

# TLM-1530M



## High Power Primary Li Metal Oxide Cell - Military Grade

### Electrical characteristics

(for batteries stored at RT for 1 year or less)

|  |                |
|--|----------------|
| Open circuit voltage                                 | 3.95 to 4.07 V |
| Closed circuit voltage<br>(at 0.1 sec on 0.5 A load) | 3.83 V min.    |
| Discharge capacity under 20 mA<br>(at RT to 2.8 V)   | 200 mAh        |
| Discharge capacity under 225 mA<br>(at RT to 2.8 V)  | 190 mAh        |

### Mechanical characteristics

|          |               |
|----------|---------------|
| Length   | 27.4 +0/-1 mm |
| Diameter | 14.8 ± 0.3 mm |
| Weight   | 11 g max.     |

### Operating conditions

|                             |                   |
|-----------------------------|-------------------|
| Maximum discharge current:  |                   |
| Continuous to 2.5 V         | 2.5 A             |
| Pulse, 1 sec, to 2.6 V      | 6.5 A             |
| Operating temperature range | -40 °C ÷ +85 °C   |
| Storage temperature range   | -55 °C ÷ +85 °C   |
| Cell impedance at RT        | < 175 mΩ at 1 kHz |

Accumulated capacity loss (when tested at RT @ 20 mA to 2.8 V)

| 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   |

### Environmental

### Compliance with military specification

|                   |                       |              |
|-------------------|-----------------------|--------------|
| Vibration         | MIL-STD 810G          | Method 514.6 |
| 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> |              |
| Spinning          | 30,000 rpm            |              |

### Safety

### Tested according to:

|  |             |
|--|-------------|
| Short circuit at RT and at +55 °C                          | UN, IEC     |
| Oven at +150 °C  | UL, IEC     |
| Nail penetration   | N/A         |
| Over-charge & over-discharge (200 % at currents up to 1 A) | UL, UN, IEC |
| Impact   | UL, UN, IEC |
| Crush  | UL IEC      |

UN Manual of Tests and Criteria, UL 1642, IEC 60086

**WARNING:**  
Fire, Explosion, And Severe Burn Hazard.  
Do Not Recharge, Crush, Disassemble, Heat Above 100°C, Incinerate Or Short Circuit.



### Technology

- Anode: Carbon based
- Cathode: Multi metal oxides
- Electrolyte: Organic
- Shut down separator

### Key Features

- High power 4 V cell
- Hermetically sealed (glass-to-metal)
- Wide operating temperature range
- Low self discharge
- Long storage life
- High g<sub>n</sub> survivability
- High homogeneity
- End of life indication capability
- High reliability
- Lightweight
- Safe design
- Assembled in custom packs (per request)

### Main Applications

- Ordnance fuzing power source
- Navigation systems
- Missile systems
- Telemetry
- Emergency systems
- Electronic warfare systems

### Ordering Part No.

|                 |             |
|-----------------|-------------|
| ■ TLM-1530M/S   | 72143622000 |
| ■ TLM-1530M/T   | 72143622150 |
| ■ TLM-1530M/TP  | 72143632000 |
| ■ TLM-1530M/PT2 | 72143635000 |

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

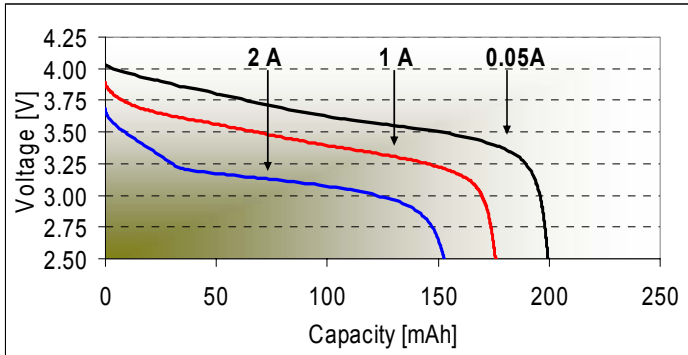
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# TLM-1530M

