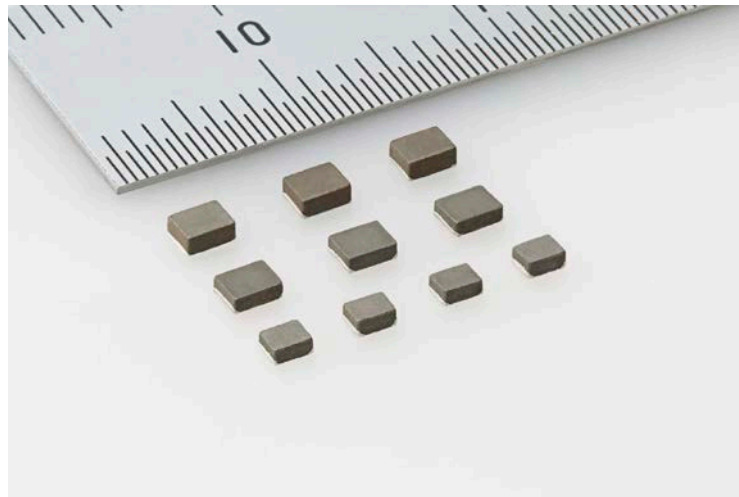


For Immediate Release

TAIYO YUDEN Announces the Addition of High Specification Products to Its Metal Power Inductor “MCOIL™” MA Series

An Improvement of Almost 24% in the DC Bias Characteristic As Compared to the Company’s Conventional Product Results in Higher Performing Devices



TOKYO, September 30, 2014 - TAIYO YUDEN CO., LTD. announced today the additions to its metal core wire-wound chip power inductor “MCOIL™” MA series line and the start of production of “MAMK2520H” (2.5 x 2.0 x 1.2mm), “MAKK2520H (2.5 x 2.0 x 1.0mm), and “MAKK2016H” (2.0 x 1.6 x 1.0mm, the maximum height value of each product), each having an improved saturation current. These products are power inductors for choke coil applications in the power supply circuits of digital devices, such as smartphones and tablet devices and address the critical needs of these devices, which are becoming further miniaturized and have an increasingly low profile with an ever-increasing performance requirement.

The currently commercialized “MAMK2520HR47M” (with an inductance value of 0.47 uH and a saturation current of 5.2 A) shows a nearly 24% improvement in the saturation current as compared to TAIYO YUDEN’s conventional product “MAMK2520TR47M” (with an inductance value of 0.47 uH and a saturation current of 4.2 A), thus contributing to a higher performance of the devices using these products.

A production system has been set up and we will begin production of these metal core wire-wound chip power inductor “MCOIL™ MA series” products from September 2014 onward at the company’s Nakanojo Plant in Gunma Prefecture, Japan at a production rate of 60 million units per month. The sample price is 50 yen per unit for each size.

Technology Background

To achieve both high performance and high efficiency, processors in mobile devices, as typified by smartphones, continue to have increasingly high speed drives and are increasingly multi-core. In such processors, power supply circuits must be installed that can support large currents in each core. Our designs achieve this while also achieving miniaturization and a decreased thickness. And, there is a growing requirement for miniaturizing and a decreasing profile for the components employed.

In order to meet these critical market requirements, TAIYO YUDEN has been providing the metal power inductor “MCOIL™” that uses TAIYO YUDEN’s own metallic magnetic materials, which has excellent DC bias characteristic. To further address the market needs we have improved the saturation current by nearly 24% as compared to our conventional product by revising the internal structure of the metal core wire-wound chip power inductor “MCOIL™ MA series” and with further improvements in the winding techniques.

In the future, TAIYO YUDEN will continue to expand the product lineup of the metal power inductor “MCOIL™” series and focus its efforts on solutions that drive improved performance.

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

These products will be on display at the TAIYO YUDEN booth at “CEATEC JAPAN 2014” to be held at Makuhari Messe (Mihama-ku, Chiba city, Chiba prefecture) from October 7th of this year.

■ Application

Choke coil applications in the power supply circuits of digital devices, such as smartphones and tablet devices.

■ The lineup of the metal power inductors MCOIL™ released this time is as shown below.

(Total nine items)

Ordering code	Inductance [μH]	Inductance tolerance	DC resistance[mΩ] max.	Rated current [A] max.	
				Saturation current	Temperature rise current
MAMK2520HR47M	0.47	±20%	25	5.2	4.0
MAKK2520HR33M	0.33	±20%	25	6.2	4.3
MAKK2520HR47M	0.47		29	5.7	4.0
MAKK2520H1R0M	1.0		53	4.1	3.0
MAKK2520H2R2M	2.2		121	2.3	1.7
MAKK2016HR24M	0.24	±20%	28	4.7	3.6
MAKK2016HR47M	0.47		36	4.0	3.3
MAKK2016HR68M	0.68		50	3.2	2.7
MAKK2016H1R0M	1.0		70	2.7	2.2