Conductive Polymer Capacitor Series

Further Information

TCJ Series - High Voltage

- Conductive Polymer 2nd electrode
- Low ESR
- Capacity range 0.47 470µF
- Voltage range 2.5 125V
- 125°C temperature range
- 17 case sizes available

TCO Series - Automotive

- Temperature -55/125°C
- CV 4.7-220µF / 4 35V
- Very Low ESR
- Surge resistant, Benign failure mode under recommended conditions ✓ Stock profile available!
- Roadmaps to 150°C, 63V and Lower ESR

TCM Series - Low ESR Multianode

- Highly conductive polymer cathode
- Extremely low ESR
- Capacity range 10 1000µF
- Voltage range 2.5 100V
- Volumetric efficiency
- High frequency capacitance retention

F38 Series - Miniature, Undertab

- Conductive Polymer 2nd electrode
- Low ESR
- Capacity range 2.2 100µF
- Voltage range 4 10V
- High resistance to inrush current
- Undertab terminations layout
- Small and low profile case size 0805 & 0603



✓ Sample books available!

Why a Conductive Polymer Capacitor?

- Do you have applications with a high operating voltage up to 100V?
- Do you want to have a higher reliability and reduced danger of ignition?
- Do you want to miniaturize your board?

The Conductive Polymer Capacitors by AVX can cover your requirements!



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Committed to excellence

Conductive Polymer Capacitors

- High Voltage TCJ Series
- Automotive TCQ Series
- Multianode TCM Series
- Miniature Undertab F38 Series



Consult | Components | Logistics | Support

www.rutronik.com

✓ Sample books available!

✓ Stock profile available!

✓ Sample books available!



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Structure

Benefits

Applications

A Conductive Polymer capacitor basically consists as well as a conventional Tantalum capacitor of a sintered Tantalum block. (Anode)

The dielectric is Tantalum pentoxide (Ta2O5) which is used as an isolating layer.

The next layer is, in opposite to the conventional Tantalum technology, a high conductive Polymer. (Cathode) This organic material enables an enormous improvement of the capacitor's performance.



Conductive Polymer capacitors are opening up opportunities for designers to shrink the size of their products and add new functionality in a wide range of applications. This technology enables to reduce the overall number of parts required, due to its lower ESR and increasing layout flexibility.

Benefits of a Conductive Polymer capacitor:

- Long lifetime because of a solid electrolyte (Polymer)
- High nominal voltage range (up to 125V)
- Only 20% voltage derating has to be considered
- Safe technology, because of an efficient self-healing mechanism and reduced danger of ignition
- High reliability
- No Piezo effect
- Stable frequency characteristics
- Low ESR
- High ripple current



Cost saving

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