

1000VDC and 1200VDC Multilayer Polymer [MLP] Film Capacitors

Quantic Paktron™

Powering Innovation with Stacked Multilayer Precision

Quantic Paktron's high voltage capacitors stand out in the industry due to their innovative stacked multilayer polymer [MLP] construction. This unique design approach sets them apart from conventional high voltage wound film capacitors, offering several key advantages:

Key Features

Stacked multilayer construction

Unique advantages over conventional wound film capacitors

- Higher frequency operation
- Ultra low ESR and ESL
- High dV/dT

Self -Encased Design

- Volumetrically efficient square shape
- Lightweight, higher capacitance density compared to boxed, wound capacitors
- Mechanically resilient body

Ultra-High ripple current ratings

- Ultra-low D.F. due to stacked construction, specialty dielectrics
- Unique design improves heat dissipation

High stability

- Zero DC-bias derating
- Low temperature coefficients
- 20+ year life expectancy without significant cap degradation

Wide Operating Temperature range

- -55°C to +125°C, vs polypropylene
[-55°C to 85°C [105°C]]: stable parameters across this range

Self Healing

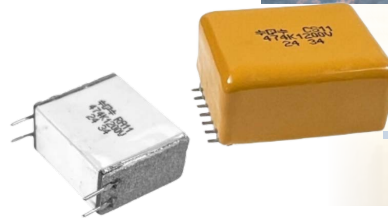
- During a fault condition, the affected area of the capacitor is "cleared", isolating the fault and allowing the capacitor to continue to operate as normal
- Mechanically flexible, no susceptibility to piezoelectric effect, surge cracking

Standard values

- Corresponding to the needs of wide bandgap switching applications
- Custom values available

Lead Times 8-10 weeks, less in some cases

Manufactured in USA



Applications

■ Wide bandgap semiconductor applications

■ Power Electronics

Inverters, converters, and power supplies

■ Renewable Energy Systems

Particularly in photovoltaic (PV) inverters for solar energy

■ Electrovehicle (EV) power trains

For power conversion and energy storage

■ Industrial Motor Drives

To manage high-voltage power distribution

■ High-frequency switching circuits

Leveraging their low ESR (Equivalent Series Resistance) characteristics

■ Snubber circuits

To suppress voltage spikes in switching applications

■ DC link applications

For smoothing and energy storage in power conversion systems

■ Medical imaging equipment

In high-voltage power supplies for X-ray and MRI machines

■ Pulsed power applications

For energy storage and discharge in scientific and industrial equipment

Data Sheets



RA11 Angstor

4pin DIP
version



CS11 Capstick

Leadframe version
Thru-Hole
SMD Option

Quantic® Paktron is a technical leader in multilayer polymer film [MLP] capacitors with a portfolio offering mission-critical, "cannot-fail" performance in demanding markets from automotive and commercial to military, space, and telecom. Its branded capacitor product series include Capstick® Capacitor [lead-frame capacitor], Surfilm® Capacitor [surface mount chip capacitor], Quencharc® Capacitor [RC network snubber capacitor], and the Angstor® Capacitor.

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