

High Power Primary Li Metal Oxide Cell

Electrical characteristics

Open circuit voltage	4.02 to 4.07 V
Closed circuit voltage (at 0.1 sec on 0.25 A load)	3.95 V min.
Discharge capacity under 10 mA (at RT to 2.8 V)	450 mAh
Discharge capacity under 225 mA (at RT to 2.8 V)	370 mAh

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

Mechanical characteristics

Length (without PTC)	27.4 +0/-1 mm
Diameter	14.8 ± 0.3 mm
Weight	12 g max.

Operating conditions

Maximum discharge current:		
Continuous to 2.5 V		2.5 A
Pulse, 1 sec, to 2.6 V		7 A
Operating temperature range	-40 °C ÷ +85 °C	
Storage temperature range	-55 °C ÷ +85 °C	
Cell impedance at RT	< 160 mΩ at 1 kHz	

Accumulated capacity loss (when tested at RT @ 10 mA to 2.8 V)

Storage Time (years)	Storage Temperature			
	22 °C	55 °C	72 °C	85 °C
1	5 %	7 %	15 %	N/A
5	7 %	25 %	40 %	N/A
10	10 %	35 %	N/A	N/A
15	N/A	N/A	N/A	N/A
20	N/A	N/A	N/A	N/A

Environmental

Compliance with specification

Vibration	UN, UL
Shock	UN, UL
Temperature Cycles	UN, UL
Altitude	UN, UL
Acceleration	TBD
Spinning	TBD

Safety

Tested according to:

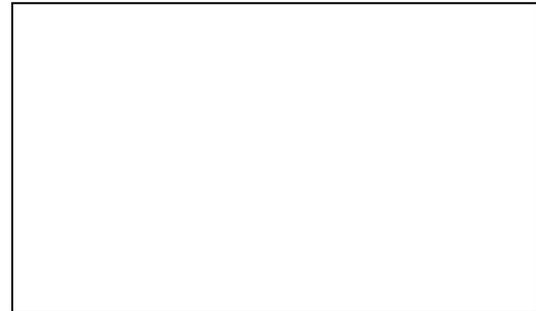
Short circuit at RT and at +55 °C	UL, UN, IEC
Oven at +130 °C	UL, IEC
Over-charge (200 % at currents up to 0.5 A)	UL, UN, IEC
Over-discharge (200 % at currents up to 1 A)	UL, UN, IEC
Impact	UL, IEC

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 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.

<input checked="" type="checkbox"/> TLM-1530HE/Z2/T*	72152822200
<input checked="" type="checkbox"/> TLM-1530HE/Z2/TP*	72152832200
<input checked="" type="checkbox"/> TLM-1530HE/Z2/PT2*	72152835200

*Z2 indicates cells with a re-settable fuse (PTC)

Tadiran Batteries Ltd.

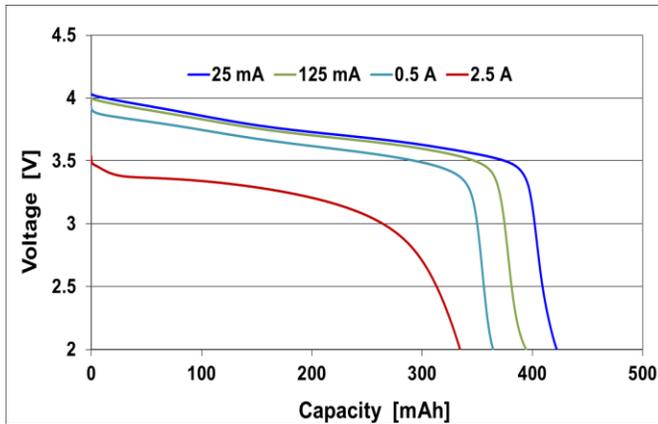
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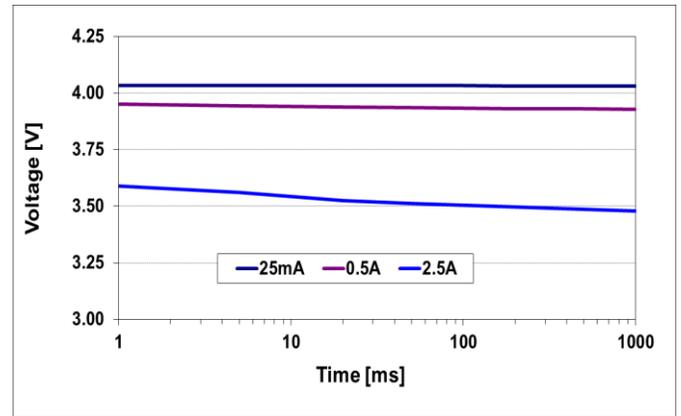
TLM-1530HE

Performance data

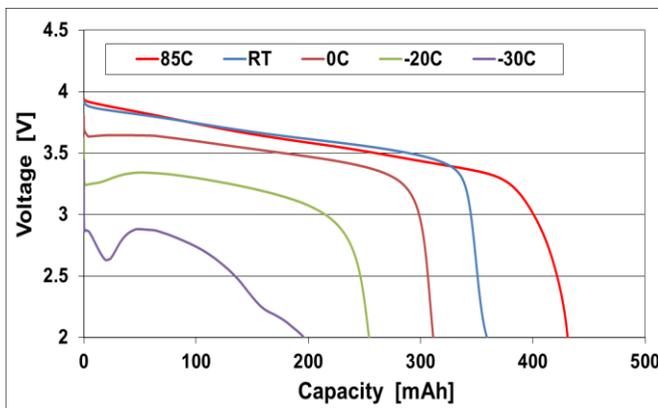
Discharge capability at RT



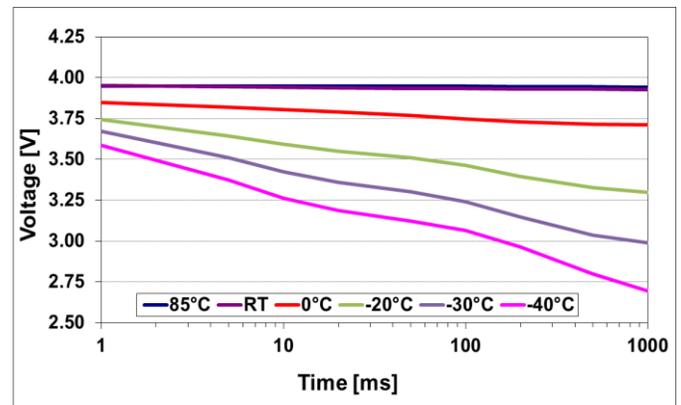
Pulse capability at RT



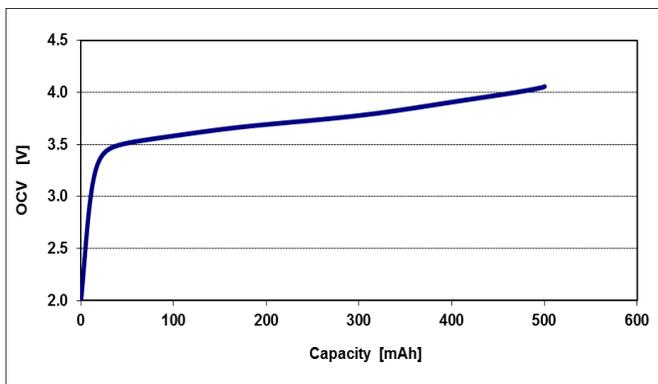
Discharge capability of 0.5 A at several temperatures



Pulse capability of 0.5 A at several temperatures



Capacity vs. OCV



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