

Tadiran Medium Power Lithium Organic Cell Model TLM-1530MP

1. Scope

This data sheet describes the mechanical design and performance of Tadiran medium power lithium organic cell model TLM-1530MP.

2. Characteristics

- 2.1. Physical
 - 2.1.1. Length: 27.4 -1 mm.
 - 2.1.2. Diameter: 14.8 ±0.3 mm.
 - 2.1.3. Weight: 11 gr. max.
- 2.2. Electrical

4.4.	Licettical	
2.2.	 Open Circuit Voltage (for batteries stored at RT for 1 year or less) 	4.02 to 4.07 V
2.2.2	2. Closed Circuit Voltage (at 0.1 sec) at 0.5 A load	3.83 minimum
2.2.	3. Discharge	
	Discharge capacity at 25 mA @ RT to 2.8 V	340 mAh
	Discharge capacity at 250 mA @ RT to 2.8 V	300 mAh
	Maximum discharge current Continuous to 2.8 V: 1 second pulse to 3 V:	2 A 5 A
2.3.	Operating Temperature Range:	-40 0 C to 85 0 C

2.4. Accumulated Capacity Loss*:

Storage Temperature	22 °C	55 °C	72 °C	85 °C
Storage Time [Y]				
1	2 %	4 %	7 %	TBD
5	5 %	15 %	28 %	N/A
10	7.5 %	22 %	N/A	N/A
15	10 %	29 %	N/A	N/A
20	12.5 %	N/A	N/A	N/A

* When tested at RT under 25 mA to 2.8 V

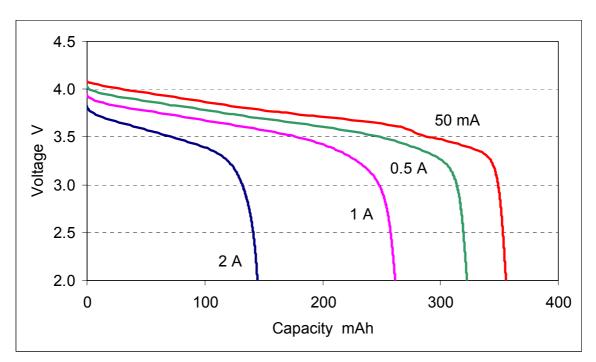
2.5. Cell impedance: Less than 200 mOhm @ 1 kHz at room temperature.

Rev. D, Sept 2006 (ECN 6100539)

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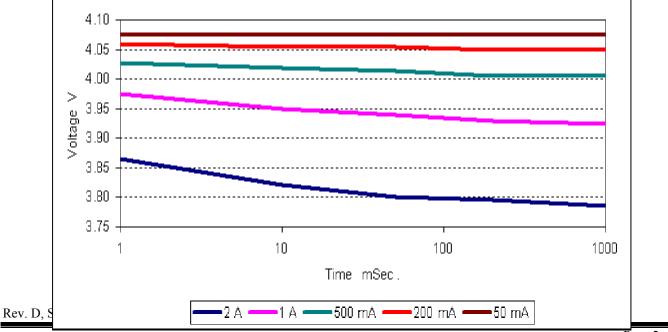


2.6 Performance Data:



Discharge capability at RT

Pulse capability at RT

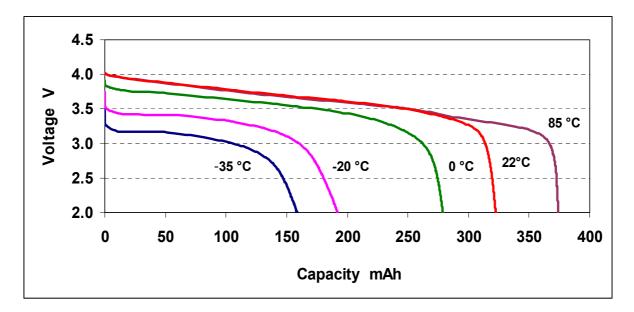


Page 2 of 4

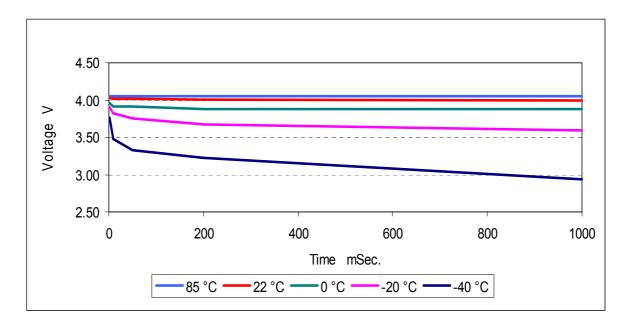
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Discharge capability @ 0.5 A at several temperatures



Pulse capability @ 0.5 A at several temperatures



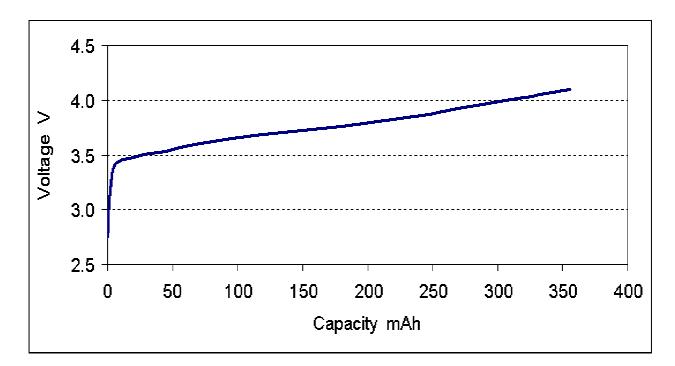
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2.7 End of life indication:

OCV measurements can provide a good estimation for the remaining capacity of the cell as shown below:



2.6. Safety tests:

The cell has succesfuly passed the following safety tests:

- Short circuit at RT and at 55°C
- Oven at 150°C
- Impact
- Nail penatration
- Over charge and over discharge

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