

For high temperature applications

TLM-1550HTM



TADIRAN BATTERIES

AA Size Primary Lithium Battery

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



Physical Characteristics

| | |
|----------|---------------|
| Length | 51.5 mm. max |
| Diameter | 14.7 ± 0.3 mm |
| Weight | 20 gr. max |

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

| | |
|----------------------|----------------|
| Open Circuit Voltage | 3.95 to 4.07 V |
|----------------------|----------------|

Discharge

| | |
|--------------------------------|---------|
| Capacity @ 20 mA & RT to 2.5 V | 500 mAh |
|--------------------------------|---------|

Maximum Discharge Current

| | |
|-------------------------|------|
| Continuous to 2.5 V | 5 A |
| 1 second pulse to 2.5 V | 15 A |

| | |
|-----------------------------|---------------------------|
| Discharge Temperature Range | -40 to +135 °C |
| Storage Temperature Range | -55 to +135 °C |
| Cell impedance | Less than 100 mΩ at 1 kHz |

Accumulated Capacity Loss *

| Storage temperature | 22 °C | 55 °C | 72 °C |
|---------------------|-------|-------|-------|
| Storage time, years | | | |
| 1 | 3 % | 6 % | 10 % |
| 5 | 7 % | 22 % | 40 % |
| 10 | 11 % | 32 % | N/A |
| 15 | 15 % | 42 % | N/A |
| 20 | 18 % | N/A | N/A |

* When tested at RT at 5 mA to 2.8 V

Self-discharge at elevated temperatures

| Temperature | 85 °C | 100 °C | 125 °C |
|----------------|-------|--------|--------|
| Self-discharge | 15 µA | 25 µA | 50 µA |

Safety Considerations

The cells successfully passed the following tests:

- Altitude simulation
- Shock & Vibration
- Short Circuit at RT & +57 °C & +72 °C
- Heating at 150 °C
- Forced Discharge
- Crush
- Temperature Cycling

Key Features

- High Power 4 V
- Hermetically sealed (glass-to-metal)
- Wide operating temperature range
- Low self-discharge
- Long storage life
- High homogeneity
- End of life indication capability
- High reliability
- Lightweight
- Safe design
- Assembled in custom packs (per request)

Main Applications

- Medical autoclavable devices
- Automotive utilities at high temp
- Oil and gas drilling
- Heavy-duty vehicle engines

Ordering P/N:

| | |
|----------------|---------------|
| TLM-1550HTM/S | 72-1563-22000 |
| TLM-1550HTM/T | 72-1563-22150 |
| TLM-1550HTM/TP | 72-1563-32000 |

WARNING:

Fire, Explosion, And Severe Burn Hazard.
Do Not Recharge, Crush, Disassemble,
Heat Above 135°C, Short Circuit,
Incinerate Or Expose Contents to water.

