

# + 18650 Cylindrical Cell

## Nanophosphate<sup>®</sup> Lithium-Ion

power. safety. life.

A123's high performance Nanophosphate<sup>®</sup> lithium iron phosphate battery technology delivers high power and high energy cells. Combine these advantages with excellent safety and outstanding life and this light weight solution exceeds power requirements. A123's 18650 cells have low capacity loss and high usable energy over a wide state of charge (SOC) allowing our products to meet end-of-life energy requirements. With concepts for virtually any lithium-ion application, A123's high performance capabilities will provide customers with customizable solutions and flexible opportunities.



### Applications

- + Communications technologies
- + Aerospace
- + Electrified mobility devices
- + Industrial equipment
- + Medical devices



### Product Specifications

Cell Dimensions (mm)	18 x 65mm
Cell Weight (g)	39
Cell Capacity (nominal)	1.1 Ah
Voltage (nominal, V)	3.3V
Recommended Standard Charge	1.5A to 3.6V CCCV, 45 min
Recommended Fast Charge	4A to 3.6 CCCV, 15 min
Internal Impedance (1KHz AC Typical)	12m $\Omega$
Maximum Continuous Discharge	30A
Recommended charge & cut-off (25°C)	3.6V to 2V
Cycle Life at 5C Discharge, 100% DOD	>1,000 cycles
Operating Temperature	-30°C to 60°C
Storage Temperature	-50°C to 60°C

### Abuse Test Result

Nail Penetration	Pass—EUCAR 4
Over-discharge	Pass—EUCAR 3
Thermal Stability	Pass—EUCAR 4
External Short	Pass—EUCAR 3
Crush	Pass—EUCAR 3

