TLM-1550SPM



AA Size High Power High Energy Primary Lithium Battery

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





Physical Characteristics

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

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

Open Circuit Voltage 4.0 to 4.2 V

Closed Circuit Voltage @ 0.1 sec. 0.5 A load, 3.85 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 m Ω at 1 kHz

Accumulated Capacity Loss *

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
- Device for immobilizing an attacker
- 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

TLM-1550SPM

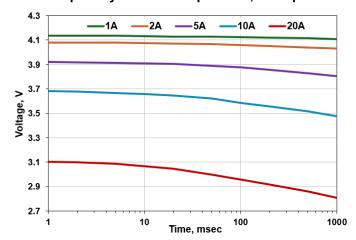


Typical Performance Data

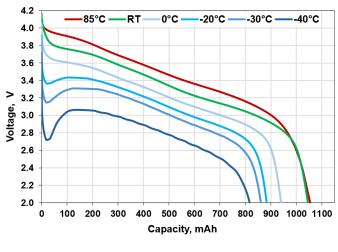
Discharge curves at room temperature

4.3 -100 mA --1A • -5A -7A -10A 4.1 3.9 3.7 3.5 3.3 3.1 2.9 2.7 2.5 100 200 300 500 600 700 800 900 1000 1100 Capacity, mAh

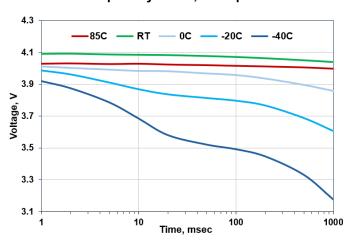
Pulse capability at room temperature, 4.2 V potential



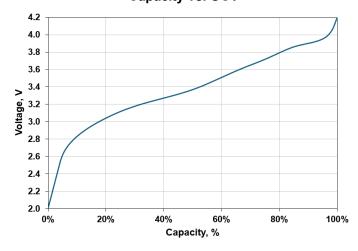
Discharge curves at 2 A



Pulse capability at 2 A, 4.2 V potential



Capacity vs. OCV



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