Panasonic’s Conductive Polymer Hybrid capacitor combines the low ESR characteristics of a polymer capacitor with the low leakage current of an aluminium electrolytic capacitor. Benefits such as high ripple current, high reliability, safety and small case sizes are the result of this technology.

Technical Information
- Voltage Range: 25 to 80 V<sub>DC</sub>
- Capacitance Range: 10 to 470 μF
- Endurance: 4000h at 125°C
- ESR: Down to 20 mΩ
- Ripple Current: up to 3 Arms
- Leakage Current: max. 0.01CV or 3 μA
- Size: Ø 5 mm to 10 mm
- Height: 5.8 mm to 10.2 mm
- Temperature Range: up to 125°C
- AEC-Q200: All series qualified

Features
- High reliability
- Downsizing
- Stable electrical characteristics
- High temperature
- Low leakage current
- Open failure mode
- Vibration withstand 10G
- Anti-vibration type withstands 30G

Main Applications
- Automotive (body, chassis, powertrain)
- Metering
- Industrial motors, drives
- Power supply
- DC/DC converter
- Hybrid charger controller

Why a Polymer Capacitor?
Are you looking for a solution which offers miniaturisation with higher capacity, a lower ESR value, higher reliability and longer lifetime?

Polymer capacitors meet your requirements!

More information at:
www.rutronik.com
https://eu.industrial.panasonic.com

Product Marketing

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OS-CON™ is an aluminum solid capacitor with high conductive polymer electrolyte material. In addition, OS-CON offers market leading ripple current rating and its low ESR has little change even at low temperatures since the electrolyte is solid.

## Technical Information
- **Voltage range**: 2 to 100 VDC
- **Capacitance range**: 3.3 to 2700 μF
- **Endurance**: 5000h at 125°C
- **ESR**: Down to 5 mΩ
- **Ripple current**: up to 7.2 Arms
- **Size**: Ø 4 mm to 10 mm
- **Height**: 5.5 mm to 13 mm
- **Temperature range**: up to 125°C
- **AEC-Q200**: Qualified series available

## Features
- High ripple current
- Wide capacitance range
- High voltage
- Very low leakage current in solid polymer class
- No dry out

## Main Applications
- IPC server
- Camera systems
- Power supply
- Industrial
- Prof. audio/video equipment
- AC/DC converter
- Switching power supplies

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The POSCAP™ uses sintered Tantalum for the Anode which enables a huge capacity despite a very low profile. Furthermore the POSCAP™ uses high conductive Polymer to achieve a very low ESR. Unlike MLCC the POSCAP™ doesn’t have any capacitance reduction by applied DC voltage.

## Technical Information
- **Voltage range**: 2 to 35 VDC
- **Capacitance range**: 2.7 to 1500 μF
- **Endurance**: 1000h at 125°C
- **ESR**: Down to 5 mΩ
- **Ripple current**: up to 6.1 Arms
- **Size**: 2.0 x 1.25 mm to 7.3 x 4.3 mm
- **Height**: 0.9 mm to 3.8 mm
- **Temperature range**: up to 125°C
- **AEC-Q200**: Qualified series available

## Features
- Smallest case sizes by high energy density
- No ignition
- No voltage derating up to 105 °C
- No dry out

## Main Applications
- Telecommunication
- Automotive infotainment/ connectivity
- Embedded systems
- Wireless M2M
- FPGA
- Prof. audio/video equipment
- AC/DC converter
- Switching power supplies

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The SP-Cap is a Polymer Organic Aluminum Capacitor that offers excellent performance from moderate to high capacitance and voltage values at low cost. The Sp-Cap offers exceptionally low ESR with high capacitance density coupled with best in class ripple current in low profile packaging.

## Technical Information
- **Voltage range**: 2 to 35 VDC
- **Capacitance range**: 2.2 to 560 μF
- **Endurance**: 1000h at 125°C
- **ESR**: Down to 3 mΩ
- **Ripple current**: up to 10.2 Arms
- **Size**: 7.3x4.3 mm
- **Height**: 0.9 mm to 2 mm
- **Temperature range**: up to 125°C
- **AEC-Q200**: Please contact Rutronik

## Features
- Ultra low ESR & high ripple current values
- Excellent solution for noise reduction
- No voltage derating
- No dry out
- No capacitance drift against high temperature / high frequency
- Security aspect – no short circuit, no ignition

## Main Applications
- Embedded systems
- CPU
- Machine vision
- Set top box
- FPGA
- Sensor buffers / load and hold