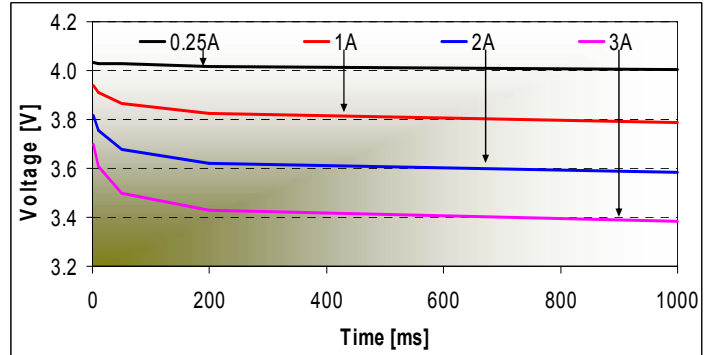


## Performance data

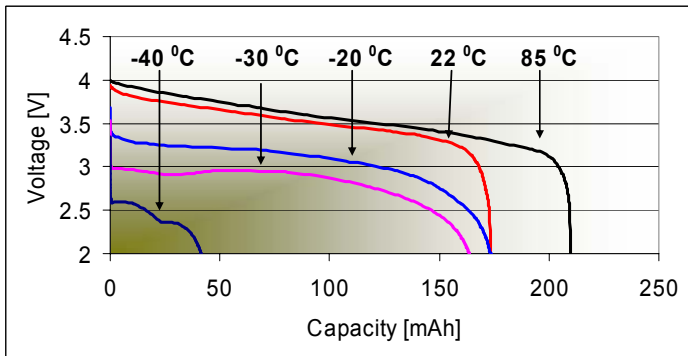
### Discharge capability at RT



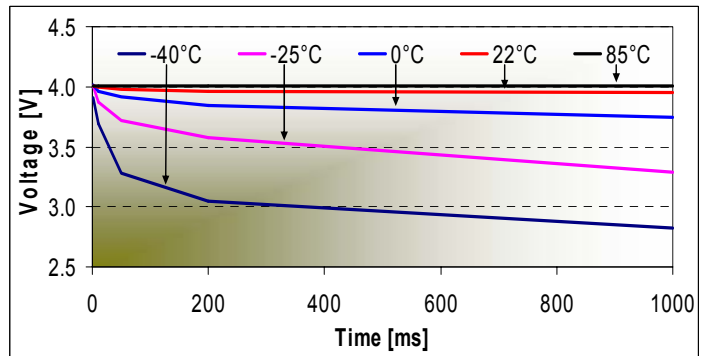
### Pulse capability at RT



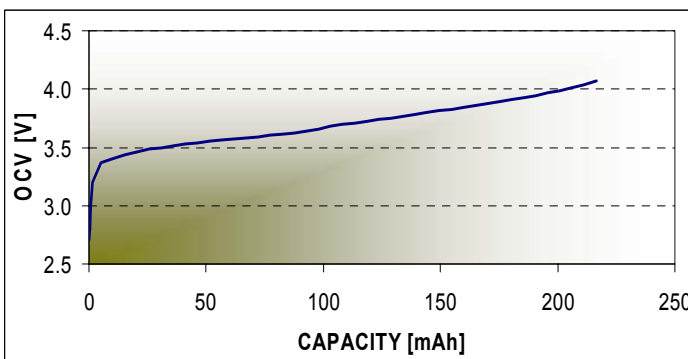
### Discharge capability of 0.5 A at several temperatures



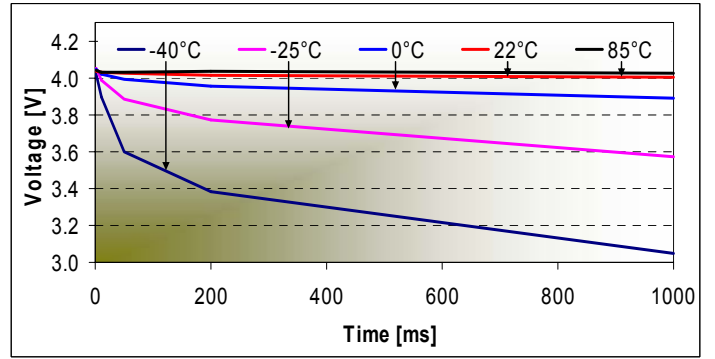
### Pulse capability of 0.5 A at several temperatures



