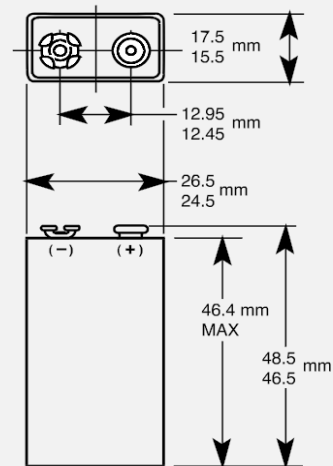


**ALKALINE-MANGANESE DIOXIDE BATTERY**



size: 9V (6LR61) PC1604



Dimensions shown are IEC standards

**KEY FEATURES**

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

**TYPICAL APPLICATIONS**

- Carbon Monoxide Detectors
- Smoke Detectors
- Multimeters
- Medical Devices
- Microphones

**ELECTRICAL CHARACTERISTICS**

- Nominal capacity (2 mA Cont., 5V cut-off) 673 mAh
- Typical Voltage (at + 20 °C) 9 V
- AC Impedance @ 1kHz 1,700 mΩ

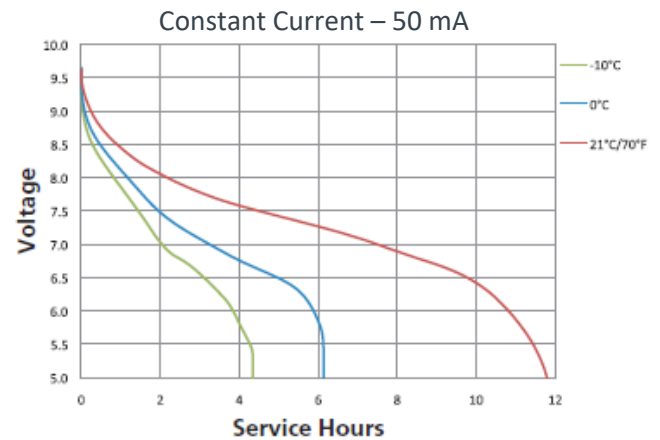
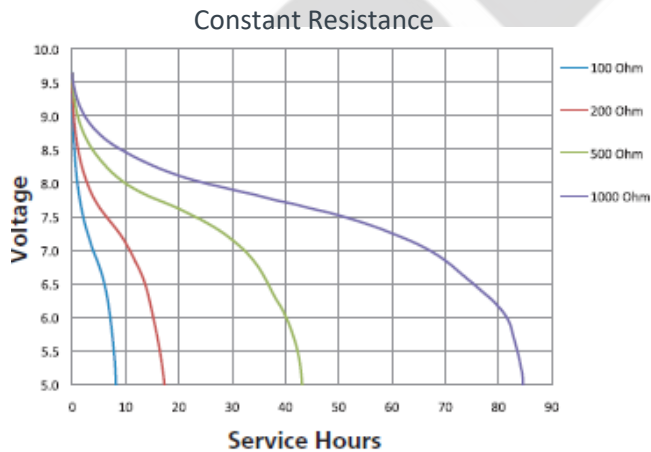
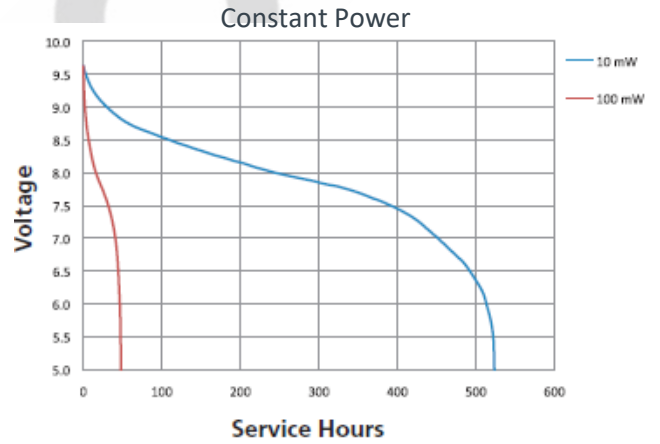
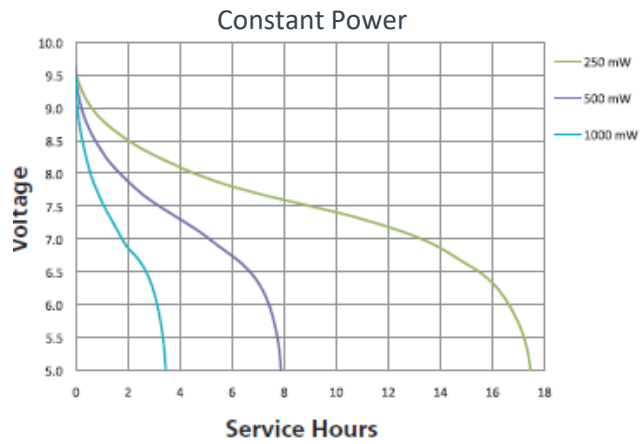
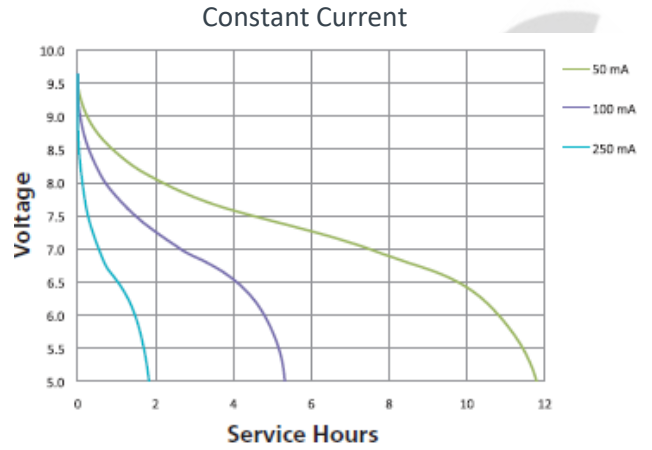
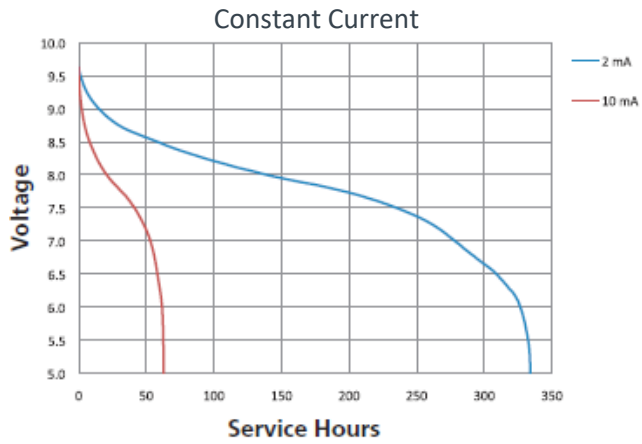
**PHYSICAL CHARACTERISTICS**

- Typical weight 45.0 g (1.6 oz)
- Typical volume 22.8 cm<sup>3</sup> (1.4 in<sup>3</sup>)
- Terminals Miniature snap

**OPERATING & STORAGE CONDITIONS**

- Operating temperature range -20°C to 54°C  
(-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C  
(41°F to 86°F)

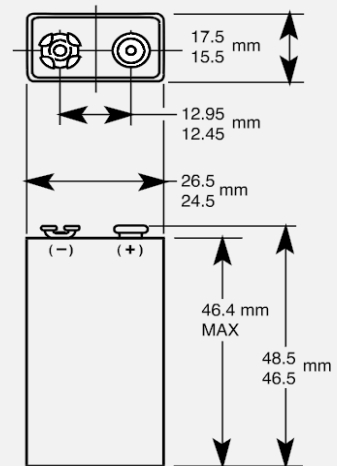
TYPICAL PERFORMANCE



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: 9V (6LR61) PC1604



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Carbon Monoxide Detectors
- Smoke Detectors
- Handicap Door Openers
- Medical Devices
- Microphones

### ELECTRICAL CHARACTERISTICS

- |   |          |
|---|----------|
| ▪ Nominal capacity (2 mA Cont., 5V cut-off) | 692 mAh  |
| ▪ Typical Voltage (at + 20 °C)              | 9 V      |
| ▪ AC Impedance @ 1kHz                       | 1,692 mΩ |

### PHYSICAL CHARACTERISTICS

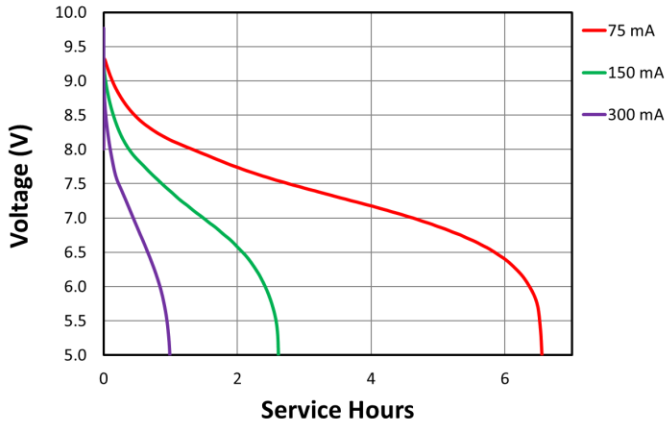
- |                  |   |
|------------------|---|
| ▪ Typical weight | 48.7 g (1.6 oz)                             |
| ▪ Typical volume | 22.8 cm <sup>3</sup> (1.4 in <sup>3</sup> ) |
| ▪ Terminals      | Miniature snap                              |

### OPERATING & STORAGE CONDITIONS

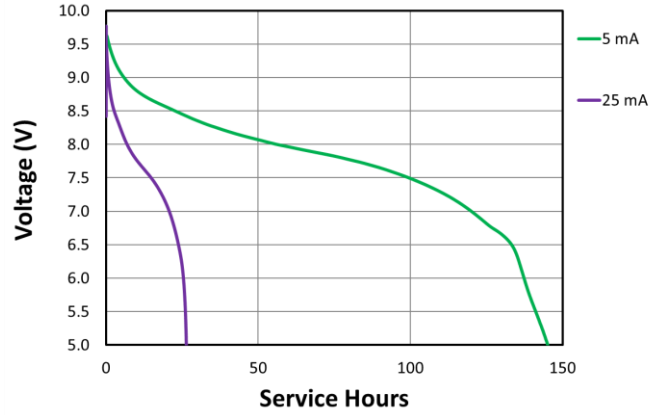
- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

TYPICAL PERFORMANCE

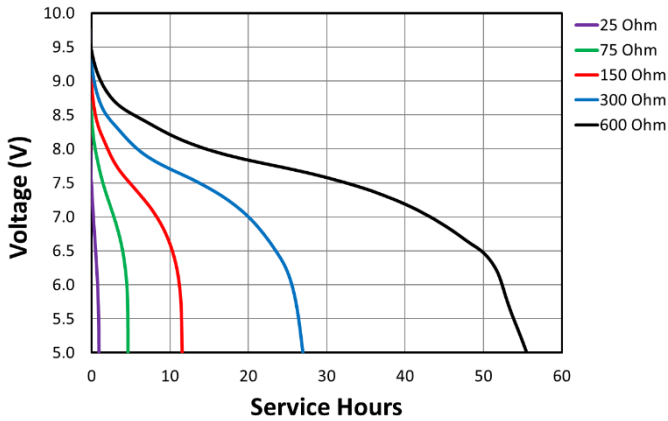
Constant Current



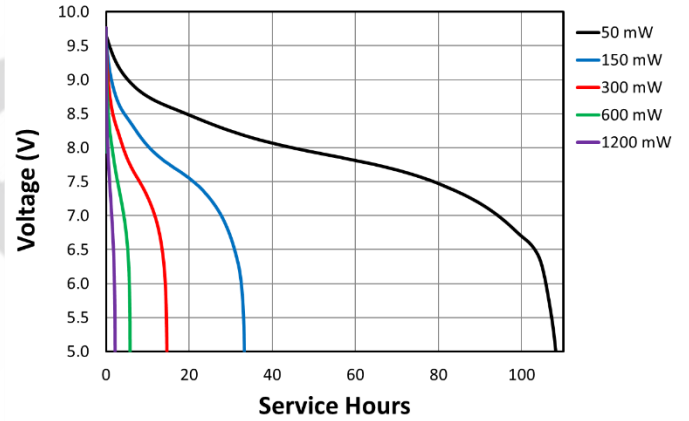
Constant Current



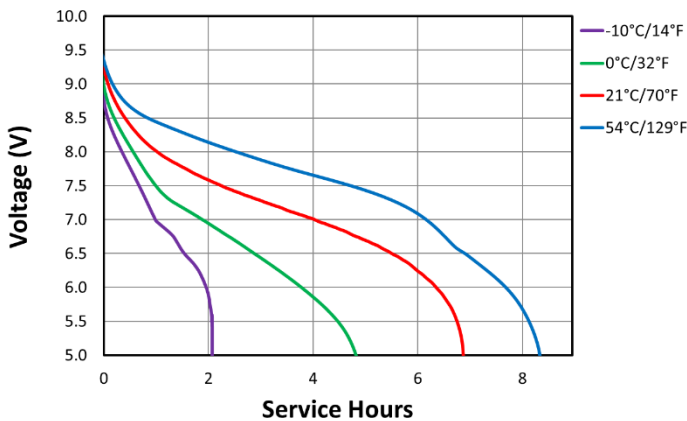
Constant Resistance



Constant Power



Constant Current - 75mA



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.

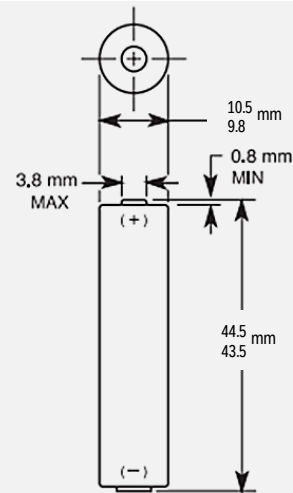
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PC2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security keypads
- Wireless mouse

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (25mA Cont., .8V cut-off) | 1,222 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 155 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 11.4 g (0.4 oz)                            |
| ▪ Typical volume | 3.5 cm <sup>3</sup> (0.2 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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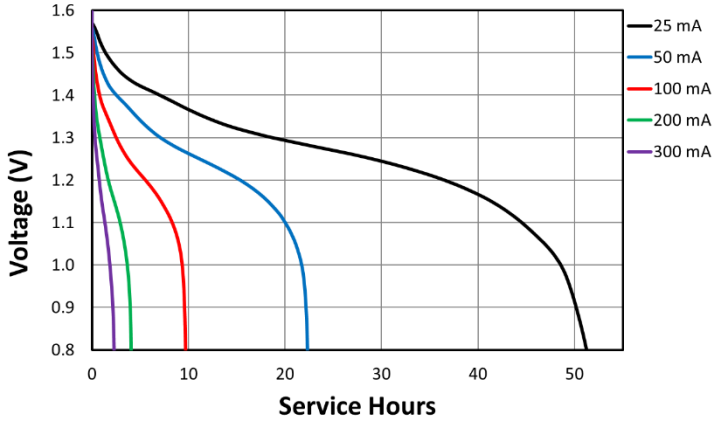
[www.procell.com](http://www.procell.com)

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.

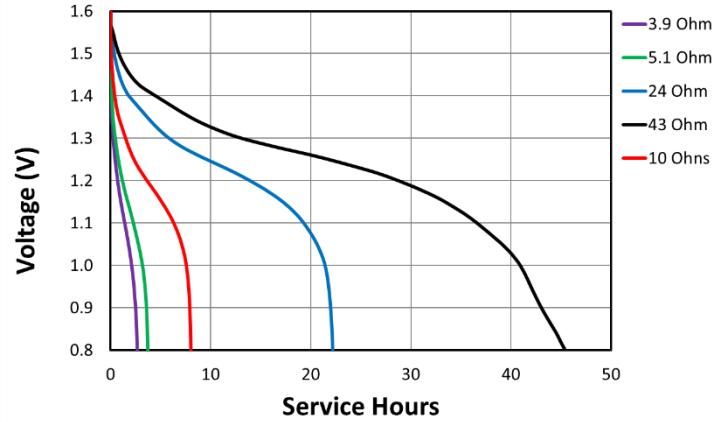
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

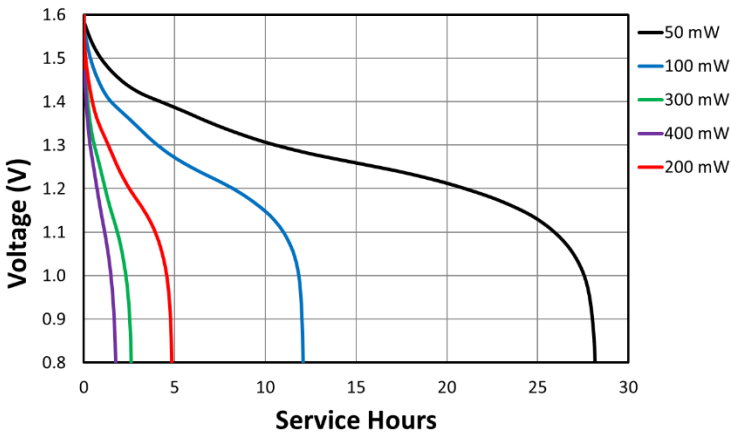
**Constant Current**



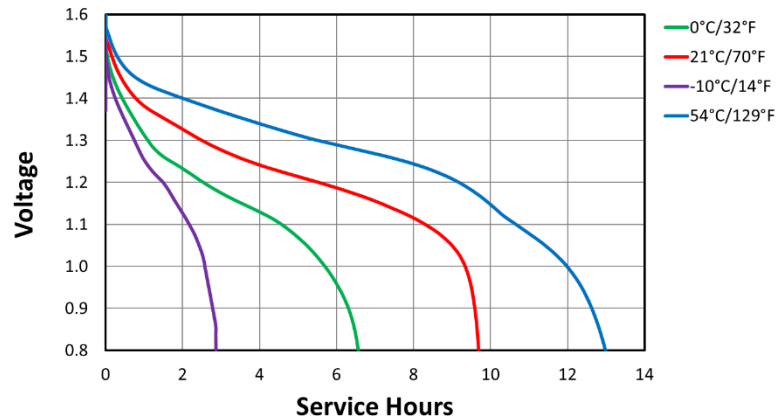
**Constant Resistance**



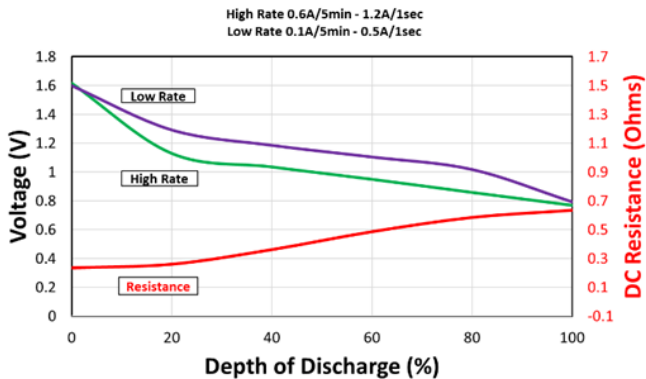
**Constant Power**



**Constant Current - 100 mA**



**Typical Internal Resistance**



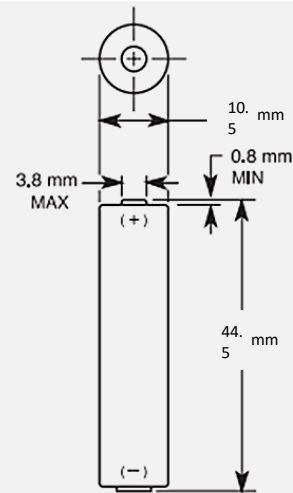
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PC2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security keypads
- Wireless mouse

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (25mA Cont., .8V cut-off) 1,222 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 155 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 11.4 g (0.4 oz)
- Typical volume 3.5 cm<sup>3</sup> (0.2 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

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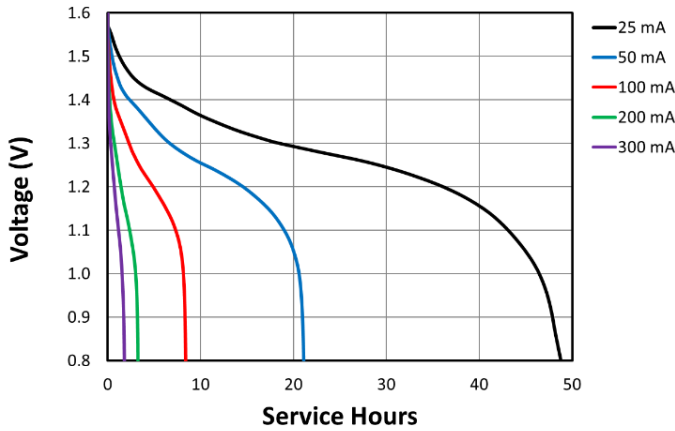
[www.procell.com](http://www.procell.com)

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.

