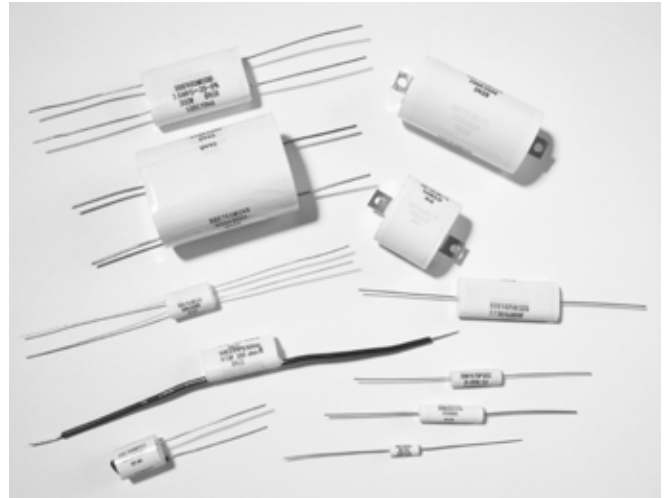




Patented Pulse Capacitor Technology

At the Leading Edge of Film Capacitor Technology™



Design Parameters/Characteristics:

- ⚡ Extreme Long-Life Reliability OR Designed to Specific Lifetime Requirements
- ⚡ No Runaway or Catastrophic Failure Mode
- ⚡ Design Flexibility to Minimize System Loop Inductance
- ⚡ Greater Performance **with** Less Volume

Capabilities:

Dielectric:	Polypropylene and Polyester
Packaging:	Radial/Axial Leads, Round/Pressed profiles Specific terminals/form factors to meet critical dimensions
Construction:	Metallized or Film/Foil, Non-Inductively Wound Single & Series-Section Designs
Capacitance:	0.01 to 1000 μ F
Tolerance:	$\pm 1\%$ to $\pm 10\%$
Voltage:	100 to 5000 VDC (per individual capacitor)
dV/dt:	Improved by 1000% over conventional designs

**SBE has been designing and manufacturing film capacitors for over 45 years.
Contact our design team today with your demanding requirements,
and let us help you develop a solution!**



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Performance Test Data Analysis 0.33 μ F, $\pm 10\%$, 2000 VDC

Specifications

Dielectric:	Metallized Polyester
Packaging:	Radial Lead, Conformal Coated
Construction:	Series-Section, Non-Inductively Wound
Capacitance:	0.33 μ F, $\pm 10\%$
Voltage:	2000 VDC/500 VAC
dV/dt:	17,500 Volts/ μ sec.
Peak Current:	5,800 Amps

Dimensions

Length:	0.98"
Thickness:	0.87"
Height:	1.18"
Lead Spacing:	0.83"
Lead Length:	0.25"
Lead Wire:	18 AWG Copper

Test conditions for

above specified part:

Test Voltage = 2 KVDC. All data readings taken at 100 KHz, +25°C
1,000 discharges into a solid copper plate, 1 pulse per second
Discharge loop inductance 27.5 nH (derived from discharge ringing frequency)
Measurements taken utilizing a 4-wire connection

	<u>Capacitance</u>	<u>Dissipation Factor</u>	<u>ESR</u>
Initial Reading	333 nF	0.014	71 m Ω
Final Reading	256 nF	0.020	123 m Ω

Capacitance dropped ~23%, however remaining capacitance was of good quality.

Test results from a similar SBE design using high quality standard material of the same thickness;
however, readings taken after *only 100* discharges:

	<u>Capacitance</u>	<u>Dissipation Factor</u>	<u>ESR</u>
Initial Reading	219 nF	0.013	95 m Ω
Final Reading	145 nF	0.182	2000 m Ω

This data is not intended for system design specification, but rather to illustrate a performance extreme.
Please contact SBE's Application Engineering Department to discuss your specific application requirements.

#SBEPatentedPulse3/08