

# 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.

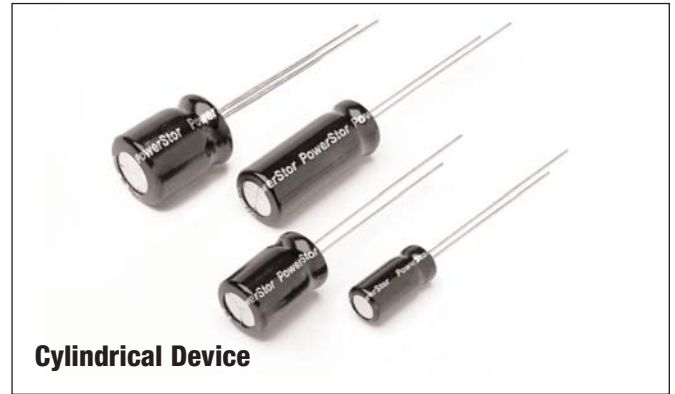
### Features & Benefits

- High specific capacitance
- Very low ESR
- Low leakage currents
- Long cycle life
- UL Recognized



### Applications

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



**Cylindrical Device**

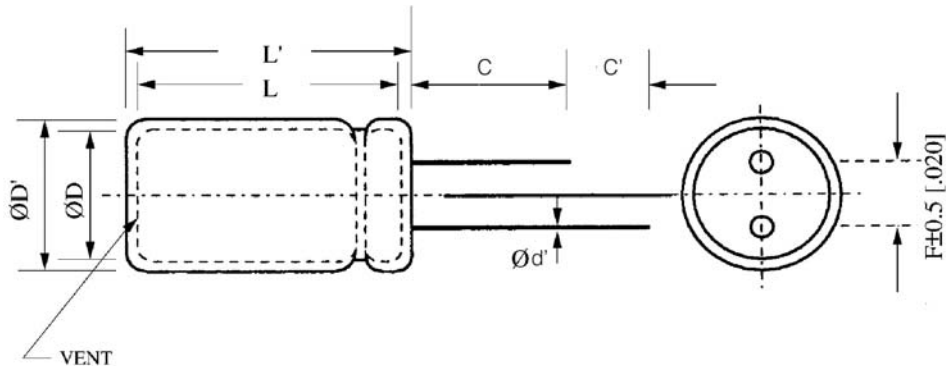
Specifications	
Working Voltage	2.5V
Surge Voltage	3.0V
Capacitance	0.22F to 2.2F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	-25°C to 70°C

Standard Product						
Nominal Capacitance (F)	Part Number	Maximum ESR (Ω) (Equivalent Series Resistance) Measured @ 100Hz	Nominal Leakage Current (μA) After 72 Hours @ 20°C	Nominal Dimensions (mm)		Typical Mass (grams/piece)
				Diameter	Length	
0.22	B0510-2R5224-R	2.00	2	5	11	0.54
1.0	B0810-2R5105-R	0.50	4	8	13	1.2
1.5	B1010-2R5155-R	0.30	7	10	14	1.9
2.2	B0820-2R5225-R	0.20	9	8	20	1.5

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	C'
B0510-2R5224-R	5.0	5.5	11.5	12.0	2.0	0.50	20.0	5.0
B0810-2R5105-R	8.0	8.5	13.0	13.5	3.5	0.50	20.0	5.0
B1010-2R5155-R	10.0	10.5	14.3	14.8	5.0	0.60	20.0	5.0
B0820-2R5225-R	8.0	8.5	20.5	21.0	3.5	0.50	20.0	5.0
<b>Tolerances</b>	<b>Maximum</b>				<b>± 0.5</b>	<b>± 0.02</b>	<b>Minimum</b>	

**Note:** Longer lead is positive.



Part Numbering System											
B	□	□	□	□	-	2	R	5	□	□	□
Series Code	Dimensions (mm)					Voltage (V) R is Decimal		Capacitance (µF)			
B Series	Diameter	Length				2R5 = 2.5V		Value	Multiplier		
								Example: 155 = 15 x 10 <sup>5</sup> µF or 1.5F			

### Packaging Information

**Packaging:**

- Standard packaging: Bulk, 100 units per bag.
- Larger bulk packages available on request.

### Part Marking

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

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