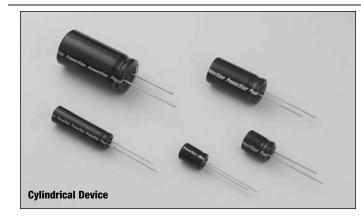
**PowerStor**<sup>®</sup>

# Supercapacitors B Series



### 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

• Long cycle life

• Ultra low ESR also available (A Series)

• High specific capacitance

• Low leakage currents

## Applications

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

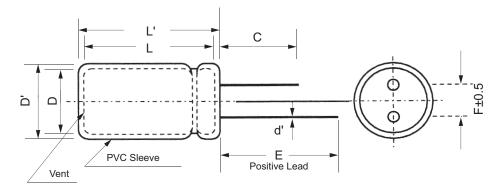
Specifications					
Operating Temperature Range	0.22F-22F @ -25°C to 70°C 33F-100F @ -25°C to 60°C				
Working Voltage	2.5V				
Surge Voltage	3.0V				
Nominal Capacitance Range	0.22 to 100F				
Capacitance Tolerance	-20% to +80% (20°C)				

Standard Products								
Nominal Capacitance	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance)	Nominal Dime	Nominal Dimensions (mm)				
(F)		Measured @ 1kHz	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 14		1.9			
2.2	B0820-2R5225-R	0.200	0 8		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	0.030 18		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 (0.22F - 22F = 1000 hrs @ 70°C @ 2.5Vdc) (33F - 100F = 1000 hrs @ 60°C @ 2.5Vdc)	<u>≤</u> 30	≤ 300				
Storage - Low and High Temperature (0.22F - 22F = 1000 hrs @ -25°C and 70°C) (33F - 100F = 1000 hrs @ -25°C and 60°C)	<u>≤</u> 30	≤ 300				



Dimensions (mm)									
Part Number	D	D'	L	Ľ	F	ď	C	E	
B0510-2R5224-R	5.0	5.5	11.5	12.0	2.0	0.50	20.0	25.0	
B0810-2R5105-R	8.0	8.5	13.0	13.5	3.5	0.50	20.0	25.0	
B1010-2R5155-R	10.0	10.5	14.3	14.8	5.0	0.60	20.0	25.0	
B0820-2R5225-R	8.0	8.5	20.5	21.0	3.5	0.50	20.0	25.0	
B1020-2R5335-R	10.0	10.5	21.8	22.3	5.0	0.60	20.0	25.0	
B0830-2R5475-R	8.0	8.5	30.5	31.0	3.5	0.50	20.0	25.0	
B1030-2R5685-R	10.0	10.5	31.0	31.5	5.0	0.60	20.0	25.0	
B1325-2R5106-R	13.0	13.5	27.9	28.4	5.0	0.60	20.0	25.0	
B1635-2R5226-R	16.0	16.5	37.5	38.0	7.5	0.80	20.0	25.0	
B1835-2R5336-R	18.0	18.5	37.5	38.0	7.5	0.80	20.0	25.0	
B1840-2R5506-R	18.0	18.5	41.5	42.0	7.5	0.80	20.0	25.0	
B1860-2R5107-R	18.0	18.5	59.5	60.0	7.5	0.80	20.0	25.0	
Tolerances	Maximum				± 0.5	± 0.02	Minimum		



Part Numbering System								
В			-	2	R	5		
Series	Dimensions (mm)			Voltage (V)		/)	Capacitance	
Code				R is decimal		al		
B = High	Diameter	Length					Value	Multiplier
Capacitance				2R5 = 2.5V Example:		nple:		
				475 = 47 x 10⁵μF or 4.7F		10⁵μF or 4.7F		

#### **Packaging Information**

Standard packaging: Bulk, 100 units per package.

Special packaging available upon request. Contact factory.

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## Part Marking

Manufacturer Capacitance (F) Max. Operating Voltage (V) Series Code (or part number) Polarity Marking

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