

# UHR-ER18505-X: A size spiral cell (Generation X)

## Technical Datasheet



| Technical Specifications           |   |
|------------------------------------|---|
| Part No                            | UHR-ER18505-X   |
| Model No                           | ER18505M-X  |
| Cell Type                          | Primary, non-rechargeable   |
| Chemistry                          | Lithium Thionyl Chloride  |
| Voltage CCV                        | 2.0 to 3.7V (temperature and load dependent)  |
| Open Circuit Voltage               | 3.65V   |
| Nominal Capacity at 1mA            | 3.0Ah to 2.0V @ +23°C   |
| Capacity Range                     | 1.8-3.0Ah 0–60°C (temperature and load dependent)   |
| Max. Constant Discharge Current    | 400mA   |
| Pulse Capability <sup>1</sup>      | Up to 800mA, 1.0 second pulse   |
| Energy Rating                      | 10.95Wh   |
| Gravimetric Energy Density         | 313Wh/kg  |
| Weight                             | 35g   |
| Operating Temperature <sup>2</sup> | -55°C to +85°C <sup>3</sup>   |
| Storage Temperature                | +30°C max., store at ≤ 20°C to minimize passivation and self-discharge  |
| Exterior/Housing                   | Stainless steel   |
| Terminals/Connector                | Radial tabs, radial pins, axial leads, flying leads. Stainless steel end caps with other terminals.   |
| Safety                             | UL 1642<br>UN 38.3 (transportation)<br>(technician replaceable)   |
| Transportation                     | Excepted Dangerous Goods<br>UN 3091: Packed with or contained in equipment<br>Air Shipment: Packing Instruction 969 and 970, Section I<br>Class 9 Dangerous Goods<br>UN 3090: Bulk shipment<br>Air shipment: Packing Instruction 968, Section IA  |
| Quality Assurance                  | Ultralife manufacturing facilities are ISO 9001:2015 and ISO 13485:2016 registered. Its products are listed under the Component Recognition Program of Underwriters Laboratories (UL) and have passed UN transportation testing, which is required for international transportation of all lithium batteries. |

### Features

- High and stable operating voltage
- Superior drain capability
- Low self-discharge rate (less than 2% after 1 year of storage at +23°C)
- Hermetic glass-to-metal seal
- Non-flammable electrolyte
- Finished product with PTC for safety
- Laser welded can seal

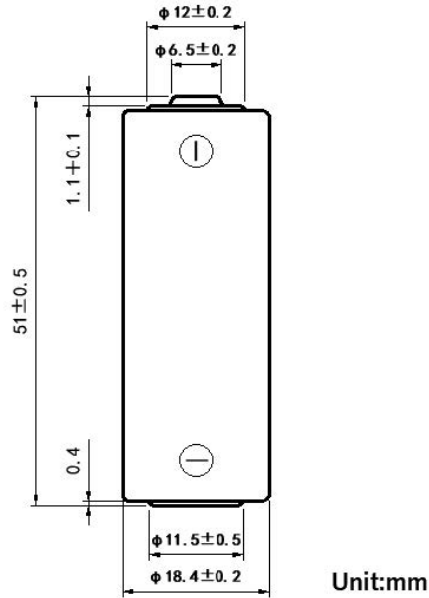
### Applications

- Utility metering
- Radio communication and other military applications
- Alarms and security systems
- Transmitters
- GPS
- LED lighting applications
- Pulse discharge
- Sensors

### Note(s)

1. Varies according to pulse characteristics, temperature, cell history and the application. Consult Ultralife for exact performance under your pulse load.
2. Operation at extreme ranges (temperature or current) may lead to reduced capacity and lower voltage readings at beginning of pulses. Consult with Ultralife for your application.
3. Exceeding the maximum temperature rating of +85°C may cause cell leaks, excessive expansion of case hardware, and / or decomposition of case shrink wrap.

# Dimensions



# Performance Graphs

