

# ULTRALIFE<sup>®</sup> Batteries

We. Are. Power.<sup>™</sup>

## 3 Volt, C-Size Cell Technical Datasheet

### The Ultralife Advantage

Better technology. Our lithium-based (lithium-manganese dioxide, lithium ion and lithium polymer) technologies enable us to design leading-edge power solutions for the world's most demanding applications.



### FEATURES

- High energy density
- No voltage delay
- Wide operating temperature range
- Lightweight
- 10-year shelf life
- Long operating life

### APPLICATIONS

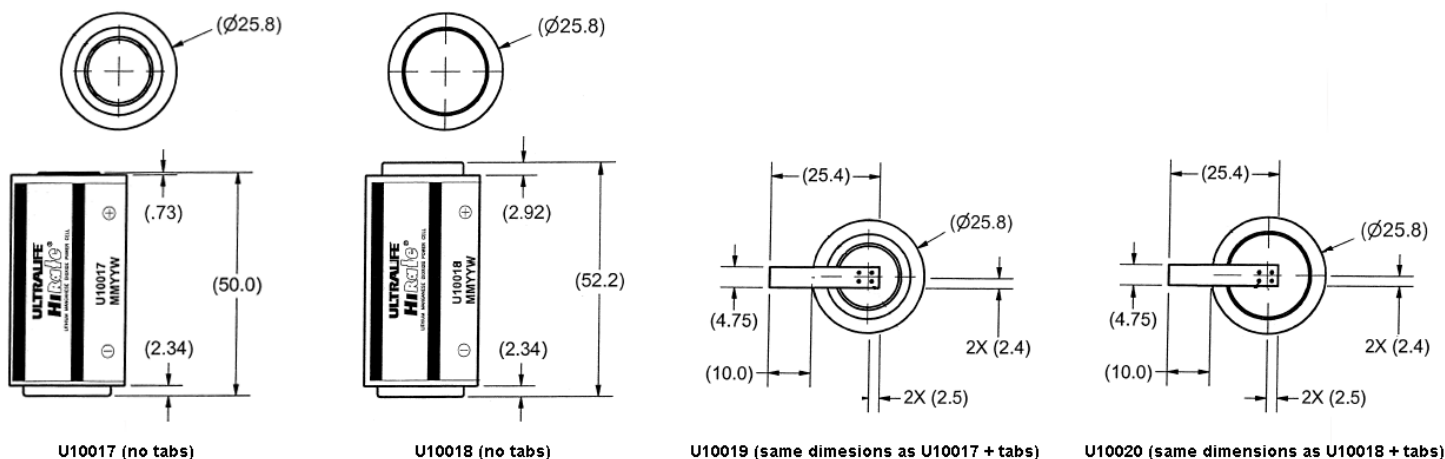
- Consumer Telematics
- Commercial Telematics
- Search & Rescue Devices
- Military Communications, Detectors & Imaging
- Medical Devices

### SPECIFICATIONS

<b>Part No</b>	U10017, U10018, U10019, U10020 (see note 2)
<b>Voltage Range</b>	1.5 to 3.3 V
<b>Average Voltage</b>	3.0 V
<b>Nominal Capacity</b>	4.8 Ah @ 150 mA to 2.0 V @ 23°C
<b>Max. Discharge</b>	2.0 A continuous
<b>Pulse Capability</b>	Up to 4.2 A Varies according to pulse characteristics, temperature, cell history and the application. Consult Ultralife.
<b>PTC (re-settable fuse)</b>	See note 3
<b>Weight</b>	61.0 grams
<b>Operating Temp</b>	-40°C to 72°C
<b>Storage Temp</b>	-40°C to 95°C
<b>Exterior/Housing</b>	Hermetic Ni-plated steel can. End caps, tabs and insulating sleeve.
<b>Terminals/Connector</b>	Flat Ni-plated +/- End Caps (U10017 and U10018) Flat Ni-plated +/- End Caps with Nickel Tabs (U10019 and U10020)
<b>Safety</b>	UL component recognized Material Safety Datasheet – MSDS065
<b>Transportation</b>	Excepted – U.S.; Class 9 – Int'l. See note 1.

