

For Immediate Release

**TAIYO YUDEN Introduces the Thinnest 0603-Size Multilayer Ceramic Capacitor in the World,
With a Thickness of 0.11 mm**

*27% Thinner Than Our Conventional Products, Contributing to the Development of Thinner
Wearable Devices*



TOKYO, February 16, 2016 – TAIYO YUDEN CO., LTD. announced today the commercialization of the “JMK063 BJ104ML,” the world’s thinnest 0603-size low-profile multilayer ceramic capacitor, achieving a thickness of 0.11 mm (0.6 x 0.3 x 0.11 mm, with the maximum height value).

This multilayer ceramic capacitor can be used for devices that are required to be small and thin, such as smartphones and wearable devices, for the purpose of decoupling IC power supply lines inside the devices. The capacitor product achieves a thickness that is roughly 27% thinner as compared to our conventional product, the “JMK063 BJ104MH” (0.6 x 0.3 x 0.15 mm, with the maximum height value), and will contribute to the development of smaller and thinner digital devices.

Production of this multilayer ceramic capacitor will commence at the company's Tamamura Plant (Tamamura-machi, Sawa-gun, Gunma Prefecture, Japan) from February 2016 onward at a production rate of 10 million units per month. The sample price is 20 yen per unit.

Technology Background

Multilayer ceramic capacitors are placed near an IC device mounted in a smartphone or a wearable device for the purpose of decoupling. In accordance with a reduction in thickness of devices, improvement in functionality, and increase in the battery size, the mounting area available to parts is decreasing. In addition to further reducing the size of electronic parts, there is a need to implement higher-density mounting, which includes mounting low-profile parts inside or at the back of the IC package, rather than the conventional methods of mounting parts on the substrate.

To address this market need, TAIYO YUDEN has commercialized the world’s thinnest 0603-size multilayer ceramic capacitor, the “JMK063 BJ104ML,” having a thickness of 0.11 mm, and has thereby expanded its lineup of low-profile multilayer ceramic capacitors. The capacitor is roughly 27% thinner than our conventional 0603-size capacitor, the “JMK063 BJ104MH,” with a height of 0.15 mm, and it

reduces the mounting area to approximately 64% of that of our conventional 1005-size capacitor, the “JMK105VBJ104ML,” with the same height of 0.11 mm (1.0 x 0.5 x 0.11 mm, with the maximum height value).

We will continue to actively promote the product development of low-profile multilayer ceramic capacitors to realize a smaller size, thinner profile, and higher capacitance.

■ 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:

Part number	Capacitance	Temperature characteristics	Rated voltage	Length (L) [mm]	Width (W) [mm]	Thickness (T) [mm] max.
JMK063 BJ104ML	0.1μF	X5R	6.3V	0.6 ± 0.03	0.3 ± 0.03	0.11