

Round, bus bar type

Series: BCAP



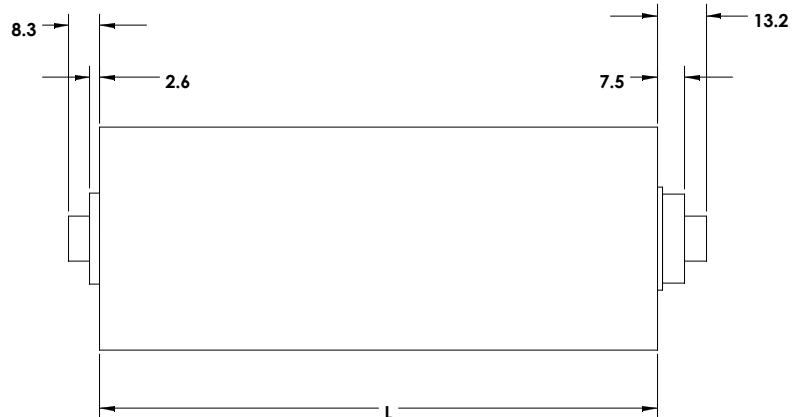
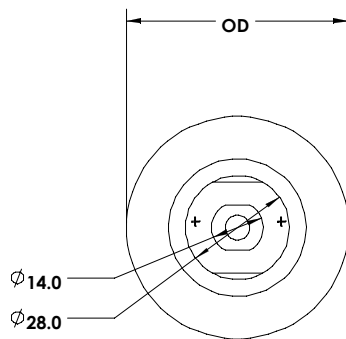
> Features:

- > Over 500,000 duty cycles
- > 10 year life capability
- > Higher energy vs electrolytic
- > Higher power vs. batteries
- > Aluminum construction
- > Round, double ended design
- > Ultra-low internal resistance
- > Resistant against reverse polarity

> Applications:

- > Automotive subsystems
- > Heavy duty vehicle subsystems
- > Rail system power
- > Windmill pitch control systems
- > Wireless transmissions

> Dimensions:



| Case size | Dimensions, mm | | Weight [g] | Vol. [l] | Typical package qty |
|-----------|----------------|----|------------|----------|---------------------|
| | L | OD | | | |
| BCAP0008 | 150 | 50 | 400 | 0.3 | 25 |
| BCAP0010 | 150 | 60 | 525 | 0.42 | 25 |
| BCAP0013 | 75 | 50 | 190 | 0.15 | 25 |

Product dimensions and specifications may change without notice. Please contact Maxwell Technologies directly for any technical specifications critical to application.

› Specifications:

| | Product Specification | | | | |
|----------------------------------|--|----------|----------|-----------|---|
| | BCAP0008 | BCAP0010 | BCAP0013 | Tolerance | Standard |
| Mounting | Screw Type | | | | |
| Capacitance, C _R [F] | 1,800 | 2,600 | 450 | +/- 20% | |
| Voltage, U _R | 2.5 | | | | |
| Internal resistance, DC [ohm] | 0.0009 | 0.0007 | 0.0024 | +/- 25 % | |
| Internal resistance, 1 kHz [ohm] | 0.00045 | 0.0003 | 0.0008 | +/- 25 % | |
| Rated current, [A] | 450 | 600 | 180 | | 5s discharge to 1/2 U _R |
| Leakage current [mA] | 4 | 5 | 3 | | 72 hrs, 25°C |
| Operating temp. range [C] | -40 to 65 | | | | |
| Storage temp. range [C] | -40 to 70 | | | | |
| Endurance, Capacitance [F] | < 20% decrease | | | | 1000 hrs @ U _R and 70°C |
| Endurance, Resistance [ohm] | < 40% increase | | | | |
| Power, P _d [W/kg] | 2080 | 2040 | 1640 | | See additional technical information |
| Power, P _v [W/l] | 2780 | 2550 | 2080 | | |
| Life Time | △C < 20% decrease, ESR < 200% increase | | | | from initial value after 10y @ 25°C |
| Cycle Life | △C < 20% decrease, ESR < 200% increase | | | | from initial value after 500K cycles @ 25°C (I = 20A) |

› Markings: Capacitors are marked with the following information

Rated capacitance, Rated voltage, product number, name of manufacturer, positive and negative terminal, warning marking

› Mounting Recommendations:

Maximum torque for M8 screw terminals is 7Nm with one key and 10Nm using a counter key.
See B-F0-0130 for additional information.

Components should not be operated outside recommended limits.

› Additional Technical Information:

$$P_d = (0.12 \times E^2 / R_d) / M$$

where E = charge voltage (U_R), R_d = internal resistance (DC)
M = capacitor weight (kg)

$$P_v = (0.12 \times E^2 / R_d) / V$$

where V = capacitor volume (l)

US Patents: 6,525,924

Worldwide Headquarters

MAXWELL TECHNOLOGIES
9244 Balboa Avenue • San Diego, 92123 CA, USA
PHONE: +(1) 858 503 3300
FAX: +(1) 858 503 3301
EMAIL: ultracapacitors@maxwell.com

European Office

MAXWELL TECHNOLOGIES SA
CH-1728 Rossens • Switzerland
PHONE: +41 (0) 26 411 85 00
FAX: +41 (0) 26 411 85 05
EMAIL: ultracapacitors@maxwell.com

Maxwell
TECHNOLOGIES
www.maxwell.com