

## 1/2AA Size High Power Primary Li Metal Oxide Cell - Military Grade

*Notice: The application load profile has to be approved by Tadiran.*



### Physical Characteristics

Length	21 mm. max
Diameter	15.1 mm. max
Weight	9 gr. max



### Electrical Characteristics (for batteries stored at RT for 1 year or less)

Open Circuit Voltage	3.95 to 4.07 V
Closed Circuit Voltage at 0.1 sec on 0.25A load	3.78V minimum

#### Discharge

Capacity under 12 mA at RT to 2.8 V	120 mAh
Capacity under 125 mA at RT to 2.8 V	105 mAh

#### Maximum Discharge Current

Continuous to 2.5 V	1 A
1 second pulse to 2.6 V	3.5 A

Discharge temperature range

-40 to +85 °C

Storage temperature range

-55 to +85 °C

Cell impedance at RT

Less than 250 mΩ at 1 kHz

### Accumulated Capacity Loss\*

Storage Time (years)	Storage Temperature			
	22 °C	55 °C	72 °C	85 °C
1	3 %	6 %	10 %	N/A
5	7 %	22 %	40 %	N/A
10	11 %	32 %	N/A	N/A
15	15 %	42 %	N/A	N/A
20	18 %	N/A	N/A	N/A

\* When tested at RT at 12 mA to 2.8 V

### Environmental

### Compliance with military specifications

Vibration	MIL-STD 810G	Method 514.6
Mechanical shock	MIL-STD 810G	Method 516.6
Temperature shock	MIL-STD 810G	Method 503.5
Salt fog	MIL-STD 810G	Method 509.5
Altitude	MIL-STD 810G	Method 500.5
Acceleration*	50,000 g <sub>n</sub> (theoretical), 20,000 g <sub>n</sub> (tested) (dependent on duration)	
Spinning*	30,000 rpm (dependent on duration)	

\* These specifications are subject to testing and confirmation based on application requirements.

### Safety Considerations

The cells successfully passed the following tests:

Short circuit at RT & +57 °C	UN, IEC
Heating at 130 °C	UL, IEC
Forced Discharge	UL, UN, IEC
Crush	UL, IEC
Vibration	UN, IEC
Mechanical shock	UN, IEC

Standards referenced: UN Manual of Tests and Criteria Section 38.3, UL 1642, IEC 60086-4

Tested according to:

#### WARNING:

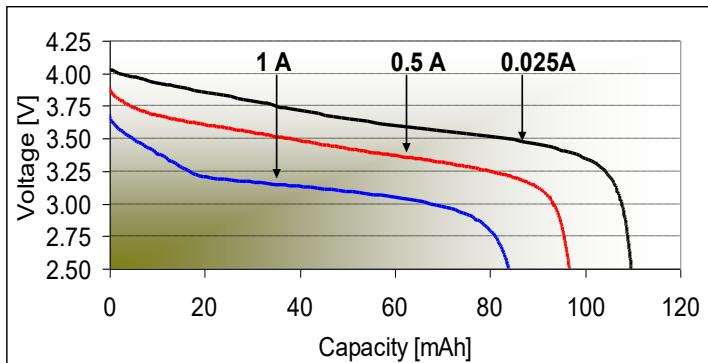
Fire, Explosion, And Severe Burn Hazard.  
Do Not Recharge, Crush, Disassemble,  
Heat Above 100°C, Short Circuit,  
Incinerate or Expose Contents to water.