### Capacity vs. OCV



### Pulse capability of 0.25 A at several temperatures

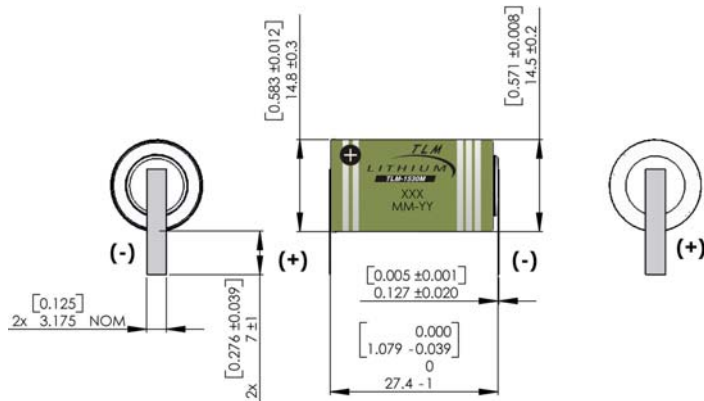


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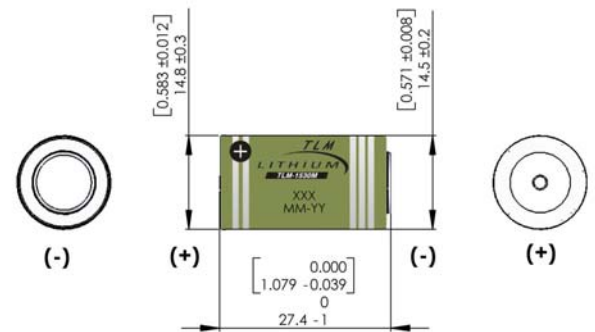
# TLM-1530M

## Lead terminations

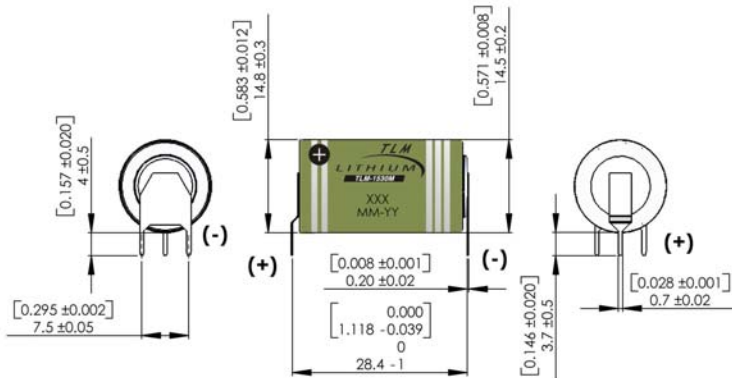
**TLM-1530M /T (Soldering Tabs)**  
Cat. # 72143622150



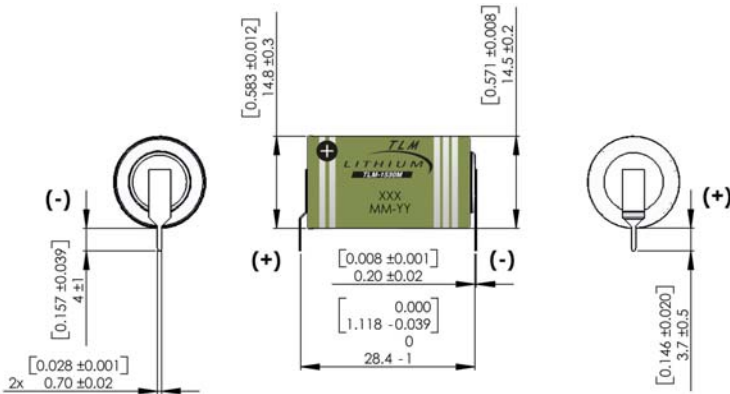
**TLM-1530M/S (Used in battery packs only)**  
Cat. # 72143622000



**TLM-1530M/TP (PCB Mountable - Polarized)**  
Cat. # 72143632000



**TLM-1530M/PT2 (PCB Mountable)**  
Cat. # 72143635000



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