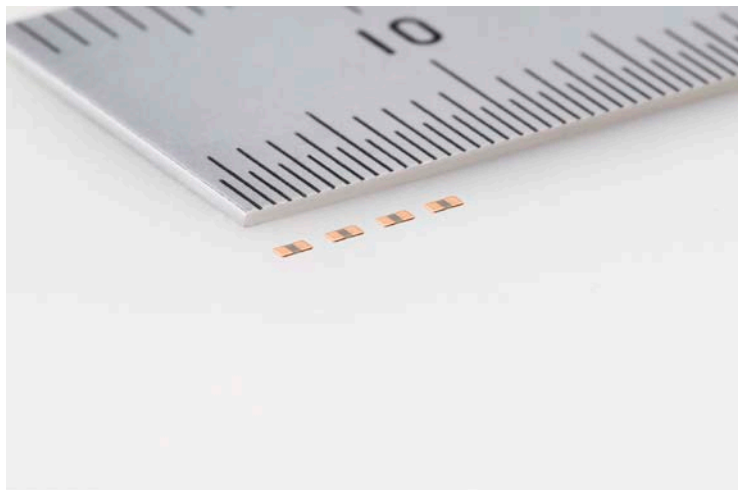


For Immediate Release

**TAIYO YUDEN Introduces the Thinnest Multilayer Ceramic Capacitor in the World  
having a Thickness of 0.11 mm**

*26% Thinner than Our Conventional Products for Better Mounting in Small and Thin Wearable Devices*



TOKYO, March 19, 2014 – TAIYO YUDEN CO., LTD. today announced the commercialization of a low-profile multilayer ceramic capacitor “JMC105 BJ224ML” (1.0 x 0.5 x 0.11mm, with the maximum height value).

This multilayer ceramic capacitor can be embedded in semiconductor packages, embedded-parts multilayer wiring substrates, as well as various modules mounted on devices that are required to be small and thin, such as smartphones and wearable devices, for the purpose of decoupling of IC power supply lines in devices. TAIYO YUDEN has employed its world leading materials technology and we have enhanced our thinning sheet technology to realize the thinnest multilayer ceramic capacitor in the world successfully accomplishing a thickness of 0.11 mm. The result of this innovative breakthrough in technology is a capacitor product with a thickness that is roughly 26% thinner as compared to our conventional products.

Production of this multilayer ceramic capacitor will commence at the company’s Tamamura plant in Gunma prefecture, Japan, from March 2014 onward at a production rate of 10 million units per month. The sample price is 15 yen per unit.

### **Technology Background**

Multilayer ceramic capacitors are placed near an IC device mounted in a smartphone and other such applications for the purpose of decoupling. Market demands call for a reduction in the size of devices and the improvement in functionality due to a reduction of the mounting area of parts. Rather than the already-known methods of mounting the multilayer ceramic capacitors on the substrate, there is a need to implement high-density mounting, which includes mounting inside or at the back of the IC package, and embedding into the substrate.

To address this market need, TAIYO YUDEN started the production of the EIA 0201 size low-profile multilayer ceramic capacitor having a thickness of 0.15 mm in January 2014. By further improving its material technology, thin film technology, and multilayer technology, TAIYO YUDEN has realized the commercialization of the thinnest multilayer ceramic capacitor in the world having a thickness of 0.11 mm. We will continue to actively promote the product development of low-profile multilayer ceramic capacitors to realize a thinner profile and higher capacitance in our components and to support the ever evolving market place.

■ Application

For decoupling of IC power supply lines in devices that are required to be small and thin, such as smartphones and wearable devices.

The product lineup of the low-profile multilayer ceramic capacitor that is currently being commercialized is as follows:

Ordering code	Capacitance	Temperature Characteristic	Rated Voltage	Length [mm]	Width [mm]	Thickness [mm] max.
JMC105 BJ224ML	0.22 $\mu$ F	X5R	6.3V	1.0 $\pm$ 0.05	0.5 $\pm$ 0.05	0.11