

TLM-1550ESM



AA Size High Power High Energy Primary Lithium Battery

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



Physical Characteristics

Length	53 mm. max
Diameter	15.1 mm. max
Weight	22 gr. max

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

Open Circuit Voltage	3.85 to 4.00 V
Closed Circuit Voltage @ 0.1 sec.	0.5A load, 3.80 V minimum

Discharge

Capacity @ 5 mA & RT to 2.0 V	1200 mAh (Typical)
Capacity @ 1 A & RT to 2.0 V	1000 mAh

Maximum Discharge Current

Continuous to 2.0 V	5 A
1 second pulse to 2.0 V	10 A

Discharge Temp. Range	-40 to +85 °C
Storage Temp. Range	-55 to +85 °C
Cell impedance	Less than 100 mΩ at 1 kHz

Accumulated Capacity Loss *

Storage Temp.	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 2.0 V

Safety Considerations

The cells successfully passed the following tests:
Altitude simulation
Shock & Vibration
Short Circuit at RT & +57 °C
Heating at 130 °C
Forced Discharge
Crush
Temperature Cycling

Key Features

- High Power 4.0 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

- Emergency Systems
- Telemetry
- Navigation systems
- Device for immobilizing an attacker
- Electronic warfare systems
- Ordnance fusing power source
- Medical Devices
- Automotive
- Internet of things (IOT)

Ordering P/N:

TLM-1550ESM/S	72-1579-22000
TLM-1550ESM/T	72-1579-22150
TLM-1550ESM/Z2/T *	72-1579-22200

* Z2 indicates that the cell is equipped with PTC SRP 200

WARNING:

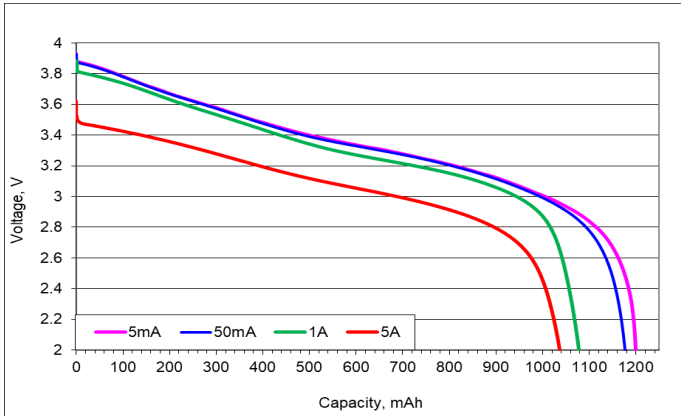
Fire, Explosion, And Severe Burn Hazard.
Do Not Recharge, Crush, Disassemble,
Heat Above 100°C, Short Circuit,
Incinerate Or Expose Contents to water.

www.tadiranbatteries.com

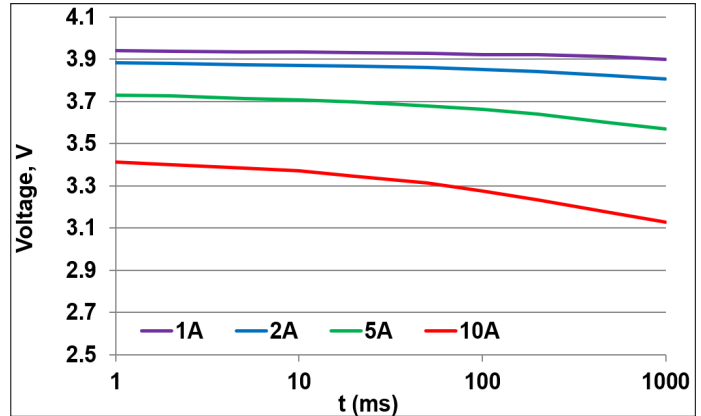
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Performance Data

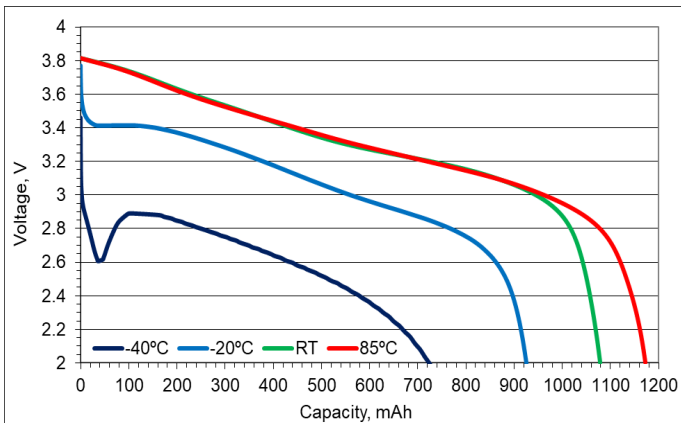
Discharge curves at Room Temperature



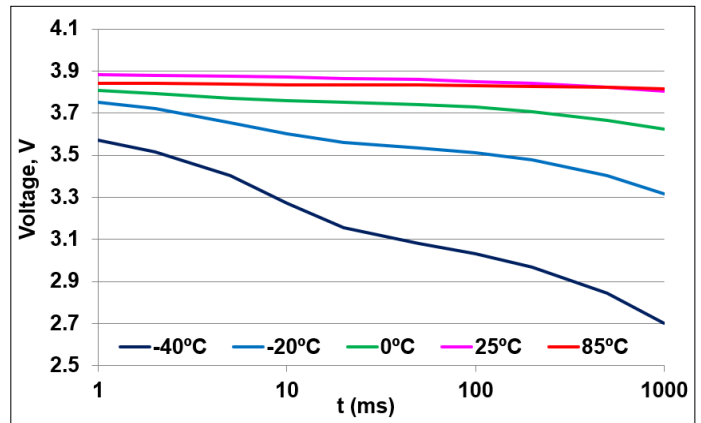
Pulse capability at Room Temperature



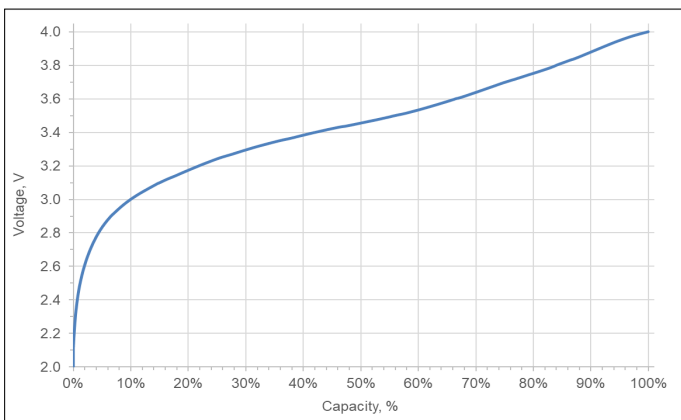
Discharge curves at 1 A



Pulse capability at 2 A



Capacity vs. OCV



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