Nanophosphate® Lithium Ion Prismatic Pouch Cell

AMP20*m1*HD-A

KEY FEATURES AND BENEFITS

- High usable energy over a wide state of charge (SOC) range and very low cost per Watt-hour
- Excellent abuse tolerance and superior calendar and cycle life from A123's patented Nanophosphate® lithium ion chemistry
- High power with over 2,400 W/kg and 4,500 W/L

AMP20 Cell Specifications	
Cell Dimensions (mm)	7.25 x 160 x 227
Cell Weight (g)	496
Cell Capacity (minimum, Ah)	19.6
Energy Content (nominal, Wh)	65
Discharge Power (nominal, W)	1200
Voltage (nominal, V)	3.3
Specific Power (nominal, W/kg)	2400
Specific Energy (nominal, Wh/kg)	131
Energy Density (nominal, Wh/L)	247
Operating Temperature	-30°C to 55°C
Storage Temperature	-40°C to 60°C

Abuse Test	Test Result
Nail Penetration	Pass – EUCAR 3
Overcharge	Pass – EUCAR 3
Over-discharge	Pass – EUCAR 3
Thermal Stability	Pass – EUCAR 4
External Short	Pass – EUCAR 3
Crush	Pass – EUCAR 3

APPLICATIONS

PHEV and EV Passenger Vehicles

PHEV and EV Commercial Vehicles

Utility-scale Storage

A123 SYSTEMS

www.a123systems.com

MD100105-01

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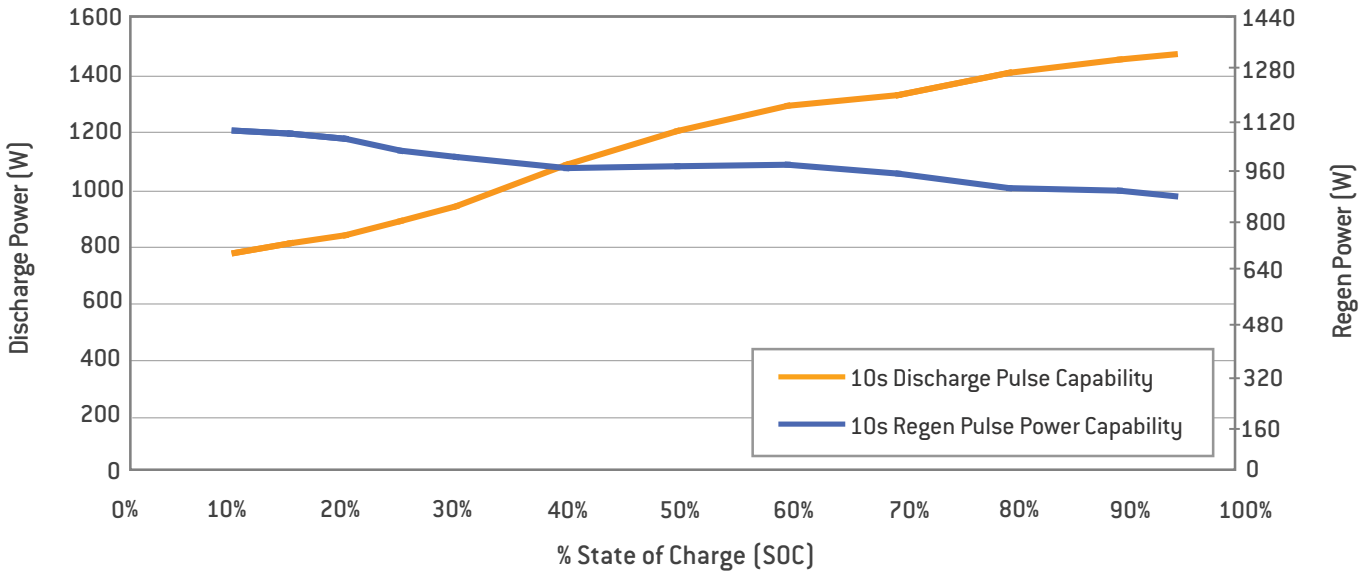
POWER

10s Pulse Power Capability vs State of Charge at 23°C, Using FreedomCAR HPPC

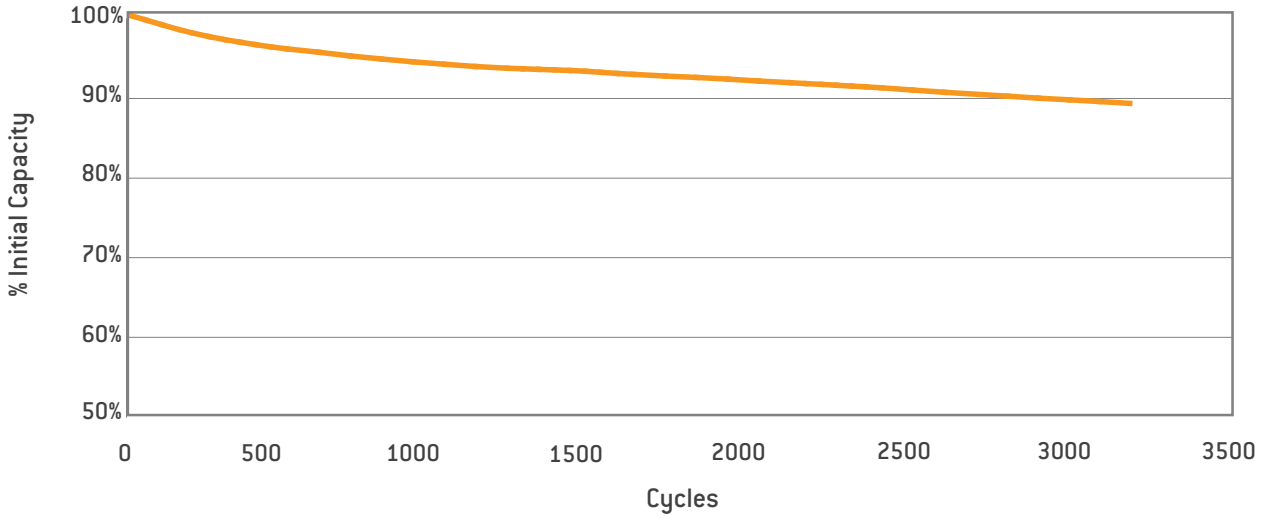
Vmax = 3.8 V, Vmin = 1.6 V



CYCLE LIFE

Capacity vs Cycles

100% Depth of Discharge (DOD), +1C/-2C, 23°C



Preliminary specifications, performance may vary depending on use conditions and application.

A123 Systems makes no warranty explicit or implied with this datasheet. Contents subject to change without notice.

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