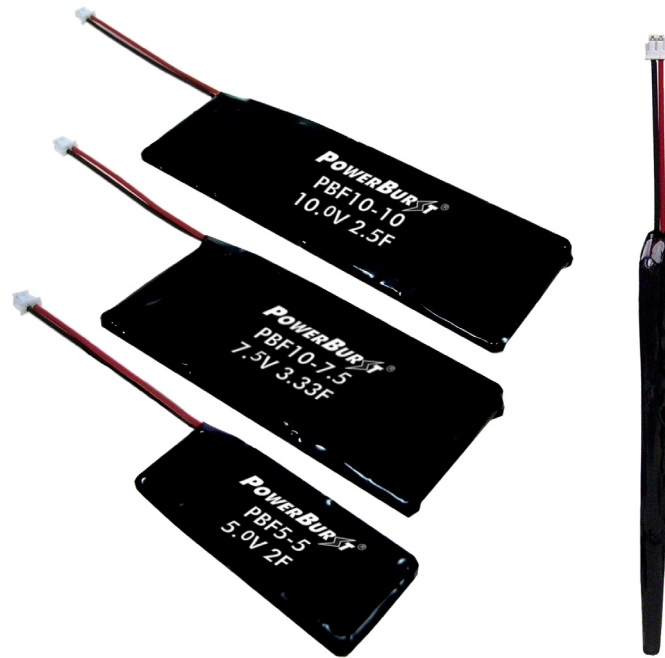


## ELECTRIC DOUBLE LAYER CAPACITOR MODULES



### FEATURES

- Ultra low profile (5.7 mm max).
- 5, 7.5 and 10V modules. Customs available.
- Active linear voltage balanced cells.
- Over 500,000 duty cycles.
- 10 year life capability.
- Hermetically sealed, thin prismatic cell design.
- Higher energy vs. electrolytic.
- Higher power vs. batteries.
- UL recognized capacitors.
- JST ZHR-2 quick connect.



