B Supercapacitors Cylindrical cells



Description

Eaton 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 Eaton 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

- 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



Ratings

Capacitance	0.22 F to 2.2 F
Maximum working voltage	2.5 V
Surge voltage	3.0 V
Capacitance tolerance	-20% to +80% (+20 °C)
Operating temperature range	-25 °C to +70 °C

Specifications

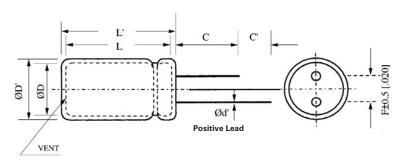
Capacitance (F) Part Number		Maximum ESR (Ω) (Equivalent Series Resistance) Measured @ 100 Hz	Nominal leakage current (uA) after 72 hours @ +20°C	Nominal dimensions (mm) (diameter x length)		Typical Mass (grams/piece)	
0.22	B0510-2R5224-R	2.0	2.0	5	11	0.54	
1.0	B0810-2R5105-R	0.50	4.0	8	13	1.2	
1.5	B1010-2R5155-R	0.30	7.0	10	14	1.9	
2.2	B0820-2R5225-R	0.20	9.0	8	20	1.5	

Performance

Parameter	Capacitance change (% of initial value)	ESR (% of max. initial value)	
Life (1000 hours @ +70 °C @ 2.5 Vdc)	≤ 30%	≤ 300%	
Storage - Low and High Temperature (1000 hours @ -25 °C and +70 °C)	≤ 30%	≤ 300%	

Dimensions (mm)

Part Number	D	D'	L	Ľ	F	d'	С	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
Tolerances	Maximum			±0.5	±0.02	Minimum		



Part marking

- Manufacturer
- Capacitance (F)
- Maximum operating voltage (V)
- Family code (or part number)
 Polarity marking

Part numbering system

В	1010			2R5	15	5	-R
	Size reference (mm)				Capacitance (µF)		
Family Code				Voltage (V) R = Decimal	Value	Multiplier	Standard product
B Family	Diameter = 10	Length = 10		2R5 = 2.5 V	Example: 155 = 15 x 10 ⁵ μF or 1.5 F		

Packaging information

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