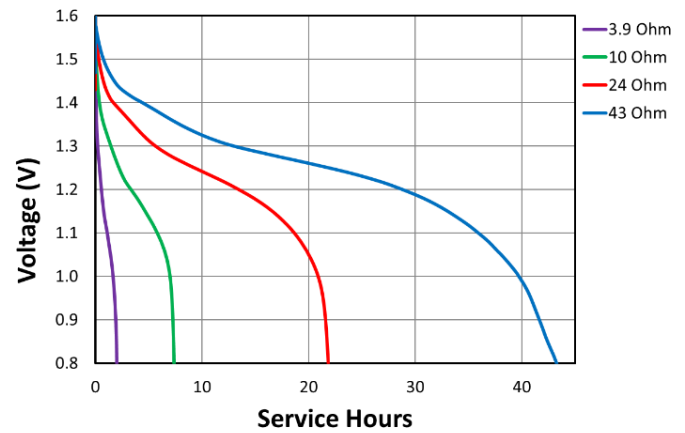
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

TYPICAL PERFORMANCE

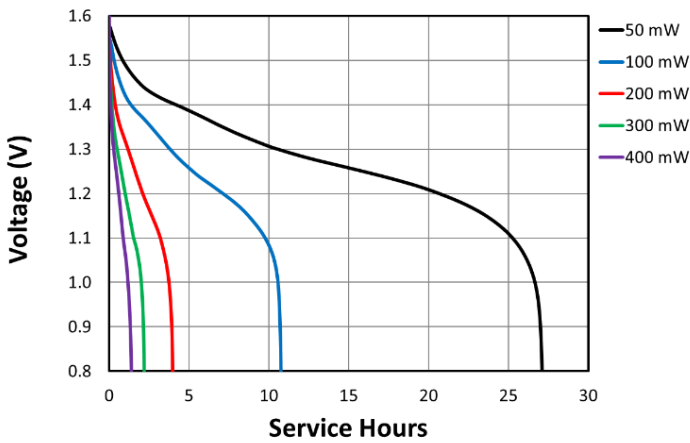
Constant Current



Constant Resistance



Constant Power



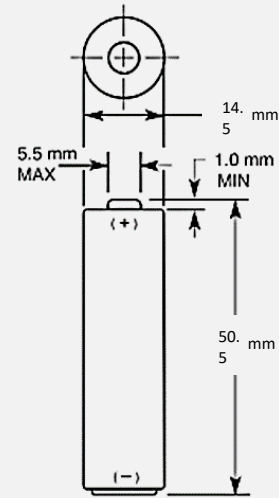
Constant Current - 100 mA



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AA (LR6) PC1500



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Control
- Wireless Mouse / Keyboard
- Clocks
- Flashlights
- Thermostats

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 3,125 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 98 mΩ     |

### PHYSICAL CHARACTERISTICS

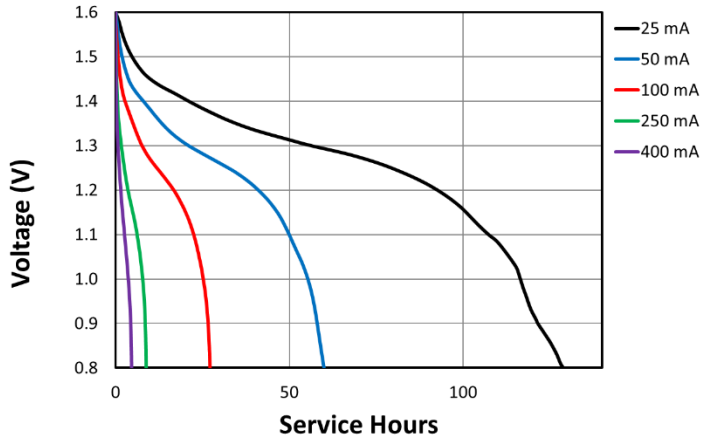
- |                  |  |
|------------------|--|
| ▪ Typical weight | 24.7 g (0.9 oz)                            |
| ▪ Typical volume | 8.4 cm <sup>3</sup> (0.5 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

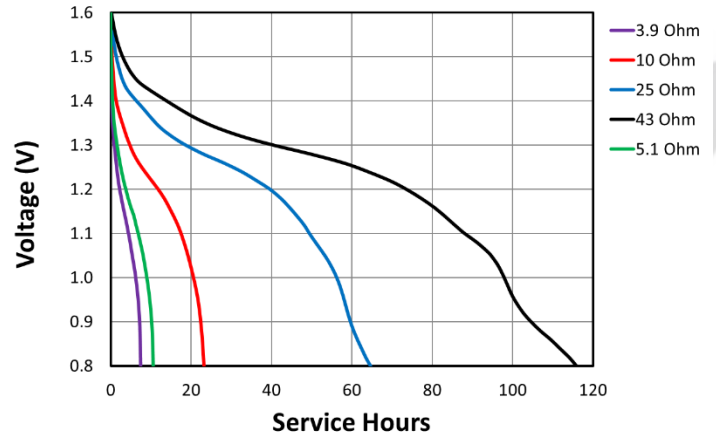
- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

TYPICAL PERFORMANCE

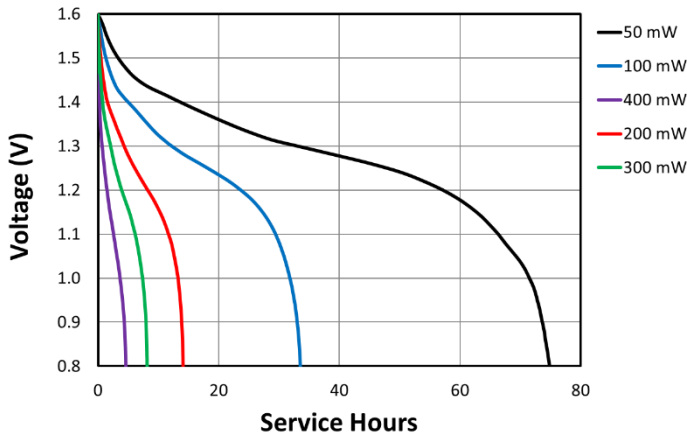
Constant Current



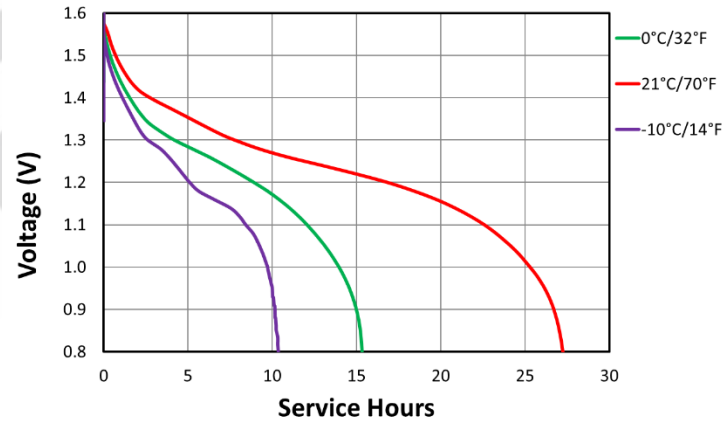
Constant Resistance



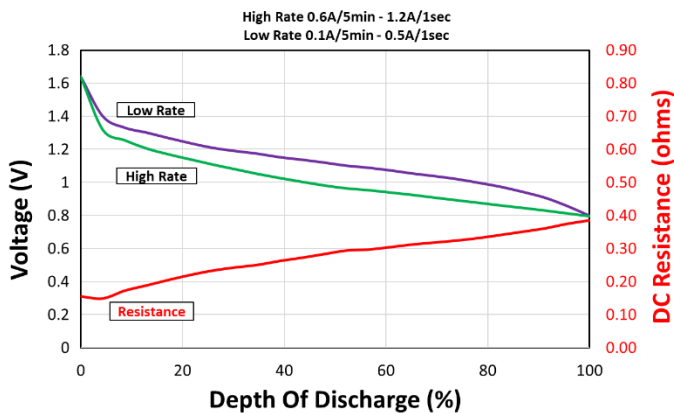
Constant Power



Constant Current - 100 mA



Typical Internal Resistance



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.

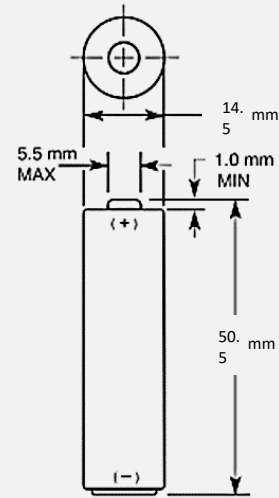
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AA (LR6) PC1500



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Control
- Wireless Mouse / Keyboard
- Clocks
- Flashlights
- Thermostats

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 3,125 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 98 mΩ     |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 24.7 g (0.9 oz)                            |
| ▪ Typical volume | 8.4 cm <sup>3</sup> (0.5 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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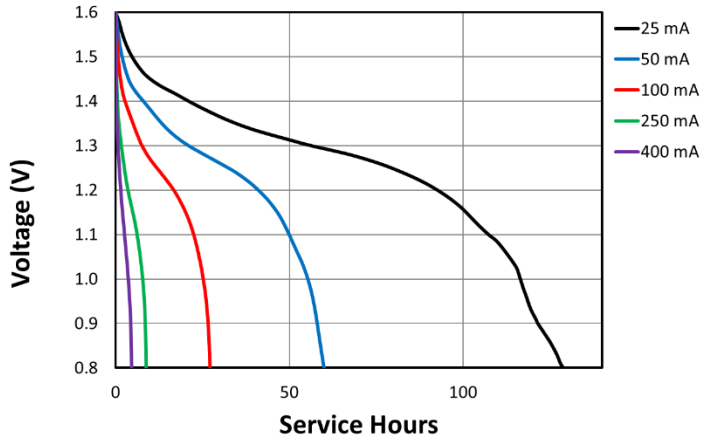
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Phone: 1-800-544-5454 (Toll-free)  
[www.procell.com](http://www.procell.com)

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.

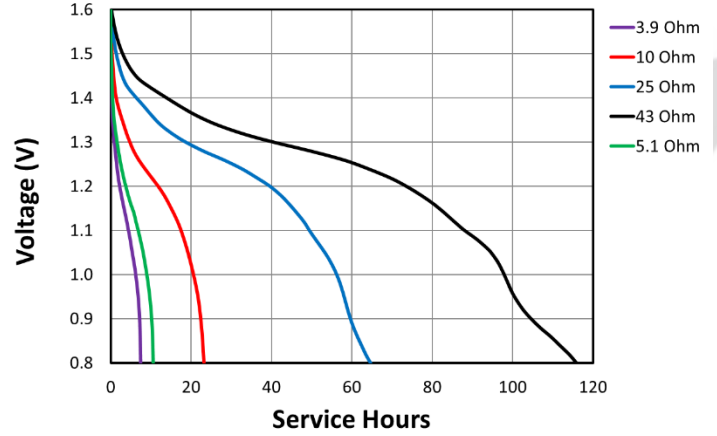
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

TYPICAL PERFORMANCE

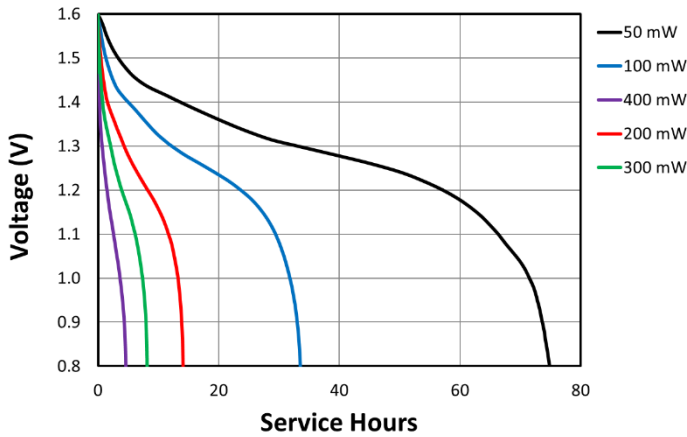
Constant Current



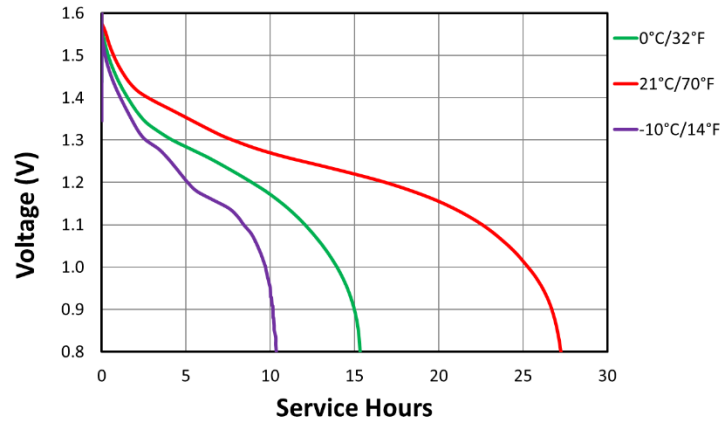
Constant Resistance



Constant Power



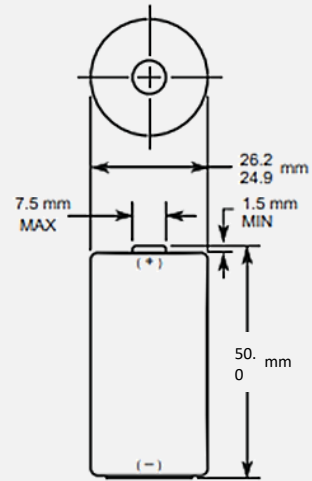
Constant Current - 100 mA



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: C (LR14) PC1400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Clocks
- Multimeters
- Flashlights
- Scales

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (25 mA Cont., .8V cut-off) 9,038 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 150 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 70.7 g (2.5 oz)
- Typical volume 26.9 cm<sup>3</sup> (1.6 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

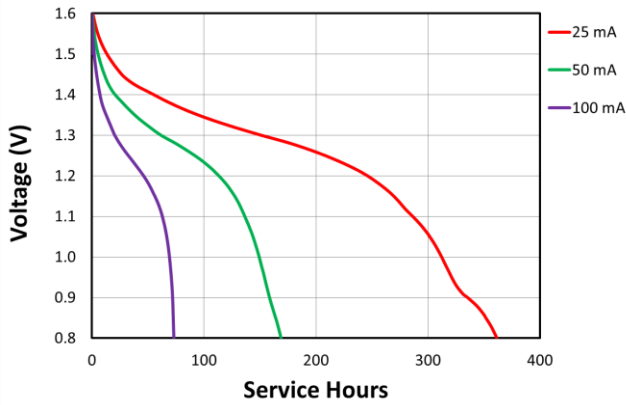
- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

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.

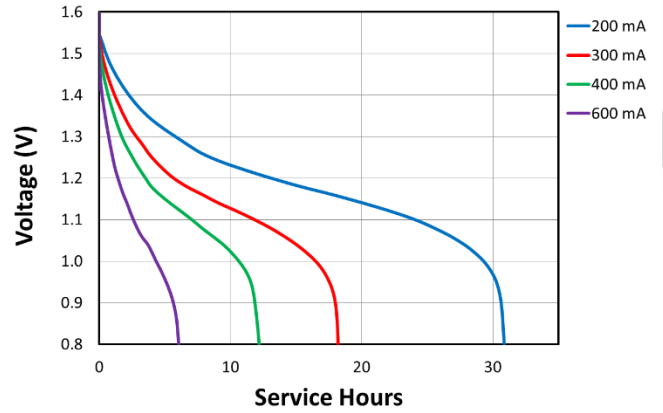
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

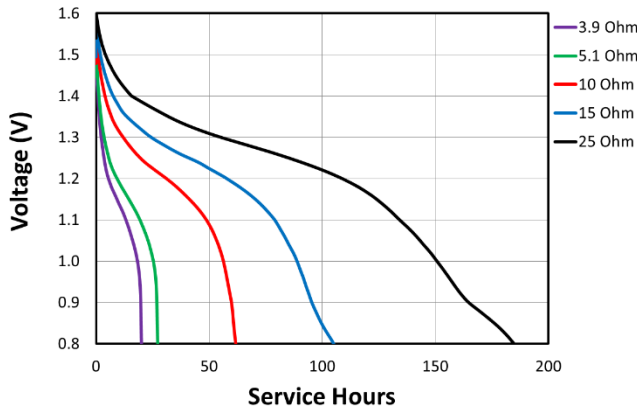
**Constant Current**



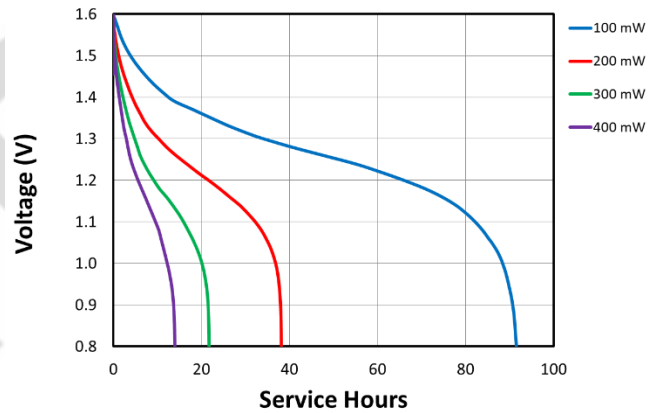
**Constant Current**



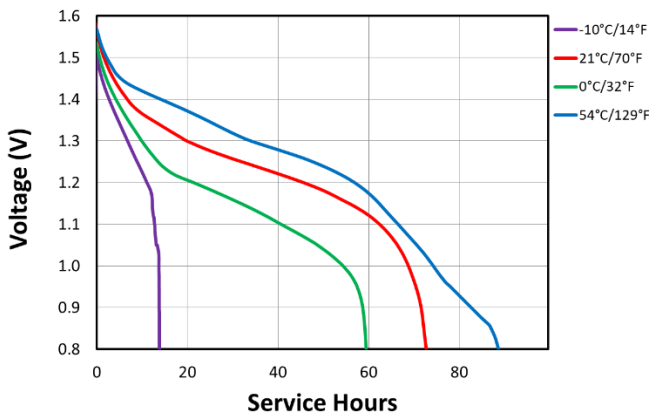
**Constant Resistance**



**Constant Power**



**Constant Current - 100 mA**



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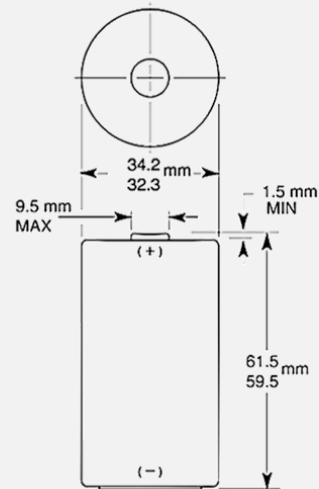
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: D (LR20) PC1300



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Clocks
- Multimeters
- Flashlights
- Scales

### ELECTRICAL CHARACTERISTICS

- |   |            |
|---|------------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 19,669 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V      |
| ▪ AC Impedance @ 1kHz                         | 133 mΩ     |

### PHYSICAL CHARACTERISTICS

- |                  |   |
|------------------|---|
| ▪ Typical weight | 144.0 g (5.1 oz)                            |
| ▪ Typical volume | 56.4 cm <sup>3</sup> (3.4 in <sup>3</sup> ) |
| ▪ Terminals      | Flat  |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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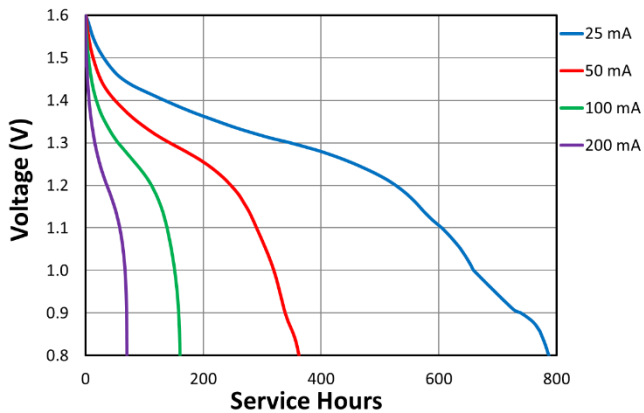
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Phone: 1-800-544-5454 (Toll-free)  
[www.procell.com](http://www.procell.com)

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.

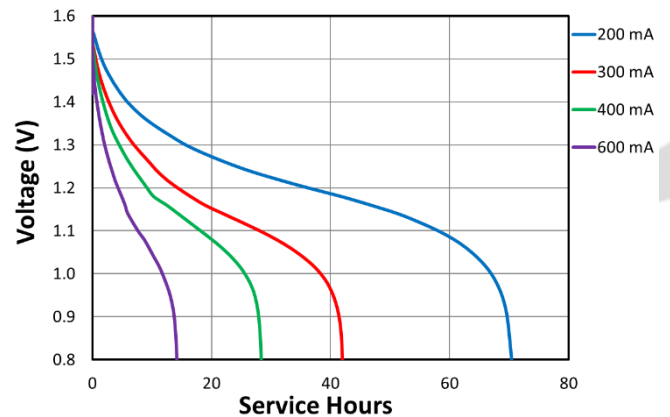
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

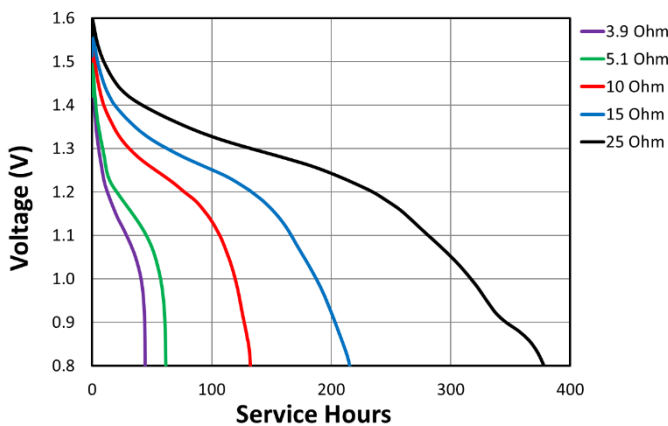
**Constant Current**



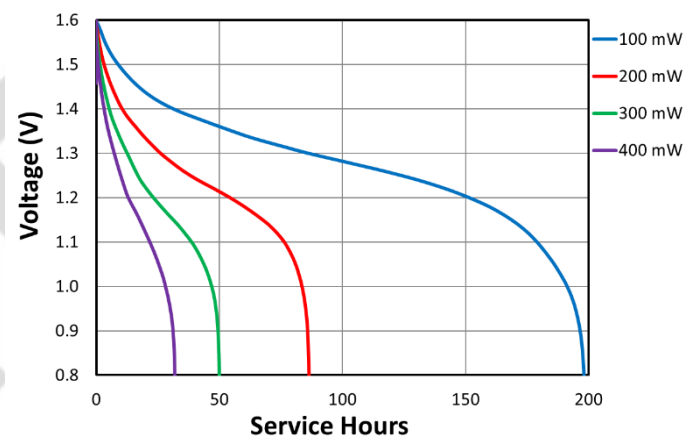
**Constant Current**



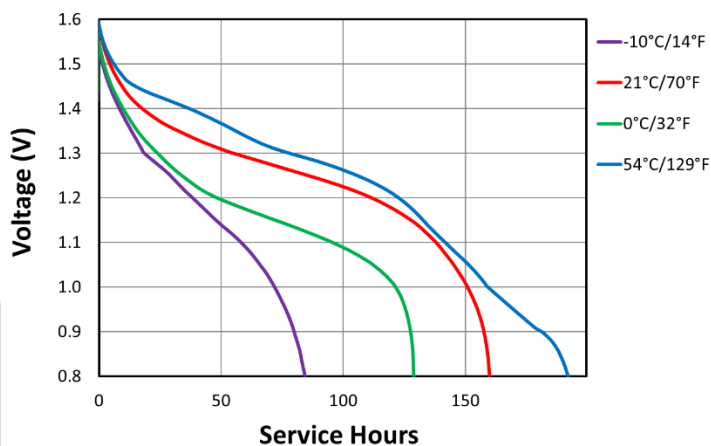
**Constant Resistance**



**Constant Power**



**Constant Current - 100 mA**



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.

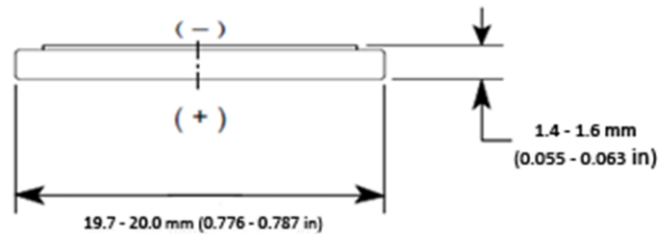
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.



