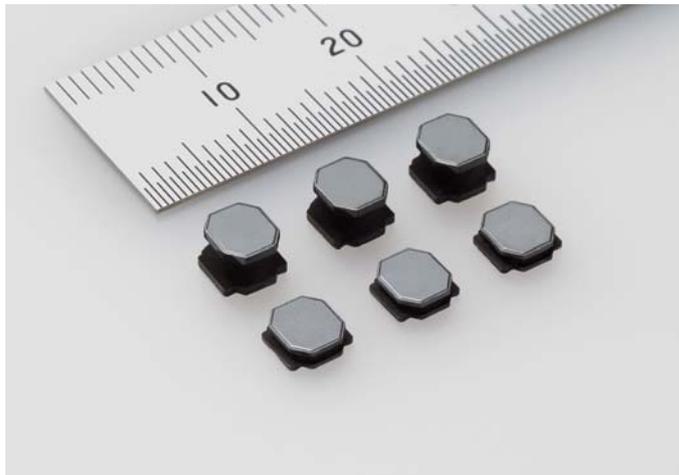


For immediate release

**Taiyo Yuden Achieves Industry-Leading DC Bias Characteristics  
in New 5mm Square Power Inductors**

*Rated Current Improved By 25% And DC Resistance Improved By 20%*



TOKYO, June 17, 2009 — Taiyo Yuden Co., Ltd. announced today the release of two new wire-wound power inductors, the NRS5020 (5.0x5.0mm, with a maximum height of 2.0mm) and the NR5040 (5.0x5.0mm, with a maximum height of 4.0mm). Both new products boast the best DC bias characteristics in the industry for 5mm square power inductors.

The NRS5020's rated current (DC bias allowed current 2.0A, inductance 4.7μH) is 25% higher than the previous Taiyo Yuden product of the same shape, which had a value of 1.6A, while the DC resistance (60mΩ, inductance 4.7μH) is 20% lower than the previous product, which was 75mΩ. The NR5040 features an even higher rated current of 2.3A, with the widely used inductance of 10μH.

These products are designed for use in DC-DC converters in various kinds of digital equipment expected to see strong growth in coming years. The NR5040 is optimum for devices like flat panel TVs and Blu-ray disc recorders, while the thinner NRS5020 is optimum for smaller devices like netbook PCs, Blu-ray drives, and digital SLR cameras. With the release of these new products, Taiyo Yuden has gone one step beyond the conventional 6.0x6.0mm square size to offer customers more compact power inductors, without sacrificing performance.

The new inductors go into mass production in June 2009 at the Taiyo Yuden production site in the Philippines, at a total production volume of 10 million units per month. The price of samples is 30 yen per unit for both types.

## Technology Background

Digital equipment voltage conversion circuits usually use DC-DC converters. Power inductors used in DC-DC converters must have DC bias characteristics sufficient to prevent inductance from declining even when a high DC current is flowing. In addition, the trend in recent years toward more compact, thinner digital devices means that components like these must also be smaller than ever.

Taiyo Yuden is meeting this market demand by optimizing the core design and materials used in its acclaimed NR series of compact, low-profile wire-wound power inductors, and is proud to present the NRS5020 and NR5040 with superior DC bias characteristics.

Taiyo Yuden will continue to develop new wire-wound power inductor products that precisely meet the needs of the market.

### NRS5020 Series Lineup

Ordering code	Inductance [ $\mu$ H]	Rdc [ $\Omega$ ]	Rated current max [A]	
			Saturation current	Temperature rise current
NRS5020T1R0N	1.0	0.021	4.4	3.5
NRS5020T1R5N	1.5	0.026	3.5	3.1
NRS5020T2R2N	2.2	0.035	3.0	2.6
NRS5020T3R3N	3.3	0.048	2.6	2.2
NRS5020T4R7N	4.7	0.060	2.0	2.0
NRS5020T6R8N	6.8	0.090	1.6	1.6
NRS5020T100M	10	0.120	1.3	1.4
NRS5020T150M	15	0.165	1.1	1.2
NRS5020T220M	22	0.260	0.9	1.0

### NR5040 Series Lineup

Ordering code	Inductance [ $\mu$ H]	Rdc [ $\Omega$ ]	Rated current max [A]	
			Saturation current	Temperature rise current
NR5040T1R5N	1.5	0.020	6.0	3.6
NR5040T2R2N	2.2	0.022	4.6	3.5
NR5040T3R3N	3.3	0.027	3.8	3.3
NR5040T4R7N	4.7	0.029	3.3	3.1
NR5040T6R8M	6.8	0.049	2.6	2.3
NR5040T100M	10	0.056	2.3	2.1
NR5040T150M	15	0.080	2.0	1.8
NR5040T220M	22	0.126	1.6	1.4
NR5040T330M	33	0.180	1.3	1.2
NR5040T470M	47	0.310	1.1	0.9