

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

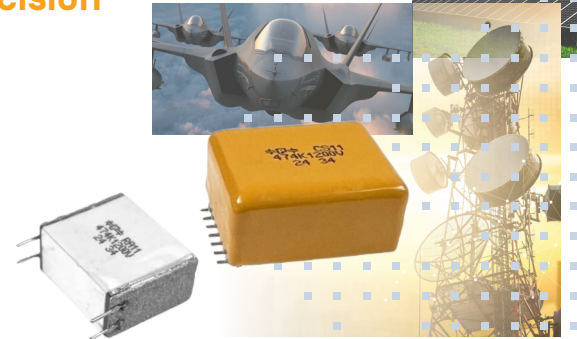
- During a fault condition, the affected area of the capacitor is "cleared", isolating the fault and allowing the capacitor to continue to operate as normal
- Mechanically flexible, no susceptibility to piezoelectric effect, surge cracking

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
Standard
Pinout



CS11 Capstick
Best Overall
Performance
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.

1205 McConville Road, Lynchburg, VA 24502 | quanticpaktron.com | info@quanticpaktron.com | +1-434-239-6941