## LITHIUM-MANGANESE DIOXIDE BATTERY



Size: PC2016



Dimensions shown are IEC standards

### KEY FEATURES

- Industry Highest Cell Capacity & High Energy
- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- Child-Safe Markings & Retail Packaging
- Wide operating temperature range (-20°C / +60°C)
- Low self-discharge with long operating life (<2% 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
  - REACH compliance
  - Quality: ISO 9001, Duracell World Class Continuous Program

### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (15kΩ Cont., 2.0 V cut-off)	85 mAh
▪ Nominal voltage (at + 20 °C)	3.0 V
▪ Standard Continuous Discharge Current	0.1 mA
▪ Maximum Continuous Discharge Current	6 mA
▪ Maximum Pulse Discharge Current at 1 sec	20 mA
▪ Nominal Energy	255 mWh
▪ AC Impedance @ 1kHz	8.5Ω

### PHYSICAL CHARACTERISTICS

▪ Typical weight	1.75 g (0.061 oz.)
▪ Li metal content	approx. 0.024 g

### OPERATING & STORAGE CONDITIONS

▪ Operating temperature range	-20°C to 60° (-4°F to 140°F)
▪ Recommended Storage (storage area should be clean, cool, dry and ventilated)	5°C to 30° (41°F to 86° F)

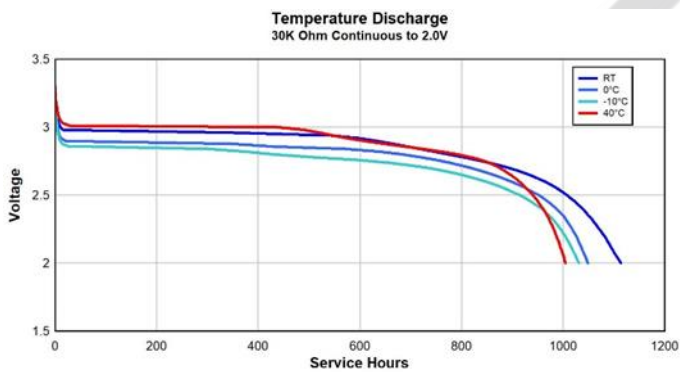
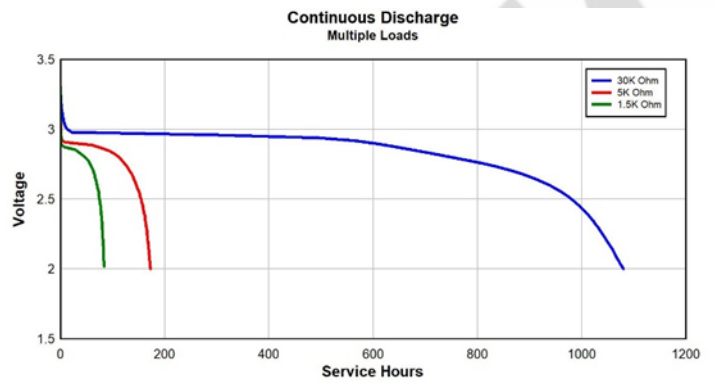
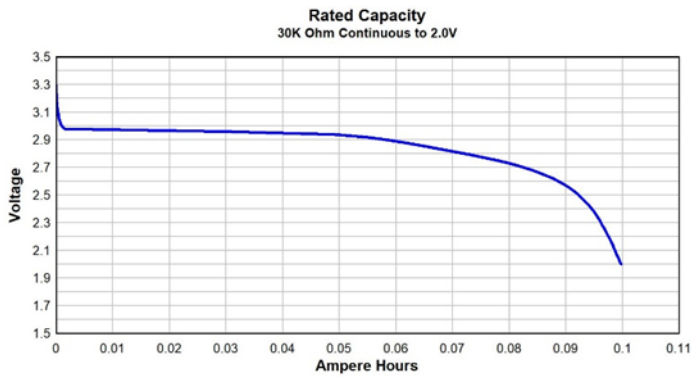
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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**TYPICAL PERFORMANCE**



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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 APPLICATIONS**

- Medical devices
- Security devices
- Fitness devices
- Watches
- Wireless sensors
- Toys
- Key-Fobs
- Bluetooth Trackers

**TYPICAL APPLICATIONS**

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, expose to heat above 100 °C (212 °F), incinerate, or expose contents to water

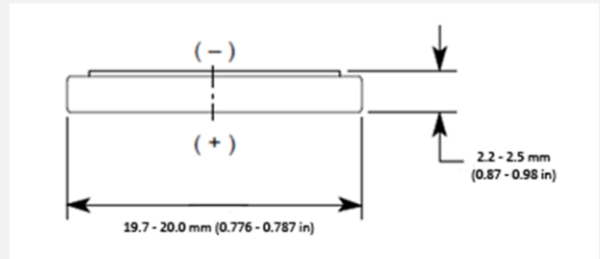
**WARNING! KEEP BATTERIES AWAY FROM CHILDREN!**

- Always keep your batteries away from children to prevent swallowing.
- If ingestion does occur, however, be aware that initial symptoms may be similar to other childhood illnesses such as coughing, drooling and discomfort.
- Battery ingestion hotline (860-498-8666)

## LITHIUM-MANGANESE DIOXIDE BATTERY



Size: PC2025



Dimensions shown are IEC standards

### KEY FEATURES

- Industry Highest Cell Capacity & High Energy
- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- Child-Safe Markings & Retail Packaging
- Wide operating temperature range (-20°C / +60°C)
- Low self-discharge with long operating life (<2% 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
  - REACH compliance
  - Quality: ISO 9001, Duracell World Class Continuous Program

### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (15kΩ Cont., 2.0 V cut-off)	165 mAh
▪ Nominal voltage (at + 20 °C)	3.0 V
▪ Standard Continuous Discharge Current	0.2 mA
▪ Maximum Continuous Discharge Current	6 mA
▪ Maximum Pulse Discharge Current at 1 sec	20 mA
▪ Nominal Energy	495 mWh
▪ AC Impedance @ 1kHz	24Ω

### PHYSICAL CHARACTERISTICS

▪ Typical weight	2.56 g (0.09 oz.)
▪ Li metal content	approx. 0.052 g

### OPERATING & STORAGE CONDITIONS

▪ Operating temperature range	-20°C to 60°C (-4°F to 140°F)
▪ Recommended Storage (storage area should be clean, cool, dry and ventilated)	5°C to 30°C (41°F to 86°F)

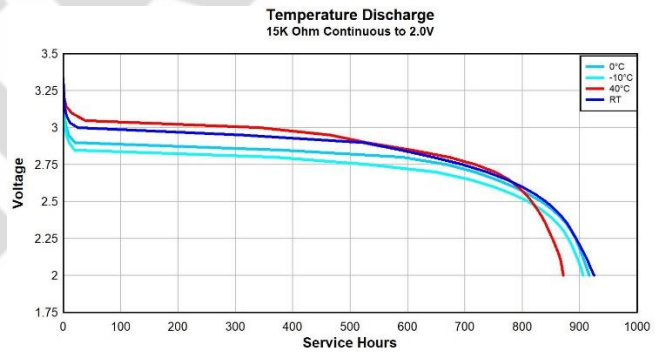
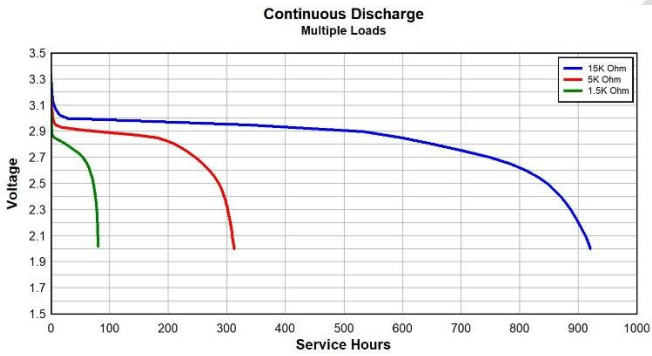
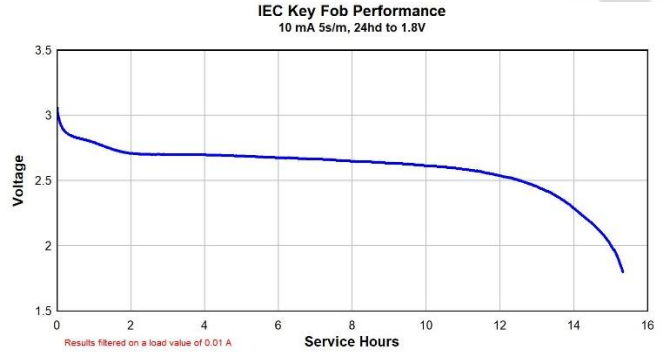
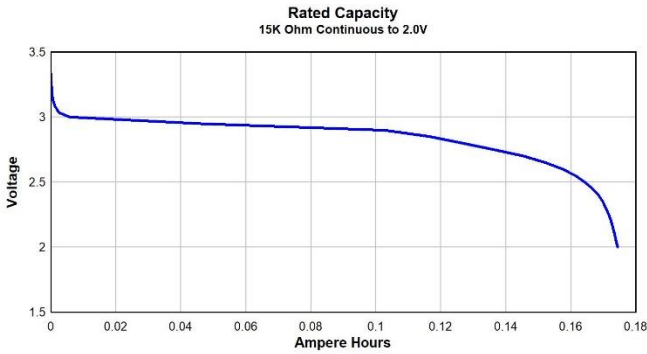
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Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

**TYPICAL PERFORMANCE**



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 APPLICATIONS

- Medical devices
- Security devices
- Fitness devices
- Watches
- Calculators
- Wireless sensors
- Toys
- Key-Fobs & Trackers

## TYPICAL APPLICATIONS

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, expose to heat above 100 °C (212 °F), incinerate, or expose contents to water

## WARNING! KEEP BATTERIES AWAY FROM CHILDREN!

- Always keep your batteries away from children to prevent swallowing.
- If ingestion does occur, however, be aware that initial symptoms may be similar to other childhood illnesses such as coughing, drooling and discomfort.
- Battery ingestion hotline (860-498-8666)

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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.

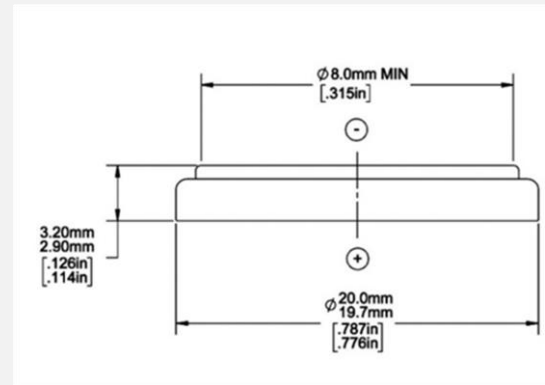
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.



## LITHIUM-MANGANESE DIOXIDE BATTERY



Size: PC2032



Dimensions shown are IEC standards

### KEY FEATURES

- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- Child-Safe Markings & Retail Packaging
- Wide operating temperature range (-20°C / +60°C)
- Low self-discharge with long operating life (<2% 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
  - REACH compliance
  - Quality: ISO 9001, Duracell World Class Continuous Program

### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (15kΩ Cont., 2.0 V cut-off)	245 mAh
▪ Nominal voltage (at + 20 °C)	3.0 V
▪ Standard Continuous Discharge Current	0.5 mA
▪ Maximum Continuous Discharge Current	6 mA
▪ Maximum Pulse Discharge Current at 1 sec	20 mA
▪ Nominal Energy	735 mWh
▪ AC Impedance @ 1kHz	20Ω

### PHYSICAL CHARACTERISTICS

▪ Typical weight	3.1 g (0.11 oz.)
▪ Li metal content	approx. 0.06 g
▪ Battery Case	Ni Plated SS

### OPERATING & STORAGE CONDITIONS

▪ Operating temperature range	-20°C to 60°C (-4°F to 140°F)
▪ Recommended Storage (storage area should be clean, cool, 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.

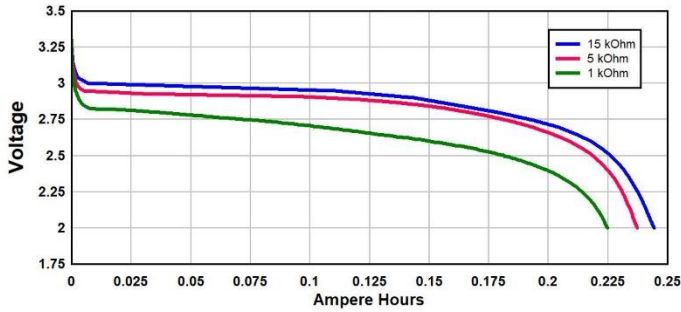
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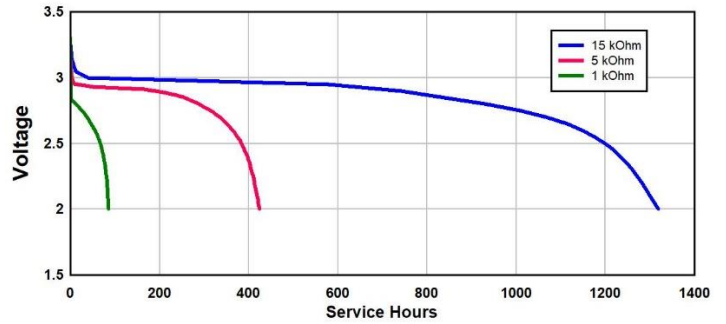
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**TYPICAL PERFORMANCE**

**Continuous Discharge Characteristics (Capacity)**



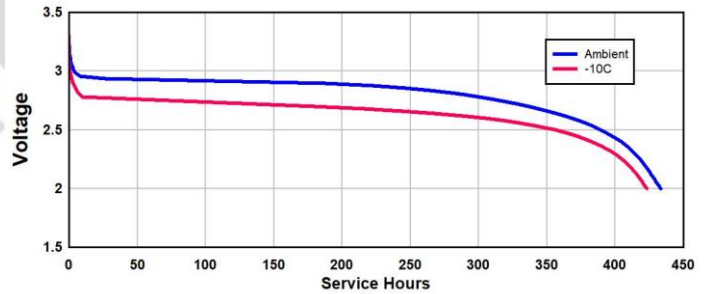
**Continuous Discharge (Service Hours)**



**IEC Key Fob Performance  
10 mA 5s/m to 1.8V**



**Cold Temperature Discharge  
5 kOhm Continuous to 2.0V**



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 APPLICATIONS**

- Medical devices
- Security devices
- Fitness devices
- Watches
- Calculators
- Wireless sensors
- Toys
- Key-Fobs & Trackers

**TYPICAL APPLICATIONS**

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, expose to heat above 100 °C (212 °F), incinerate, or expose contents to water

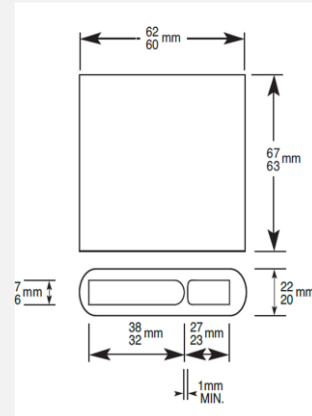
**WARNING! KEEP BATTERIES AWAY FROM CHILDREN!**

- Always keep your batteries away from children to prevent swallowing.
- If ingestion does occur, however, be aware that initial symptoms may be similar to other childhood illnesses such as coughing, drooling and discomfort.
- Battery ingestion hotline (860-498-8666)

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: 4.5V (3LR12) PC1203



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### ELECTRICAL CHARACTERISTICS

- Typical Voltage (at + 20 °C) 4.5 V
- AC Impedance @ 1kHz 810 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 154.0 g (5.4 oz)
- Typical volume 83 cm<sup>3</sup> (5.1 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

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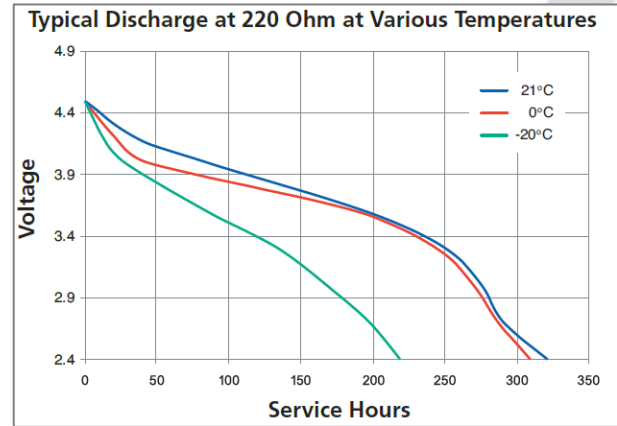
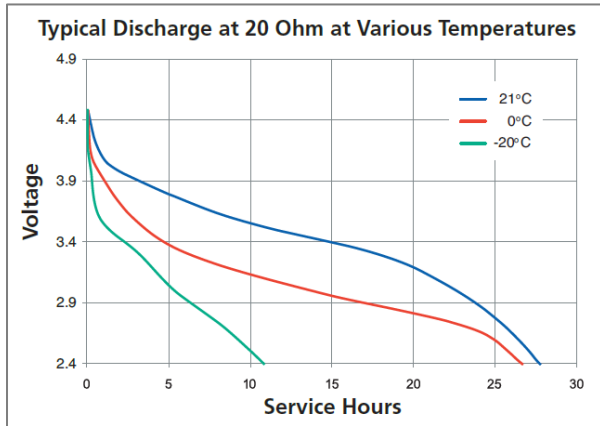
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Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

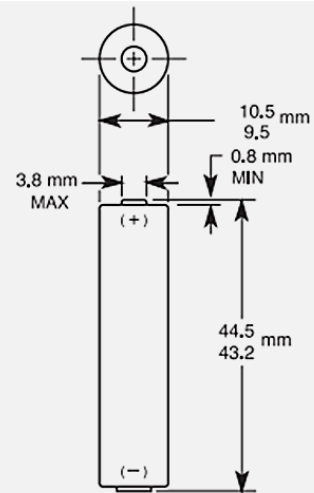
## TYPICAL PERFORMANCE



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (L03) PC2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security keypads
- Wireless mouse

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (43 Ω Cont., .8V cut-off) | 1,236 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 116 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 11.6 g (0.4 oz)                            |
| ▪ Typical volume | 3.5 cm <sup>3</sup> (0.2 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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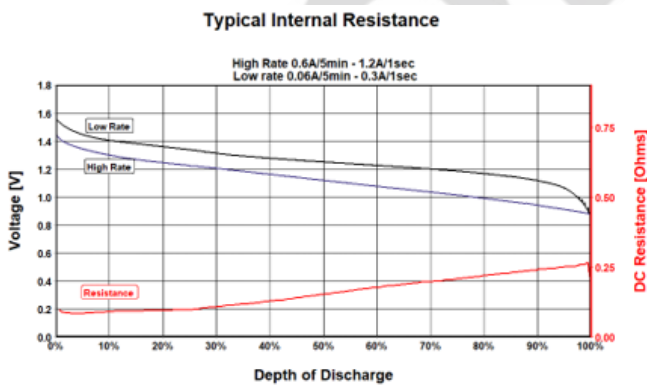
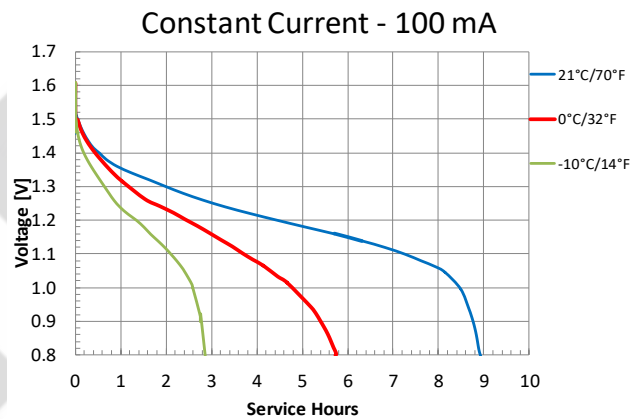
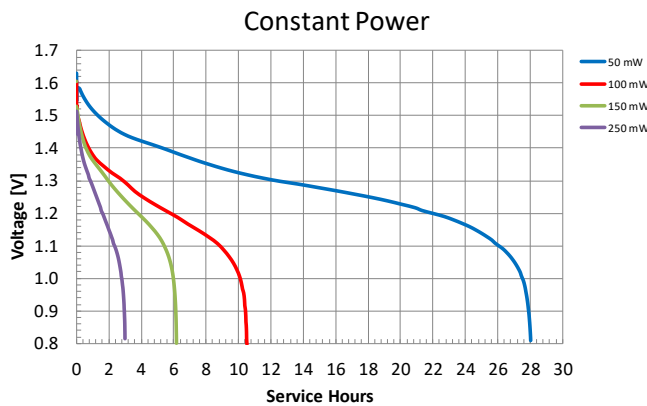
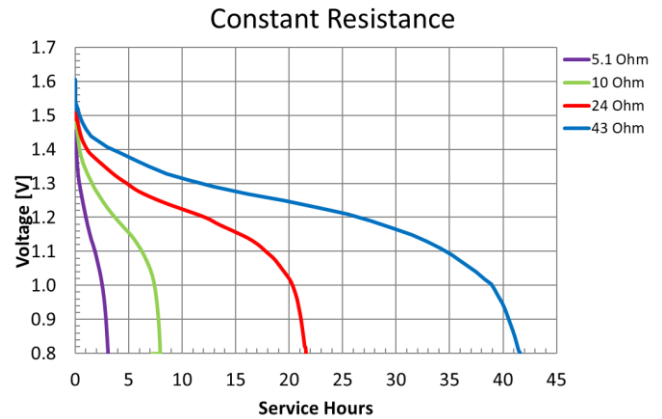
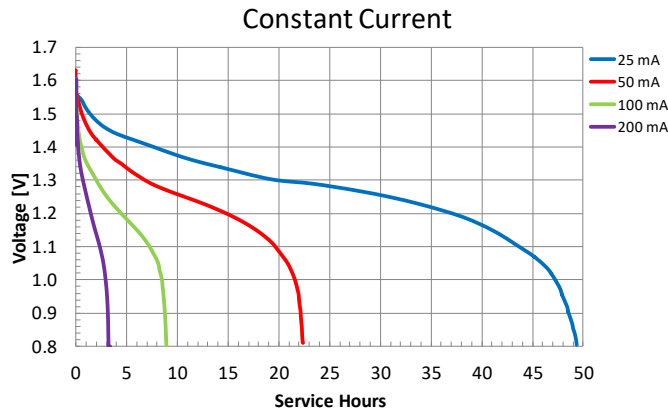
[www.procell.com](http://www.procell.com)

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



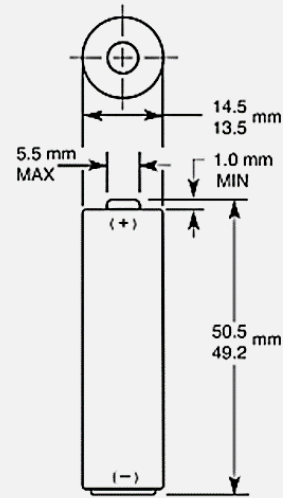
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AA (LR6) PC1500



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security Keypads
- Wireless Mouse

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (43 Ω Cont., .8V cut-off) 3,016 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 81 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 24.0 g (0.8 oz)
- Typical volume 8.4 cm<sup>3</sup> (0.5 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

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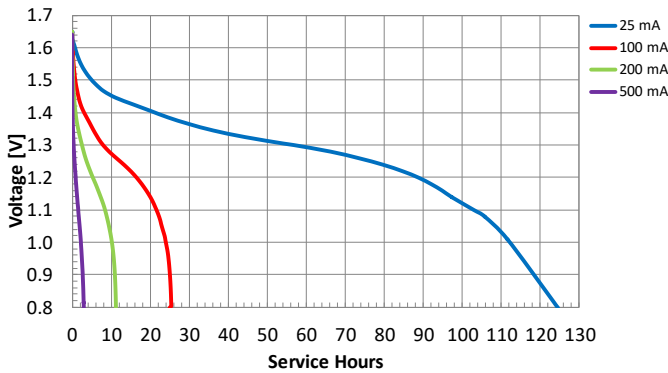
[www.procell.com](http://www.procell.com)

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.

