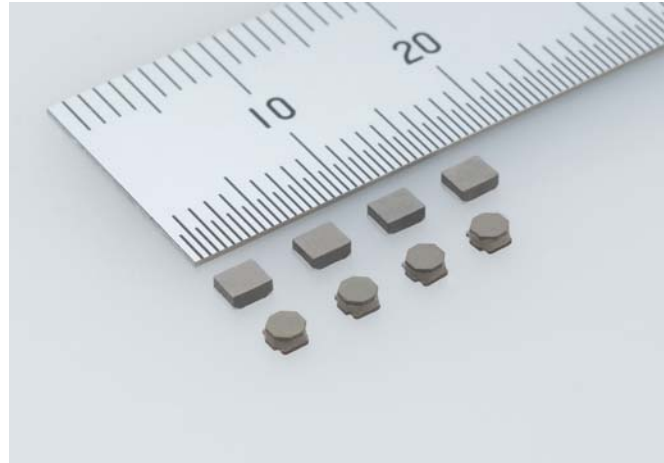


For immediate release

TAIYO YUDEN Announces Commercial Production of Metal Power Inductor “MCOIL™”, Optimal for Smartphones

*Achieves Industry’s Best-in-Class DC Bias Characteristics with
Superior Materials and Process Technology*



TOKYO, May 10, 2012 — TAIYO YUDEN CO., LTD. has succeeded in developing the metal power inductor “MCOIL™”, the first of a series of coil components that use metallic magnetic materials optimal for use in choke coils for power supply circuits in compact mobile devices such as smartphones and tablet PCs that are becoming smaller, thinner, and more feature-rich. TAIYO YUDEN today announced commercial production of the 2520 size metal core wire-wound chip power inductor “MAMK2520” (2.5x2.0x1.2mm) and the 2mm square size metal core SMD power inductor “MDMK2020” (2.0x2.0x1.2mm, height is maximum value for both).

A combination of newly developed metallic magnetic materials with TAIYO YUDEN’s advanced process technology achieves for both products the best-in-class DC bias characteristics in the industry as well as size reduction. MAMK 2520T2R2M (inductance value 2.2μH, saturation current 2300mA) has 2.3 times higher saturation current than TAIYO YUDEN’s existing BRL2518T2R2M (inductance value 2.2μH, saturation current 1000mA). MDMK2020T2R2M (inductance value 2.2μH, saturation current 2000mA) has 1.5 times higher saturation current than TAIYO YUDEN’s existing NRS2012T2R2M (inductance value 2.2μH, saturation current 1350mA).

The commercial production will commence in May 2012 at the Company’s Nakanojo Plant in Gunma Prefecture, Japan at a production volume of 40 million and 20 million units per month for MAMK2520 and MDMK2020, respectively. The sample price is 50 yen per unit for each type.

Technology Background

Electronic components are densely packed into a thinner and smaller chassis due to increasing demand for higher performance and more diversified functionality in portable devices such as

smartphones and tablet PCs. Challenges for circuit choke coils include increasing number of circuit choke coils to be mounted due to increased functionality of the device; supporting high current for high performance ICs; and shrinking the size and thickness due to size and thickness reduction of the devices. However, conventional ferrite choke coils had a challenge that DC bias characteristics worsened, and high current could not be supplied as the coil shrunk.

TAIYO YUDEN was able to develop two series of the power inductors that are smaller and handle higher current, by developing a metallic magnetic component that improves the DC bias characteristics, and combining it with the process technology already established in the NR and BR series.

TAIYO YUDEN will continue to offer the “MCOIL™” products by pushing ahead with the development of smaller and thinner products that meet the demand for smartphones markets.

*“MCOIL” is a registered trademark or trademark of TAIYO YUDEN CO., LTD. used both for Japan and other countries.

Application

Choke coils for power supply circuits in compact mobile computing devices (tablet PCs, smartphones, etc.)

The Metal Core Wire-wound Chip Power Inductors MAMK2520 Series Lineup

Ordering code	Inductance [μH]	DC resistance [mΩ] max.	Rated current [mA]	
			Saturation current	Temperature rise current
MAMK2520TR47M	0.47	39	4800	3900
MAMK2520T1R0M	1.0	59	3600	3100
MAMK2520T2R2M	2.2	117	2300	2200
MAMK2520T3R3M	3.3	156	2100	1900
MAMK2520T4R7M	4.7	260	1700	1500

The Metal Core SMD Power Inductors MDMK2020 Series Lineup

Ordering code	Inductance [μH]	DC resistance [mΩ] max.	current [mA]	
			Saturation current	Temperature rise current
MDMK2020TR47M	0.47	46	4800	2450
MDMK2020T1R0M	1.0	64	2900	2050
MDMK2020T1R5M	1.5	86	2300	1750
MDMK2020T2R2M	2.2	109	2000	1550
MDMK2020T3R3M	3.3	178	1550	1200
MDMK2020T4R7M	4.7	242	1300	1050