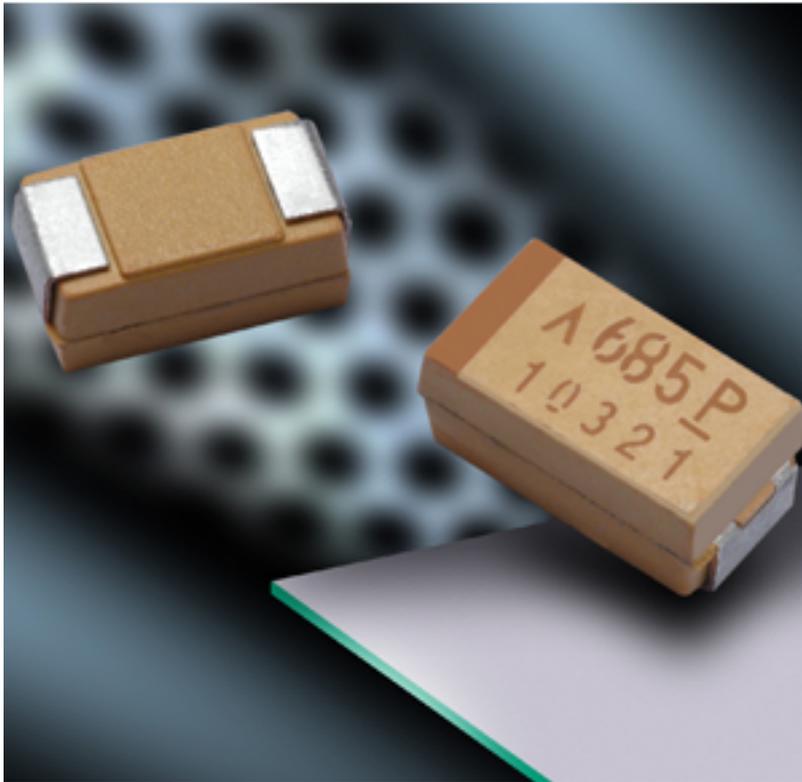


# Capacitors maintain 20% recommended voltage derating



AVX Corporation has developed the industry's first 63V and 75V single-anode tantalum polymer capacitors. Part of the TCJ Series polymer tantalum capacitors, these new surface mount devices (SMDs) deliver high capacitance, high voltage and low ESR values in a small case size. Available in 1 $\mu$ F/63V, 4.7 $\mu$ F/63V, 10 $\mu$ F/63V and 4.7 $\mu$ F/75V, 6.8 $\mu$ F/75V rated voltages, the TCJ Series polymer tantalum capacitors maintain 20% recommended voltage derating, thus significantly extending the usable voltage range. This unique combination brings polymer tantalum technology to a number of new applications and enables the development of a new generation of power supplies.

The TCJ Series high voltage capacitors feature reduced ignition failure mode, making them more robust and less likely to overload. The TCJ Series polymer tantalum capacitor maintains high reliability exceeding 1% per 1000 hours at 85°C and full-rated voltage. In addition, SMD technology provides the advantages of small case sizes and low profiles for high-speed pick and place during manufacturing.

The TCJ Series 63V and 75V polymer tantalum capacitors are well-suited for high-voltage applications, including AC/DC converters supplying circuits in LCD TVs, base stations, rectifiers, switching hubs, router and line filters; as well as LED power drivers in PC monitors and LED TVs.

"The new TCJ Series high voltage polymer tantalum capacitors are ideal for a wide

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range of applications, as AC/DC convertors require both high voltage and high ripple current, which facilitates the low ESR offered by conductive polymer technology,” said Dan Lane, product manager at AVX. “In addition, LED power drivers have high voltage requirements, as branches of serially connected diodes are used and also require capacitance to function as effectively as possible.”

The TCJ Series high voltage tantalum polymer capacitors are free of piezo issues related to the use of MLCC ceramic capacitors in circuits such as backlight controllers in LCD monitors and displays. These high voltage tantalum capacitors also reduce the overall number of parts required due to its lower ESR, increasing layout flexibility. The low-profile TCJ Series high voltage polymer capacitors enable LCD monitors and similar devices to become even thinner and take up less space than comparable aluminum electrolytic capacitors.

AVX has adopted halogen-free compliance for the new series, in accordance with criteria for environmentally responsible product designs recently adopted by other major electronics companies.

For more information about AVX’s TCJ Series capacitors, contact AVX at One AVX Boulevard, Fountain Inn, S.C. 29644; by calling 864-967-9343; or on the Web at [www.avx.com](http://www.avx.com) [1].

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### **Links:**

[1] <http://www.avx.com>