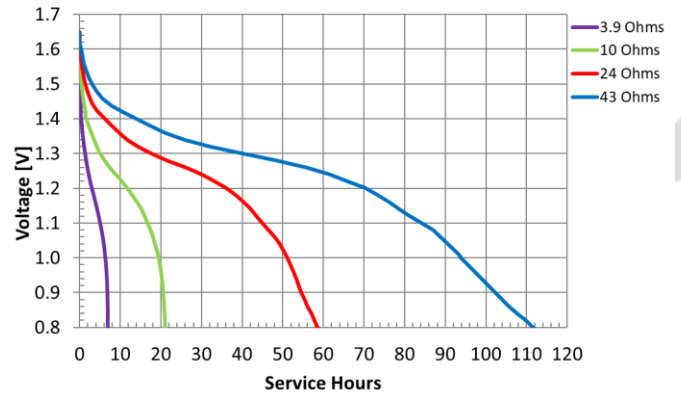
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

## TYPICAL PERFORMANCE

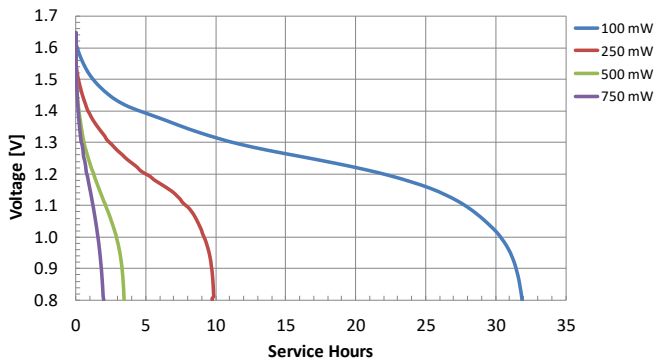
### Constant Current



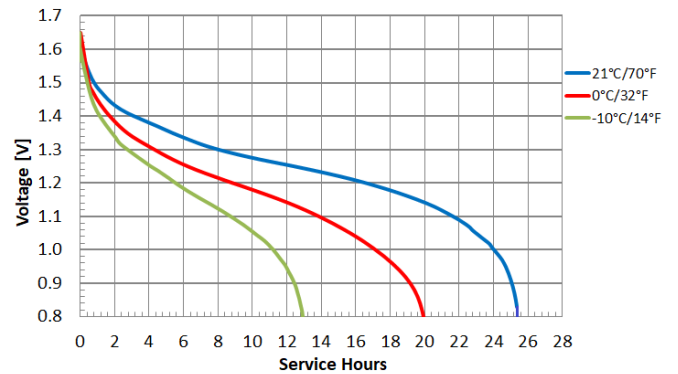
### Constant Resistance



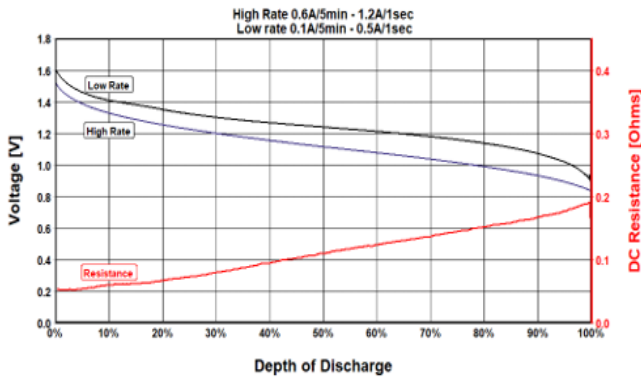
### Constant Power



### Constant Current - 100 mA



### Typical Internal Resistance



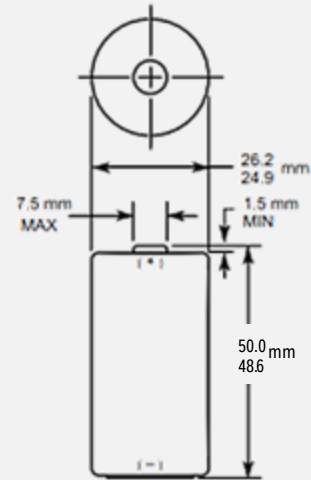
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: C (LR14) PC1400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSIC 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Security Keypads
- Sensors
- Flushometers

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (25 Ω Cont., .8V cut-off) | 8,100 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 150 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |   |
|------------------|---|
| ▪ Typical weight | 69.0 g (2.4 oz)                             |
| ▪ Typical volume | 26.9 cm <sup>3</sup> (1.6 in <sup>3</sup> ) |
| ▪ Terminals      | Flat  |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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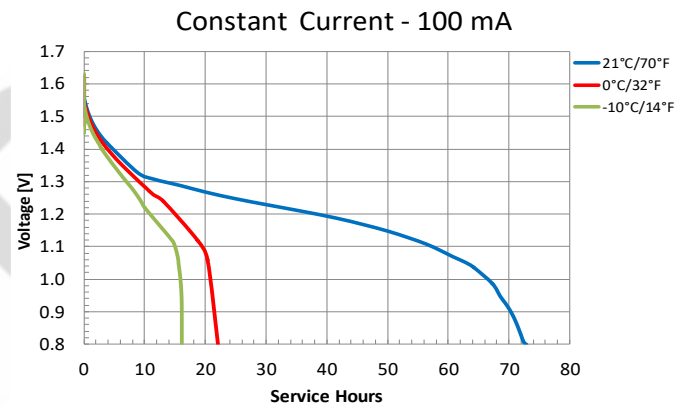
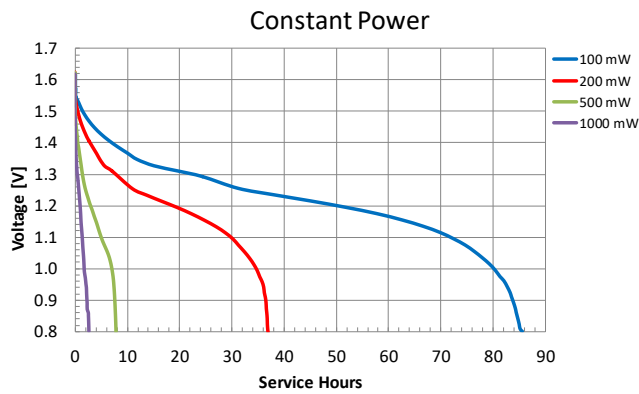
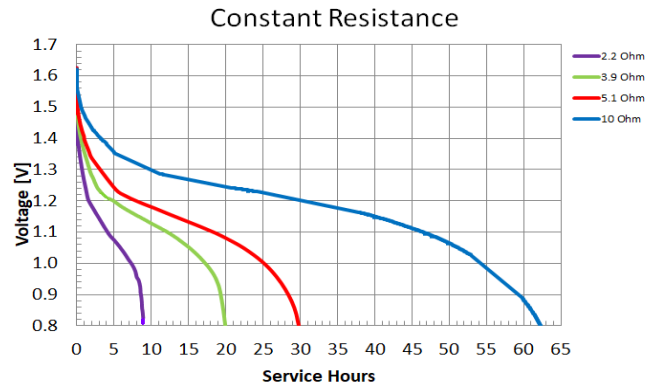
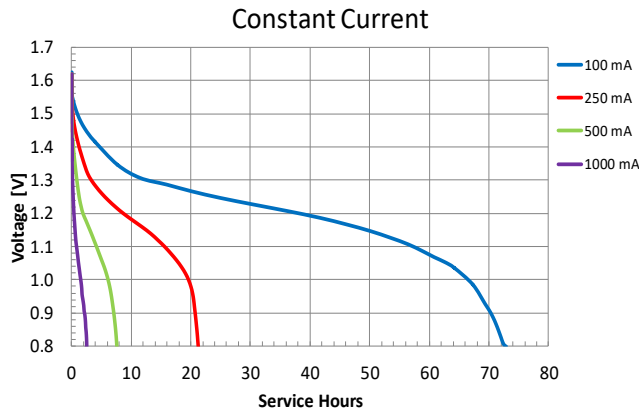
PROFESSIONAL BATTERIES

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

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.

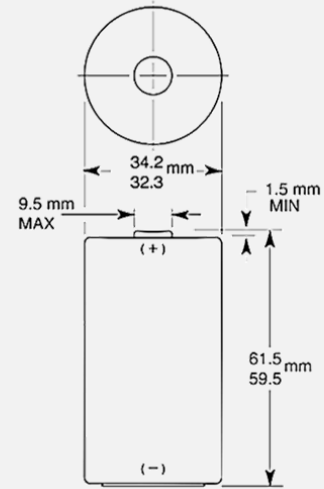
TYPICAL PERFORMANCE



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: D (LR20) PC1300



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Security Keypads
- Sensors
- Flushometers

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (25 Ω Cont., .8V cut-off) 15,476 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 136 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 139.0 g (4.9 oz)
- Typical volume 56.4 cm<sup>3</sup> (3.4 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

# PROCELL®

PROFESSIONAL BATTERIES

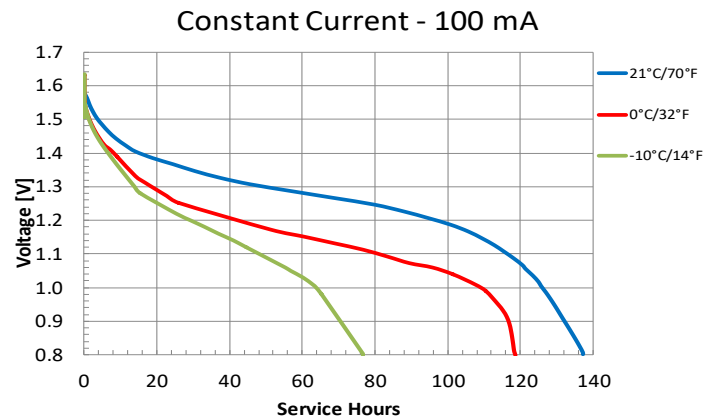
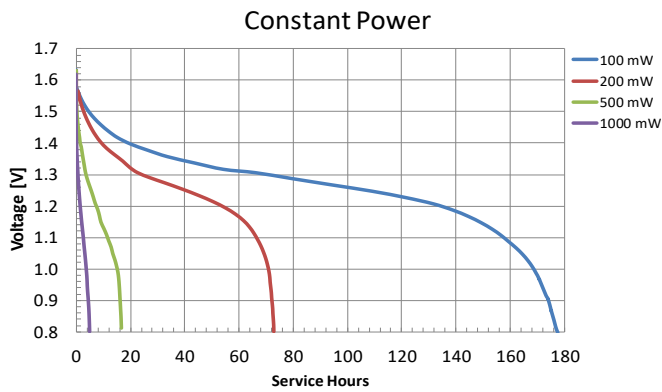
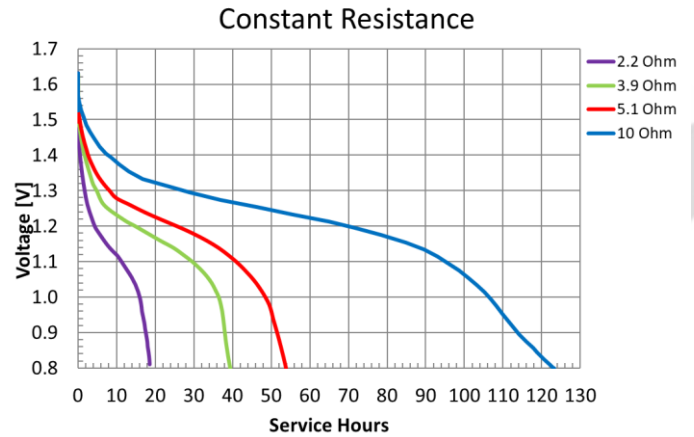
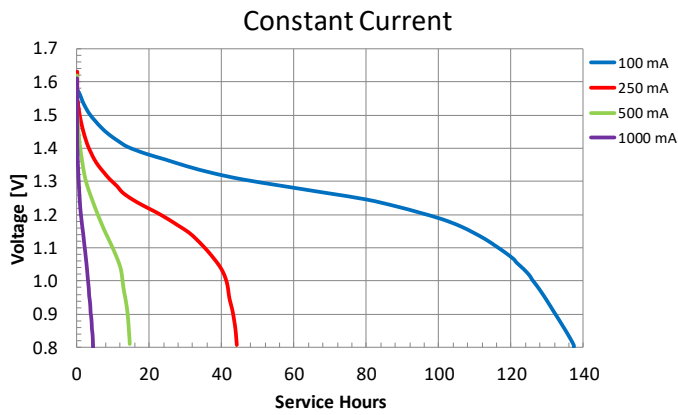
Procell Professional batteries  
Berkshire Corporate Park  
Phone: 1-800-544-5454 (Toll-free)  
[www.procell.com](http://www.procell.com)

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.



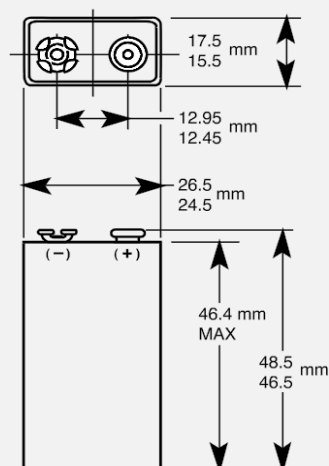
## TYPICAL PERFORMANCE



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: 9V (6LR61) PX1604



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Door Locks
- Air Fresheners
- Medical Devices
- Radios

### ELECTRICAL CHARACTERISTICS

- |   |          |
|---|----------|
| ▪ Nominal capacity (2 mA Cont., 5V cut-off) | 726 mAh  |
| ▪ Typical Voltage (at + 20 °C)              | 9 V      |
| ▪ AC Impedance @ 1kHz                       | 1,692 mΩ |

### PHYSICAL CHARACTERISTICS

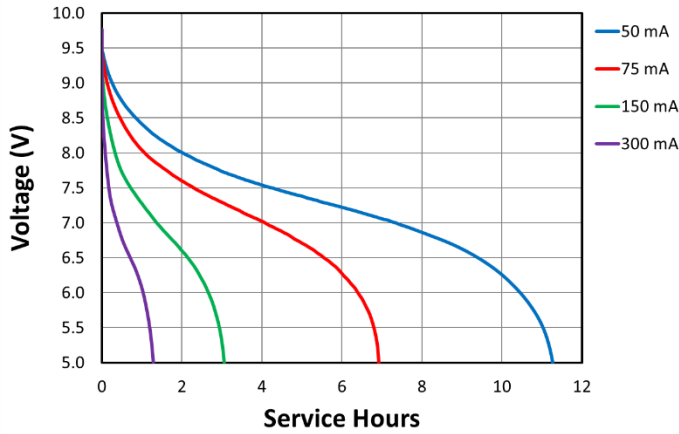
- |                  |   |
|------------------|---|
| ▪ Typical weight | 48.5 g (1.6 oz)                             |
| ▪ Typical volume | 22.8 cm <sup>3</sup> (1.4 in <sup>3</sup> ) |
| ▪ Terminals      | Miniature snap                              |

### OPERATING & STORAGE CONDITIONS

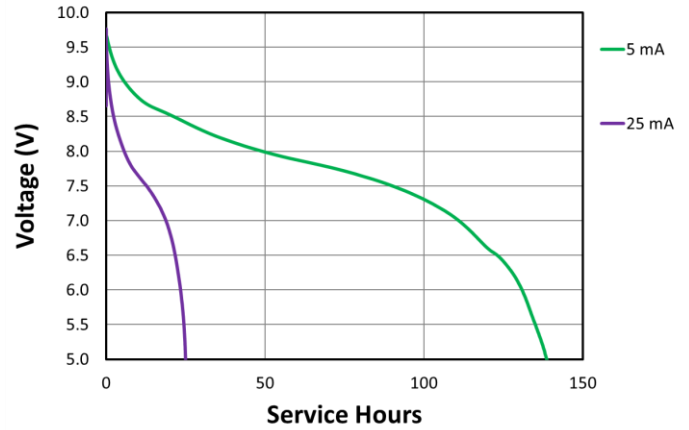
- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

TYPICAL PERFORMANCE

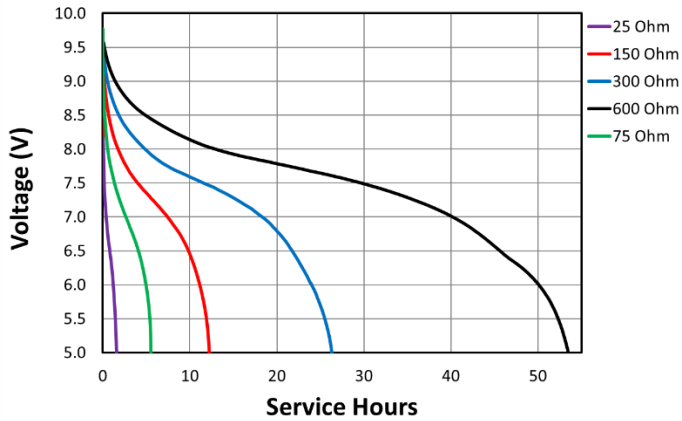
Constant Current



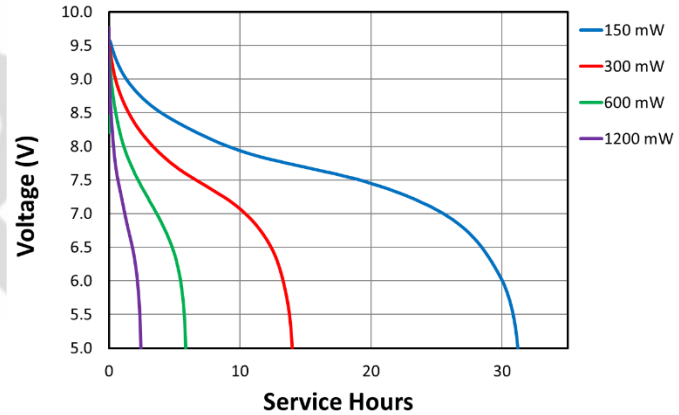
Constant Current



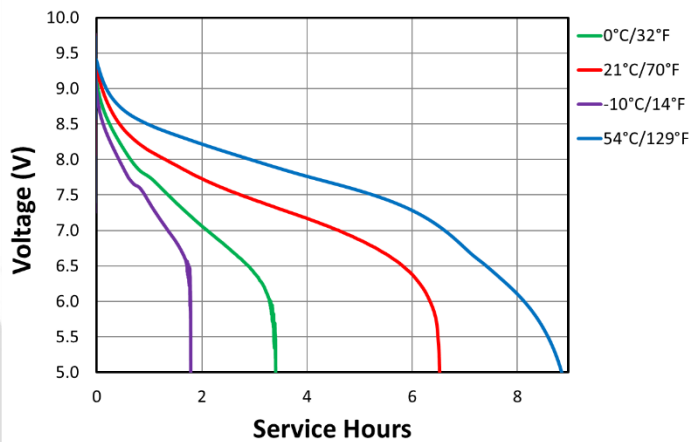
Constant Resistance



Constant Power



Constant Current - 75mA



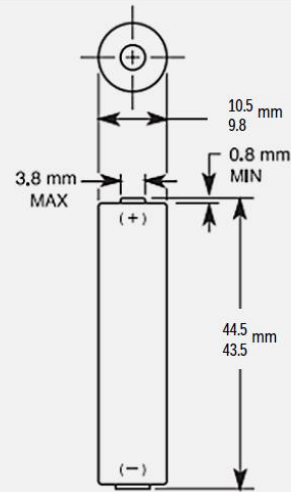
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PX2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Blood pressure monitors
- Soap dispensers
- Flashlights
- Pulse oximeters

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (25 mA Cont., .8V cut-off) 1,223 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 116 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 11.3 g (0.4 oz)
- Typical volume 3.5 cm<sup>3</sup> (0.2 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

# PROCELL®

PROFESSIONAL BATTERIES

Procell Professional batteries

Berkshire Corporate Park

Phone: 1-800-544-5454 (Toll-free)

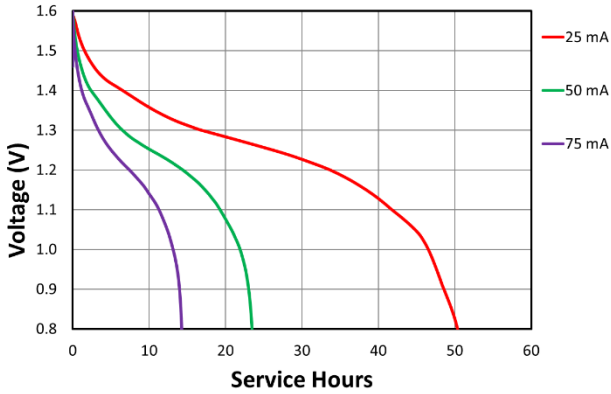
[www.procell.com](http://www.procell.com)

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.

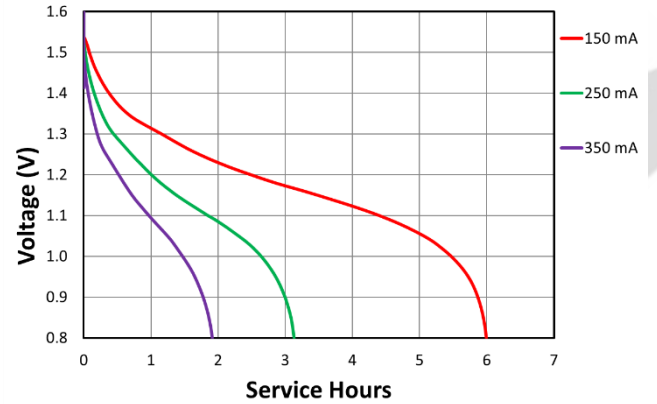
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

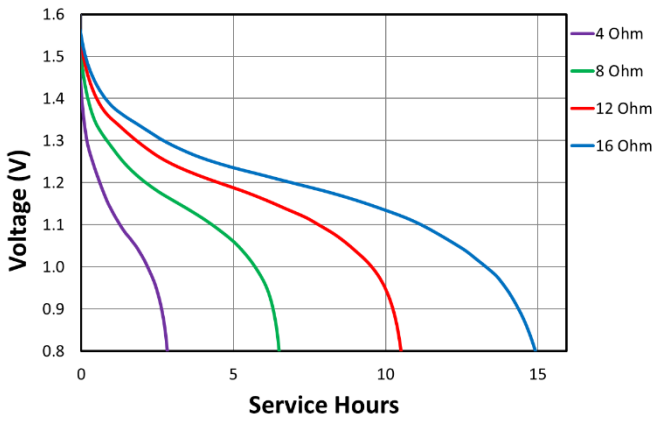
**Constant Current**



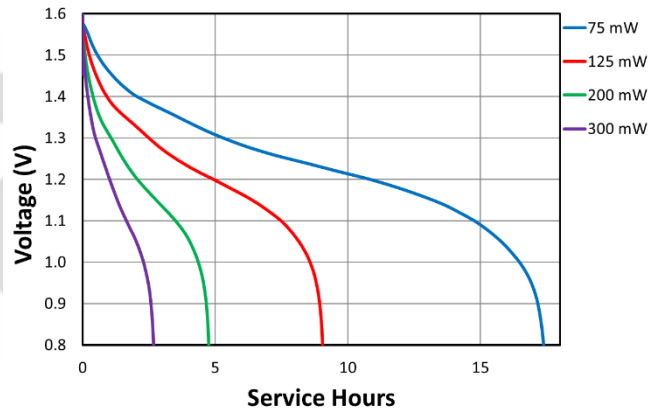
**Constant Current**



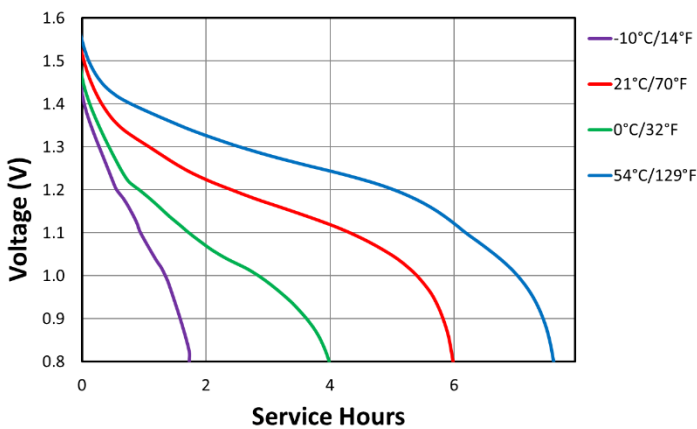
**Constant Resistance**



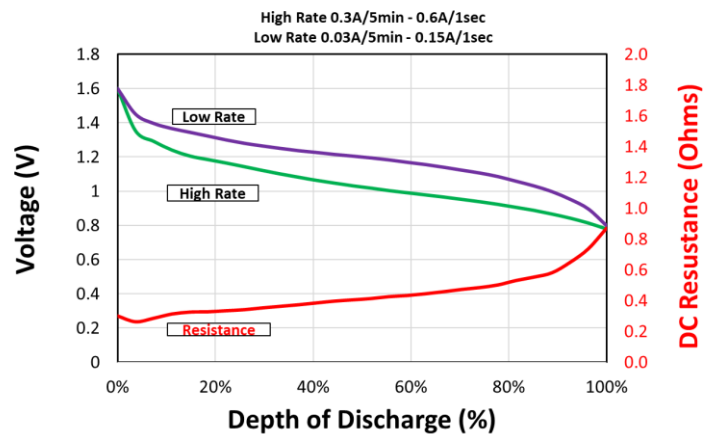
**Constant Power**



**Constant Current - 150mA**



**Typical Internal Resistance**



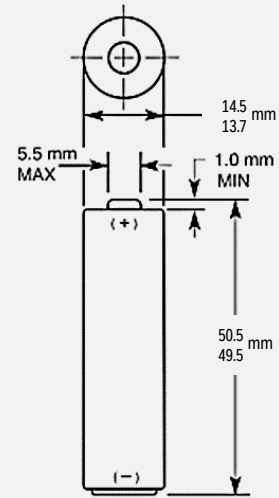
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AA (LR6) PX1500



