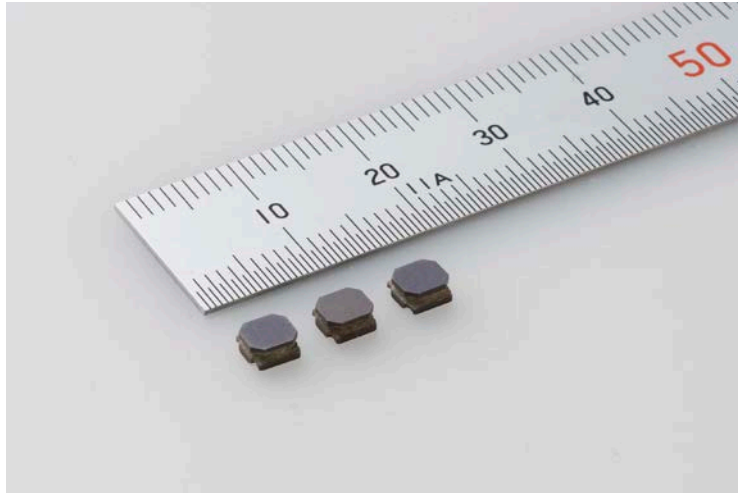


For Immediate Release

TAIYO YUDEN Adds a New Size to Metal Power Inductor MCOIL™ MD Series

High-current characteristics and lineup expanded with new size options to meet diversified needs



TOKYO, January 22, 2015 - TAIYO YUDEN CO., LTD. is pleased to announce the addition of MDWK4040 (4.0 × 4.0 × 2.0 mm (maximum height)) to its metal core SMD power inductor MCOIL™ MD series.

The power inductors are intended for use as choke coils for power supply circuits in information equipment such as personal computers, servers, and SSDs. The new MDWK4040, with a maximum height of 2.0 mm, has been added to the TAIYO YUDEN's conventional MDMK4040 product line (4.0 × 4.0 × 1.2 mm (maximum height)). With the optimized shape of its metal core, the MDWK4040 achieves one of the best direct-current superposition characteristics in the industry. The MDWK4040 can meet the demand for high-current power supply circuits in increasingly sophisticated equipment such as servers.

In January 2015, TAIYO YUDEN established a mass production system at its Nakanojo Plant (Nakanojo-machi, Agatsuma-gun, Gunma Prefecture) to provide a total output of ten million metal core SMD power inductor MCOIL™ MD series 4-mm square per month. Our sample price for the product is 50 yen.

Technology Background

As the Internet of Things (IoT) develops along with the need to process a massive amount of data known as “big data,” information equipment with higher performance and higher functionality is always in demand. Servers, particularly with enhanced processing capabilities, use high-current, low-voltage CPUs and it is essential that they have high-current power supply circuits.

In response to this demand, TAIYO YUDEN has added the new MDWK4040 with a maximum height of 2.0 mm to the metal core SMD power inductor MCOIL™ MD series. The MDWK4040 utilizes our proprietary magnetic metal material and achieves one of the best direct current superposition characteristics in the industry. Eleven different items with optimized internal structure provide inductance ranging from 0.20 to 10 μH.

TAIYO YUDEN will continue developing metal power inductors MCOIL™ that meet market demand and will expand the lineup to satisfy a variety of requirements for equipment.

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

■ Application

Choke coils for power supply circuits in information equipment such as personal computers, servers, and SSDs.

The new metal core SMD power inductors MCOIL™ MD series are listed below.

Part No.	Nominal inductance [μH]	Inductance tolerance [%]	DC resistance [mΩ] (max.)	Rated current [A]			
				DC superposition current		Temperature rise current	
				max.	typ.	max.	typ.
MDWK4040TR20NM	0.20	±30	9.8	17.0	23.0	9.2	10.0
MDWK4040TR33NM	0.33	±30	13	16.0	21.0	7.8	8.8
MDWK4040TR47NM	0.47	±30	13	10.0	15.0	7.8	8.8
MDWK4040TR68MM	0.68	±20	16	8.0	12.0	7.3	8.3
MDWK4040T1R0MM	1.0	±20	27	7.0	9.4	5.1	5.8
MDWK4040T1R5MM	1.5	±20	41	7.0	9.4	4.1	4.7
MDWK4040T2R2MM	2.2	±20	54	5.4	7.5	3.5	4.0
MDWK4040T3R3MM	3.3	±20	75	3.7	5.2	3.0	3.3
MDWK4040T4R7MM	4.7	±20	107	3.5	5.0	2.5	2.8
MDWK4040T6R8MM	6.8	±20	158	2.9	4.0	2.0	2.3
MDWK4040T100MM	10	±20	194	2.2	3.1	1.6	1.9