



Aerogel Supercapacitors A Series

Description

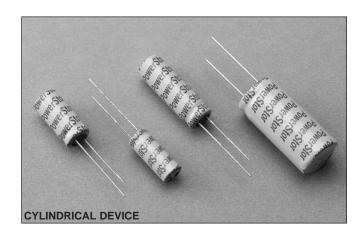
The PowerStor Aerogel Capacitor is a unique, ultra-high capacitance device based on a novel type of carbon foam, known as carbon aerogel. Aerogel capacitors are similar to supercapacitors, ultracapacitors and electrochemical double layer capacitors (EDLCs) with the added benefit of low ESR (Equivalent 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	Part	Nominal ESR	Nominal Dimensions					
Capacitance	Capacitance Number (Equivalent Series Resistance)							
(F)		Measured @ 1kHz (Ω)						
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	ESR						
	(% of initial measured value)	(% of initial specified value)						
Life (1000 hrs @ 70°C @ 2.5 volts DC)	≤ 30	≤ 300						
Storage - Low and High Temperature	≤ 30	≤ 300						
(1000 hrs @ -25°C and 70°C)								



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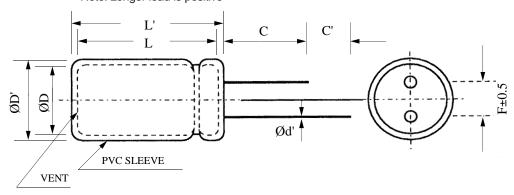




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DIMENSIONS (mm)									
Part Number	D	D'	L	L'	F	ď'	С	C'	
A0820-2R5474	8.0	8.5	20.5	21.0	3.5	0.50	20.0	5.0	
A1020-2R5105	10.0	10.5	21.8	22.3	5.0	0.60	20.0	5.0	
A1030-2R5155	10.0	10.5	31.0	31.5	5.0	0.60	20.0	5.0	
A1635-2R5475	16.0	16.5	37.5	38.0	7.5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

Note: Longer lead is positive



PART NUMBERING SYSTEM										
Α				-	2	R	5			
Series Code	Dimensions (mm)				Voltage (V) R is decimal			Capacitance (µF)		
B = Very	Diameter		Length		2R5 = 2.5V		Val	ue	Multiplier	
Low ESR							2R5 = 2.5V			475

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



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Visit us on the Web at www.cooperET.com

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