

DLCAP™ Module (Horizontal installation)



For an easy usage of Electric Double Layer Capacitor DLCAP™, we have prepared modules (horizontal installation). Compared to conventional products, it is smaller when connected. (please refer 'Custom Module support example')

● Application Examples

◆ Energy Saving

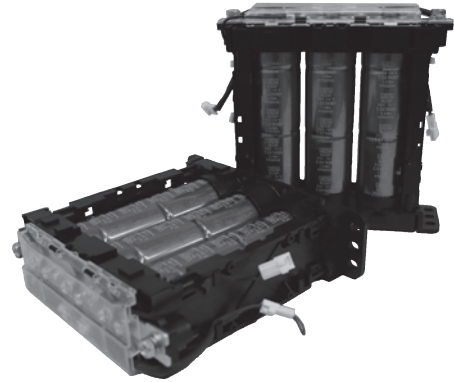
- Peak power assistance
- Effective recapture of kinetic energy

◆ Renewable Energy

- Stabilization of windmill power
- High efficient charge of solar energy
- Electricity assist for fuel cell

◆ Safety & Emergency Applications

- Momentary large power supply at power failure
- Back up for power source failure



● DLCAP™ Module

◆ FEATURES

- Voltage equalization circuit installed
- Over voltage detection circuit installed
- Thermistor for temperature monitor installed

◆ SPECIFICATIONS

Items	Specifications
Operating Temperature	-40°C ~ +70°C
Capacitance Tolerance	+10%/-15% (20°C)
Temperature Characteristics	Capacitance Change ≤ ±30% of the measured value at 20°C
	Internal Resistance Change ≤ 1200% of the internal resistance maximum value given in the ratings tables (-40°C)
Load Life Test	After the capacitors are subjected to the rated DC voltage at 70°C for 2000 hours, the following specifications shall be satisfied when they are restored to 20°C .
	Capacitance Change ≤ ±30% of the initial measured value at 20°C
	Internal Resistance Change ≤ 300% of the internal resistance maximum value given in the ratings tables
Bias Humidity Test	After the capacitors are left at 60°C and 90 to 95%RH for 500 hours without voltage applied, the following specifications shall be satisfied when they are restored to 20°C .
	Capacitance Change ≤ ±30% of the initial measured value at 20°C
	Internal Resistance Change ≤ 300% of the internal resistance maximum value given in the ratings tables
Insulation Resistance	The measured value between the lumped terminal and the case using 500Vdc insulation resistance meter shall be more than 100MΩ.
Insulation Withstand Voltage	No abnormality after the AC 2500V is applied between lumped terminal and package for 1 minute. package for 1 minute.

◆ STANDARD RATINGS

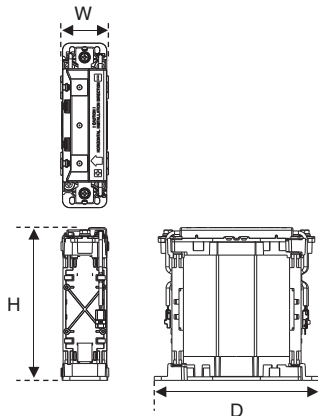
Rated Voltage [V]	Capacitance		Product Size*2			Internal Resistance		Weight*1 [kg]	Energy Storage*2 [Wh]	Part No.
	Typ. [F]	Min. [F]	W [mm]	D [mm]	H [mm]	Typ. [mΩ]	Max. [mΩ]			
7.5	133	113	54	186	88	6.6	7.8	0.7	1.1	MDXE7R5S131PB3111B*3
	466	396			172.6	3.6	4.2			1.2

* 1 Reference data

* 2 Energy Storage (Wh) is calculated based on 「電気及び電子機器用電気二重層キャパシタの輸送に関する手引書」 (Japanese only) by JEITA.

* 3 This module uses only DXE series cells.

◆ DIMENSIONS



◆ Screw Specification
Screw : M6
Tightening torque : 5.2 Nm±10%

● DLCAP™ Custom Module Acceptable

Customized specifications can be designed upon request.

◆ Custom design examples;

- High voltage application
- Large capacitance application
- High current application

- Proper balance circuit suggestion
- Usage under vibration or physical shocks.
- Optional circuits for charge/discharge control

Please consult us for other special specifications.