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Medical Devices
- Security Cameras
- Soap Dispensers
- Electronic Door Locks
- Window Blinds/Shades

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 3,072 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 77 mΩ     |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 24.3 g (0.9 oz)                            |
| ▪ Typical volume | 8.4 cm <sup>3</sup> (0.5 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

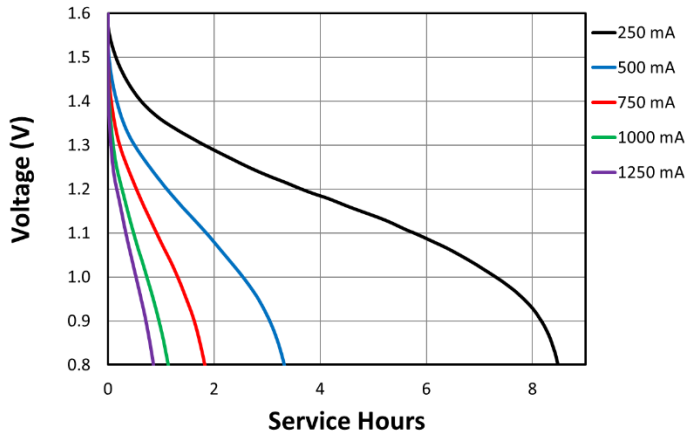
### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86° F)   |

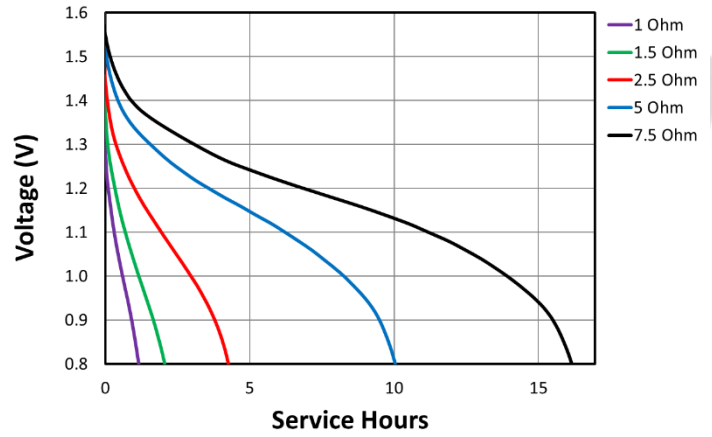


TYPICAL PERFORMANCE

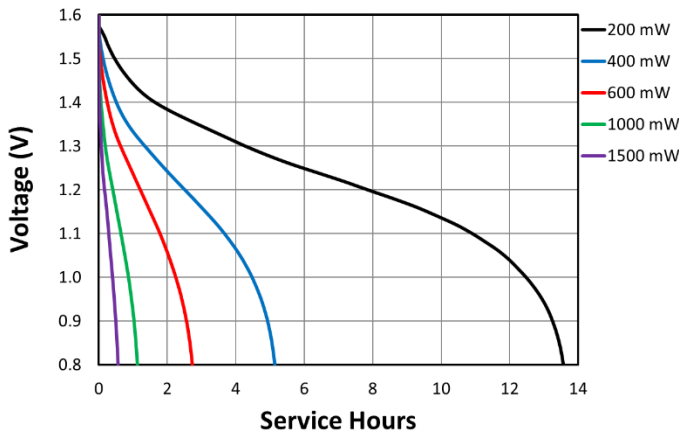
Constant Current



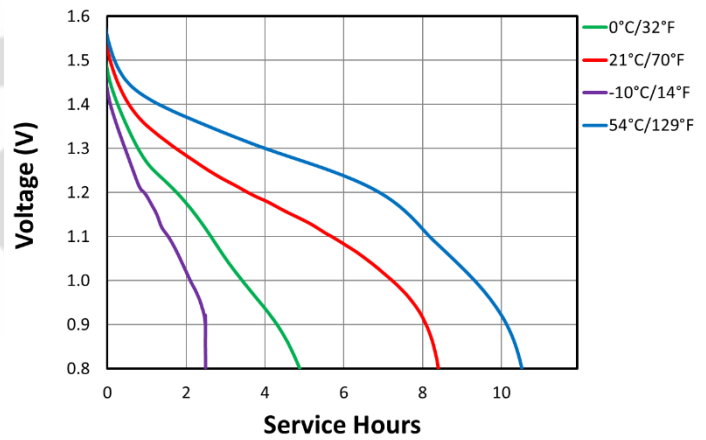
Constant Resistance



Constant Power



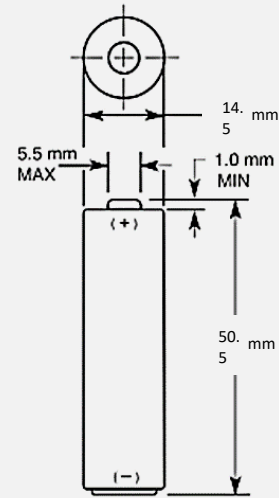
Constant Current - 250 mA



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AA (LR6) PX1500



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Medical Devices
- Security Cameras
- Soap Dispensers
- Electronic Door Locks
- Window Blinds/Shades

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 3,072 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 77 mΩ     |

### PHYSICAL CHARACTERISTICS

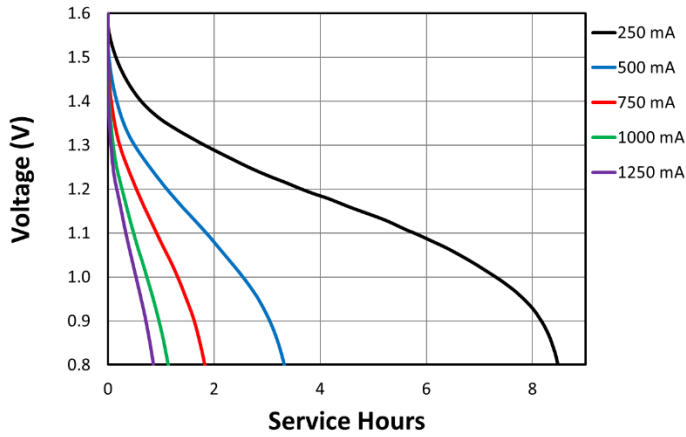
- |                  |  |
|------------------|--|
| ▪ Typical weight | 24.3 g (0.9 oz)                            |
| ▪ Typical volume | 8.4 cm <sup>3</sup> (0.5 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

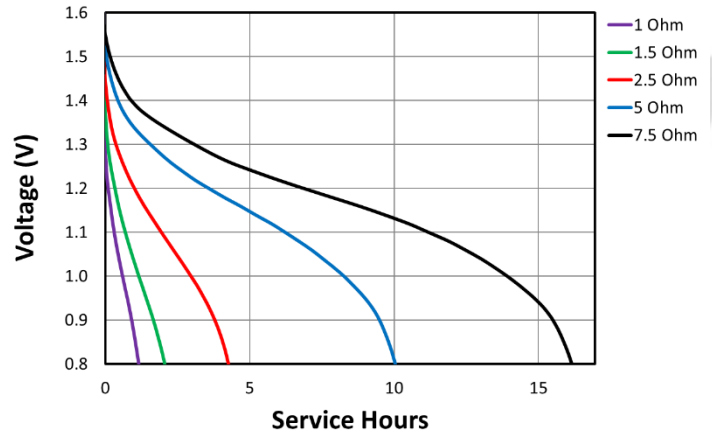
- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86° F)   |

TYPICAL PERFORMANCE

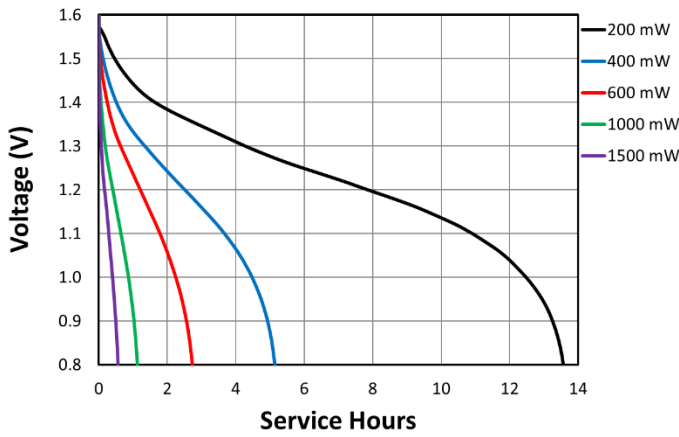
**Constant Current**



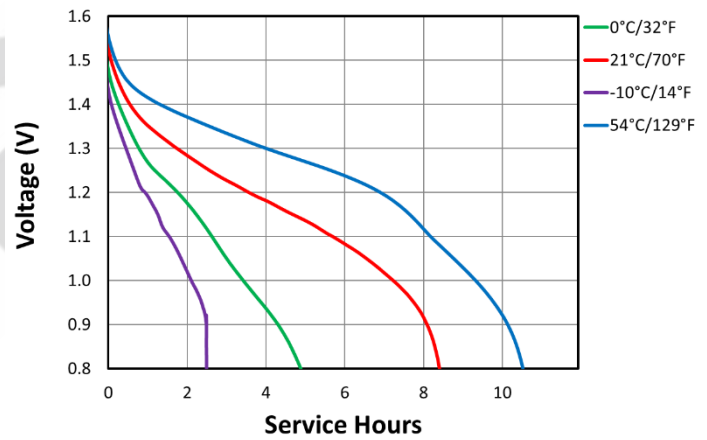
**Constant Resistance**



**Constant Power**



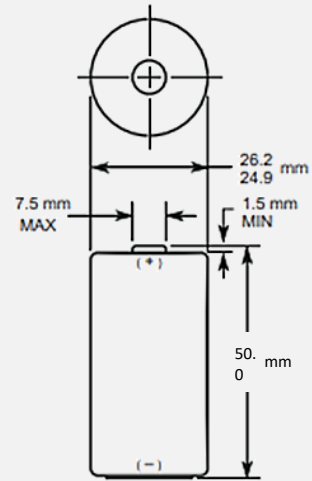
**Constant Current - 250 mA**



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: C (LR14) PX1400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Sanitizer Dispensers
- Air Fresheners
- Paper Towel Dispensers
- Flashlights
- Soap Dispensers

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 8,240 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 74 mΩ     |

### PHYSICAL CHARACTERISTICS

- |                  |   |
|------------------|---|
| ▪ Typical weight | 65.0 g (2.5 oz)                             |
| ▪ Typical volume | 26.9 cm <sup>3</sup> (1.6 in <sup>3</sup> ) |
| ▪ Terminals      | Flat  |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(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.

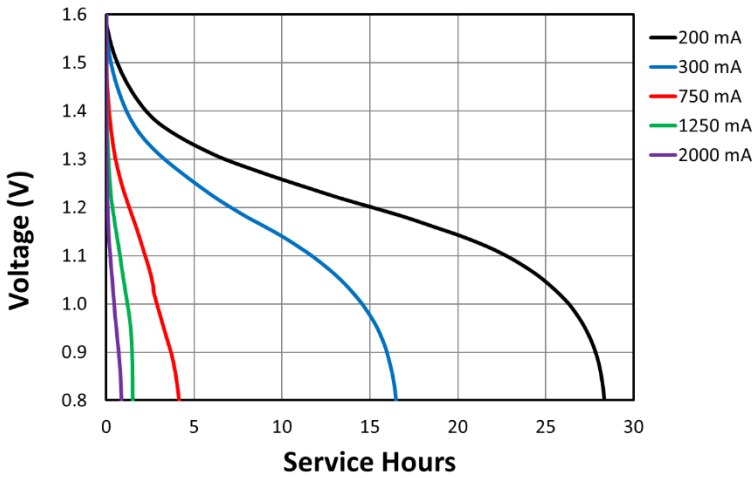
# PROCELL®

PROFESSIONAL BATTERIES

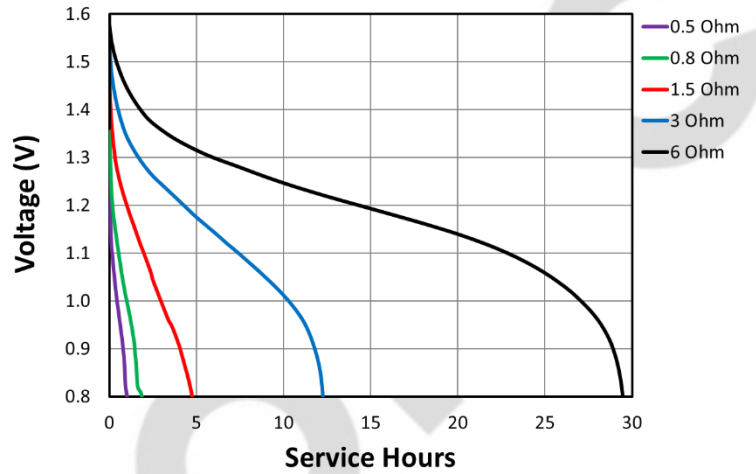
Procell Professional batteries  
Berkshire Corporate Park  
Phone: 1-800-544-5454 (Toll-free)  
[www.procell.com](http://www.procell.com)

**TYPICAL PERFORMANCE**

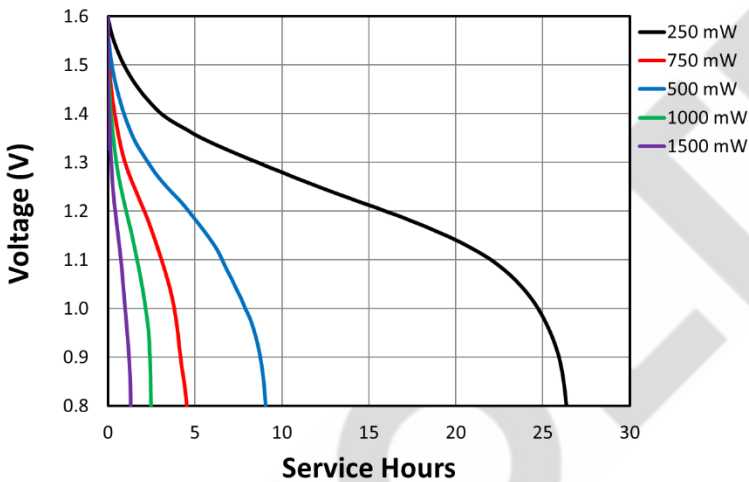
**Constant Current**



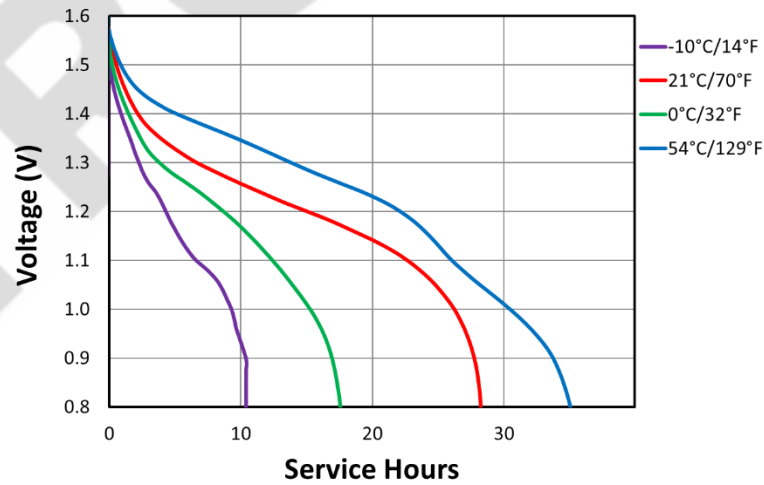
**Constant Resistance**



**Constant Power**



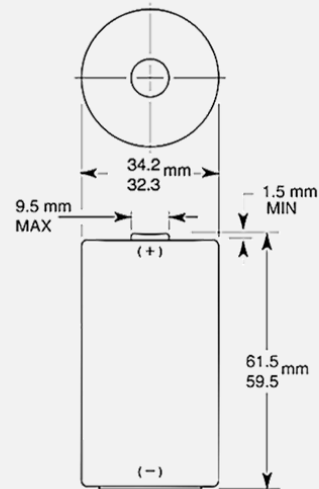
**Constant Current - 200 mA**



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: D (LR20) PX1300



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Sanitizer Dispensers
- Automatic Odorizers
- Paper Towel Dispensers
- Flashlights
- Soap Dispensers

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (25 mA Cont., .8V cut-off) 18,600 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 56 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 140.0 g (5 oz)
- Typical volume 56.4 cm<sup>3</sup> (3.4 in<sup>3</sup>)
- Terminals Flat

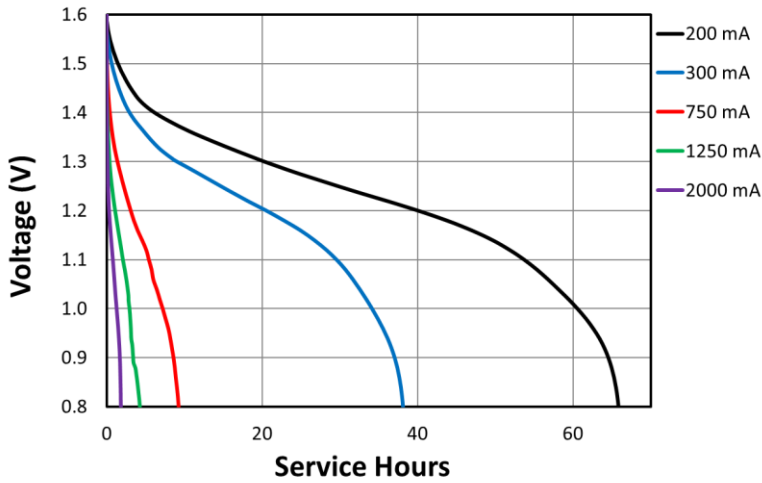
### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

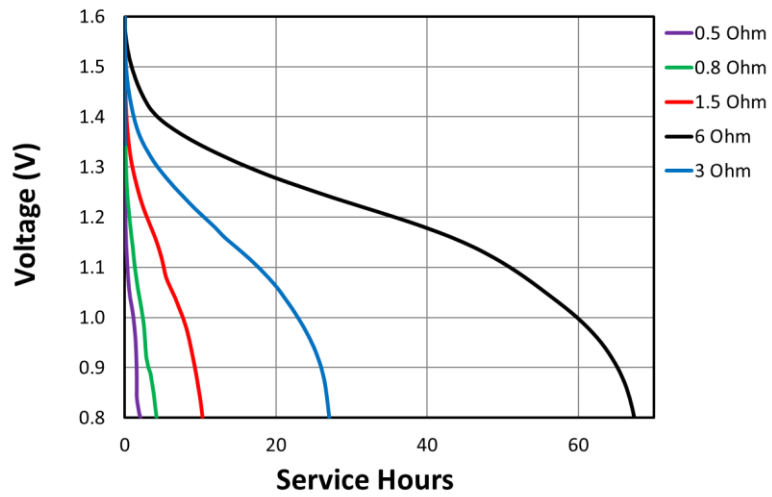


**TYPICAL PERFORMANCE**

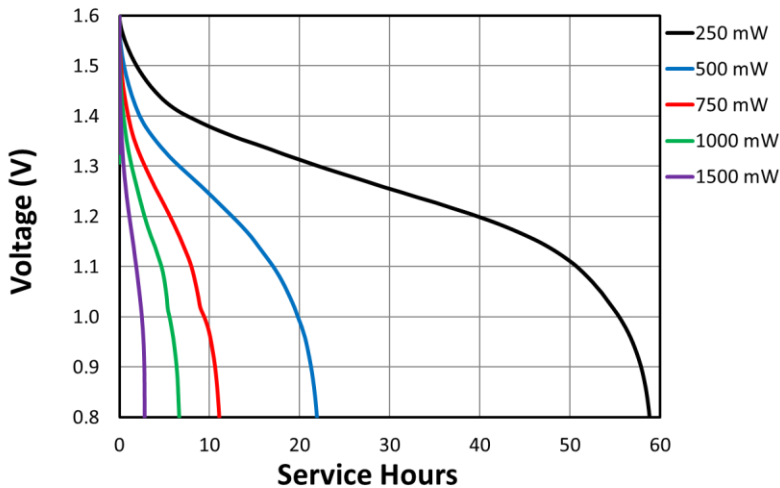
**Constant Current**



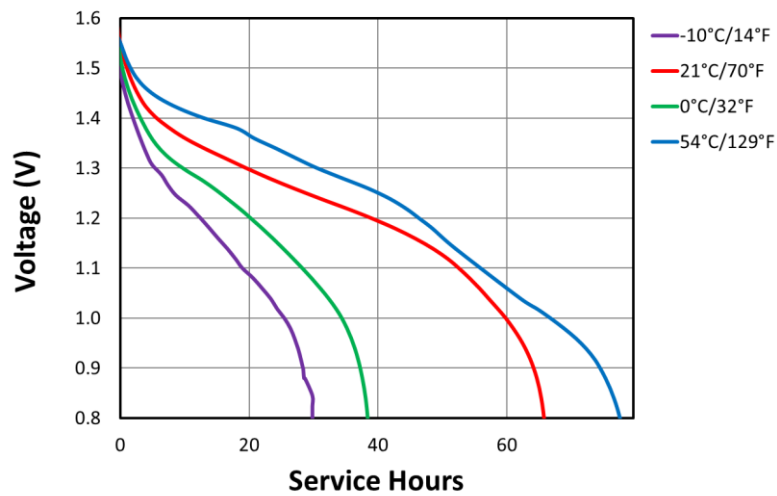
**Constant Resistance**



**Constant Power**



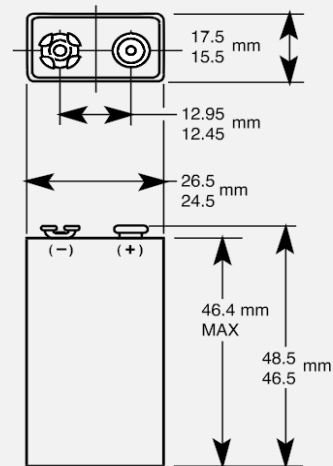
**Constant Current - 200 mA**



**ALKALINE-MANGANESE DIOXIDE BATTERY**



Size: 9V (6LR61) PX1604



Dimensions shown are IEC standards

**KEY FEATURES**

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

**TYPICAL APPLICATIONS**

- Door Locks
- Air Fresheners
- Medical Devices
- Radios

**ELECTRICAL CHARACTERISTICS**

- Nominal capacity (2 mA Cont., 5V cut-off) 726 mAh
- Typical Voltage (at + 20 °C) 9 V
- AC Impedance @ 1kHz 1,692 mΩ

**PHYSICAL CHARACTERISTICS**

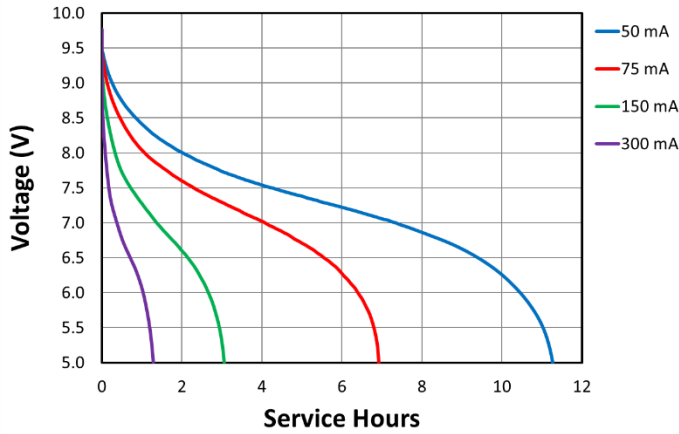
- Typical weight 48.5 g (1.6 oz)
- Typical volume 22.8 cm<sup>3</sup> (1.4 in<sup>3</sup>)
- Terminals Miniature snap

