

Technology

- Lithium Ion Polymer Battery
- LiFePO₄-based Cathode
- Carbon-based Anode

Feature

- High Structural Stability
- Long Life Cycle
- Minimum Self-Discharge
- Wide Temperature Range

Product General Specification

Mechanical Characteristics

	F014	F010
Model	F014	F010
Length	216 ± 1 mm (without terminal)	216 ± 1 mm (without terminal)
Width	130 ± 1 mm	90 ± 1 mm
Thickness	7.1 ± 0.2 mm	6.9 ± 0.2 mm
Weight	approx.400 g	approx.270g

Electrical Characteristics

	F014	F010
Nominal Voltage	3.2 V	3.2 V
Nominal Capacity	14.5 Ah	10.0 Ah
AC Impedance (1 KHz)	< 5 mΩ	< 10 mΩ
Specific Energy	100 Wh/Kg	120 Wh/Kg
Energy Density	220 Wh/L	240 Wh/L

Operating Conditions

Charge Conditions :

	F014	F010
Recommended Charge Method	CC/ CV	CC/ CV
Maximum Charge Voltage	3.65 V	3.65 V
Recommended Charge Current	0.5 C Current	0.5 C Current
Maximum Charge Current	1.0 C Current	1.0 C Current

Discharge Conditions :

	F014	F010
Recommended Voltage Limit for Discharge	2.4 V	2.4 V
Lower Voltage Limit for Discharge	2.0 V	2.0 V
Recommended Discharge Current	up to 5 C Current	up to 3 C Current
Maximum Discharge Current (Continuous)	10 C Current	5 C Current
Maximum Discharge Current (Peak < 10 sec)	15 C Current	10 C Current

Operating Temperature :

	F014	F010
Recommended Charge Temperature	-30 °C / + 50 °C	-30 °C / + 50 °C
Storage Temperature	0 °C / + 40 °C	0 °C / + 40 °C
	-30 °C / + 50 °C	-30 °C / + 50 °C

Cycle Life at 25 °C

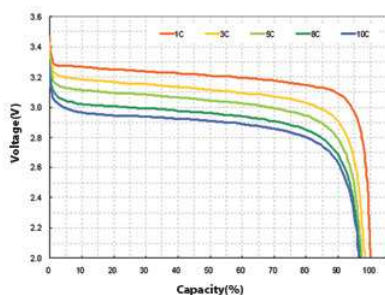
(1C Charge / 1C Discharge DOD100%)

2000 Cycles to 80% Nominal Capacity

2000 Cycles to 80% Nominal Capacity

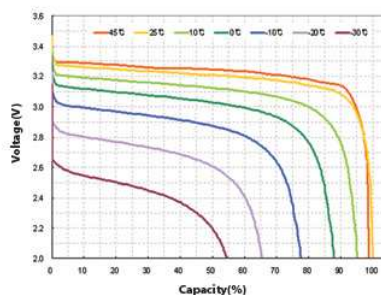
ePLB F014 Performance

Discharge Rate Characteristics



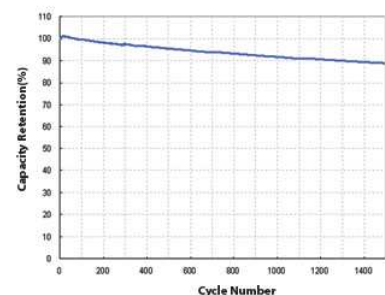
CHARGE : CC(1.0C)/CV(3.65V to 0.05C) at 25°C
DISCHARGE : CC to 2.0V at 25°C

Temperature Characteristics



CHARGE : CC(1.0C)/CV(3.65V to 0.05C) at 25°C
DISCHARGE : CC(1.0C) to 2.0V at various temperature

Cycle Life



CHARGE : CC(1.0C)/CV(3.65V to 0.05C or 2.5hr) at 25°C
DISCHARGE : CC(1.0C) to 2.0V at 25°C (DOD100%)