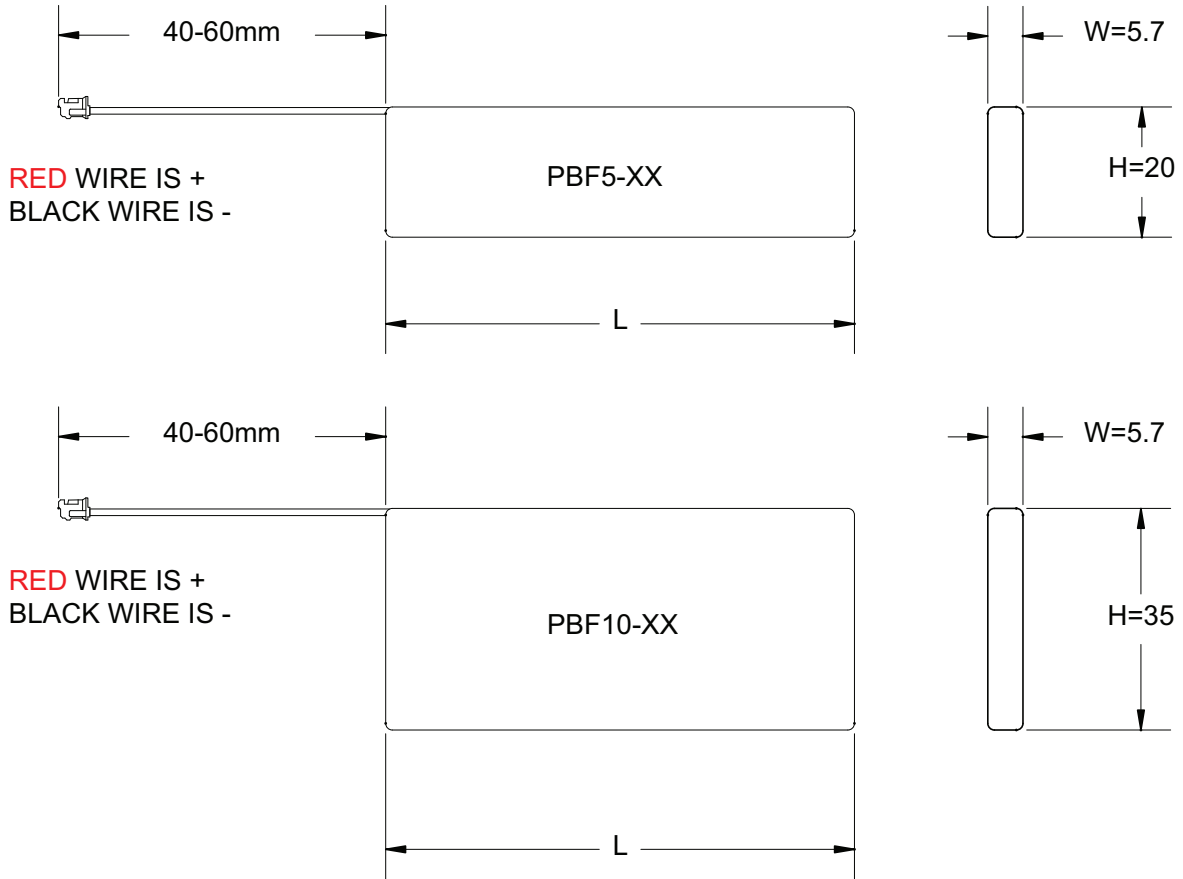
### APPLICATIONS

- Automatic meter readers.
- Solid state drives.
- Back up power for soft shut down requirements.
- Handheld electronic devices.
- Medical devices.
- Wireless transmission.

### SPECIFICATIONS

| Item                        | Performance   |   |
|-----------------------------|---|---|
| Operating Temperature Range | -40°C ~ +70°C   |   |
| Storage Temperature Range   | -40°C ~ +85°C   |   |
| Rated Voltage               | 5, 7.5 and 10 VDC   |   |
| Capacitance                 | 1.0F ~ 5F   |   |
| Capacitance Tolerance       | ±20%  |   |
| Leakage Current             | PBF5 Module   | 0.02mA measured after 72 hours at 25°C                        |
|                             | PBF10 Module  | 0.04mA measured after 72 hours at 25°C                        |
| Temperature Characteristics | Capacitance Change  | Within ±10% of initial measured value at 25°C (-40°C ~ +70°C) |
|                             | Internal Resistance   | Within 2 times of initial measured value at 25°C (at -40°C)   |
| Endurance                   | After 1000 hours application of rated voltage at +70°C, the capacitor shall meet the following limits:          |   |
|                             | Capacitance Change  | Within 30% of initial measured value                          |
|                             | Internal Resistance   | Within 2 times of initial specified value                     |
| Shelf Life                  | After 1000 hours storage at +70°C without load, the capacitor shall meet the specified limits for Endurance.    |   |
| Cycle Test                  | Modules are cycled between rated voltage and half rated voltage under constant current at 25°C (500,000 cycles) |   |
|                             | Capacitance Change  | Within 30% of initial measured value                          |
|                             | Internal Resistance   | Within 2 times of initial specified value                     |

DIMENSIONS



AVAILABLE MODULES

| Module    | Rated Voltage (VDC) | Capacitance (F) | ESR DC ( $\Omega$ ) | ESR AC, 1KHz ( $\Omega$ ) | Max Dimensions (mm) |     |    |
|-----------|---------------------|-----------------|---------------------|---------------------------|---------------------|-----|----|
|           |                     |                 |                     |                           | L                   | W   | H  |
| PBF5-5    | 5                   | 2.00            | 0.80                | 0.58                      | 48                  | 5.7 | 20 |
| PBF10-5   | 5                   | 5.00            | 0.36                | 0.25                      | 48                  | 5.7 | 35 |
| PBF5-7.5  | 7.5                 | 1.33            | 1.20                | 0.84                      | 72                  | 5.7 | 20 |
| PBF10-7.5 | 7.5                 | 3.33            | 0.54                | 0.38                      | 72                  | 5.7 | 35 |
| PBF5-10   | 10                  | 1.00            | 1.60                | 1.12                      | 96                  | 5.7 | 20 |
| PBF10-10  | 10                  | 2.50            | 0.72                | 0.50                      | 96                  | 5.7 | 35 |