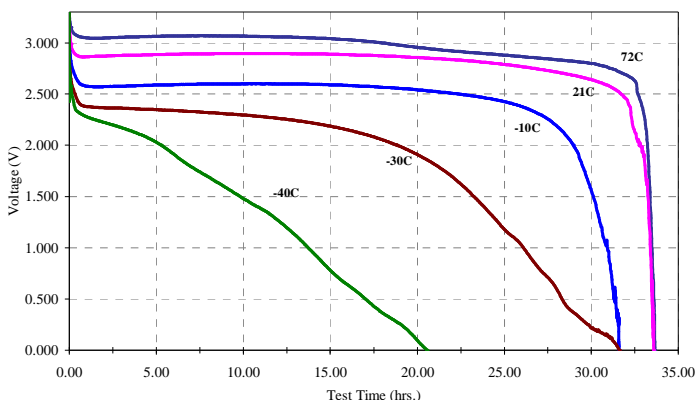
<b>Note 1</b>	For a complete description of transportation regulations and definitions of the transportation classifications "Excepted" and "Class 9," refer to the Ultralife web site at <a href="http://www.ultralifebatteries.com">www.ultralifebatteries.com</a> .
<b>Note 2</b>	U10017 and U10018, Flat Ni-plated +/- End Caps U10019 and U10020, Flat Ni-plated +/- End Caps with Nickel Tabs
<b>Note 3</b>	U10018 and U10020 have PTC (re-settable fuse) U10017 and U10019 do NOT

**DIMENSIONS**

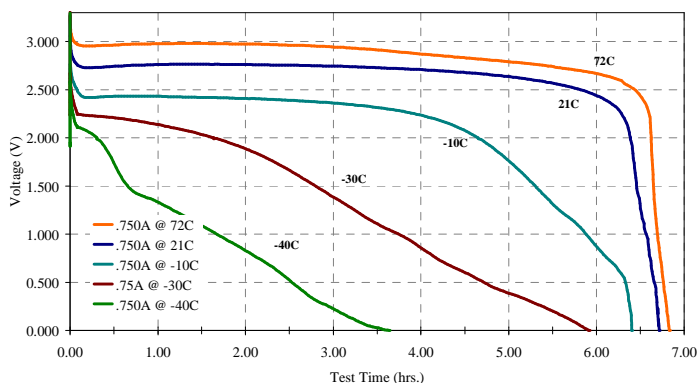


**PERFORMANCE GRAPHS**

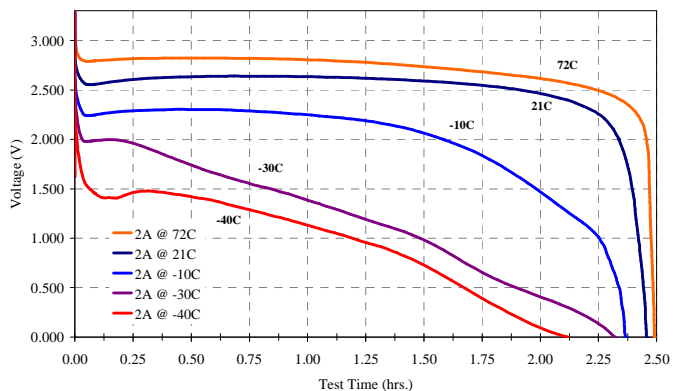
"C" 0.150 Amp Discharge at Various Temperatures  
(Single Cell Discharges, Better low temperature performance is achieved in multi-cell packs)



"C" 0.750 Amp Discharge at Various Temperatures  
(Single Cell Discharges, Better low temperature performance is achieved in multi-cell packs)



"C" 2.0 Amp Discharge at Various Temperatures  
(Single Cell Discharges, Better low temperature performance is achieved in multi-cell packs)



Start Up Comparison of Li/MnO2 vs Li/So2  
"C" Size Cells at 0.75Amps / -30C

