

Description

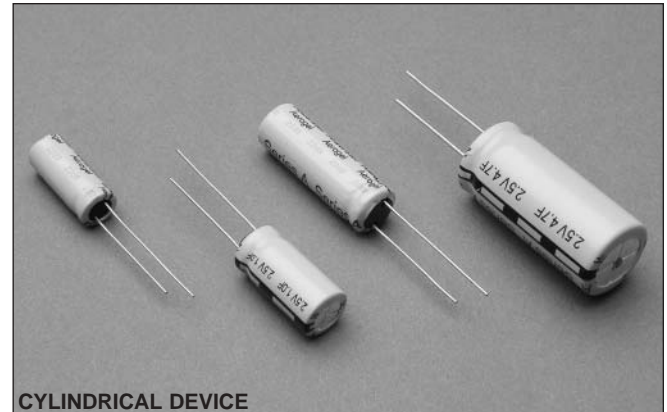
The PowerStor Aerogel Capacitor is a unique, ultra-high capacitance device based on a novel type of carbon foam, known as carbon aerogel. Aerogel capacitors are similar to supercapacitors, ultracapacitors and electrochemical double layer capacitors (EDLCs) with the added benefit of low ESR (Equivalent Series Resistance).

Features & Benefits

- Very low ESR
- Low leakage current
- Long cycle life
- High useable capacity
- Very high specific capacitance also available (B Series)

Applications

- Pulse power
- Hold-up power
- DC/DC converters
- Hybrid battery packs
- Valve / solenoid actuation



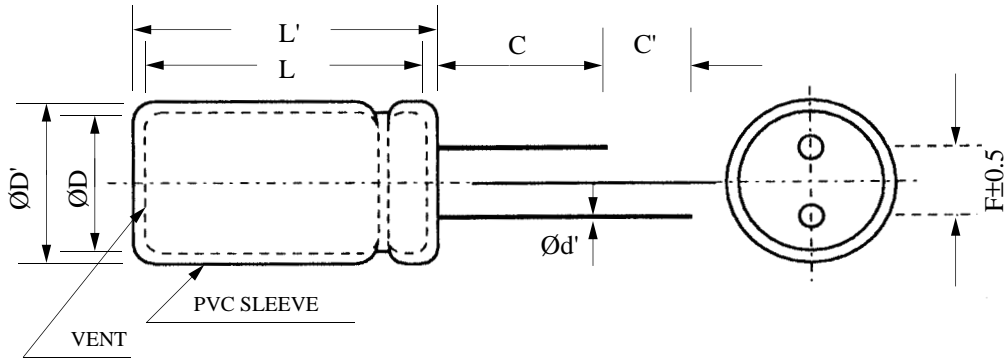
SPECIFICATIONS	
Working Voltage	2.5 volts
Surge Voltage	3.0 volts
Nominal Capacitance Range	0.47 to 4.7 F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

STANDARD PRODUCTS			
Nominal Capacitance (F)	Part Number	Nominal ESR (Equivalent Series Resistance) Measured @ 1kHz (Ω)	Nominal Dimensions
0.47	A0820-2R5474	0.150	Ø = 8 mm; L = 20 mm
1.0	A1020-2R5105	0.090	Ø = 10 mm; L = 20.5 mm
1.5	A1030-2R5155	0.060	Ø = 10 mm; L = 30 mm
4.7	A1635-2R5475	0.025	Ø = 16 mm; L = 35 mm

PERFORMANCE		
Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 2.5 volts DC)	≤ 30	≤ 300
Storage - Low and High Temperature (1000 hrs @ -25°C and 70°C)	≤ 30	≤ 300

DIMENSIONS (mm)								
Part Number	D	D'	L	L'	F	d'	C	C'
A0820-2R5474	8.0	8.5	20.5	21.0	3.5	0.50	20.0	5.0
A1020-2R5105	10.0	10.5	21.8	22.3	5.0	0.60	20.0	5.0
A1030-2R5155	10.0	10.5	31.0	31.5	5.0	0.60	20.0	5.0
A1635-2R5475	16.0	16.5	37.5	38.0	7.5	0.80	20.0	5.0
Maximum					± 0.5	± 0.02	Minimum	

Note: Longer lead is positive



PART NUMBERING SYSTEM											
A	□	□	□	□	-	2	R	5	□	□	□
Series Code	Dimensions (mm)					Voltage (V) R is decimal		Capacitance (μF)			
B = Very Low ESR	Diameter	Length				2R5 = 2.5V		Value	Multiplier		
								Example: 475 = 47 x 10 ⁵ μF or 4.7 F			

PACKAGING INFORMATION

Standard packaging: Bulk, 100 units per package.

Special packaging available upon request. Contact factory.

PART MARKING

Manufacturer
Capacitance (F)
Max. Operating Voltage (V)
Series Code (or part number)
Polarity Marking