**OPERATING & STORAGE CONDITIONS**

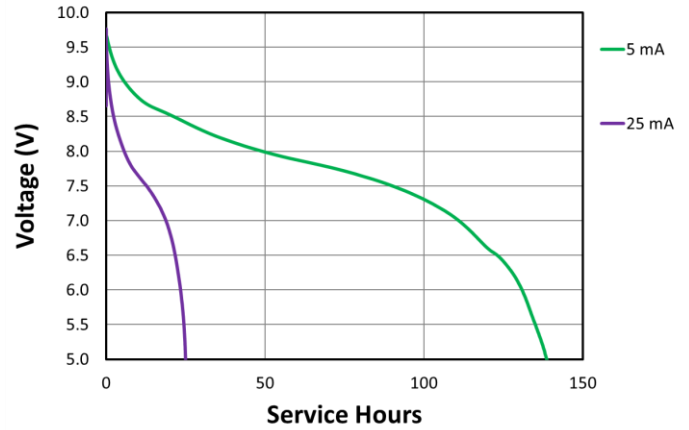
- Operating temperature range -20°C to 54°C  
(-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C  
(41°F to 86°F)

TYPICAL PERFORMANCE

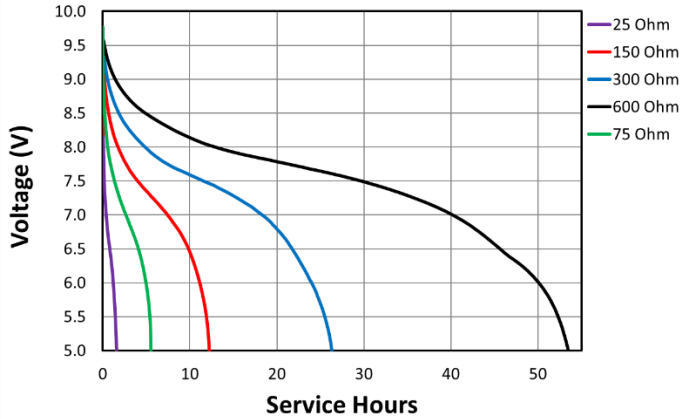
Constant Current



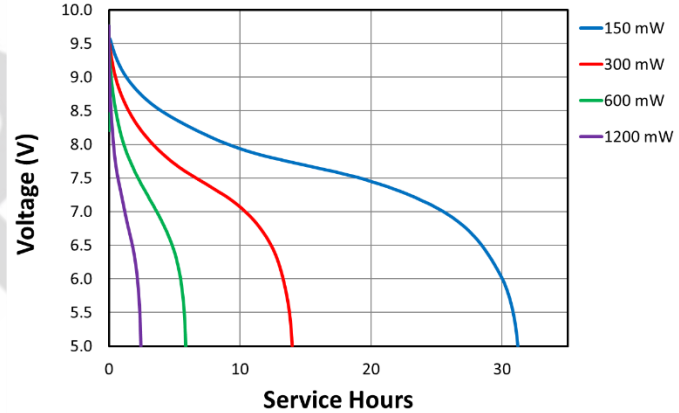
Constant Current



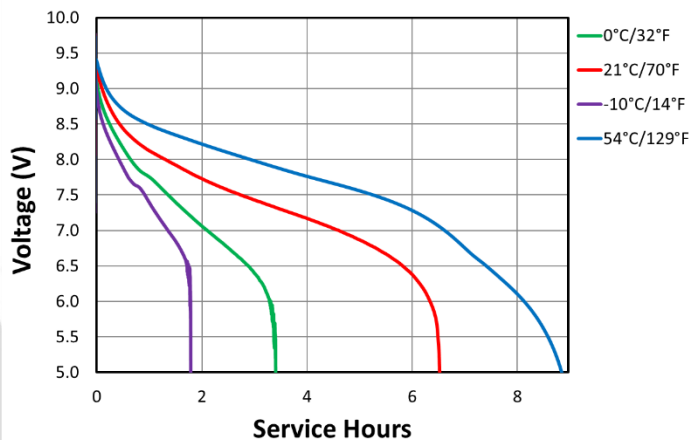
Constant Resistance



Constant Power



Constant Current - 75mA



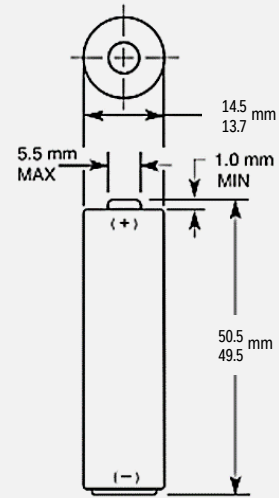
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

**ALKALINE-MANGANESE DIOXIDE BATTERY**



Size: AA (LR6) PX1500



Dimensions shown are IEC standards

**KEY FEATURES**

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

**TYPICAL APPLICATIONS**

- Medical Devices
- Security Cameras
- Soap Dispensers
- Electronic Door Locks
- Window Blinds/Shades

**ELECTRICAL CHARACTERISTICS**

- Nominal capacity (25 mA Cont., .8V cut-off) 3,112 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 68 mΩ

**PHYSICAL CHARACTERISTICS**

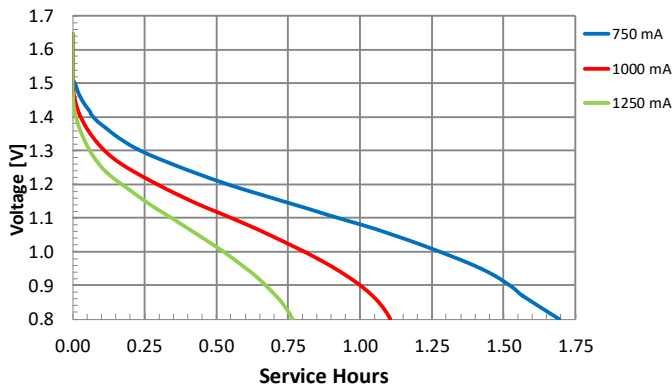
- Typical weight 24.3 g (0.9 oz)
- Typical volume 8.4 cm<sup>3</sup> (0.5 in<sup>3</sup>)
- Terminals Flat

**OPERATING & STORAGE CONDITIONS**

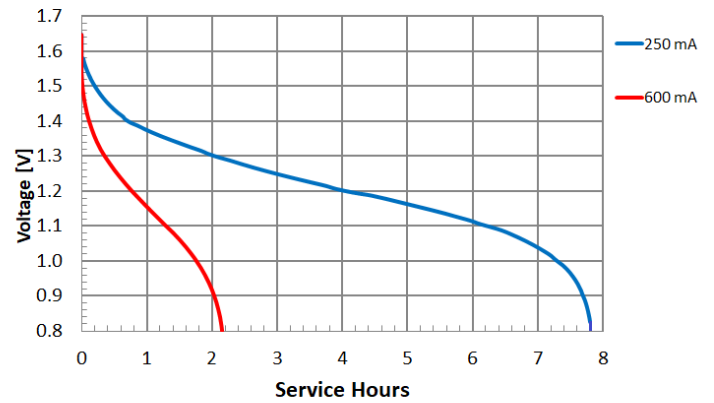
- Operating temperature range -20°C to 54°C  
(-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C  
(41°F to 86° F)

TYPICAL PERFORMANCE

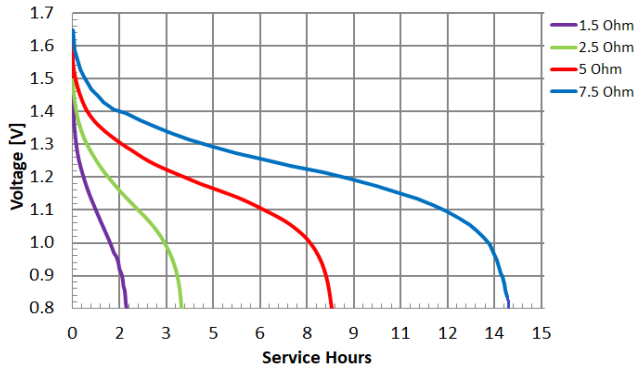
Constant Current



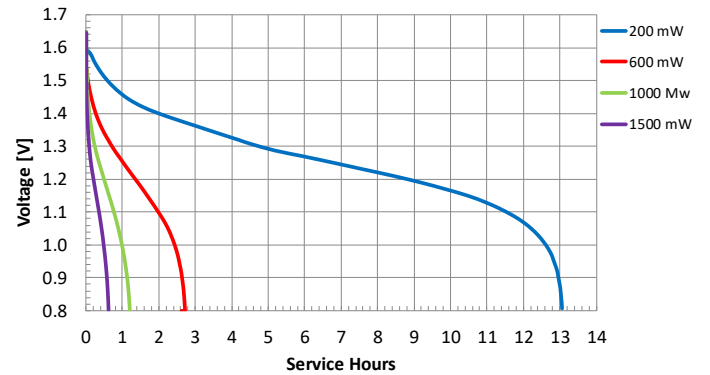
Constant Current



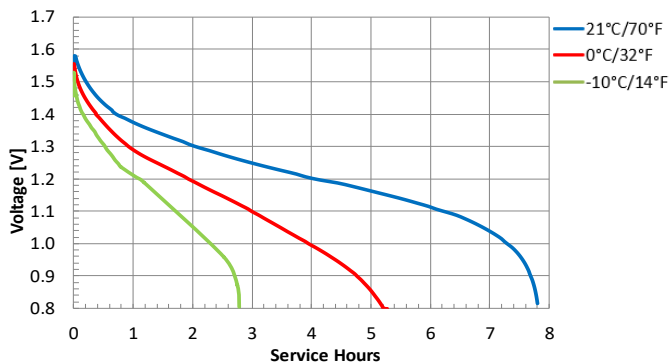
Constant Resistance



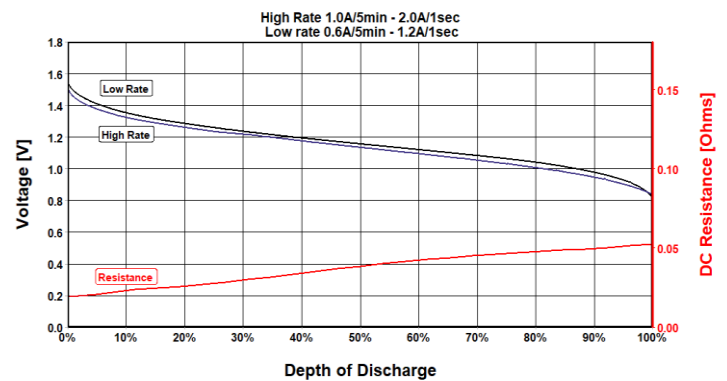
Constant Power



Constant Current - 250 mA



Typical Internal Resistance



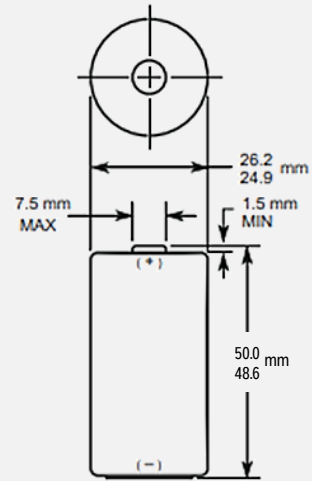
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: C (LR14) PX1400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Sanitizer Dispensers
- Air Fresheners
- Paper Towel Dispensers
- Flashlights
- Soap Dispensers

### ELECTRICAL CHARACTERISTICS

- |   |           |
|---|-----------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 8,240 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V     |
| ▪ AC Impedance @ 1kHz                         | 74 mΩ     |

### PHYSICAL CHARACTERISTICS

- |                  |   |
|------------------|---|
| ▪ Typical weight | 65.0 g (2.5 oz)                             |
| ▪ Typical volume | 26.9 cm <sup>3</sup> (1.6 in <sup>3</sup> ) |
| ▪ Terminals      | Flat  |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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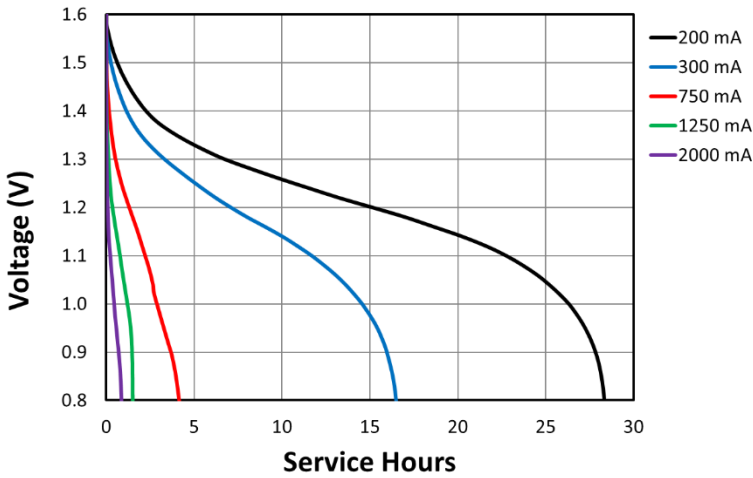
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

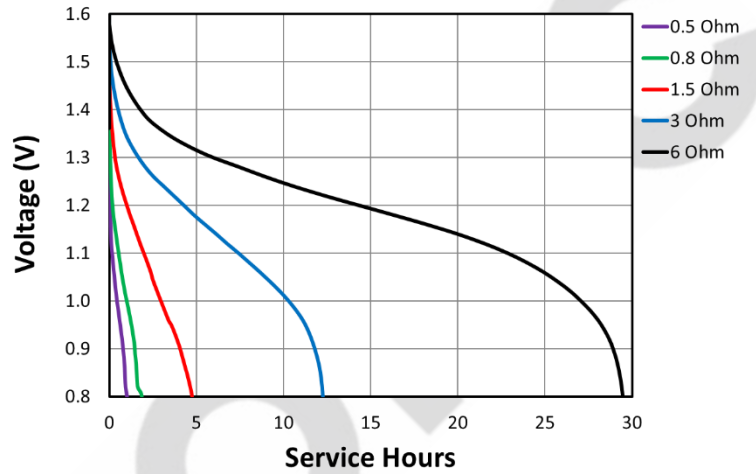


**TYPICAL PERFORMANCE**

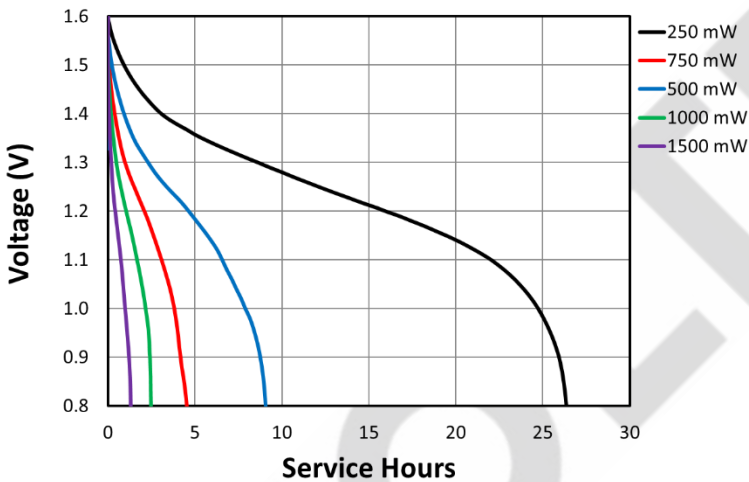
**Constant Current**



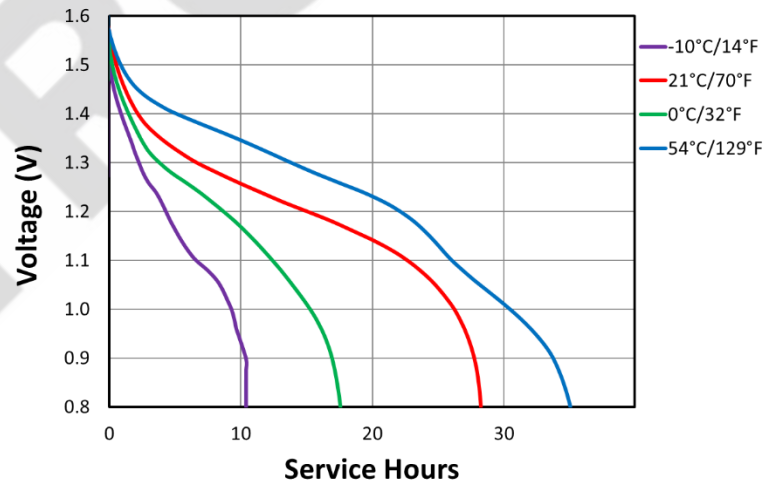
**Constant Resistance**



**Constant Power**



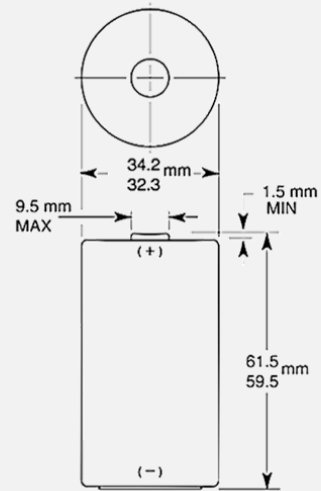
**Constant Current - 200 mA**



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: D (LR20) PX1300



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Sanitizer Dispensers
- Automatic Odorizers
- Paper Towel Dispensers
- Flashlights
- Soap Dispensers

### ELECTRICAL CHARACTERISTICS

- |   |            |
|---|------------|
| ▪ Nominal capacity (25 mA Cont., .8V cut-off) | 18,600 mAh |
| ▪ Typical Voltage (at + 20 °C)                | 1.5 V      |
| ▪ AC Impedance @ 1kHz                         | 56 mΩ      |

### PHYSICAL CHARACTERISTICS

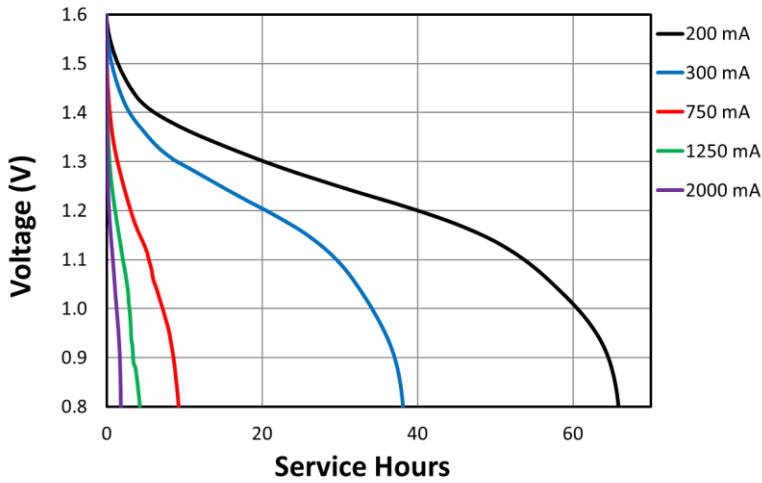
- |                  |   |
|------------------|---|
| ▪ Typical weight | 140.0 g (5 oz)                              |
| ▪ Typical volume | 56.4 cm <sup>3</sup> (3.4 in <sup>3</sup> ) |
| ▪ Terminals      | Flat  |

### OPERATING & STORAGE CONDITIONS

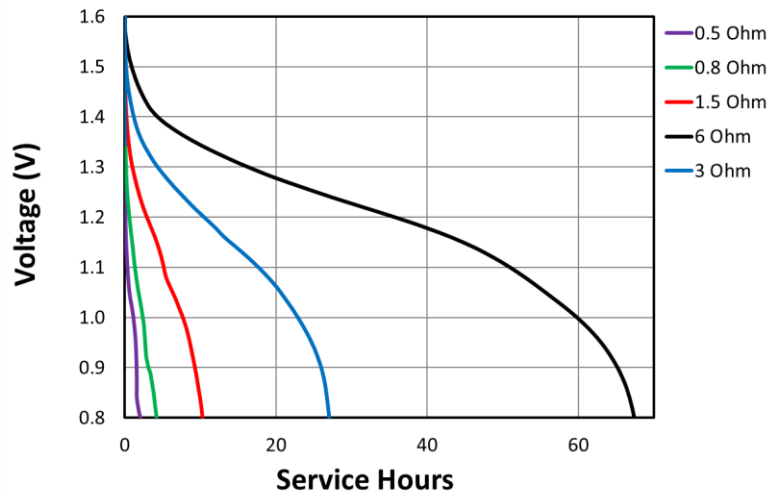
- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

**TYPICAL PERFORMANCE**

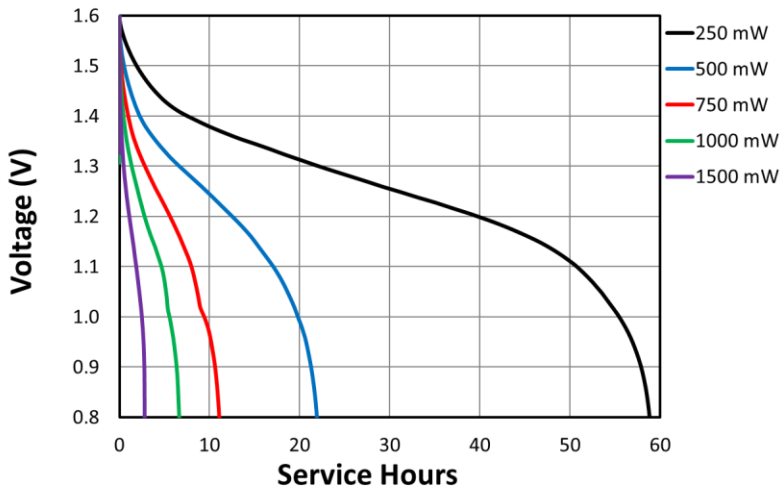
**Constant Current**



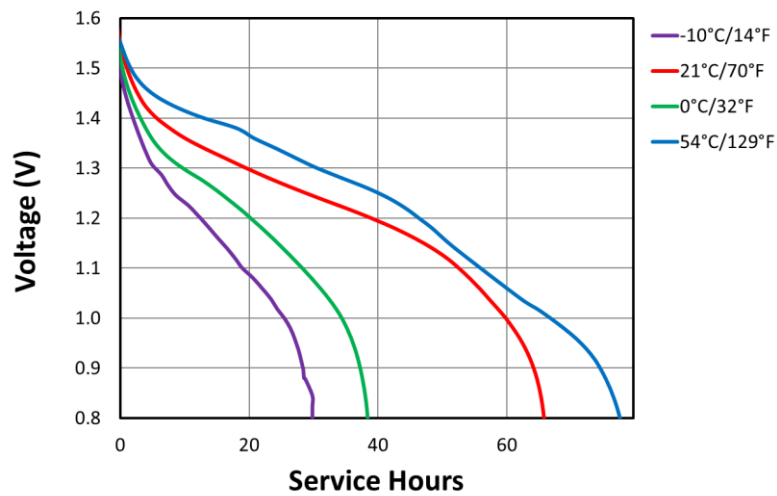
**Constant Resistance**



**Constant Power**



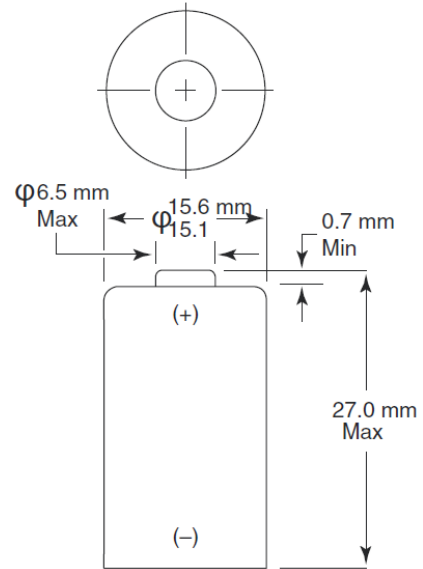
**Constant Current - 200 mA**



## LITHIUM/MANGANESE DIOXIDE BATTERY



Size: CR2



### 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, cameras)
- Smoke Detectors
- Wireless Sensors
- Remote Control
- High Intensity Flashlights
- Laser Sights

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### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (100 Ohm Cont, 2 V cut-off)	920 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	20 mA
▪ Nominal Energy	2.55 Wh
▪ AC Impedance @ 1kHz	500 mOhm

### PHYSICAL CHARACTERISTICS

▪ Typical weight	11.0g (0.39 oz.)
▪ Li metal content	approx. 0.30 g

### OPERATING & STORAGE CONDITIONS

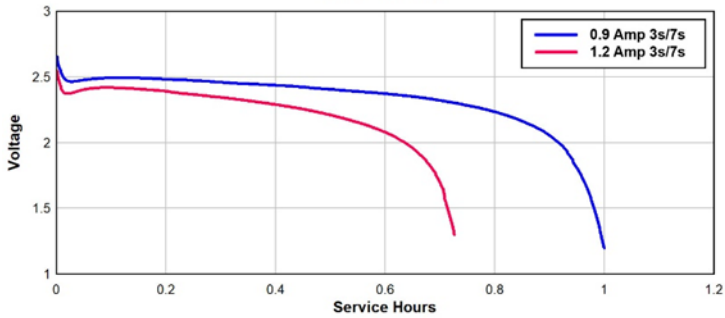
▪ Operating temperature range	-20°C to 75°C (-4°F to 167°F)
▪ Recommended Storage	Storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated
	5°C to 30°C (41°F to 86° F)

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.

