ePLB F High Power Product

Technology

Lithium Ion Polymer Battery
$LiFePO_4$-based Cathode
Carbon-based Anode
High Power Density
Optimized for PHEV, EV

Product General Specification

Mechanical Characteristics

Model	F014
Length	222 ± 1 mm (excluding terminal)
Width	129 ± 1 mm
Thickness	7.1 ± 0.2 mm
Weight	approx. 383 g

Electrical Characteristics

Nominal Voltage	3.2 V
Nominal Capacity	14 Ah
AC Impedance (1 KHz)	< 5 mΩ
Specific Energy	115 Wh/Kg
Energy Density	230 Wh/L
Specific Power(DOD50%, 10sec)	2000 W/Kg
Power Density(DOD50%, 10sec)	3500 W/L

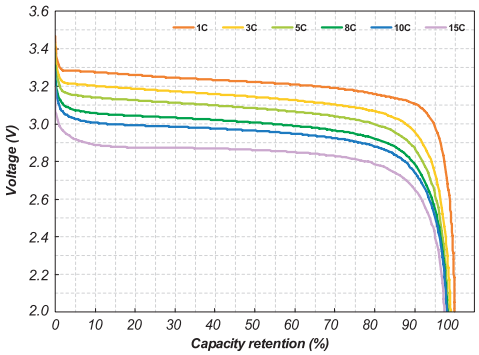
Operating Conditions

Charge Conditions :	
Recommended Charge Method	CC/CV
Maximum Charge Voltage	3.65 V
Recommended Charge Current	0.5 C Current
Discharge Conditions :	
Lower Voltage Limit for Discharge	2.0 V
Maximum Discharge Current (Continuous)	5 C Current
Maximum Discharge Current (Peak < 30 sec)	10 C Current
Operating Temperature :	-30˚C / + 55˚C
Recommended Charge Temperature	0˚C / + 40˚C
Storage Temperature	-30˚C / + 55˚C

Cycle Life at 25˚C : (1 C Charge / 1 C Discharge, DOD100%)
3000 Cycles to 80% Nominal Capacity

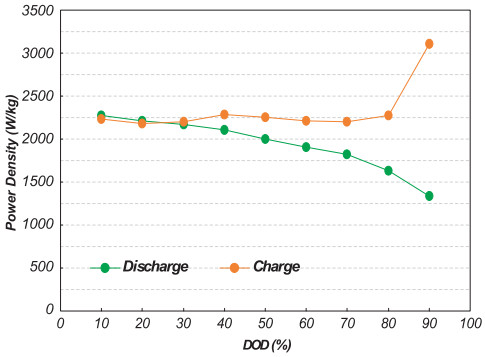
ePLB F014 Performance

Discharge Characteristics



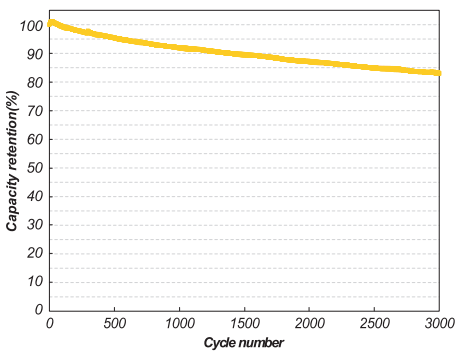
CHARGE : CC(1.0C)/CV(3.65V to 0.05C) at 25˚C
DISCHARGE : CC to 2.0V at 25˚C

Pulse Power Characteristics



HPPC calculated from FreedomCAR Battery Test Manual

Cycle Life



CHARGE : CC(1.0C)/CV(3.65V to 0.05C) at 25˚C
DISCHARGE : CC(1.0C) to 2.0V at 25˚C (DOD100%)

EiG Energy Innovation Group