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

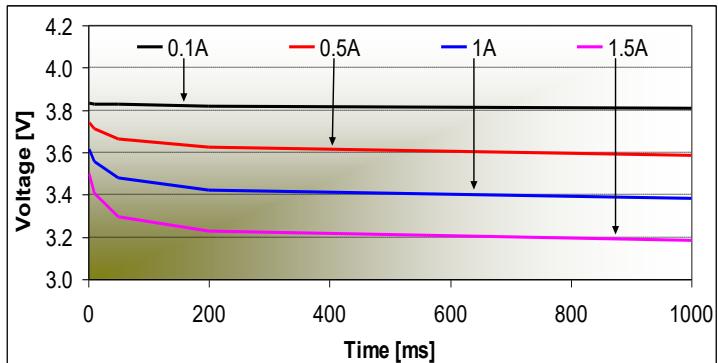
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## Performance Data

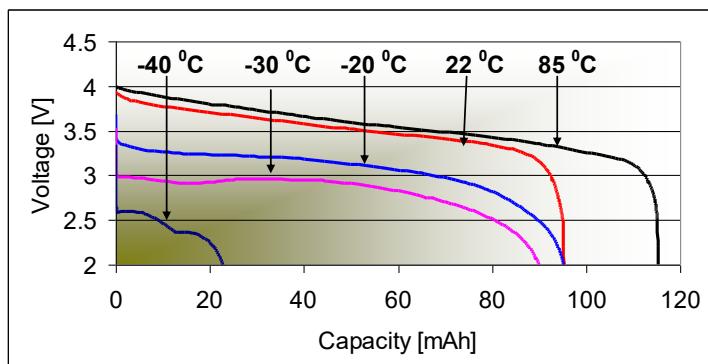
Discharge curves at Room Temperature



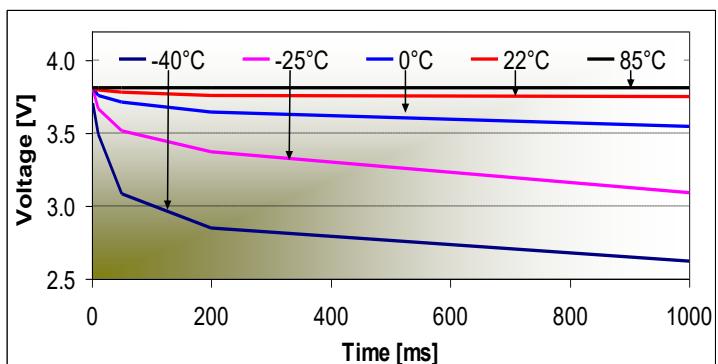
Pulse capability at Room Temperature



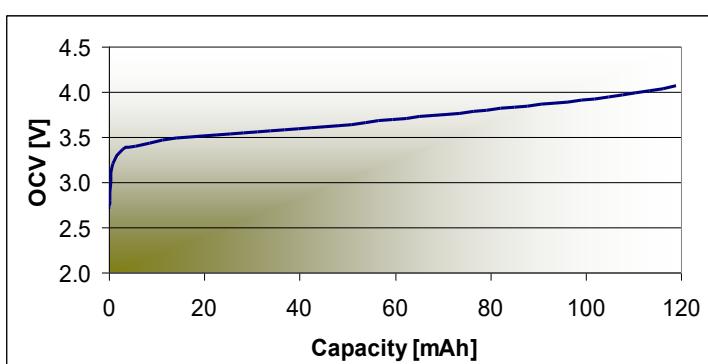
Discharge curves at 0.25 A



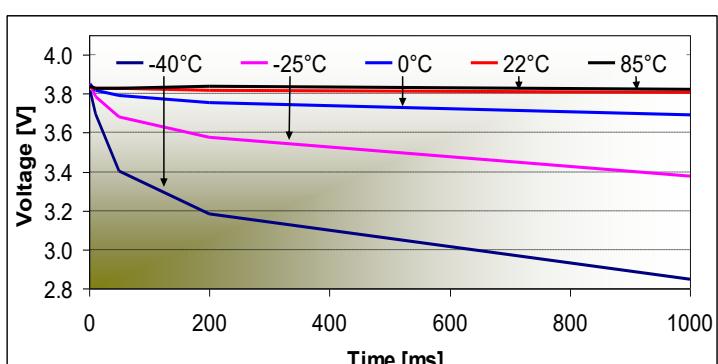
Pulse capability at 0.25 A



Capacity vs. OCV



Pulse capability at 0.125 A



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