

For immediate release

TAIYO YUDEN Commercializes 0201-Size Temperature Compensating Multilayer Ceramic Capacitors That Achieve a Capacitance of 100 pF

The industry's largest class of capacitance, contributing to the development of smaller and thinner wearable devices



TOKYO, September 14, 2017—TAIYO YUDEN CO., LTD. announced today the commercialization of three items including LMK021CH101JK-W(0.25 x 0.125 x 0.125 mm), a 0201-size temperature compensating multilayer ceramic capacitor with a capacitance of 100 pF, the industry's largest class of capacitance.

These products are used in impedance matching applications for wireless communication modules in devices such as smartphones and wearable devices.

Mass production of the products began in September 2017 at our Tamamura plant (Tamamura-machi, Sawa-gun, Gunma Prefecture, Japan) at a rate of one million units per month, with a sample price of 10 yen per unit.

Technology Background

In accordance with the prevalence of devices requiring increased thinness and multi-functionality such as smartphones, or small, thin devices such as wearable devices, the decrease in mounting area has resulted in growing demand for further size and thickness reduction of electronic parts used in high-frequency circuits or high-frequency modules. As more and more devices become multi-band compatible to support the diverse range of telecom standards and frequency ranges adopted around the world, demand has been on the rise for impedance matching circuitry that supports each of these different telecom standards, requiring manufacturers to develop multiple lineups of products in smaller steps.

In response to these demands, TAIYO YUDEN has commercialized 109 items of 0201-size temperature compensating multilayer ceramic capacitors in small steps of capacitance variance from 0.2 pF to 56 pF. We have now added three items including the 0201-size temperature compensating multilayer ceramic capacitor with a capacitance of 100 pF, the industry's largest class of capacitance, by sophisticating the conventional capacitance enhancement technique and refining material and multilayer techniques.

Moving forward, we will continue to make our multilayer ceramic capacitors even smaller and thinner, as well as enhance their capacitance in response to market demands.

■ Application

Impedance matching applications for wireless communication modules in devices such as smartphones and wearable devices

■ The characteristics of the 0201-Size Temperature Compensating Multilayer Ceramic Capacitors are as shown below.

Part number	Rated voltage	Temperature characteristics	Capacitance	Capacitance tolerance
LMK021CH101JK-W	10V	CH	100pF	±5%
LMK021CH820JK-W	10V	CH	82pF	
LMK021CH680JK-W	10V	CH	68pF	