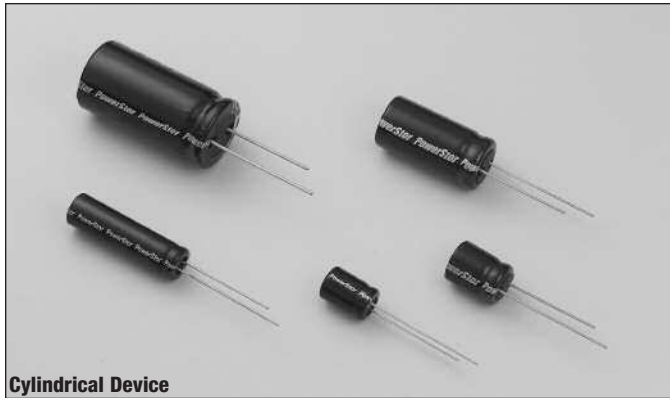


# Supercapacitors

## B Series



Cylindrical Device

### Description

Cooper Bussmann<sup>®</sup> PowerStor<sup>®</sup> 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

- High specific capacitance
- Very low ESR
- Low leakage currents
- Long cycle life
- Ultra low ESR also available (A Series)

### Applications

- Main power
- Hybrid battery packs
- Hold-up power
- Pulse power

### Specifications

<b>Working Voltage</b>	2.5V
<b>Surge Voltage</b>	3.0V
<b>Nominal Capacitance Range</b>	0.22 to 100F
<b>Capacitance Tolerance</b>	-20% to +80% (20°C)
<b>Operating Temperature Range</b>	-25°C to 70°C

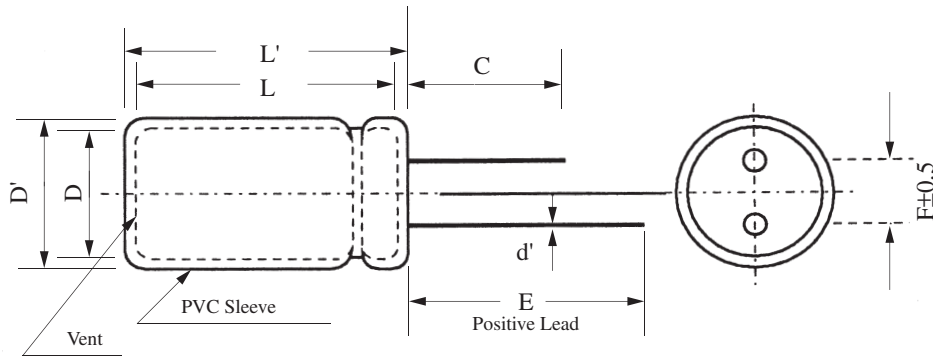
### Standard Products

Nominal Capacitance (F)	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)		Typical Mass (grams/1 piece)
			Diameter	Length	
0.22	B0510-2R5224-R	3.000	5	11	0.54
1.0	B0810-2R5105-R	0.400	8	13	1.2
1.5	B1010-2R5155-R	0.300	10	12.5	1.9
2.2	B0820-2R5225-R	0.200	8	20	1.5
3.3	B1020-2R5335-R	0.150	10	20.5	2.8
4.7	B0830-2R5475-R	0.150	8	30	2.6
6.8	B1030-2R5685-R	0.100	10	30	3.9
10	B1325-2R5106-R	0.060	13	26	5.6
22	B1635-2R5226-R	0.040	16	35	11.0
33	B1835-2R5336-R	0.030	18	35	13.5
50	B1840-2R5506-R	0.025	18	40	14.7
100	B1860-2R5107-R	0.020	18	60	22.0

### 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
<b>B0510-2R5224-R</b>	5.0	5.5	11.5	12.0	2.0	0.50	20.0	25.0
<b>B0810-2R5105-R</b>	8.0	8.5	13.0	13.5	3.5	0.50	20.0	25.0
<b>B1010-2R5155-R</b>	10.0	10.5	13.9	14.4	5.0	0.60	20.0	25.0
<b>B0820-2R5225-R</b>	8.0	8.5	20.5	21.0	3.5	0.50	20.0	25.0
<b>B1020-2R5335-R</b>	10.0	10.5	21.8	22.3	5.0	0.60	20.0	25.0
<b>B0830-2R5475-R</b>	8.0	8.5	30.5	31.0	3.5	0.50	20.0	25.0
<b>B1030-2R5685-R</b>	10.0	10.5	31.0	31.5	5.0	0.60	20.0	25.0
<b>B1325-2R5106-R</b>	13.0	13.5	27.9	28.4	5.0	0.60	20.0	25.0
<b>B1635-2R5226-R</b>	16.0	16.5	37.5	38.0	7.5	0.80	20.0	25.0
<b>B1835-2R5336-R</b>	18.0	18.5	37.5	38.0	7.5	0.80	20.0	25.0
<b>B1840-2R5506-R</b>	18.0	18.5	41.5	42.0	7.5	0.80	20.0	25.0
<b>B1860-2R5107-R</b>	18.0	18.5	59.5	60.0	7.5	0.80	20.0	25.0
<i>Tolerances</i>	Maximum				± 0.5	± 0.02	Minimum	



Part Numbering System									
<b>B</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	-	<b>2</b> <b>R</b> <b>5</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Series Code	Dimensions (mm)					Voltage (V) R is decimal	Capacitance		
B = High Capacitance	Diameter	Length				2R5 = 2.5V	Value	Multiplier	
							Example: 475 = 47 x 10 <sup>5</sup> 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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