can support further improved performance and higher efficiency, has been added to the metal power inductor MCOIL™ product family to expand the lineup to as many as five series (◆), aiming at continuously responding to any needs, including the realization of smaller, thinner and higher-performance devices, cost reduction, and large devices that can supply high current. We will continue to actively promote the expansion of the product lineup and the performance improvement of the metal power inductor MCOIL™ series.

* "MCOIL" is a registered trademark or a trademark of TAIYO YUDEN CO., LTD. in Japan and other countries.

These products will be exhibited in the TAIYO YUDEN booth in CEATEC JAPAN 2015 that will take place from October 7th at Makuhari Messe (Mihama-ku, Chiba-City, Chiba Prefecture, Japan).

◆ Characteristics of the metal power inductor MCOIL™ series

Series name	Characteristics
Metal Core Wire-wound Chip Power Inductors MCOIL™ MA series	Small size standard
Metal Wire-wound Chip Power Inductors MCOIL™ MB series	Cost-effective
Metal Multilayer Chip Power Inductors MCOIL™ MC series	Ultra small, low profile
Metal Core SMD Power Inductors MCOIL™ MD series	Large, low profile
Metal Wire-wound Chip Power Inductors MCOIL™ ME series	High-spec

■ Application

Choke coil applications for power supply circuits of digital devices typified by smartphones and wearable devices.

■ The product lineup of the metal wire-wound chip power inductor MCOIL™ ME series released on this occasion is as shown below (three items in total).

Product name	Inductance [μH]	Inductance allowance	DC resistance [mΩ] max.	Rated current [A] max.	
				DC saturation allowable current	Temperature rise allowable current
MEKK2016TR47M	0.47	±20%	30	4.5	4.3
MEKK2016T1R0M	1.0		60	3.6	3.1
MEKK2016T2R2M	2.2		150	2.4	1.9

http://www.taiyo-yuden.com/images/stories/taiyo/pdf/MCOIL_ME_series%20Oct15.pdf