



**CORNELL
DUBILIER**



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

Cornell Dubilier offers unparalleled expertise in the design and manufacture of custom pulse power capacitors for life-saving medical devices, industrial lasers, fusion research 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
- Fusion Research
- High Energy Dynodes
- Electromagnetic Propulsion Systems (EMPS)

Defibrillator Capacitors

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, Medical, and Research

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 high-energy pulsing applications.

YOUR PARTNERS IN SUCCESSFUL AND EFFECTIVE DESIGN SOLUTIONS — Our engineering and manufacturing teams will work with you collaboratively to create the most effective capacitor solution and test program 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 pulse capacitor design and manufacturing experience, so we can quickly analyze your needs and develop the custom solution you require.

WE WORK WITH YOU THROUGH THE ENTIRE PROCESS — Review technical requirements, design, prototyping, in-house, and field testing.



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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 – 150,000 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: 5 nF to 50,000 μ F
- Capacitance Tolerance: Custom
- Voltage Range: Up to 150 kV
 - Peak Current Level: up to 250 kA
- Inductance: <10 nH (Custom Designs)
- Energy Density: 2.75 J/cc
- Pulse Life (Nominal): 100 to 1×10^9 Cycles
- Rep Rate: .01 to 1000 Hz

Medical Device(Defibrillator) Specifications

- 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 (Cornell Dubilier, Cornell Dubilier Marketing, Inc., and affiliates) is dedicated to advancing capacitor technology for new applications. Cornell Dubilier combines innovative products with engineering expertise to provide reliable component solutions for inverters, wind and solar power, electric vehicles, power supplies, motor drives, HVDC, motors, welding, aerospace, telecom, medical equipment, and UPS systems. A global group of companies, Cornell Dubilier has ISO-9001-certified manufacturing and distribution facilities in Liberty, SC; New Bedford, MA; Snow Hill, NC, Mexicali, Mexico; and Hong Kong.



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FILM PULSE CAPACITORS

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ALUMINUM ELECTROLYTIC PULSE CAPACITORS

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