

BITS ABOUT BATTERIES

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Advanced Optronic Devices

AOD (Australia)



Australian Government

Department of Industry and Science



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Battery storage

- AMPERE HOURS (Ah)
- Are a variable quantity
- Rate of charging
- Rate of discharge
- Depth of discharge
- Storage temperature

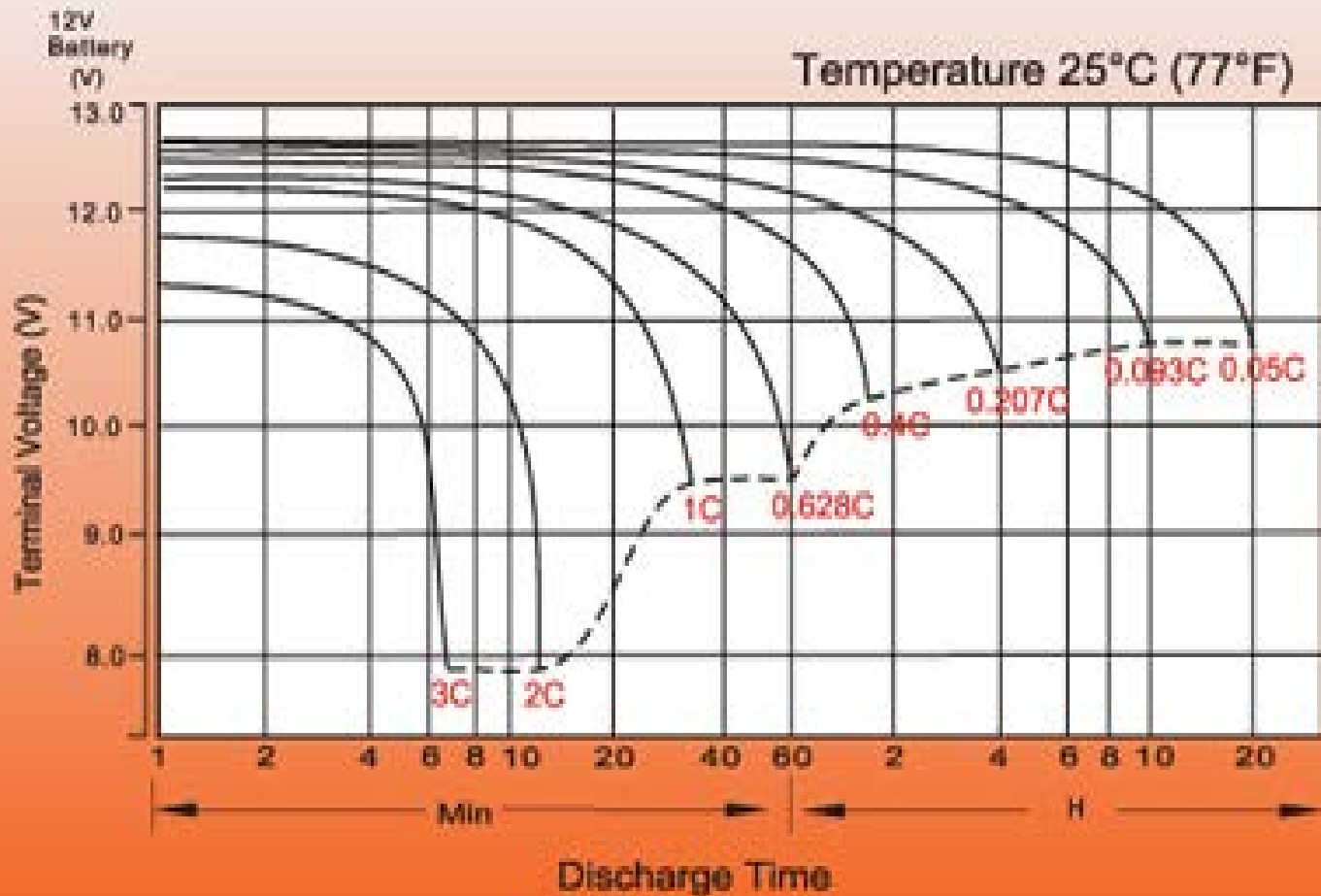


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Discharge Characteristics

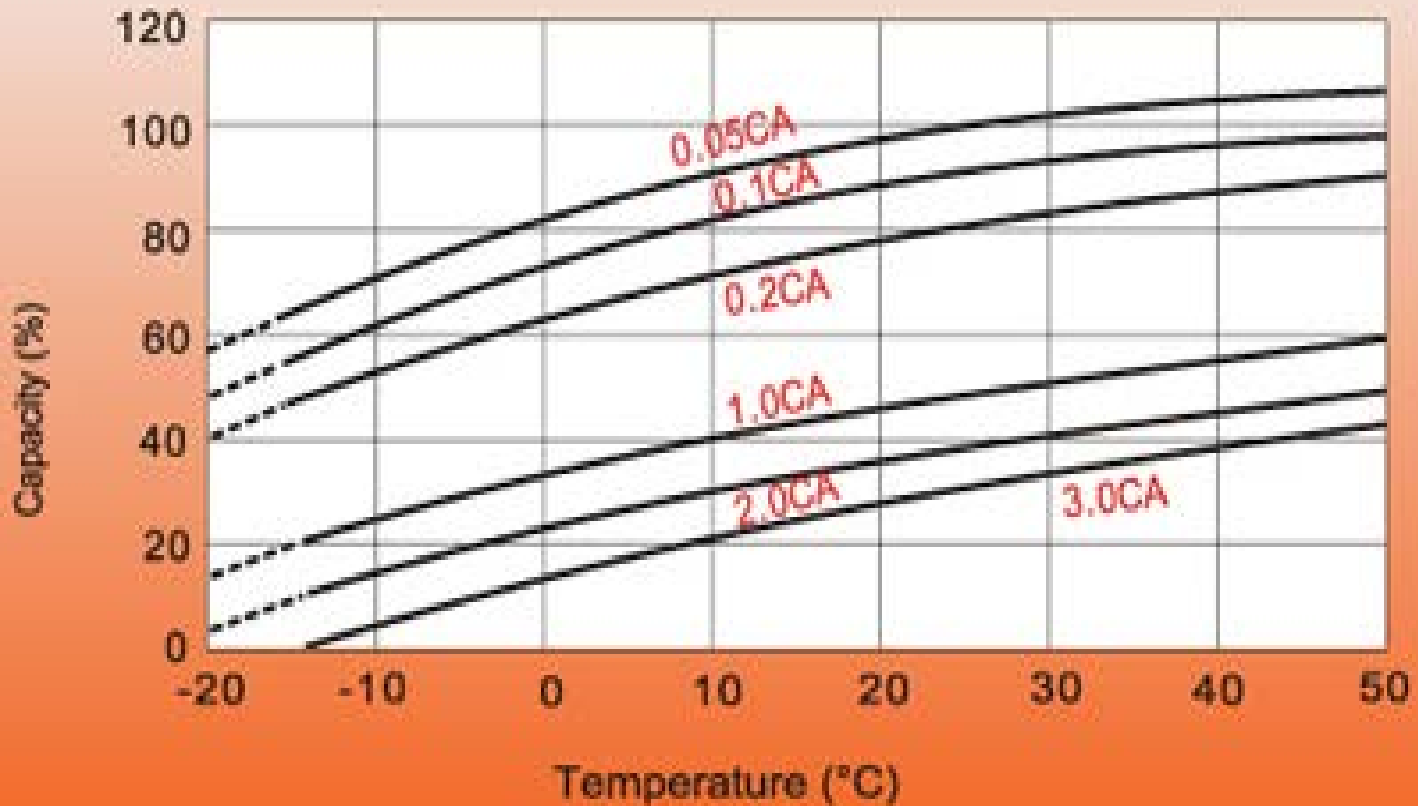


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Temperature Effects in Relation to Battery Capacity



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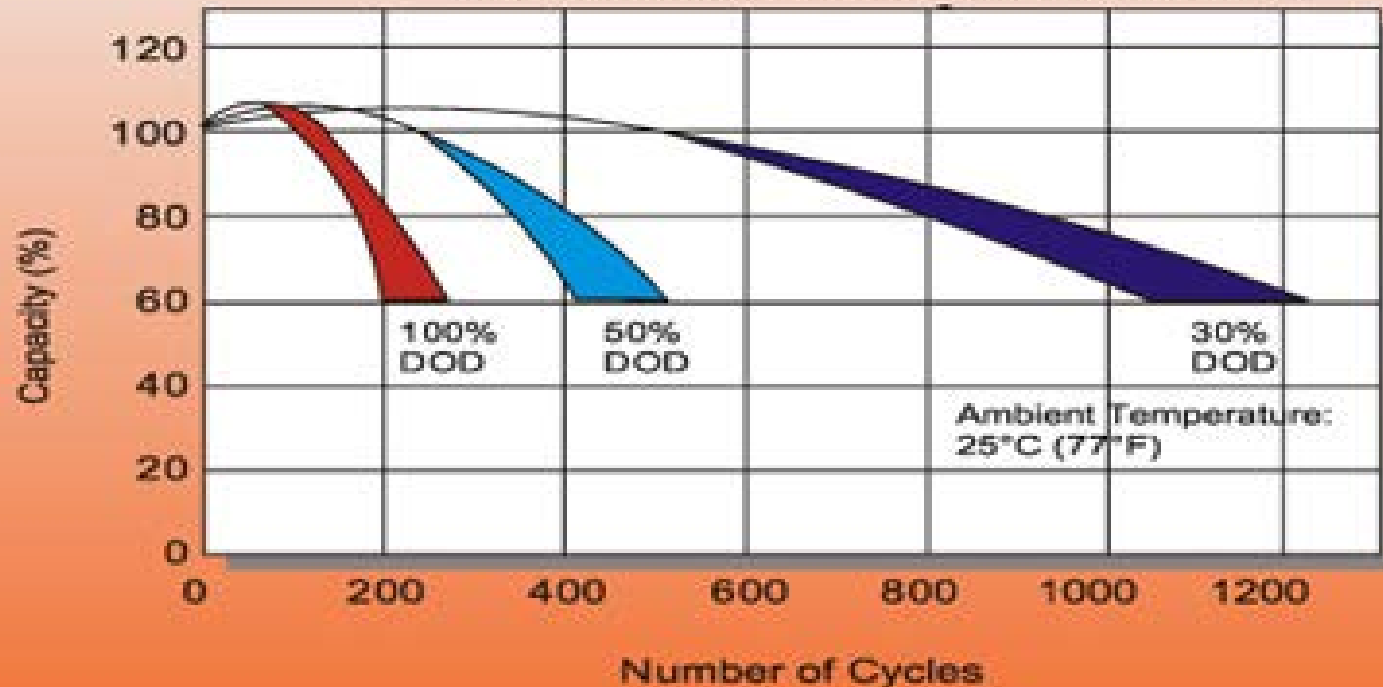
Cycle Life in Relation to Depth of Discharge

