TLI-1550HC



Tadiran Lithium Ion High Capacity

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

Max. Capacity when charge to 4.1 V 500 mAh (discharged @ 20 mA to 2.2 V at 20 °C)

Discharge end voltage

2.2 V (discharge below 2.2 V at 20 °C may increase the TLI internal impedance)

Mechanical characteristics

Length Diameter Weight	52.0 +0/-1 mm 15.1 mm. max 18.8 gr. max
Operating conditions	To.o yr. max
Max continuous discharge current at 20 °C	4.0 A (without PTC)
Charge (Constant Current Constant Voltage method) Max. charge voltage Max. charge current at -20 °C ÷ +50 °C Max. charge current at -40 °C ÷ +85 °C	4.1 V 120 mA 20mA
Charge/discharge operating temperature	-40 °C ÷ +85 °C
Charge/discharge cycles (charge 250 mA to 4.1 V EOC 20 mA, discharge 200 mA to 2.5 V at 20 °C)	> 500
Reversible Retention Capacity after 100 cycles (discharge at 100 mA at 20 $^\circ$ C)	93%
Reversible Retention Capacity after 5 years (discharge at 100 mA at 20 $^\circ\text{C}$)	91%
Cell impedance at RT	< 100 m Ω at 1 kHz
Safety	Tested according to:
Short circuit at RT and at +55 °C Thermal abuse at +130 °C Overcharge & Forced Discharge	UL, UN, IEC UL, IEC UL, UN, IEC

Overcharge & Forced Discharge Impact Crush Shock and vibration Temperature Cycling UN Manual of Tests and Criteria 38.3, UL 1642, IEC 62133

Warning:

Fire, Explosion, And Severe Burn hazards. Do Not Crush, Disassemble, Heat Above 100°C, Short Circuit, Incinerate or Expose Contents to Water.



Technology

- Anode: Carbon based
- ☑ Cathode: Multi metal oxides
- Electrolyte: Organic X
- Shut down separator

Key Features

- ☑ Wide operating temperature range
- High number of charge/discharge cycles
- ☑ Low self-discharge long operating life
- ☑ Hermetically sealed (glass-to-metal)
- ☑ High reliability
- ☑ Lightweight
- ☑ Safe design

Main Applications

- Energy Harvesting
- Asset, Container & Cargo Tracking
- Automotive Emergency Call
- Internet of things (IOT)
- Electrical grid monitoring
- Parking Meter
- BUB in metering

Ordering Part No.

TLI-1550HC/Z2/T 61-1553-14200 TLI-1550HC/Z2/TP \mathbf{X} 61-1553-14300

> For TLI-1550HC w/o PTC please contact Tadiran Batteries Ltd.

Tadiran Batteries Ltd. 44 Yitzhak Rabin Boulevard Kiryat Ekron 76950, Israel Tel: +972 (8) 944-4555 Fax: +972 (8) 941-3079

www.tadiran.com

UL, IEC

UL, UN, IEC

UL, UN, IEC

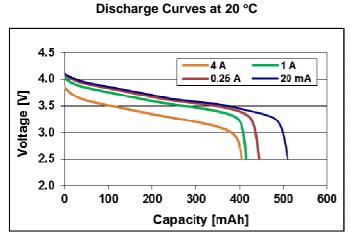
UL, UN, IEC

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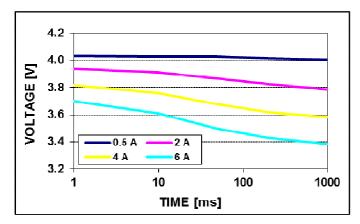
TLI-1550HC



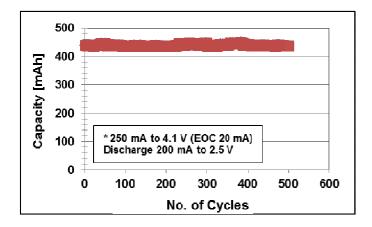
Performances data



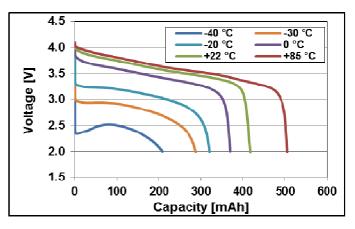
10 Sec. Pulse Capability at RT



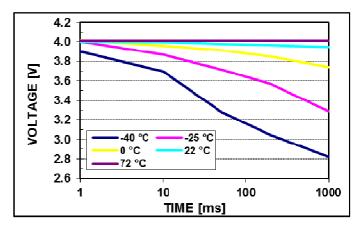
Charge/ Discharge Cycling Performance at RT *



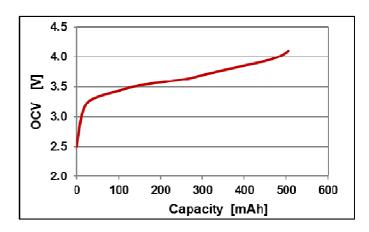
Discharge Curves at 1 A



1 Sec. Pulse Capability at 1A



OCV vs. Capacity



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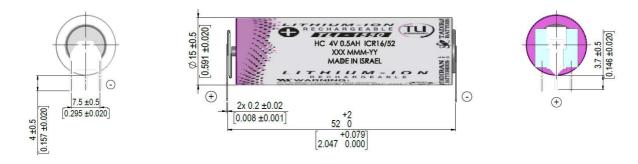


Lead termination

TLI-1550HC/Z2/T 61-1553-14200



TLI-1550HC/Z2/TP 61-1553-14300



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