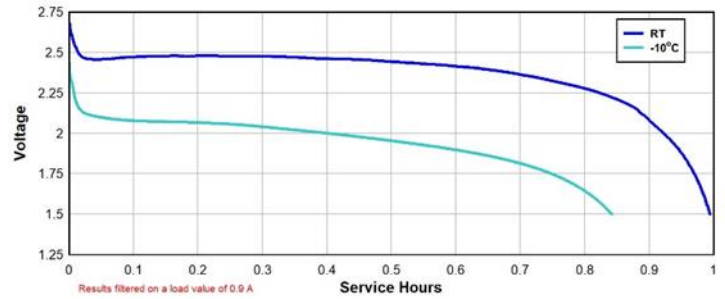
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

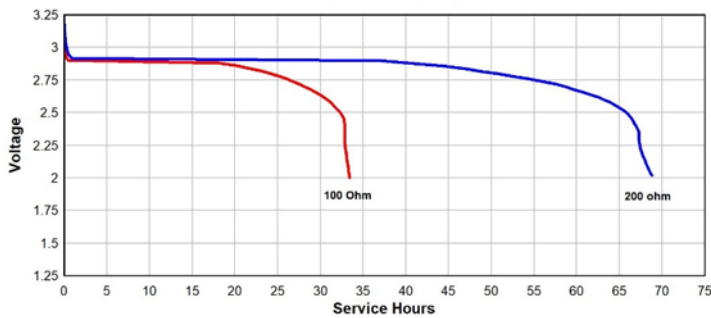
**Pulse Discharge**



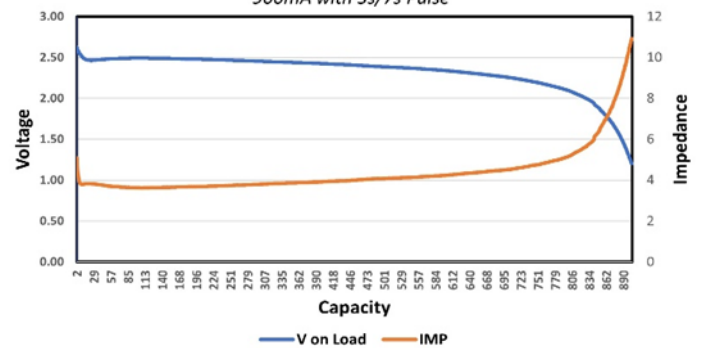
**Temperature Discharge**  
900mA 3s/27s to 1.5V



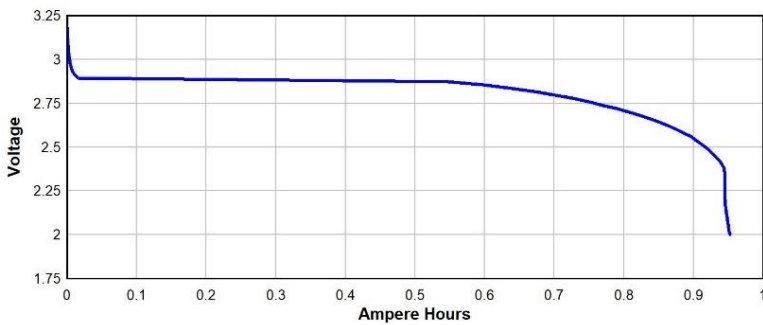
**Continuous Discharge**



**CR2 Internal DC Impedance**  
900mA with 3s/7s Pulse



**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**

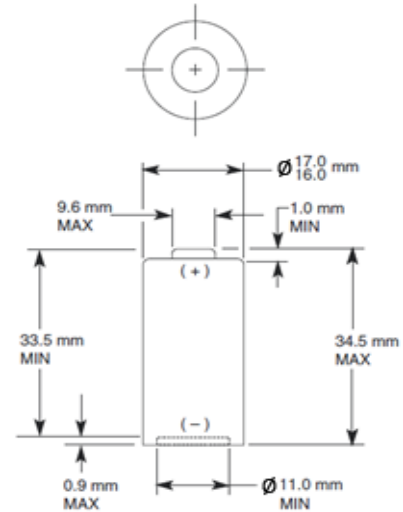
- Fire, explosion and burn hazard
- Do not recharge, short circuit, crush, disassemble heat above 100°C (212°F), incinerate or expose contents to water

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.



## LITHIUM-MANGANESE DIOXIDE BATTERY



Size: CR123A

Dimensions shown are IEC standards

### KEY FEATURES

- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- 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

### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (100 Ω Cont., 2V cut-off)	1550 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	4.65 Wh
▪ AC Impedance @ 1kHz	250 mΩ

### PHYSICAL CHARACTERISTICS

▪ Typical weight	17.0 g (0.60 oz.)
▪ Li metal content	approx. 0.56g

### OPERATING & STORAGE CONDITIONS

▪ Operating temperature range	-20°C to 75°C (-4°F to 167°F)
▪ Recommended Storage (storage area should be clean, cool, 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.

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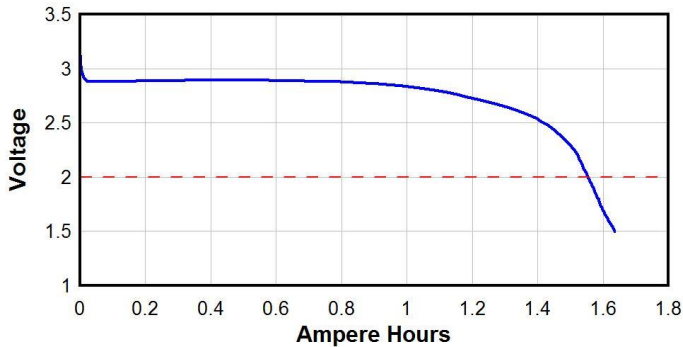
Phone: 1-800-544-5454 (Toll-free)

[www.procell.com](http://www.procell.com)

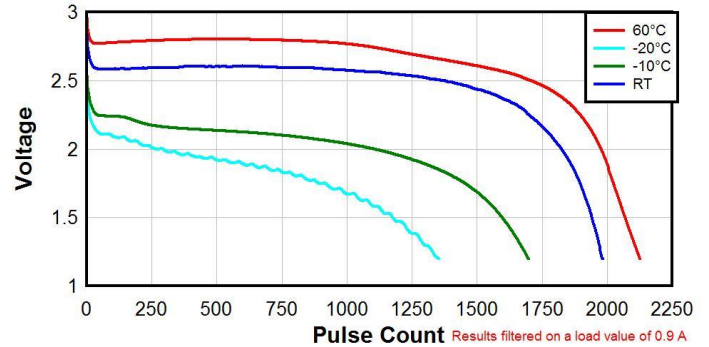


**TYPICAL PERFORMANCE**

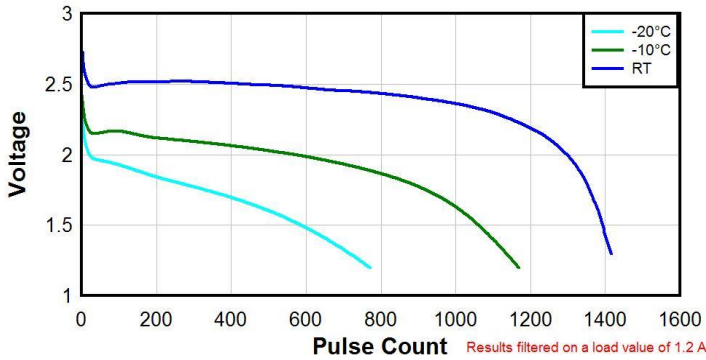
**Capacity Testing**  
100 Ohm Continuous to 2.0V



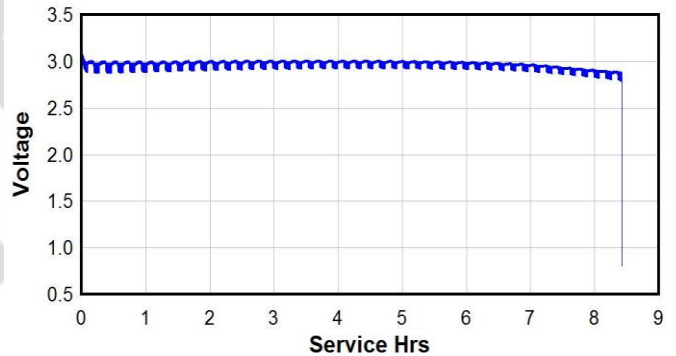
**0.9 Amp, 3 sec ON / 27 sec OFF**  
@ Various Temperatures



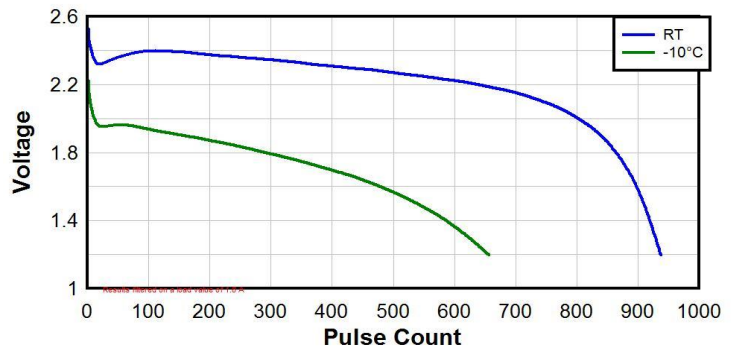
**1.2 Amp 3 sec ON / 7 sec OFF**  
@ Various Temperatures



**Pulse Testing**  
50 mA Intermittent to 1.8V



**1.8 Amp 3 sec ON / 7 sec OFF**  
@ Various Temperatures



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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.

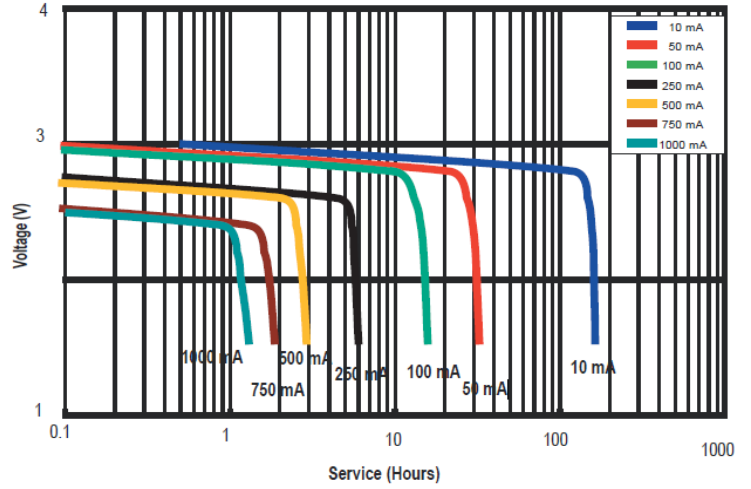
## TYPICAL APPLICATIONS

- Cameras
- Security devices (sensors, monitoring cameras)
- Smoke Detectors
- Wireless Sensors
- Door locks
- High Intensity Flashlights
- Laser Sights

## 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

Continuous Discharge  
RT to 1.55 Volts



## 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

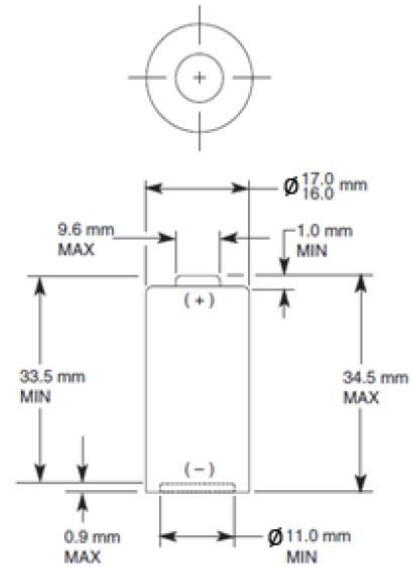
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## LITHIUM/MANGANESE DIOXIDE BATTERY



Size: CR123A



Dimensions shown are IEC/ANSI standards

### 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

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### 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

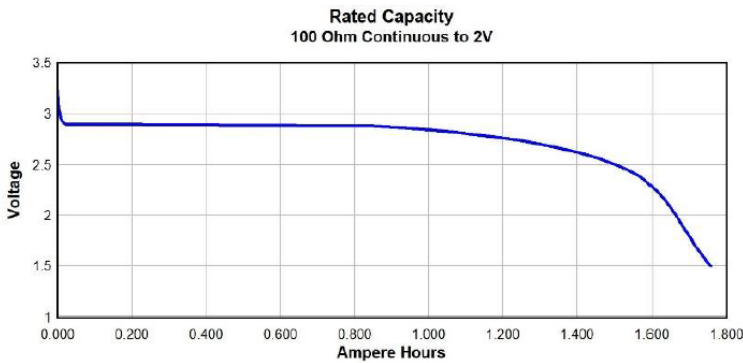
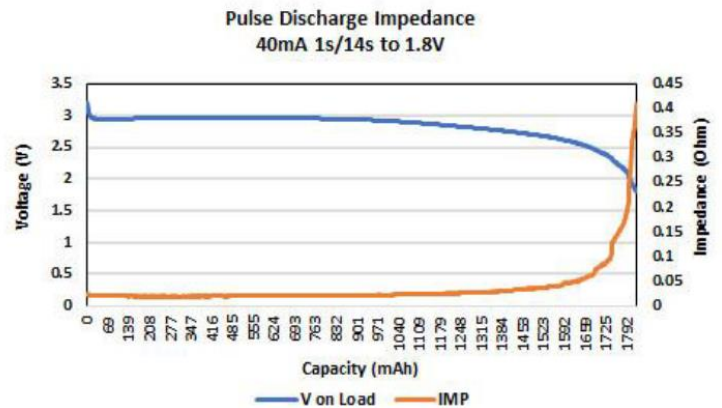
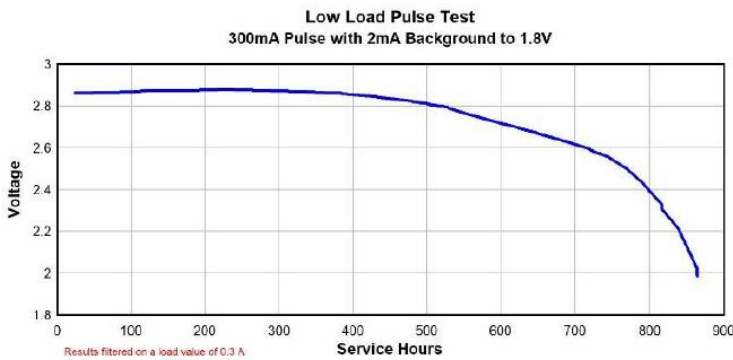
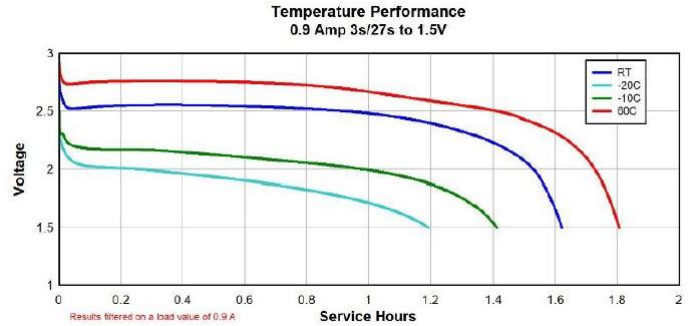
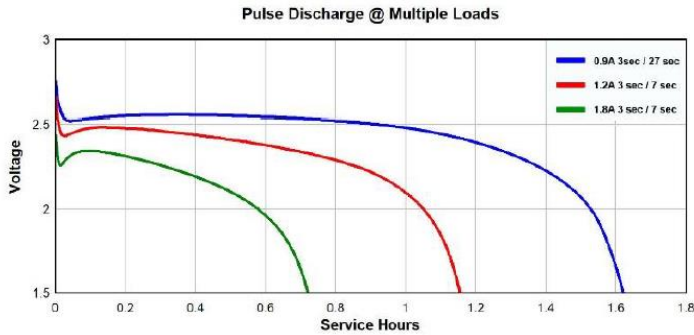
### OPERATING & STORAGE CONDITIONS

▪ 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**



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

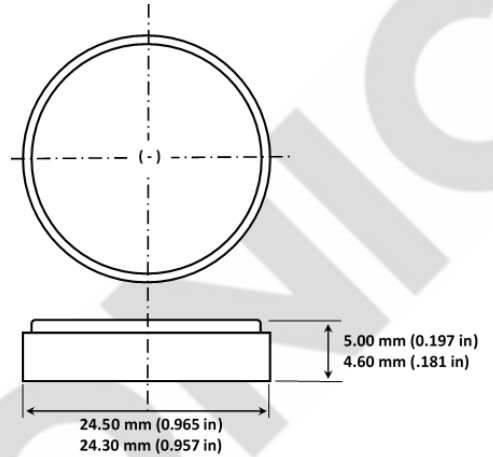
Delivered capacity is dependent on the applied load, operating temperature and cut-off voltage. Please refer to the charts and discharge data shown for examples of the energy/service life that the battery will provide for various load conditions.

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

## LITHIUM/MANGANESE DIOXIDE BATTERY



Size: PX2450



Dimensions shown are IEC standards

### KEY FEATURES

- High voltage response, stable during most of the lifetime of the application
- Reliable Performance
- Child-Safe Markings
- Wide operating temperature range (-20°C/ + 60°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
  - REACH compliance
  - Quality: ISO 9001, Duracell World Class Continuous Program

### TYPICAL APPLICATIONS

- Security Devices
- Watches & Calculators
- Fitness Devices & Wireless Sensors
- Key-Fobs & Trackers
- Remote Controls & Garage Door Openers
- Measurement Devices

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

### ELECTRICAL CHARACTERISTICS

▪ Nominal capacity (7.5k Ohm Cont., 2.0 V cut-off)	600 mAh
▪ Minimum Open Circuit Voltage (at +20°C)	3.0 V
▪ Standard Continuous Discharge Current	0.4 mA
▪ Maximum Continuous Discharge Current	7 mA
▪ Maximum Pulse Discharge Current at 1 sec	25 mA
▪ Nominal Energy	1.8 Wh

### PHYSICAL CHARACTERISTICS

▪ Typical weight	6.3 g (0.22 oz.)
▪ Li metal content	approx. 0.18 g

### OPERATING & STORAGE CONDITIONS

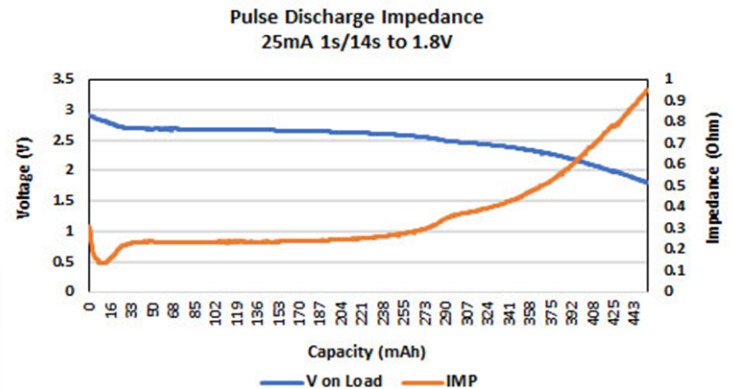
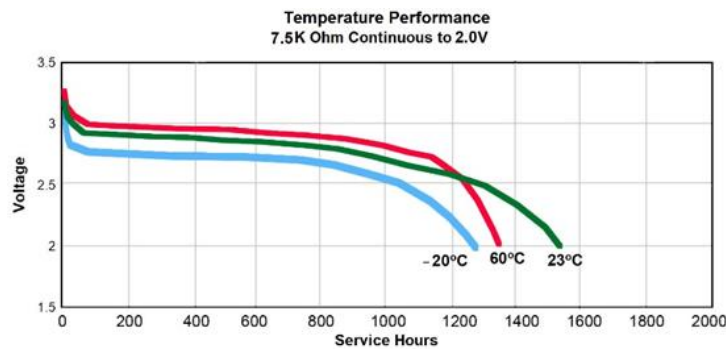
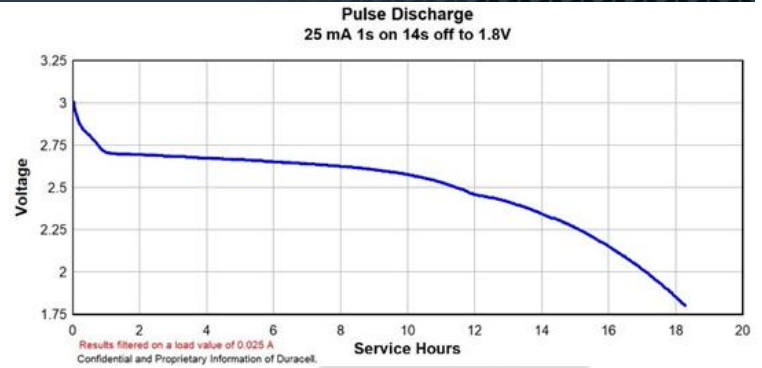
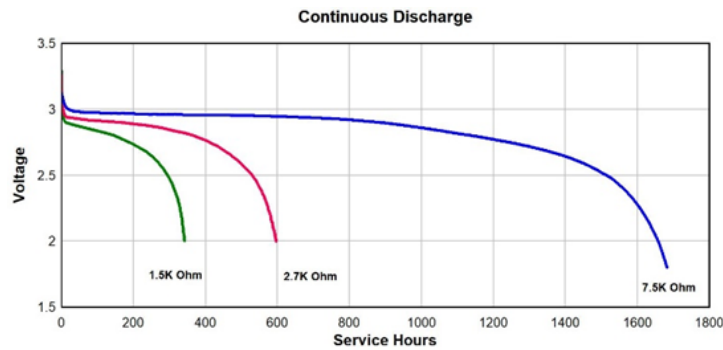
▪ Operating temperature range	-20°C to 60°C (-4°F to 140°F)
▪ Recommended Storage	Storage area should be clean, cool (preferably not exceeding +30°C), dry and ventilated
	5°C to 30°C (41°F to 86° F)

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



### 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

### Warning! Keep batteries away from children!

- Always keep your batteries away from children to prevent Swallowing.
- If ingestion does occur, however, be aware that initial symptoms may be similar to other childhood illnesses such as coughing, drooling and discomfort.
- Battery ingestion hotline (1-800-498-8666).

