

## LITHIUM/MANGANESE DIOXIDE BATTERY



Size: CR123A

### KEY FEATURES

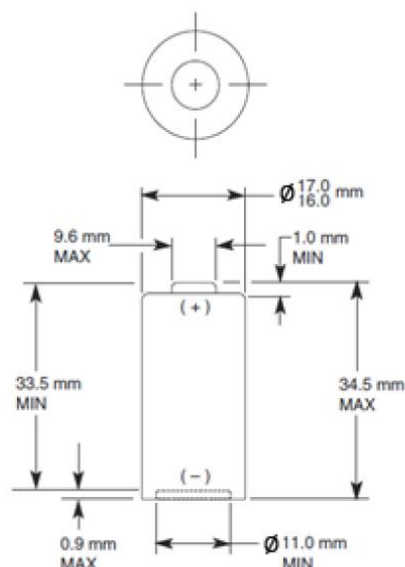
- Industry Highest Cell Capacity & High Energy
- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- Wide operating temperature range (-20°C/ + 75°C)
- Low self-discharge with long operating life (<1% after 1 year of storage at + 20 °C)
- Excellent resistance to corrosion
- Designed to meet all major quality, safety, and environment standards:
  - Safety: IEC 60086-4
  - Transport: UN 38.3
  - RoHS and REACH compliance
  - Quality: ISO 9001, Duracell World Class Continuous Program

### TYPICAL APPLICATIONS

- Security Devices (sensors, monitoring cameras)
- Smoke Detectors
- Wireless Sensors
- Door Locks
- High Intensity Flashlights
- Laser Sights

**PROCELL®**  
PROFESSIONAL BATTERIES

Procell Professional batteries  
Berkshire Corporate Park  
Phone: 1-800-544-5454 (Toll-free)  
[www.procell.com](http://www.procell.com)



Dimensions shown are IEC/ANSI standards

### ELECTRICAL CHARACTERISTICS

Nominal capacity (100 Ohm Cont, 2 V cut-off)	1600 mAh
Typical Voltage (at +20°C)	3.2-3.3 V
Standard Continuous Discharge Current	20 mA
Maximum Continuous Discharge Current	60 mA
Maximum Abnormal Charge Current	25 mA
Nominal Energy	4.35 Wh
AC Impedance @ 1kHz	350 mOhm

### PHYSICAL CHARACTERISTICS

Typical weight	17.0g (0.60 oz.)
Li metal content	approx. 0.53 g

### OPERATING & STORAGE CONDITIONS

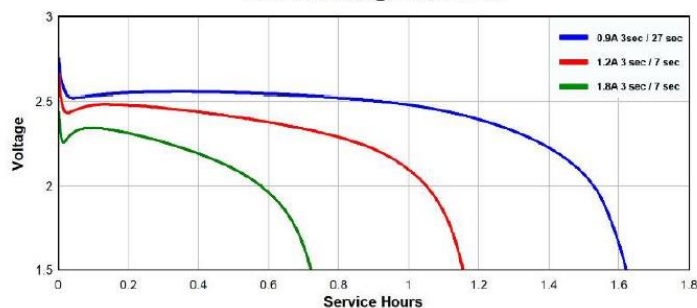
Operating temperature range	-20°C to 75°C (-4°F to 167°F)
Recommended Storage	Storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated
	5°C to 30°C (41°F to 86°F)

Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

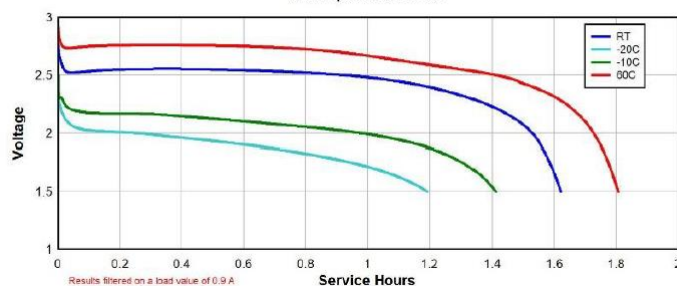
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

## TYPICAL PERFORMANCE

Pulse Discharge @ Multiple Loads



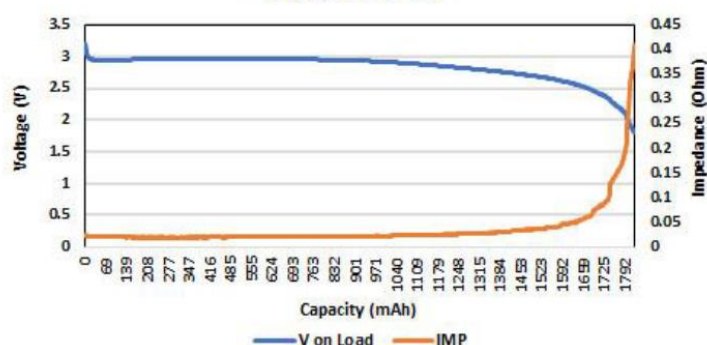
Temperature Performance  
0.9 Amp 3s/27s to 1.5V



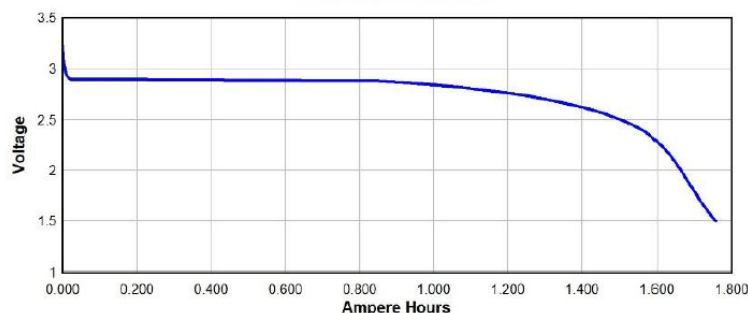
Low Load Pulse Test  
300mA Pulse with 2mA Background to 1.8V



Pulse Discharge Impedance  
40mA 1s/14s to 1.8V



Rated Capacity  
100 Ohm Continuous to 2V



60086-4 © IEC:2007 Edition 3.0

Test	Test designation	Observation
A	Altitude	Pass
B	Thermal cycling	Pass
C	Vibration	Pass
D	Shock	Pass
E	External short circuit	Pass
F	Impact	Pass
G	Crush	Pass
H	Forced discharge	Pass
I	Abnormal charging	Pass
J	Free fall	Pass
K	Thermal Abuse	Pass

### Warning

- Fire, explosion and burn hazard
- Do not recharge, short circuit, crush, disassemble heat above 100°C (212°F), incinerate or expose contents to water

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