



**CORNELL
DUBILIER**



Proven Pulse Power Capacitor Technology for Your Next Medical, Industrial or Military Application

Cornell Dubilier offers unparalleled expertise in the design and manufacture of custom pulse power capacitors for life-saving medical devices, industrial lasers and critical military applications.

Our extensive capacitor design and manufacturing capabilities include aluminum electrolytic, all types of film and paper dielectrics, metalized and foil electrodes, dry and oil-filled constructions, with a broad range of plastic and metal packaging options. Our pulse capacitors function in a wide variety of operating environments and deliver reliable performance over long periods of time.



Applications:

- External Defibrillators
- Industrial and Medical Lasers
- Diagnostic Imaging Equipment
- MARX Generator Banks
- Electro-Magnetic Pulse Forming (EMP)
- Flash Lamps
- Strobe Lights
- Particle Accelerators
- High Energy Dynodes
- Electromagnetic Propulsion Systems (EMPS)

Medical

Cornell Dubilier medical pulse and defibrillator capacitors are designed to meet the reliability demands of a Class III medical device. Leading manufacturers choose Cornell Dubilier because they can count on 100% field reliability when it really matters.

Industrial/Military

Our capacitors for industrial and military pulse and laser applications draw on Cornell Dubilier's deep technical capabilities and flexible manufacturing processes. We have a long history in the pulse power area where multiple capacitor technologies are needed to satisfy the particularly stringent requirements of pulsing applications.

YOUR PARTNERS IN SUCCESSFUL AND EFFECTIVE DESIGN SOLUTIONS — At Cornell Dubilier, our goal is to get you to the pulse capacitor solution you need quickly and easily. Just give us a call and talk to any of our design engineers directly. Our engineering and manufacturing teams will work with you collaboratively to create the most effective and long-lasting capacitor solution for your application.

CUSTOM DESIGNS TO MEET YOUR SPECS — It's easy to integrate Cornell Dubilier capacitors into your development pipeline. Our engineering team has over 100 years collective experience in capacitor design and precision manufacturing, so we can quickly analyze your needs and develop the custom solution you require.



SPEED TO MARKET — Need it fast? We excel at quick turnaround. We can work with you through the entire process from concept through 3-D prototyping to field testing.

CORNELL DUBILIER PROVIDES FLEXIBLE OPTIONS — Our capacitors come in metal or plastic enclosures with terminations ranging from flexible wire leads to screw terminals with high voltage ceramic insulators.

Highlights:

- Typical voltage ranges
 - Defibrillators: 1000 – 6000 Vdc
 - Pulse/Laser: 100 – 100,000 Vdc
- Peak current delivery up to 250 kA
- Designed for user-specified life
- Dry or oil-filled with an environmentally “green” fluid
- Various terminal configurations to fit custom requirements
- Metal or plastic enclosures
- Low inductance

General Pulse Power Specifications

- Capacitance Range: 0.01 μ F to 50,000 μ F
- Capacitance Tolerance: \pm 3% to \pm 10%
- DC Voltage Range: Up to 50 kV
 - Peak current – up to 250 kA
- Operating Life: Up to 100 million shots
- Operating Temperature Range: - 40°C to +55°C typical
- Higher temperature limit available

Medical Device (Defibrillator) Specifications:

- Capacitance Range: 32 to 500 μ F
- Capacitance Tolerance: \pm 5% Standard
- Typical DC Voltage Range: 800 VDC to 6,000 VDC
- Energy Density: up to 2.0 J/cc
- 5000 – 40,000 pulse life rating



Cornell Dubilier Electronics is a technology leader and manufacturer of high-quality capacitors used in demanding industrial, medical and military/aerospace applications.

Our deep technical capabilities and flexible manufacturing processes enable us to meet the unique requirements of your pulse power applications. Our capacitors are designed and built using computer-integrated manufacturing systems under an ISO 9001:2015-certified quality management system. They undergo rigorous quality assurance testing, including 100% electrical and visual testing to further ensure reliability and high-level performance. Contact us at sales1@cde.com or call 508-910-3500 for your next project and see how Cornell Dubilier can help energize your ideas.

