

### Specification

Nominal Voltage	6V	
Nominal Capacity(20HR)	4.5AH	
Dimensions	Length	70 ± 1mm (2.76 inches)
	Width	47 ± 1mm (1.85 inches)
	Container Height	100 ± 2mm (3.94 inches)
	Total Height (with Terminal)	106 ± 2mm (4.17 inches)
	Approx Weight	Approx 0.81 kg (1.79lbs)
Terminal	T1/T2	
Container Material	ABS	
Rated Capacity	4.50 AH/0.225A	(20hr, 1.80V/cell, 25°C/77°F)
	4.19 AH/0.419A	(10hr, 1.80V/cell, 25°C/77°F)
	3.78 AH/0.756A	(5hr, 1.75V/cell, 25°C/77°F)
	3.30 AH/1.10A	(3hr, 1.75V/cell, 25°C/77°F)
	2.73AH/2.73A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	67.5A (5s)	
Internal Resistance	Approx 25mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-15 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 1.35A. Voltage 7.2V~7.5V at 25°C(77°F)Temp. Coefficient -15mV/°C	
	Standby Use No limit on Initial Charging Current Voltage 6.75V~6.9V at 25°C(77°F)Temp. Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto control system



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	8.64	6.02	4.97	4.31	3.46	2.66	2.17	1.33	1.01	0.831	0.706	0.611	0.486	0.404	0.223
1.80V/cell	10.6	7.19	5.76	4.87	3.83	2.90	2.34	1.41	1.06	0.874	0.736	0.638	0.504	0.419	0.225
1.75V/cell	12.6	8.13	6.35	5.31	4.09	3.08	2.46	1.47	1.10	0.901	0.756	0.654	0.518	0.427	0.227
1.70V/cell	14.3	8.96	6.88	5.70	4.29	3.20	2.57	1.53	1.14	0.924	0.775	0.670	0.525	0.434	0.231
1.65V/cell	15.7	9.64	7.27	5.98	4.47	3.32	2.67	1.58	1.17	0.943	0.792	0.683	0.534	0.440	0.234
1.60V/cell	16.5	10.0	7.58	6.17	4.60	3.40	2.73	1.63	1.19	0.966	0.808	0.696	0.545	0.447	0.236

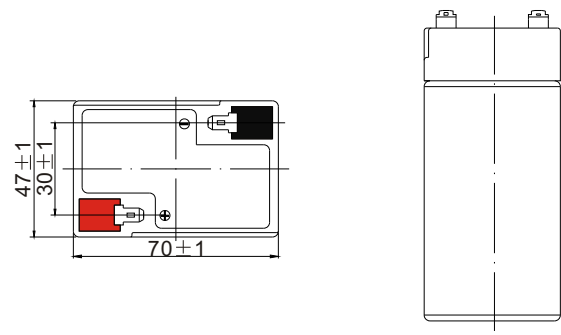
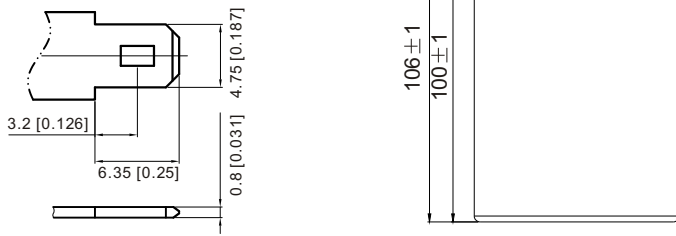
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.3	11.5	9.55	8.35	6.74	5.21	4.28	2.63	2.01	1.66	1.41	1.23	0.977	0.815	0.450
1.80V/cell	19.8	13.6	11.0	9.37	7.41	5.65	4.58	2.78	2.10	1.73	1.46	1.27	1.01	0.838	0.452
1.75V/cell	23.2	15.2	12.0	10.1	7.86	5.96	4.80	2.88	2.16	1.78	1.49	1.30	1.03	0.849	0.453
1.70V/cell	26.0	16.6	12.9	10.8	8.20	6.16	4.97	2.98	2.22	1.81	1.52	1.32	1.04	0.858	0.459
1.65V/cell	28.3	17.6	13.4	11.2	8.48	6.36	5.15	3.05	2.27	1.84	1.55	1.34	1.05	0.866	0.463
1.60V/cell	29.2	18.1	13.9	11.4	8.62	6.44	5.22	3.13	2.31	1.87	1.57	1.36	1.07	0.876	0.464