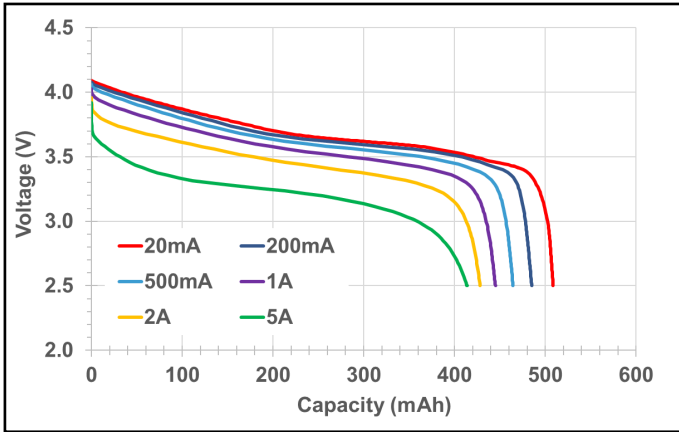
www.tadiranbatteries.com

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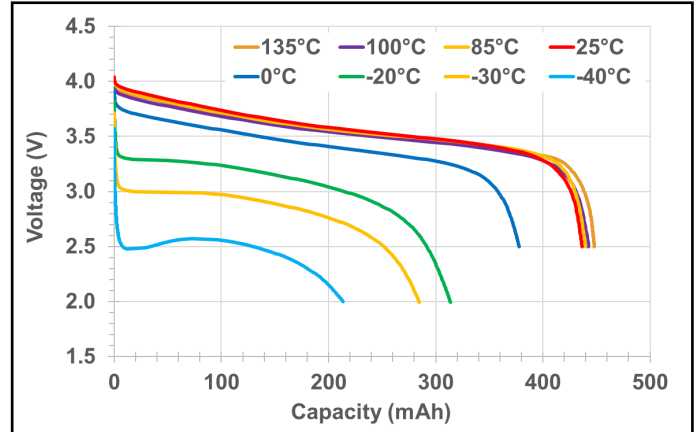


Performance Data

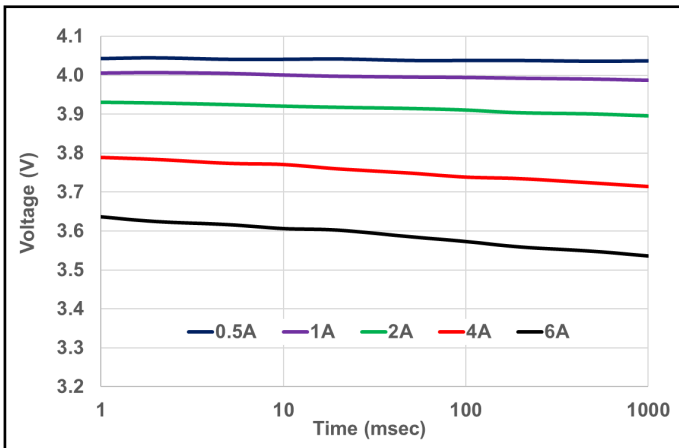
Discharge curves at Room Temperature



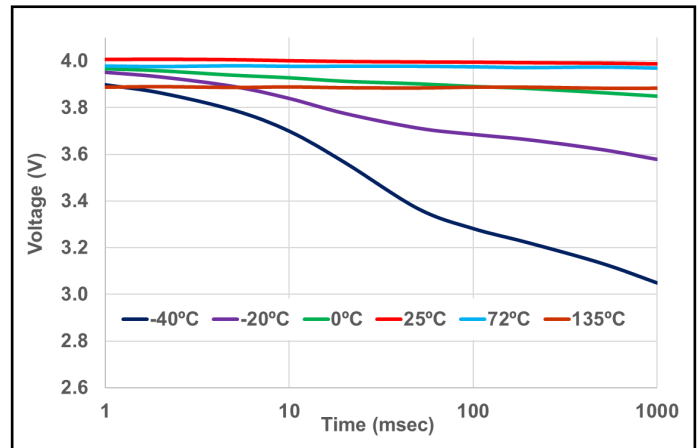
Discharge curves at 1 A



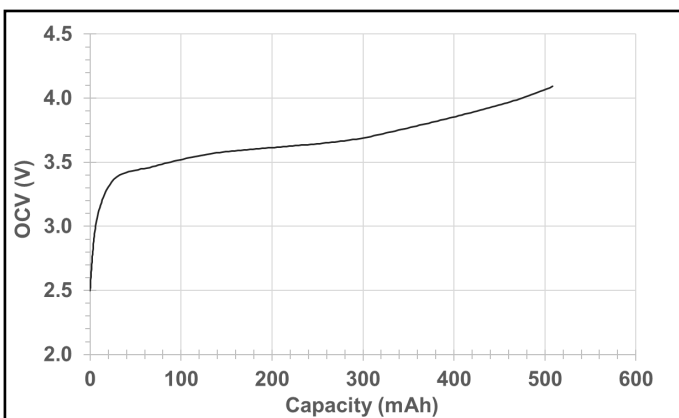
Pulse Capability at Room Temperature



Pulse Capability at 1 A



Open Circuit Voltage vs Capacity



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