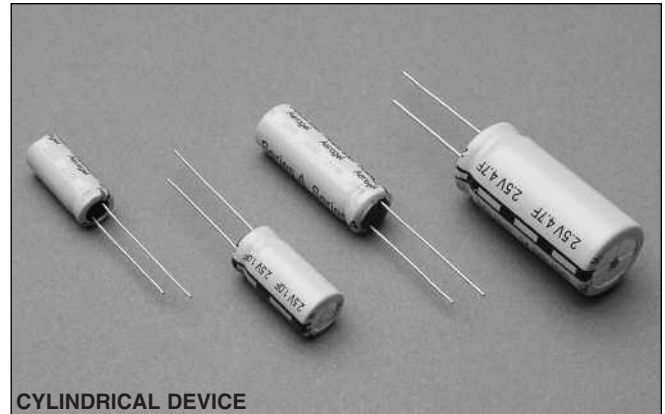


Description

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

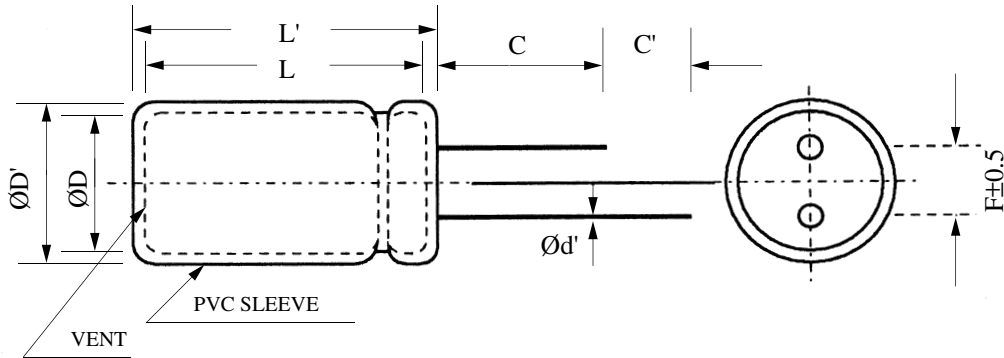
SPECIFICATIONS	
Working Voltage	2.5 volts
Surge Voltage	3.0 volts
Nominal Capacitance Range	0.47 to 4.7 F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

STANDARD PRODUCTS				
Nominal Capacitance (F)	Part Number	Nominal ESR (Equivalent Series Resistance) Measured @ 1kHz (Ω)	Nominal Dimensions	Typical Mass (grams/1 piece)
0.47	A0820-2R5474-R	0.150	Ø = 8 mm; L = 20 mm	1.788
1.0	A1020-2R5105-R	0.090	Ø = 10 mm; L = 20.5 mm	2.608
1.5	A1030-2R5155-R	0.060	Ø = 10 mm; L = 30 mm	3.814
4.7	A1635-2R5475-R	0.025	Ø = 16 mm; L = 35 mm	10.748

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-R	8.0	8.5	20.5	21.0	3.5	0.50	20.0	5.0
A1020-2R5105-R	10.0	10.5	21.8	22.3	5.0	0.60	20.0	5.0
A1030-2R5155-R	10.0	10.5	31.0	31.5	5.0	0.60	20.0	5.0
A1635-2R5475-R	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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	2	R	5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Series Code	Dimensions (mm)					Voltage (V) R is decimal		Capacitance (μF)			
B = Very Low ESR	Diameter	Length				2R5 = 2.5V		Value	Multiplier		
								Example: 475 = $47 \times 10^5 \mu F$ 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