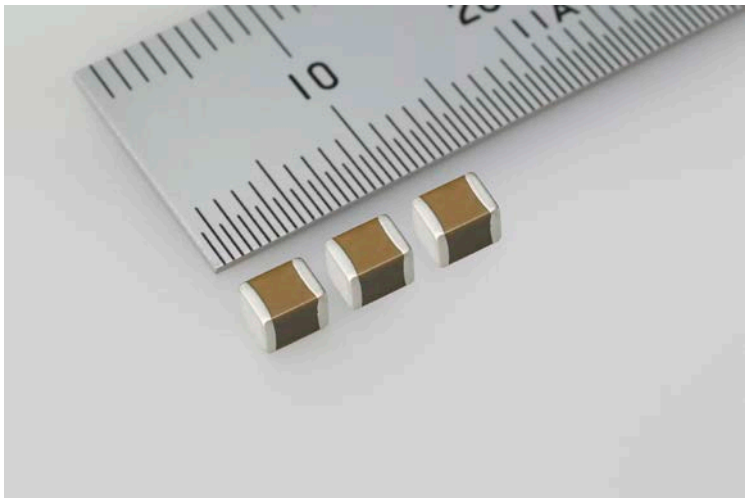
For Immediate Release

TAIYO YUDEN Extends its Lineup of Large-Capacitance Multilayer Ceramic Capacitors

Leading the Trend of Increased Capacitance toward the Realization of 1000µF Products



TOKYO, September 17, 2015 - TAIYO YUDEN CO., LTD. announced today the commencement of mass-production of the JMK325ABJ337MM (temperature characteristics: X5R, maximum operating temperature: 85°C) and AMK325AC6337MM (temperature characteristics: X6S, maximum operating temperature: 105°C) products, which realize a rated voltage of 6.3V and 4.0V, respectively, at a capacitance of 330µF.

Both products have improved rated voltage compared to the company's conventional products, AMK325ABJ337MM (temperature characteristics: X5R) and PMK325AC6337MM (temperature characteristics: X6S), which both have a capacitance of 330µF at a rated voltage of 4.0V and 2.5V, respectively.

The mass-production system for JMK325ABJ337MM and AMK325AC6337MM will be prepared at at the company’s Tamamura Plant in Gunma Prefecture, Japan in October 2015, at a production rate of one million units per month. The sample price is 300 yen per unit.

By the end of the year, mass-production will also commence for the LMK325ABJ227MM (temperature characteristics: X5R) and JMK325AC6227MM (temperature characteristics: X6S) products (both 3.2 x 2.5 x 2.5 mm), realizing a rated voltage of 10V and 6.3V, respectively, at a capacitance of 220µF.

These products will be used for power smoothing in information- and communications-related devices.

Technology Background

To improve the efficiency of power supplies, an increasing number of digital devices are now being provided with switching-type power supply circuits. Power supply circuits of this kind use multiple large-capacitance capacitors in the output stage to smooth the output voltage and ensure stable operation of the device. Generally, multilayer ceramic capacitors have a low ESR and superior frequency characteristics compared to tantalum or aluminum electrolytic capacitors, and are effective as smoothing capacitors for controlling the ripple current in increasingly high-frequency power

circuits. Additionally, being smaller in size than electrolytic capacitors, multilayer ceramic capacitors also contribute to reducing the mounting area.

TAIYO YUDEN is the world leader in the capacitance increase of multilayer ceramic capacitors. For example, in April of this year we commenced with mass-production of the AMK432BJ477MM (4.5 x 3.2 x 2.5 mm) product, featuring the world largest capacitance of 470µF as a multilayer ceramic capacitor, by continuously improving accuracy from the materials technology stage.

TAIYO YUDEN will continue to make further additions to its line-up of super high-end large-capacitance multilayer ceramic capacitor products having a capacitance in excess of 100µF, and we intend to continue the development of higher capacitance products with the aim of realizing a capacitance of 1000µF.

These products, together with multilayer ceramic capacitor prototypes that have achieved a capacitance of 1000µF, will be on display at the TAIYO YUDEN booth at CEATEC JAPAN 2015 to be held at Makuhari Messe (Mihama-ku, Chiba-City, Chiba Prefecture, Japan) from October 7th.

■ Main application
Power smoothing in information- and communications-related devices

■ Characteristics of the multilayer ceramic capacitors presently released are as shown below
(★: mass-production to commence within this year)

Part number	Capacitance	Capacitance tolerance	Temperature characteristics	Rated voltage	Length (L) [mm]	Width (W) [mm]	Thickness (T) [mm]	
AMK432 BJ477MM	470µF	±20%	X5R	4.0V	4.5 ±0.4	3.2 ±0.3	2.5±0.2	
PMK432 C6477MM	470µF	±20%	X6S	2.5V				
JMK325ABJ337MM	330µF	±20%	X5R	6.3V	3.2 ±0.3	2.5 ±0.3	2.5±0.3	
AMK325AC6337MM	330µF	±20%	X6S	4.0V				
LMK325ABJ227MM	220µF	±20%	X5R	10V				★
JMK325AC6227MM	220µF	±20%	X6S	6.3V				★