

Supercapacitors

B Series - High Capacitance



Description

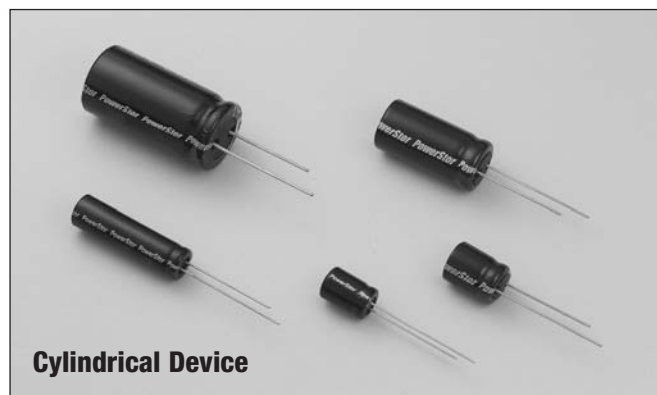
Cooper Bussmann PowerStor® supercapacitors are unique, ultra-high capacitance devices utilizing electrochemical double layer capacitor (EDLC) construction combined with new, high performance materials. This combination of advanced technologies allows Cooper Bussmann to offer a wide variety of capacitor 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

Applications

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



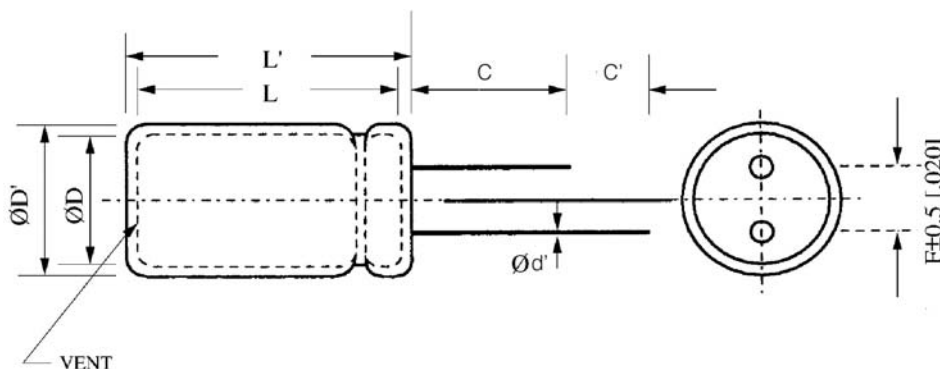
Specifications	
Working Voltage	2.5V
Surge Voltage	3.0V
Capacitance	3.3F to 100F
Capacitance Tolerance	-20% to +80% (20°C)
Operating Temperature Range	3.3-22F = -25°C to 70°C, 33-100F = -25°C to 60°C

Standard Product					
Nominal Capacitance (F)	Part Number	Nominal ESR (Ω) (Equivalent Series Resistance) Measured @ 1kHz	Nominal Dimensions (mm)		Typical Mass (grams/piece)
			Diameter	Length	
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 (3.3F - 22F = 1000 hrs @ 70°C @ 2.5Vdc) (33F - 100F = 1000 hrs @ 60°C @ 2.5Vdc)	≤ 30 %	≤ 300 %
Storage Low and High Temperature (3.3F - 22F = 1000 hrs @ -25°C and 70°C) (33F - 100F = 1000 hrs @ -25°C and 60°C)	≤ 30 %	≤ 300 %

Dimensions (mm)								
Part Number	D	D'	L	L'	F	d'	C	C'
B1020-2R5335-R	10.0	10.5	21.8	22.3	5.0	0.60	20.0	5.0
B0830-2R5475-R	8.0	8.5	30.5	31.0	3.5	0.50	20.0	5.0
B1030-2R5685-R	10.0	10.5	31.0	31.5	5.0	0.60	20.0	5.0
B1325-2R5106-R	13.0	13.5	27.9	28.4	5.0	0.60	20.0	5.0
B1635-2R5226-R	16.0	16.5	37.5	38.0	7.5	0.80	20.0	5.0
B1835-2R5336-R	18.0	18.5	37.5	38.0	7.5	0.80	20.0	5.0
B1840-2R5506-R	18.0	18.5	41.5	42.0	7.5	0.80	20.0	5.0
B1860-2R5107-R	18.0	18.5	59.5	60.5	7.5	0.80	20.0	5.0
Tolerances	Maximum				± 0.5	± 0.02	Minimum	

Note: Longer lead is positive.



Part Numbering System											
B	□	□	□	□	—	2	R	5	□	□	□
Series Code	Dimensions (mm)		Voltage (V)				Capacitance (μF)				
			R is Decimal				Value		Multiplier		
B Series	Diameter	Length	2R5 = 2.5V				Example: 475 = 47 x 10 ⁵ μF or 4.7F				

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

North America

Cooper Bussmann
1225 Broken Sound Parkway NW
Suite F
Boca Raton, FL 33487-3533
Tel: 1-561-998-4100
Fax: 1-561-241-6640
Toll Free: 1-888-414-2645

Cooper Bussmann
P.O. Box 14460
St. Louis, MO 63178-4460
Tel: 1-636-394-2877
Fax: 1-636-527-1607

Europe

Cooper Bussmann
Cooper (UK) Limited
Burton-on-the-Wolds
Leicestershire • LE12 5TH UK
Tel: +44 (0) 1509 882 737
Fax: +44 (0) 1509 882 786

Cooper Bussmann
Avda. Santa Eulalia, 290
08223
Terrassa, (Barcelona), Spain
Tel: +34 937 362 812
+34 937 362 813
Fax: +34 937 362 719

Asia Pacific

Cooper Bussmann
1 Jalan Kilang Timor
#06-01 Pacific Tech Centre
Singapore 159303
Tel: +65 278 6151
Fax: +65 270 4160

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