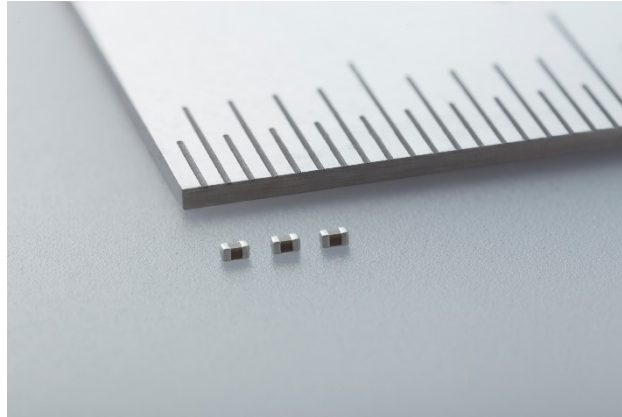


For immediate release

TAIYO YUDEN Launches 0603-Size Automotive Multilayer Ceramic Capacitors
Proposing the Downsizing of Multilayer Ceramic Capacitors for Automobiles with Enhanced Functionality



TOKYO, June 30, 2020 — TAIYO YUDEN CO., LTD. announced today the commercialization of 13 products, including the 0603-size multilayer ceramic capacitor LMR063 B7103KP-F (0.6 x 0.3 x 0.3 mm, with a rated voltage of 10 V and a capacitance of 0.01 μ F).

These products have achieved the small dimensions of the 0603-size products in addition to compatibility with AEC-Q200, a reliability test qualification standard for automotive passive components. Example applications for these new capacitors include power line decoupling and anti-noise parts that can be used in on-board devices for automotive power trains such as engines and transmissions or Advanced Driver Assistance System (ADAS) units.

Production of the multilayer ceramic capacitors commenced at the company's Tamamura Plant (Tamamura-machi, Sawa-gun, Gunma Prefecture, Japan) from June 2020 at a production rate of ten million units per month, with a sample price of 5 yen per unit.

Technology Background

In recent years, automobile electrification and electronification have increasingly progressed in step with the proliferation of electric and hybrid vehicles. On the other hand, ADAS units are required to process data from various kinds of sensors at high speeds. EMC measures are absolutely required for these electronics circuits to remove external and internally generated noise to prevent malfunction. As these automotive devices increase in functionality and use higher-density packaging, both highly reliable and smaller on-board multilayer ceramic capacitors are required.

TAIYO YUDEN has increasingly expanded its automotive product lineup to realize compatibility between larger capacitance in smaller dimensions and high reliability. With this commercialization endeavor, we have sophisticated our materials and process technologies to launch LMR063 B7103KP-F, achieving automotive-grade high reliability together with small 0603-size dimensions at the same time.

TAIYO YUDEN will continue to further expand its product lineup to respond to needs from markets requiring high reliability.

■Applications

Power line decoupling and anti-noise parts that can be used in on-board devices for automotive power trains such as engines and transmissions or Advanced Driver Assistance System (ADAS) units

■Characteristics

Part number	Rated voltage [V]	Temperature characteristics	Rated capacitance [F]	Capacitance tolerance [%]	L [mm]	W [mm]	H [mm]
TMR063 B7101KP-F	25	X7R	100p	±10, ±20	0.6±0.03	0.3±0.03	0.3±0.03
TMR063 B7151KP-F	25	X7R	150p				
TMR063 B7221KP-F	25	X7R	220p				
TMR063 B7331KP-F	25	X7R	330p				
TMR063 B7471KP-F	25	X7R	470p				
TMR063 B7681KP-F	25	X7R	680p				
TMR063 B7102KP-F	25	X7R	1000p				
TMR063 B7152KP-F	25	X7R	1500p				
TMR063 B7222KP-F	25	X7R	2200p				
TMR063 B7332KP-F	25	X7R	3300p				
LMR063 B7472KP-F	10	X7R	4700p				
LMR063 B7682KP-F	10	X7R	6800p				
LMR063 B7103KP-F	10	X7R	0.01u				

Note: Products are tested based on the test conditions and methods defined in AEC-Q200. Please consult with TAIYO YUDEN for details of the product specifications and AEC-Q200 test results, etc., and please review and approve TAIYO YUDEN's product specifications before ordering.

TAIYO YUDEN CO., LTD. Product Inquiries: <https://www.yuden.co.jp/or/contact/>