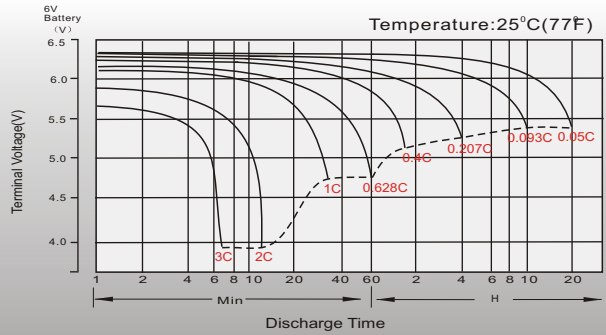
## Dimensions

### T1 Terminal

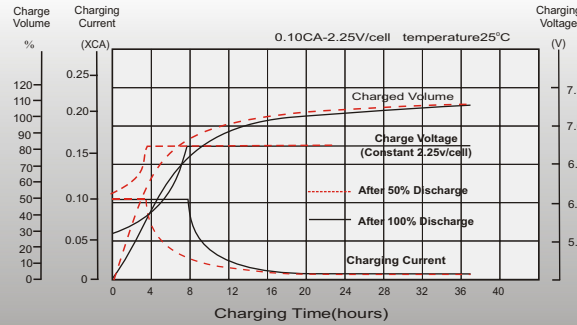
Unit: mm [inches]



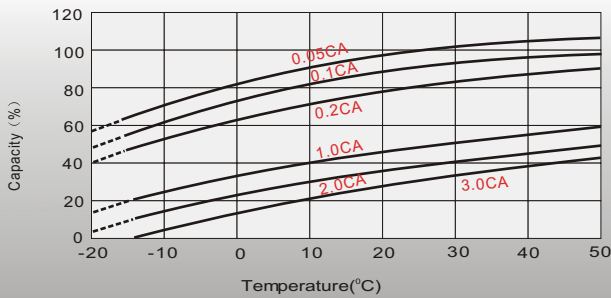
## Discharge Characteristics



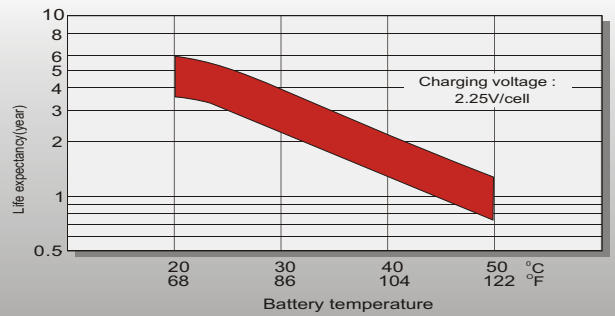
## Float Charging Characteristics



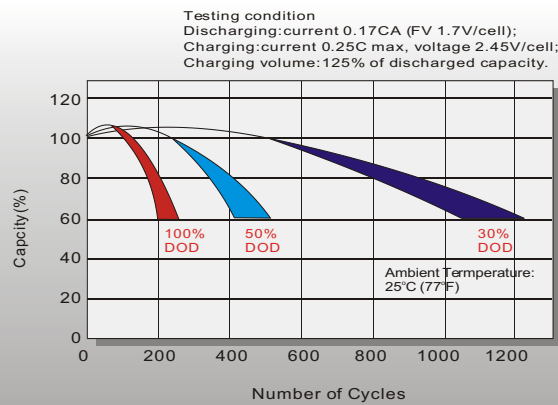
## Temperature Effects in Relation to Battery Capacity



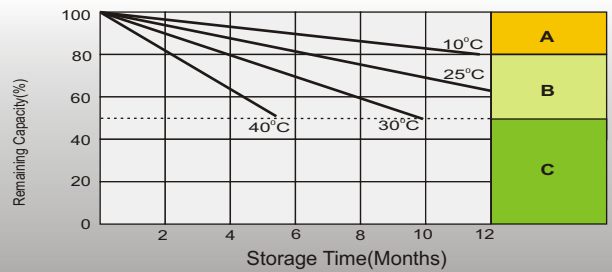
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## Self Discharge Characteristics



- 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 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

## Sales Office

### China sales office:

Add: 5th Floor, Xinbaohui Bldg., Nanhai Blvd.,  
Nanshan, Shenzhen, China. 518052  
Tel: +86-755-86036060 (100 lines)  
Fax: +86-755-26067269  
E-mail: export@leoch.com  
Http://www.leoch.com

### North America sales office:

Add: 19751 Descartes, Unit A,  
Foothill Ranch, CA 92610, USA  
Tel: 949-588-5853  
Fax: 949-588-5966  
E-mail: sales@leoch.us  
Http://www.leoch.us

### Europe sales office:

Add: 9B Wheatstone Park, Waterwells  
Business Park, Gloucester, GL2 2AQ, UK.  
Tel: +44(0) 01452 729428  
Fax: +44 (0)1452-690125  
E-mail: Sales.Europe@leoch.com

### Singapore sales office:

Add: No. 53, Ubi Avenue 1, #03-21 Paya  
Ubi Industrial Park, Singapore 408934  
Tel: + 65 6841 6629  
E-mail: sales.sg@leoch.com

### HongKong sales office:

Add: Unit 3910, 39/F, Cable TV Tower, No. 9  
Hoi Shing Road, Tsuen Wan, NT, H.K  
Tel: +852 3578 6666  
E-mail: sales.hk@leoch.com