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For immediate release

## Taiyo Yuden Introduces World's First 100μF in EIA 0805 Size Multilayer Ceramic Capacitor

Uses Advanced Materials Technology and Thin Layer Technology to Achieve Reduction by about 62% of the Company's Previous Product Size



TOKYO, March 25, 2010 -Taiyo Yuden Co., Ltd. today announced details of the commercial release of the "AMK212BJ107MG" (2.0x1.25x1.25mm), achieving an industry-leading capacitance of  $100\mu$ F in an EIA 0805 size multilayer ceramic capacitor. It achieves the same capacitance and performance of the previous Taiyo Yuden model, the EIA 1206 size "AMK316BJ107ML" (3.2x1.6x1.6mm) in just 38% of the earlier volume. The product is optimum for IC power lines in smartphones and other high-performance mobile phones, and in notebook PCs, where steady demand for higher performance and expanded functions is coupled with demand for more compact size.

With this release, the lineup of multilayer ceramic capacitors with  $100\mu$ F capacitance has increased, with rated voltage up to 16V for the EIA 1210 size (3.2x2.5x2.5mm), to 6.3V for the EIA 1206 size, and to 4V for the EIA 0805 size. This lineup should encourage more product substitution away from electrolytic capacitors. Furthermore, the product, together with compact, high-value products featuring  $1\mu$ F capacitance in the EIA 0201 size and  $10\mu$ F capacitance in the EIA 0402 size, shows that Taiyo Yuden is actively developing high-end multilayer ceramic capacitors.

Production will commence in March 2010 at the Company's Tamamura Plant in Gunma Prefecture, Japan at an output pace of 1 million units per month. Sample price is 70 yen per unit.

## **Technology Background**

High-performance mobile phones such as smartphones, and notebook PCs, are becoming ever more compact with increased functions and higher performance. Moreover, such high performance and rich functions need to be incorporated into a limited chassis space. To this end, the high-value multilayer ceramic capacitor used for the power line also needs to be smaller

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while also maintaining high performance.

Ever since Taiyo Yuden's commercialization of a nickel-electrode high-value multilayer ceramic capacitor in 1984, the company has advanced the materials technology of multilayer ceramic capacitors, thin layer technologies, and other technologies to promote ever more compact, higher-value capacitors. The "AMK212BJ107MG" is the latest product of this technology development, achieving as many as 800 layers stacked in a single ceramic capacitor.

Ordering code	Capacitance	Capacitance tolerance	Temperature characteristics	Rated voltage	Length (L) [mm]	Width (W) [mm]	Thickness (T) [mm]
AMK212BJ107MG	100µF	±20%	X5R	4V	2.0±0.20	1.25±0.20	1.25±0.20

## Characteristics of the EIA 0805 size high value multilayer ceramic capacitor are as follows.