Testing condition

Discharging: current 0.17C (FV1.7/cell);

Charging: current 0.25C max, voltage 2.45V/cell;

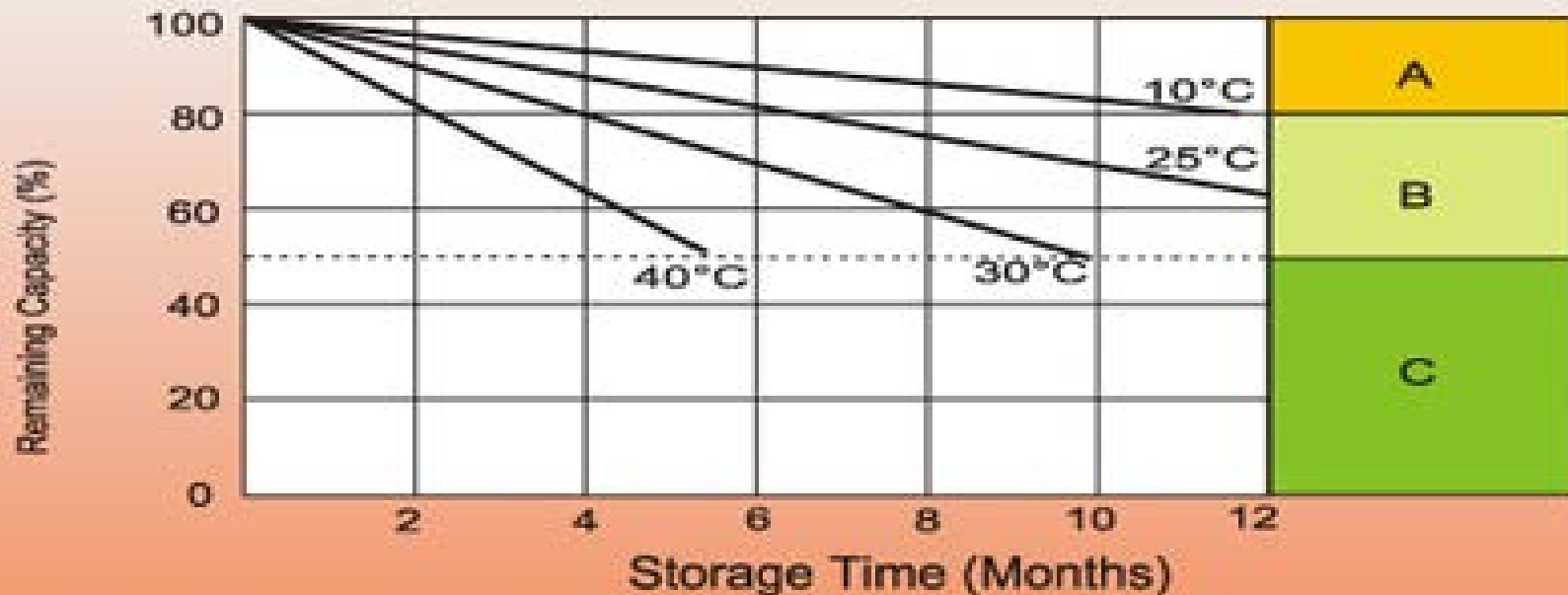
Charging volume: 125% of discharged capacity.



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A

No supplementary charge required.

(Carry out supplementary charge before use if 100% capacity is required).

B

Supplementary charge required before use. Optional charging way as below:

1. Charged for above 3 days at limited current 0.25C A and constant voltage 2.25V/cell.
2. Charged for above 20 hours at limited current 0.25C A and constant voltage 2.45V/cell.
3. Charged for 8–10 hours at limited current 0.05C A.

C

Supplementary charge may often fail to recover the capacity.

The battery should never be left standing till this is reached.



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Part Number	Nominal Voltage	Rated Capacity (AH)					Dimension								Weight		Terminal
							Length		Width		Container Height		Total Height (with Terminal)				
		20HR	10HR	5HR	3HR	1HR	mm	in	mm	in	mm	in	mm	in	kg	lbs	
LP12 V7AH	12	7.00	6.53	6.00	5.37	4.55	151	5.93	65	2.55	94.5	3.71	100	3.93	2.18	4.8	T1



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