SBE Part #: 700D506920-436

Technical Data Sheet

Electrical Specifications

Capacitance/Tolerance:	50 µF, ±10%
DC Voltage Rating:	2000 VDC
Dielectric/Construction:	Patented pulse technology metallized polypropylene film. Three series section design, non-inductively wound.
Dielectric Withstand Voltage:	Unit shall withstand a DC potential of 2500 Volts for two minutes.
Maximum Surge Voltage:	Units should not be exposed to a surge voltage greater than 2500 Volts.
Insulation Resistance:	2000 MΩ Min at +25°C.
ESR @ 100 KHz.:	1.6 milliohms
ESL:	~ 50 nH. The actual capacitor loop inductance will depend on the application interconnect design.
Operating Temperature:	-40°C to +85°C
Peak Current Rating:	3240 Amps Repetitive
Peak Fault Current:	4050 Amps. One time discharge, with anticipated < 5% cap loss
RMS Current Rating:	50 Amps RMS. Assumes a terminal temperature < 75°C and an approximate +10°C temperature rise from terminal surface to internal capacitor hot spot
Peak-to-Peak Voltage:	3750 Volts MAX. When operated at this peak-to-peak voltage the capacitor can be expected to withstand ~5000 discharges. Reducing this value to 2812 V peak-to-peak will increase discharge life on the order of 10 times. Reducing this value to 2121 V peak-to-peak will increase this discharge life more than 1000 times. Reducing the Q of the discharge circuit will improve shot life for all cases. End of life for the above estimated shot life is 10% capacitance reduction.

Mechanical Specifications

Dimensions:	See drawing.
Core:	Hollow phenolic core with 1.0” I.D. Meets UL-94HB specifications
Terminals:	Tin coated copper, 0.032” thick by 0.75” wide
Encapsulation:	Capacitor body has an outer tape wrap of flame retardant polyester tape (meets UL510 specifications).

Marking:

SBE	SBE Company Identification
700D436	Unique SBE Part Number
50 μF ±10%	Capacitance value and tolerance
2000 VDC	DC Voltage Rating
yyww	Weekly date code (i.e. 0915 = 15th week of 2009)

Rev. 10/26/09

SBE Inc., Power Ring Division
131 South Main St. • Barre, VT 05641 USA
Tel: 802-476-4146 • **Fax:** 802-476-4149
Email: PowerRing@SBElectronics.com
Web: www.SBElectronics.com

ISO 9001:2000 QMI SAI GLOBAL