

TLM-1550UHP



Ultra High Power Primary Li Metal Oxide Cell

Electrical characteristics (Typical Data)

Open circuit voltage	3.95 to 4.07 V
Closed circuit voltage (at 0.1 sec on 0.5 A load)	3.88 V min.
Discharge capacity under 20 mA (at RT to 2.8 V)	400 mAh
Discharge capacity under 5 A (at RT to 2.8 V)	310 mAh

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

Mechanical characteristics

Length	51.0 +/-1 mm
Diameter	14.8 ± 0.3 mm
Weight	20.0 g max.

Operating conditions

Maximum discharge current:	
Continuous to 2.5 V	15 A
Pulse, 1 sec, to 3.0 V	20 A
Operating temperature range	-40 °C ÷ +85 °C
Storage temperature range	-55 °C ÷ +85 °C
Cell impedance at RT	< 50 mΩ at 1 kHz

Accumulated capacity loss (when tested at RT @ 20 mA to 2.8 V)

Storage Time (years)	Storage Temperature			
	22 °C	55 °C	72 °C	85 °C
1	6 %	9 %	16 %	TBD
5	8 %	15 %	N/A	N/A
10	10 %	N/A	N/A	N/A
15	TBD	N/A	N/A	N/A
20	TBD	N/A	N/A	N/A

Environmental

Compliance with military specification

Vibration	UN
Shock	UN
Temperature Shock	TBD
Salt fog	TBD
Altitude	UN
Acceleration	TBD
Spinning	TBD

Safety

Tested according to:

Short circuit at RT and at +55 °C	UN, IEC
Oven at +150 °C	UL, IEC
Over-charge (200 % at currents up to 0.5 A)	UL, UN, IEC
Over-discharge (200 % at currents up to 2 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.

- ☒ TLM-1550UHP/T 72155422150
- ☒ TLM-1550UHP/TP 72155432000
- ☒ TLM-1550UHP/PT2 72155435000

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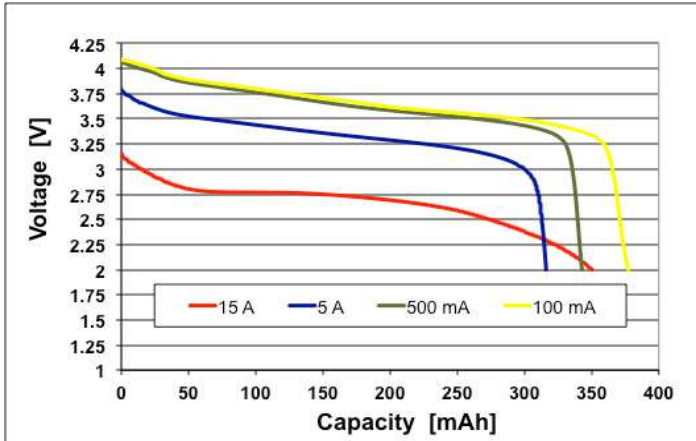
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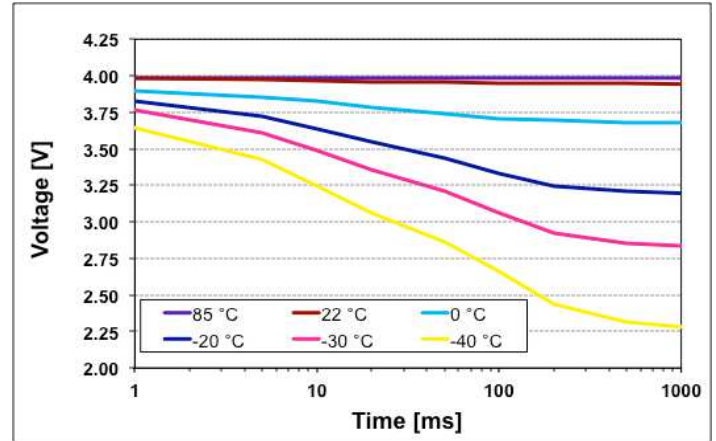


Performance data

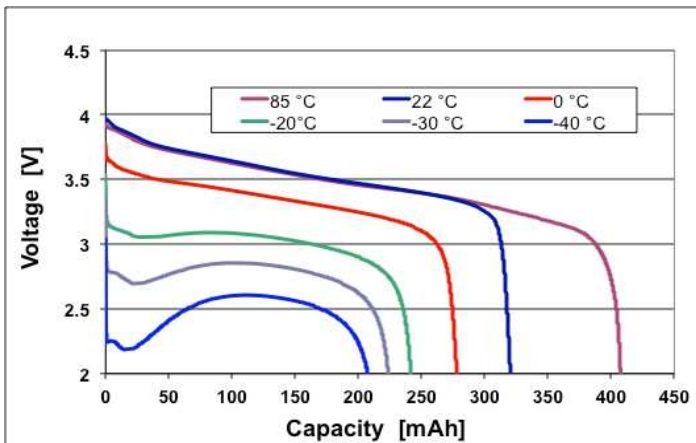
Discharge capability at RT



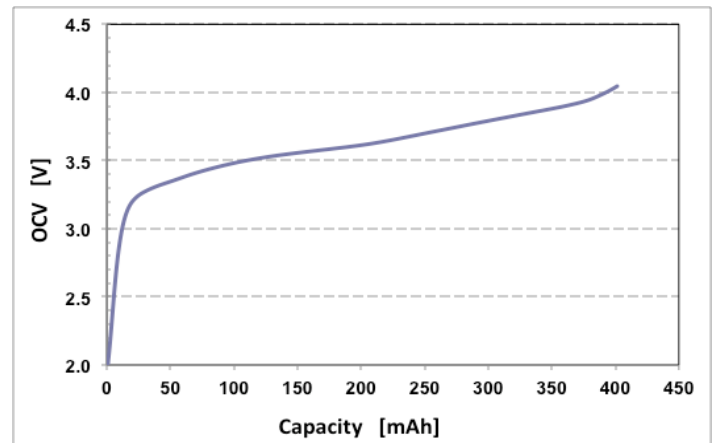
Pulse capability (2 A) at several temperatures



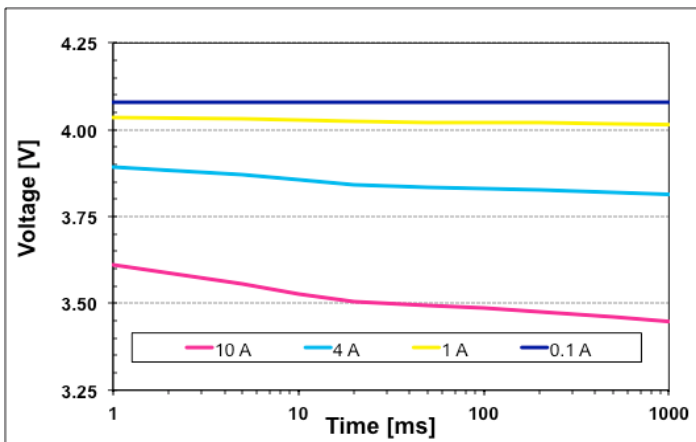
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Capacity vs. OCV



Pulse capability at RT



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