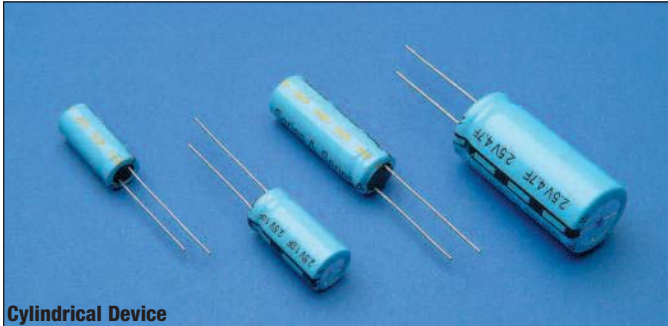


Supercapacitors A Series



Cylindrical Device

Description

Cooper Bussmann[®] PowerStor[®] supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor solutions tailored to specific applications that range from a few micro-amps for several days to several amps for milliseconds.



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

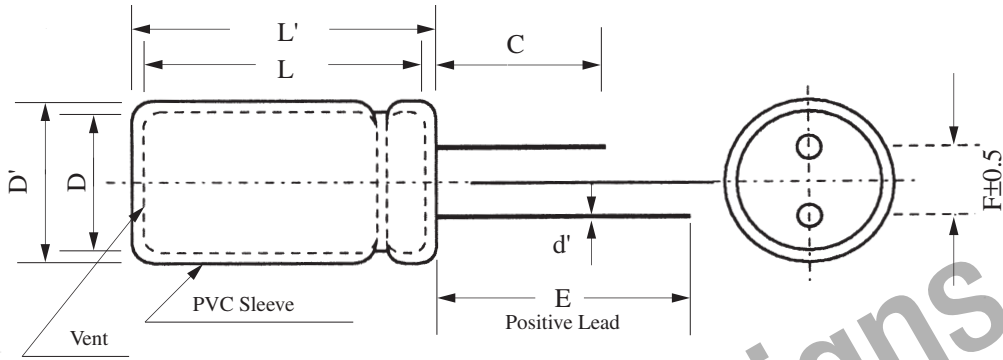
Standard Products

Nominal Capacitance (F)	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)		Typical Mass (grams/1 piece)
			Diameter	Length	
0.47	A0820-2R5474-R	0.150	8	20	1.8
1.0	A1020-2R5105-R	0.090	10	20.5	2.6
1.5	A1030-2R5155-R	0.060	10	30	3.8
4.7	A1635-2R5475-R	0.025	16	35	10.7

Performance

Parameter	Capacitance Change (% of initial measured value)	ESR (% of initial specified value)
Life (1000 hrs @ 70°C @ 2.5Vdc)	≤ 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	E	
A0820-2R5474-R	8.0	8.5	20.5	21.0	3.5	0.50	20.0	25.0	
A1020-2R5105-R	10.0	10.5	21.8	22.3	5.0	0.60	20.0	25.0	
A1030-2R5155-R	10.0	10.5	31.0	31.5	5.0	0.60	20.0	25.0	
A1635-2R5475-R	16.0	16.5	37.5	38.0	7.5	0.80	20.0	25.0	
Tolerances	Maximum				± 0.5	± 0.02	Minimum		



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 4.7F			

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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