### 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

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TYPICAL APP

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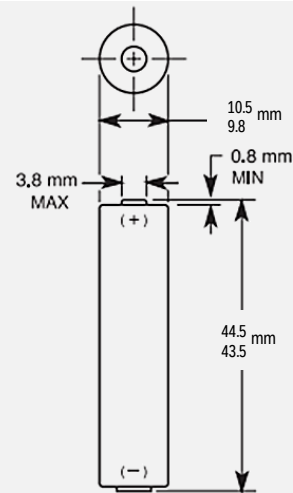
[www.procell.com](http://www.procell.com)



## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PC2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security keypads
- Wireless mouse

### ELECTRICAL CHARACTERISTICS

- Nominal capacity (43 Ω Cont., .8V cut-off) 1,262 mAh
- Typical Voltage (at + 20 °C) 1.5 V
- AC Impedance @ 1kHz 125 mΩ

### PHYSICAL CHARACTERISTICS

- Typical weight 11.6 g (0.4 oz)
- Typical volume 3.5 cm<sup>3</sup> (0.2 in<sup>3</sup>)
- Terminals Flat

### OPERATING & STORAGE CONDITIONS

- Operating temperature range -20°C to 54°C (-4°F to 130°F)
- Recommended Storage (storage area should be clean, cool, dry and ventilated) 5°C to 30°C (41°F to 86°F)

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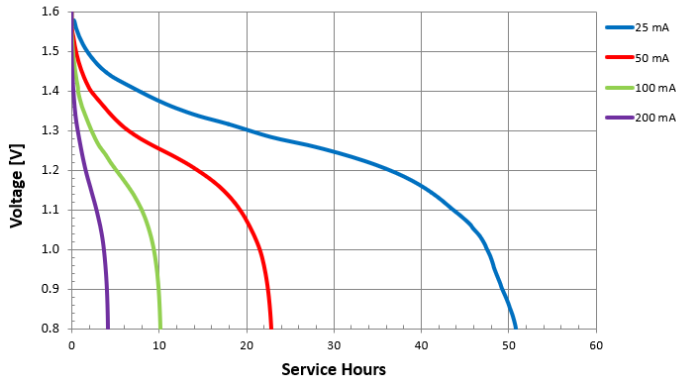
[www.procell.com](http://www.procell.com)

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.

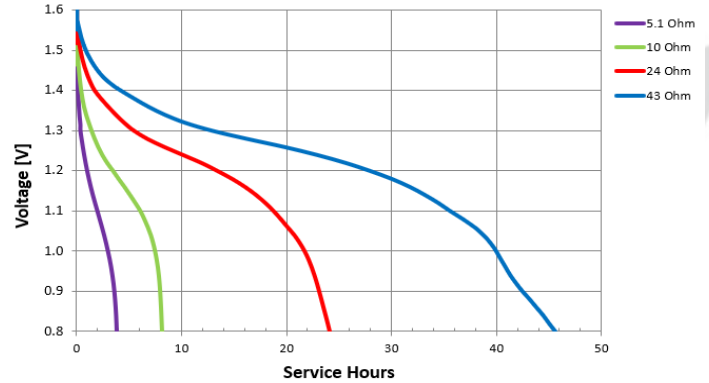
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

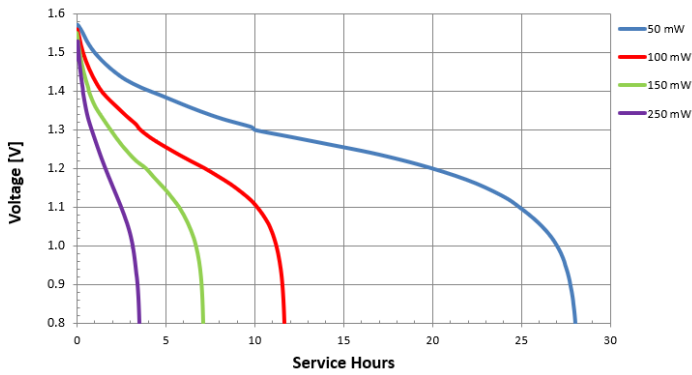
Constant Current



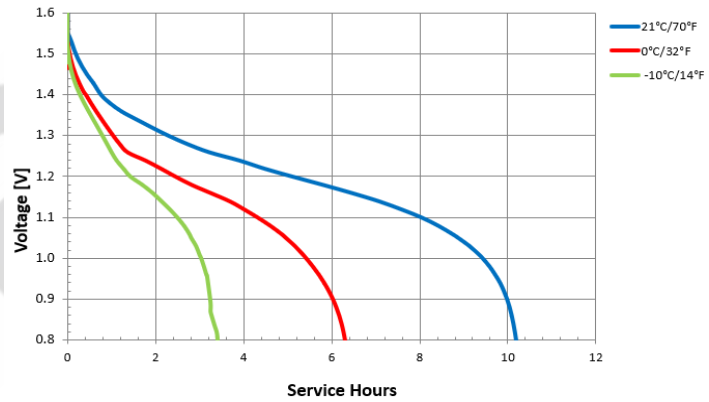
Constant Resistance



Constant Power

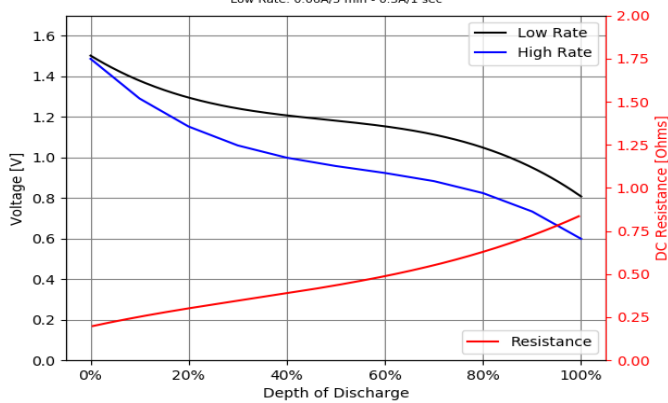


Constant Temperature - 100 mA



Typical Internal Resistance

High Rate: 0.6A/5 min - 1.2A/1sec  
Low Rate: 0.06A/5 min - 0.3A/1 sec



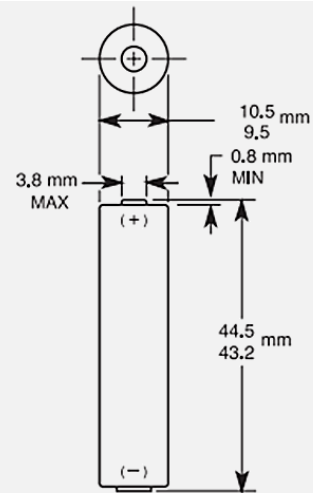
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Size: AAA (LR03) PC2400



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  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Remote Controls
- Sensors
- Security keypads
- Wireless mouse

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (43 Ω Cont., .8V cut-off) | 1,262 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 125 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 11.6 g (0.4 oz)                            |
| ▪ Typical volume | 3.5 cm <sup>3</sup> (0.2 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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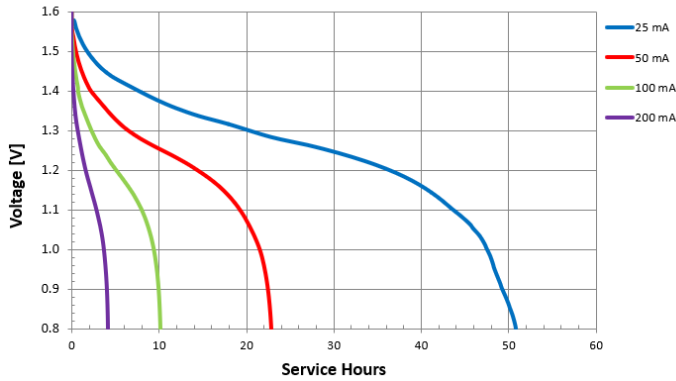
[www.procell.com](http://www.procell.com)

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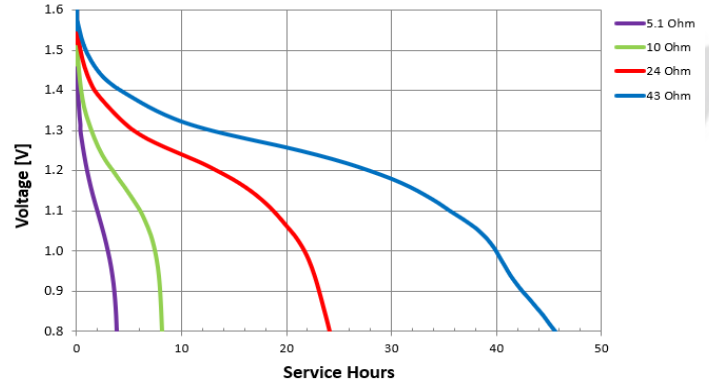
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

**TYPICAL PERFORMANCE**

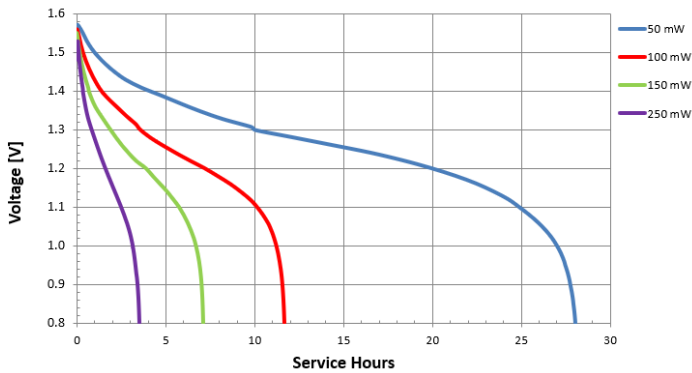
Constant Current



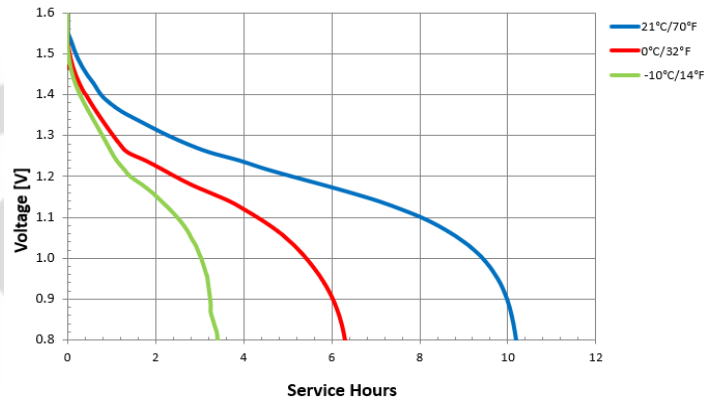
Constant Resistance



Constant Power

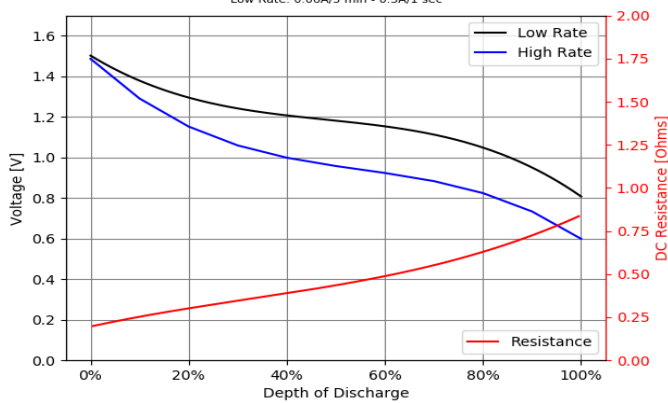


Constant Temperature - 100 mA



Typical Internal Resistance

High Rate: 0.6A/5 min - 1.2A/1sec  
Low Rate: 0.06A/5 min - 0.3A/1 sec



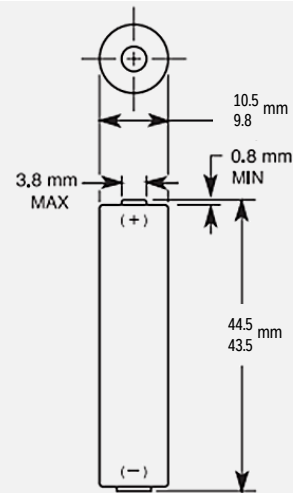
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## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PX2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Blood pressure monitors
- Soap dispensers
- Flashlights
- Pulse oximeters

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (5 mA Cont., .8V cut-off) | 1,461 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 129 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 11.6 g (0.4 oz)                            |
| ▪ Typical volume | 3.5 cm <sup>3</sup> (0.2 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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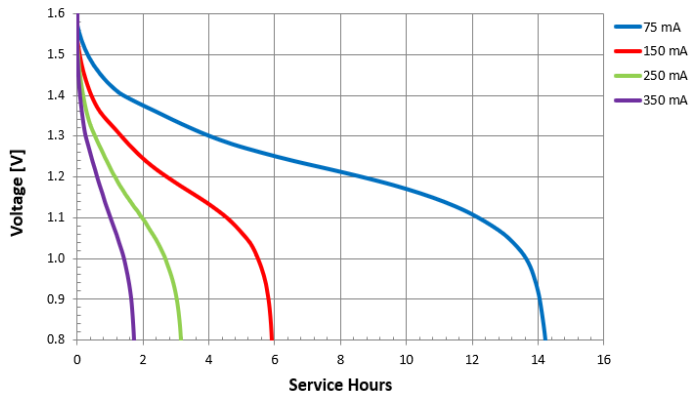
[www.procell.com](http://www.procell.com)

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.

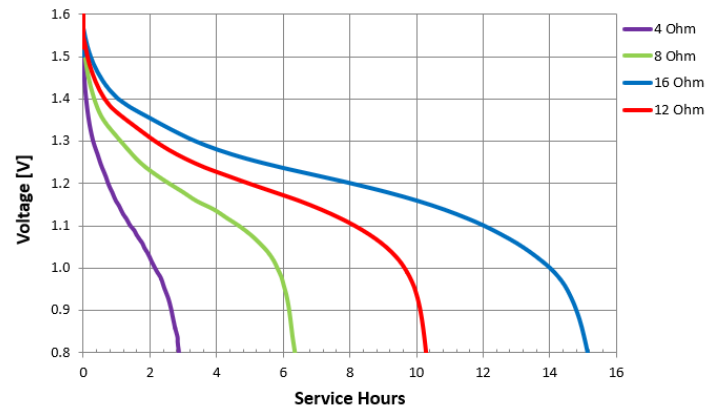
This data is subject to change. Performance information is typical. Contact Duracell for the latest information.

TYPICAL PERFORMANCE

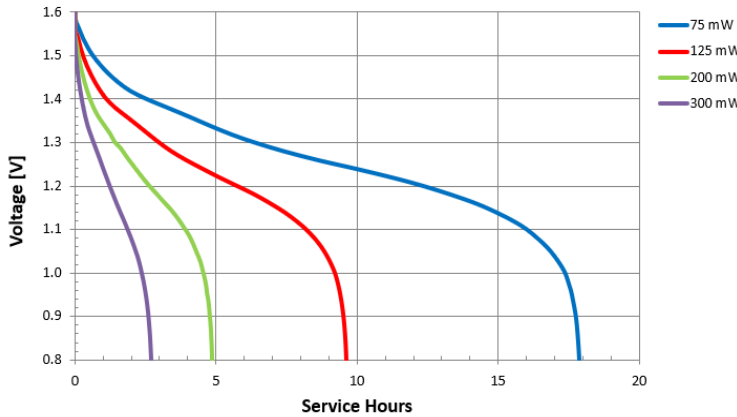
Constant Current



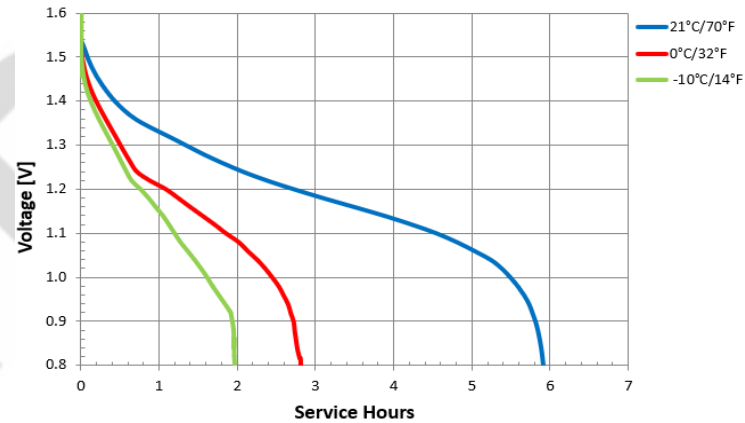
Constant Resistance



Constant Power

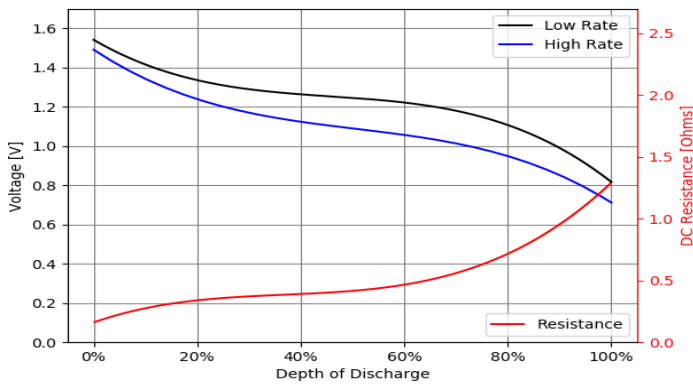


Constant Temperature - 150 mA



Typical Internal Resistance

High Rate: 0.3A/5 min - 0.6A/1 sec to 0.8V  
Low Rate: 0.03A/5 min - 0.15A/1 sec to 0.8V



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.

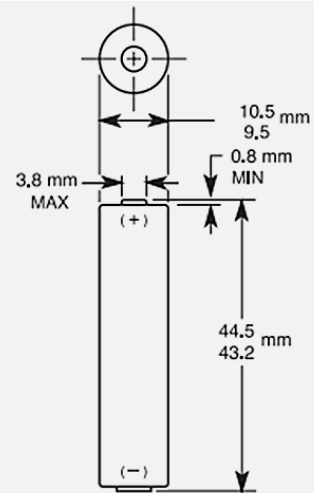
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## ALKALINE-MANGANESE DIOXIDE BATTERY



Size: AAA (LR03) PX2400



Dimensions shown are IEC standards

### KEY FEATURES

- Reliable Performance
- Excellent resistance to corrosion
- Designed to meet all major quality, safety and environmental standards:
  - Safety: IEC 60086-5
  - ANSI C 18.1M, Part-2
  - EU Battery Directive
  - Quality: ISO 14001 and 9001, Duracell World Class Continuous Improvement Program

### TYPICAL APPLICATIONS

- Blood pressure monitors
- Soap dispensers
- Flashlights
- Pulse oximeters

### ELECTRICAL CHARACTERISTICS

- |  |           |
|--|-----------|
| ▪ Nominal capacity (5 mA Cont., .8V cut-off) | 1,461 mAh |
| ▪ Typical Voltage (at + 20 °C)               | 1.5 V     |
| ▪ AC Impedance @ 1kHz                        | 129 mΩ    |

### PHYSICAL CHARACTERISTICS

- |                  |  |
|------------------|--|
| ▪ Typical weight | 11.6 g (0.4 oz)                            |
| ▪ Typical volume | 3.5 cm <sup>3</sup> (0.2 in <sup>3</sup> ) |
| ▪ Terminals      | Flat                                       |

### OPERATING & STORAGE CONDITIONS

- |  |                                  |
|--|----------------------------------|
| ▪ Operating temperature range  | -20°C to 54°C<br>(-4°F to 130°F) |
| ▪ Recommended Storage (storage area should be clean, cool, dry and ventilated) | 5°C to 30°C<br>(41°F to 86°F)    |

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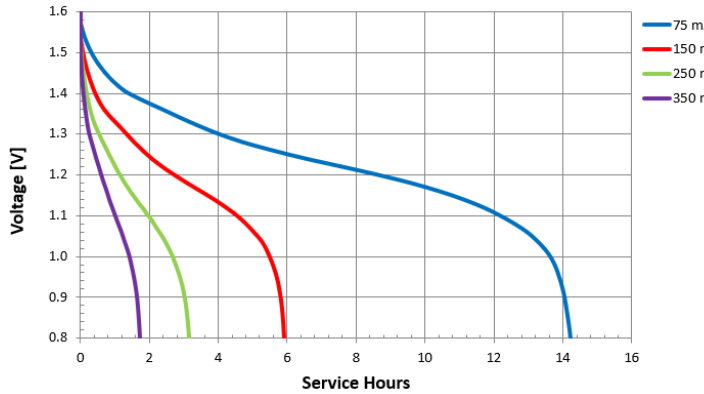
[www.procell.com](http://www.procell.com)

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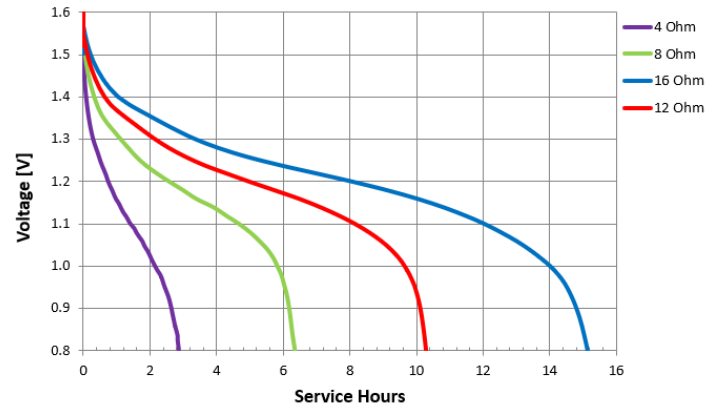
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TYPICAL PERFORMANCE

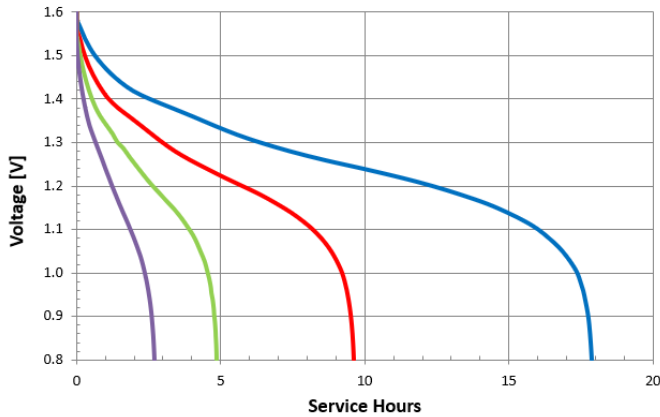
Constant Current



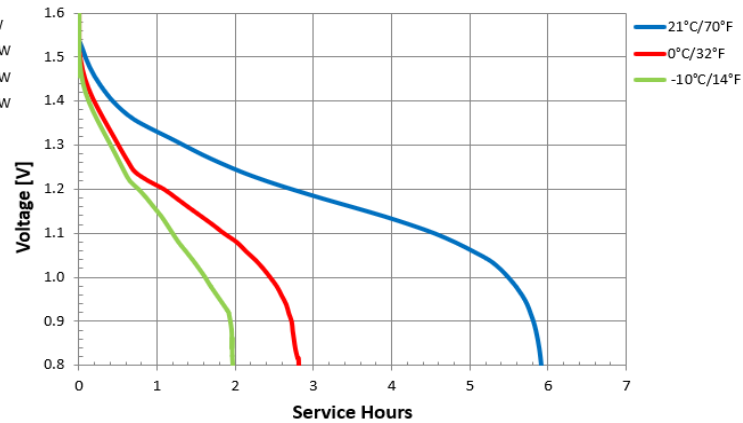
Constant Resistance



Constant Power



Constant Temperature - 150 mA



Typical Internal Resistance

High Rate: 0.3A/5 min - 0.6A/1 sec to 0.8V  
Low Rate: 0.03A/5 min - 0.15A/1 sec to 0.8V

