



For Immediate Release

TDK Contact in Japan:

Yoichi Osuga
TDK Corporation
Corporate Communications Dept.
Tel: (81)-3-5201-7102
E-mail: pr@jp.tdk.com

TDK Contact in U.S.:

Sara Reynoso
TDK Corporation of America
Tel: 972-409-4519
E-mail: sreynoso@tdktca.com



**TDK Develops Compact, High-Capacitance MLCC
for 100V Applications**

- Industry's Highest Level of Capacitance for 100V Rated Capacitors; Up to 50% Smaller -

TOKYO JAPAN, June 17, 2009 — TDK Corporation announced today the development of a multilayer ceramic chip capacitor with a rated voltage of 100V for mid-voltage applications. The new product uses ceramic dielectric thin-layer and multilayering technologies, both areas in which TDK excels, to improve capacitance to the industry's highest levels in the mid-voltage range. Mass production in Japan is scheduled to begin in July.

As the fundamental driving performance of automobiles improves, and comfort and safety functions become more advanced, there is a substantial increase in the use of electronic equipment. In addition, next-generation eco-friendly cars that can contribute to reducing environmental impact through better fuel efficiency and lower carbon dioxide emissions have attracted considerable attention. Amidst these developments, the number of electronic devices installed in limited space is increasing, and market demand is rising for components that can contribute to the miniaturization of these devices.

TDK is responding to these market needs by using its strengths in materials and multilayering technologies to reduce the gaps between ceramic dielectrics layers by approximately 40% compared to earlier products. In addition, sintering conditions were optimized to maintain the reliability needed for automobile on-board MLCCs while making components smaller and increasing capacitances.

- continued -

2 – TDK Develops Compact, High-Capacitance MLCC – 2

As a result, these new products have the same capacitance of earlier TDK components but are approximately 50% smaller, while a component that is the same size has approximately double the capacitance. They feature X7S temperature characteristics (operating temperature range: -55°C to 125°C; change in capacitance: $\pm 22\%$), making them ideal for use in engine compartments as well as the switching power supply smoothing circuits¹ needed for industrial equipment.

Main Applications

- Input/output smoothing in automobile engine compartments (battery lines, etc.)
- Industrial equipment switching power supply smoothing
- Cell balancing applications for hybrid vehicle batteries
- Unregulated 48V power supplies for networking
- Power-over-ethernet applications

Main Characteristics

Configuration	Thickness (mm)	Rated Voltage (V)	Capacitance (μF)	Temperature Characteristics
C1005(0402)	0.55 max	100	0.01	X7S
C1608(0603)	0.90 max	100	0.1	X7S
C2012(0805)	1.45 max	100	1.0	X7S
C3216(1206)	1.80 max	100	2.2	X7S
C3225(1210)	2.20 max	100	3.3	X7S
C4532(1812)	2.50 max	100	4.7	X7S
C5750(2220)	2.80 max	100	10	X7S

About TDK:

TDK Corporation (NYSE: TDK), a leading global electronics company based in Japan. The company was established in 1935 to commercialize "ferrite," a key material in electronics and magnetics. TDK's current product line includes ferrite materials, electronic components, factory automation solutions, anechoic chambers & test systems, magnetic heads for hard disk drives (HDD) and power supplies. Net sales in FY09 were US\$7.4 billion. For additional information on TDK products visit our web site at www.tdk.com.

###