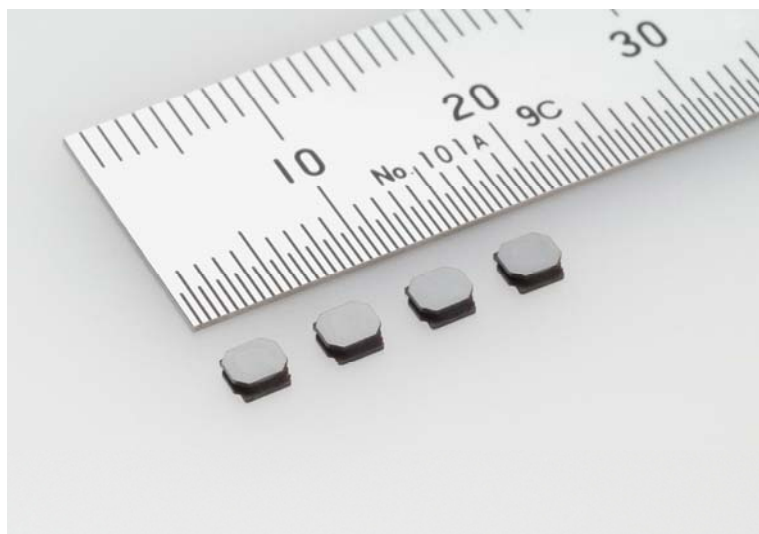


For immediate release

## Taiyo Yuden Introduces Groundbreaking Wire-Wound Power Inductor for LED Flash DC-DC Converters

*Delivers Industry-Leading DC Bias Characteristics in a Compact, Low-Profile Shape*



TOKYO, May 7, 2009 — Taiyo Yuden Co., Ltd. announced today the release of a revolutionary new wire-wound power inductor designed for use in the LED flash DC-DC converters required by cell phones with cameras and various other mobile devices. The new product, the NRV3012, measures only 3.0 x 3.0mm, with a maximum height of 1.2mm.

The new NRV3012 boasts the best DC bias characteristics of any power inductor its size. The rated current (1.8A based on DC saturation) has been improved by more than 60% over Taiyo Yuden's previous product with the same configuration, which had a value of 1.1A. The new product also requires 40% less chip surface area than the company's previous product with equivalent DC bias characteristics, which was 4.0 x 4.0mm.

Most conventional LED flash DC-DC converters use inductors with cores made of relatively expensive metallic materials. By contrast, this product, with a ferrite material, realizes the same DC bias characteristics and other performance features as same-size inductors made with more expensive materials. The NRV3012 offers customers much greater design freedom by meeting the need to replace power inductors sized 4.0 x 4.0mm or bigger.

Mass production of the product began in April 2009 at the company's Nakanojo Plant in Gunma Prefecture, Japan, at a pace of 5 million units per month. The price for samples is 20 yen per unit.

## Technology Background

Today's cell phones with cameras often include a built-in LED flash device to enable users to take good photos even when there is not enough light. LED flash technology is also becoming more popular for use in mobile music players with built-in cameras, digital still cameras, and other devices.

LED flash voltage conversion circuits most often use a DC-DC converter. As today's devices have become lighter, thinner, and smaller, the demand for smaller, thinner DC-DC converters has grown. The only way to meet this demand was to find a way to make the power inductor — the key component in the conversion circuit — smaller and slimmer, but without compromising the DC bias characteristics required to prevent loss of inductance, even with large DC currents.

With the introduction of the NRV3012, Taiyo Yuden has risen to this challenge. The company made the most of the core design and materials used in its NR series — which has already earned a strong reputation as a compact, low-profile wire-wound power inductor — to create a compact, low-profile unit with industry-leading DC bias characteristics.

Taiyo Yuden is committed to expanding the new product line to meet the growing market demand.

The NRV3012 is currently available in one model, detailed below.

Ordering code	Inductance [ $\mu$ H]	Rdc [ $\Omega$ ]	Rated current [A]	
			Saturation current	Temperature rise current
NRV3012T 2R2M	2.2	0.120	1.80	1.10