

Description

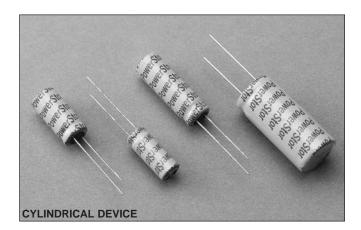
The PowerStor Aerogel Capacitor is a unique, ultra-high capacitance device based on a novel type of carbon foam, known as carbon aerogel. Aerogel capacitors are similar to supercapacitors, ultracapacitors and electrochemical double layer capacitors (EDLCs) with the added benefit of low ESR (Equivalent 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	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 (% 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	≤ 30	≤ 300				
(1000 hrs @ -25°C and 70°C)						



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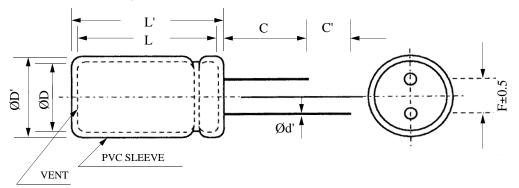
PowerStor[®] Aerogel Supercapacitors A Series

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DIMENSIONS (mm)								
Part Number	D	D'	L	Ľ	F	d'	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	Minii	mum	

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			Value	Multiplier
Low ESR						2R5 = 2.5V		V

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



 PS-5101 9/02
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