

ELECTRIC DOUBLE LAYER CAPACITOR MODULES



FEATURES

- Active linear voltage balanced cells.
- Over 500,000 duty cycles.
- 10 year life capability.
- Hermetically sealed, stainless steel construction.
- Higher energy vs. electrolytic.
- Higher power vs. batteries.
- UL recognized capacitors.
- JST ZHR-2 quick connect.

APPLICATIONS

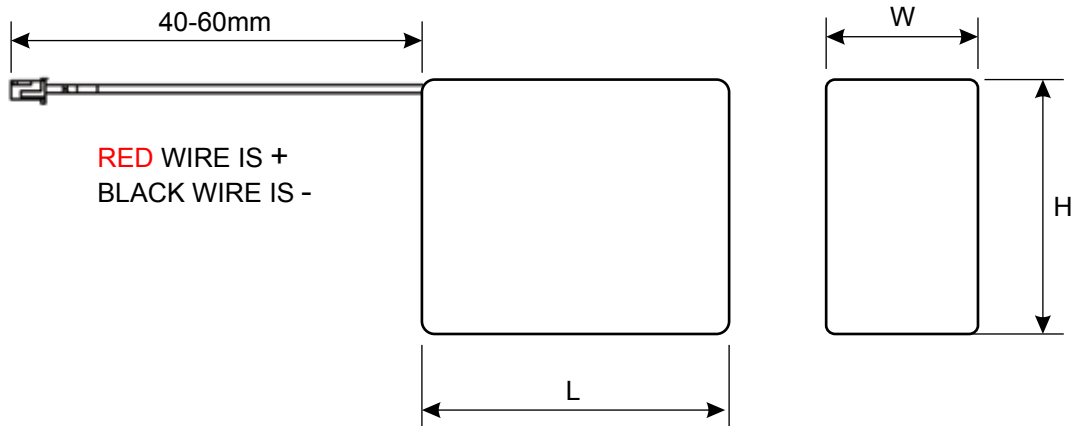
- Automatic meter readers.
- Automotive subsystems.
- Back up power for soft shut down requirements.
- Battery powered tools and handheld electronic devices.
- Digital cameras and other consumer electronics.
- Medical devices.
- Motor peak power shaving.
- Solar charged devices.
- Wireless transmission.



SPECIFICATIONS

Item	Performance	
Operating Temperature Range	-40°C ~ +70°C	
Storage Temperature Range	-40°C ~ +85°C	
Rated Voltage	5 ~ 25VDC	
Capacitance	0.4F ~ 5F	
Capacitance Tolerance	±20%	
Leakage Current	PB5 Module	0.02mA measured after 72 hours at 25°C
	PB10 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
Humidity Test	After 500 hours storage at +40 ± 2°C, 90-95% R.H., the capacitor shall meet the specified limits for Endurance	

DIMENSIONS



AVAILABLE MODULES

Module	Rated Voltage (VDC)	Capacitance (F)	ESR DC (Ω)	ESR AC, 1KHz (Ω)	Dimensions (mm)		
					L	W	H
PB5-5	5	2.00	0.80	0.56	24	12	20
PB10-5	5	5.00	0.36	0.25	24	12	34
PB5-7.5	7.5	1.33	1.20	0.84	24	16	20
PB10-7.5	7.5	3.33	0.54	0.38	24	16	34
PB5-10	10	1.00	1.60	1.12	24	21	20
PB10-10	10	2.50	0.72	0.50	24	21	34
PB5-12.5	12.5	0.80	2.00	1.40	24	25	20
PB10-12.5	12.5	2.00	0.90	0.63	24	25	34
PB5-15	15	0.67	2.40	1.68	48	16	20
PB10-15	15	1.67	1.08	0.75	48	16	34
PB5-20	20	0.50	3.20	2.24	48	21	20
PB10-20	20	1.25	1.44	1.00	48	21	34
PB5-25	25	0.40	4.00	2.80	48	25	20
PB10-25	25	1.00	1.80	1.25	48	25	34

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