

TLM-1550SPM



TADIRAN BATTERIES

AA Size High Power High Energy Primary Lithium Battery

Notice: Application load profiles should be reviewed and approved by Tadiran.

TLM
LITHIUM



Physical Characteristics

Length	51.5 mm. max
Diameter	15 mm. max
Weight	21 g. max

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

Open Circuit Voltage	3.95 to 4.05 V
Closed Circuit Voltage @ 0.1 sec.	0.5 A load, 3.7 V minimum

Discharge

Capacity @ 5 mA & RT to 2.0 V	950 mAh
Capacity @ 1 A & RT to 2.0 V	900 mAh

Maximum Discharge Current (RT)	
Continuous to 2.0 V	10 A
1 second pulse to 2.0 V	20 A

Discharge Temperature Range	-40 to +105 °C
Storage Temperature Range	-55 to +105 °C
Cell impedance	Less than 50 mΩ at 1 kHz

Capacity Loss During Storage *

Storage time, years	Storage temperature		
	22 °C	55 °C	72 °C
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

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 (upon request)

Main Applications

- Defense and Emergency Systems
- Telemetry
- Navigation systems
- Law enforcement equipment
- Electronic warfare systems
- Ordnance fusing power source
- Medical Devices
- Automotive
- Internet of things (IoT)
- Oceanographic Buoys

Ordering P/N:

TLM-1550SPM/S	72-1555-22000
TLM-1550SPM/T	72-1555-22150
TLM-1550SPM/TP	72-1555-32000

Safety Considerations

The cells successfully passed the following tests:

Altitude simulation
Shock and Vibration
Short Circuit at RT and +57 °C
Heating at 130 °C
Forced Discharge
Crush
Temperature Cycling

WARNING:

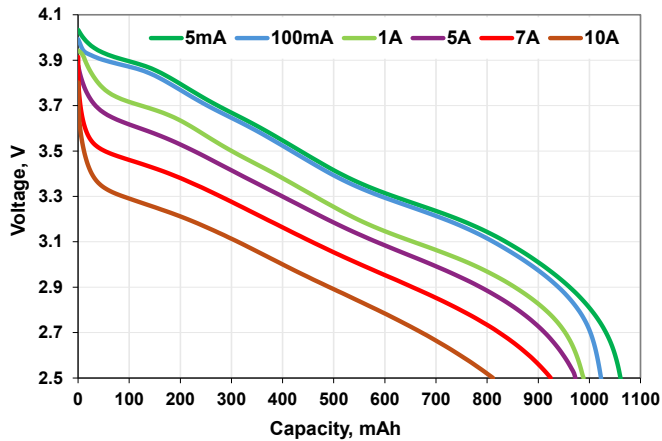
Fire, Explosion, And Severe Burn Hazard.
Do Not Recharge, Crush, Disassemble,
Heat Above 105°C, Short Circuit,
Incinerate Or Expose Contents to water.

www.tadiranbatteries.com

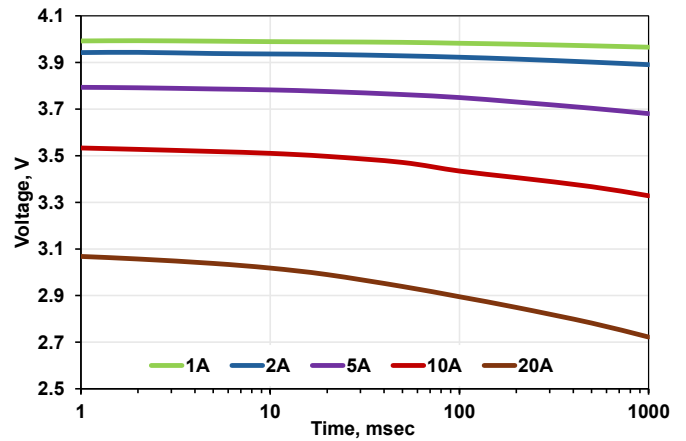
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Typical Performance Data

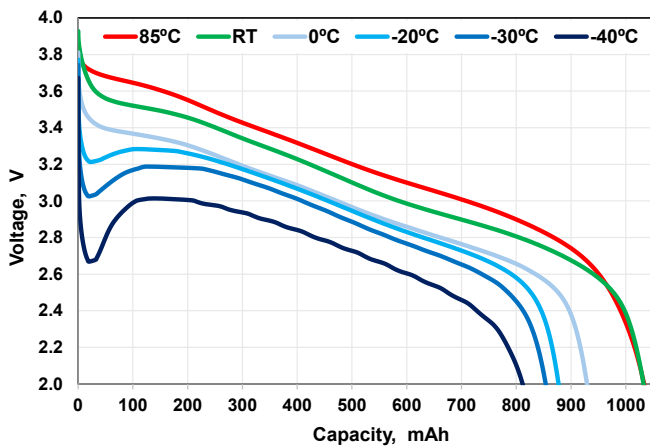
Discharge curves at room temperature



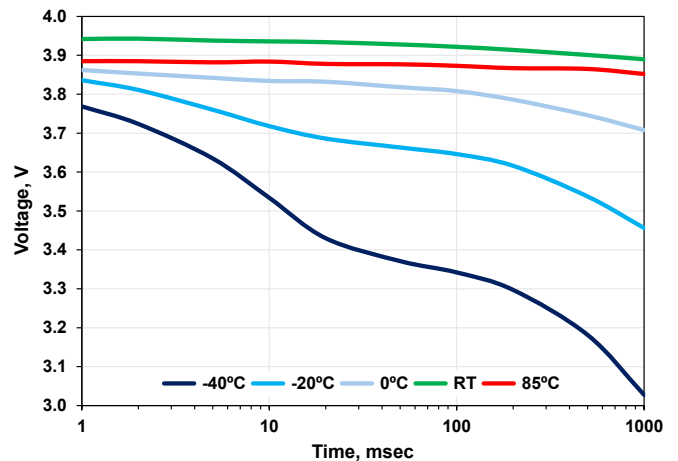
Pulse capability at room temperature, 4.05 V potential



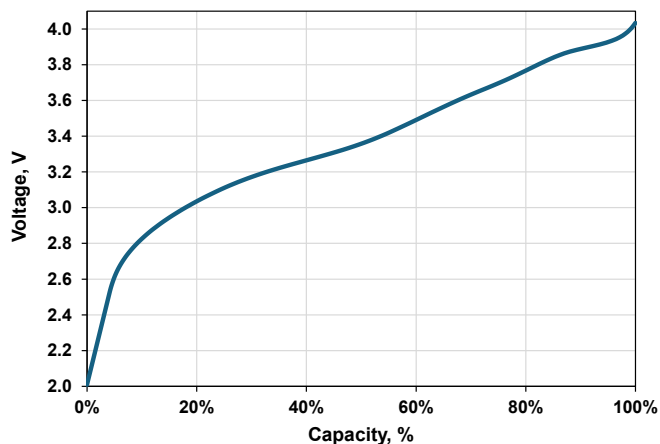
Discharge curves at 2 A



Pulse capability at 2 A, 4.05 V potential



Capacity vs. OCV



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