

For immediate release

## Taiyo Yuden Introduces a New Multilayer Chip Power Inductor Approximately 72% Smaller than the Company's Previous Products

*Combining a High Current Rating with Low DC Resistance  
in an EIA 0603 Size that is 0.55 mm Thin*



TOKYO, July 29, 2010 — TAIYO YUDEN CO., LTD. today announced details of the commercial release of an EIA 0603 size multilayer chip power inductor CKP1608L1R5M, measuring only 1.6 mm x 0.8 mm with a maximum height of 0.55 mm. This multilayer chip power inductor is ideally suited for DC-DC converter choke coil applications for portable devices.

Compared with the company's existing series CKP2012N1R5M, which measure 2.0 mm x 1.25 mm with a maximum height of 1.0 mm, this new offering achieves an approximate 72% smaller volume. With a rated current—an essential characteristic for a choke coil—of 0.7A based on an inductance value of 1.5 $\mu$ H, the new multilayer chip power inductor realizes essentially the same performance as Taiyo Yuden's existing product lineup (rated current of 0.8A based on an inductance value of 1.5 $\mu$ H). Furthermore, boasting a maximum DC resistance value of 0.25 $\Omega$ , this new offering secures a leading position within the industry for products of the same size. At a time when markets are calling for more compact and thinner devices that deliver lower power consumption, this multilayer chip power inductor is considered the ideal product as a DC-DC converter choke coil for mobile phones and smartphones as well as portable audio players.

Production will commence in August 2010 at the company's Tamamura Plant in Gunma Prefecture, Japan at an output pace of 5 million units per month. The sample price is 20 yen per unit.

### Technology Background

The continuing trend toward more compact and thinner mobile phones including smartphones and other portable devices such as portable audio players is driving the need for compact and thin electronic components that are mounted on those devices. At the same time, with a growing focus on higher performance and more diversified functionality, the adoption of high-efficiency DC-DC converters that maximize battery power and extend device

run time is also rising. For the choke coils used in such DC-DC converters, power inductors that deliver a superior rated current performance in a more compact and thin size are in high demand.

Responding to these market needs, Taiyo Yuden has optimized the properties of materials used and multilayer structures to release on a commercial basis an EIA 0603 size multilayer chip power inductor with a thinness of 0.55 mm, CKP1608L1R5M. In addition to achieving an approximate 72% smaller volume, this new product delivers around the same rated current value as the company's existing products.

Looking ahead, Taiyo Yuden will continue to develop products that match the needs of the market in the form of innovative multilayer chip power inductors.

The specifications of the CKP1608L1R5M are provided as follows.

Ordering code	Inductance [ $\mu$ H]	Inductance tolerance	DC resistance [ $\Omega$ ]		Rated current [A] (max.)
			(max.)	(typ.)	
CKP1608L1R5M	1.5	+30%, -10%	0.25	0.22	0.7