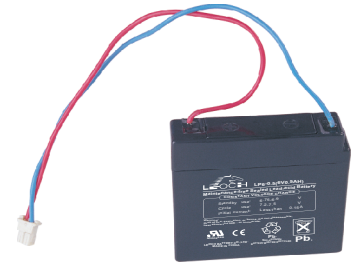


### Specification

Nominal Voltage	6V	
Nominal Capacity(20HR)	0.5AH	
Dimension	Length	57 ± 1mm (2.24 inches)
	Width	14 ± 1mm (0.55 inches)
	Container Height	50 ± 1mm (3.74 inches)
	Total Height (with Terminal)	52 ± 1mm (3.98 inches)
	Approx Weight	Approx 0.10 kg (0.22lbs)
Terminal	\	
Container Material	ABS	
Rated Capacity	0.500 AH/0.025A	(20hr, 1.80V/cell, 25°C/77°F)
	0.465 AH/0.0465A	(10hr, 1.80V/cell, 25°C/77°F)
	0.425 AH/0.085A	(5hr, 1.75V/cell, 25°C/77°F)
	0.384 AH/0.128A	(3hr, 1.75V/cell, 25°C/77°F)
	0.314AH/0.314A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	7.5A (5s)	
Internal Resistance	Approx 200mΩ	
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 0.15A. 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	0.952	0.731	0.606	0.524	0.405	0.298	0.251	0.149	0.116	0.095	0.077	0.067	0.0540	0.0451	0.0248
1.80V/cell	1.278	0.934	0.732	0.619	0.478	0.347	0.282	0.162	0.125	0.101	0.083	0.072	0.0573	0.0465	0.0250
1.75V/cell	1.441	1.027	0.799	0.666	0.496	0.360	0.295	0.168	0.128	0.103	0.085	0.074	0.0583	0.0478	0.0253
1.70V/cell	1.587	1.119	0.853	0.700	0.516	0.374	0.304	0.173	0.131	0.106	0.087	0.075	0.0591	0.0487	0.0257
1.65V/cell	1.750	1.208	0.907	0.744	0.545	0.384	0.311	0.175	0.137	0.110	0.090	0.077	0.0600	0.0497	0.0261
1.60V/cell	1.930	1.311	0.971	0.792	0.575	0.400	0.314	0.183	0.141	0.113	0.093	0.079	0.0606	0.0503	0.0262

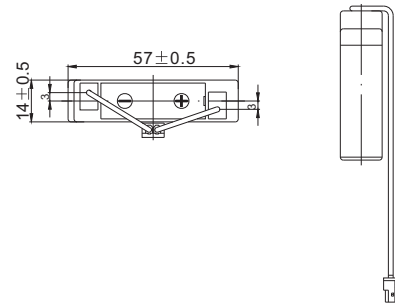
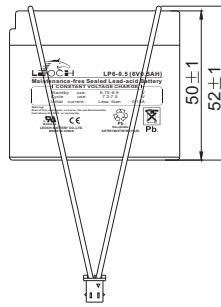
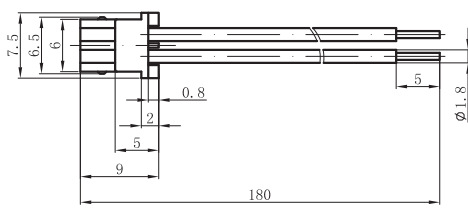
### Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	1.741	1.351	1.130	0.987	0.772	0.573	0.485	0.289	0.227	0.185	0.151	0.132	0.107	0.089	0.0490
1.80V/cell	2.312	1.706	1.347	1.150	0.897	0.662	0.540	0.313	0.243	0.196	0.162	0.141	0.113	0.092	0.0495
1.75V/cell	2.551	1.844	1.453	1.225	0.923	0.680	0.563	0.323	0.246	0.200	0.165	0.144	0.114	0.094	0.0499
1.70V/cell	2.732	1.964	1.530	1.278	0.956	0.705	0.579	0.331	0.253	0.205	0.169	0.147	0.116	0.096	0.0507
1.65V/cell	2.969	2.100	1.615	1.347	1.000	0.716	0.588	0.334	0.262	0.211	0.173	0.150	0.117	0.098	0.0514
1.60V/cell	3.199	2.228	1.698	1.420	1.048	0.742	0.590	0.346	0.269	0.217	0.178	0.152	0.118	0.099	0.0516

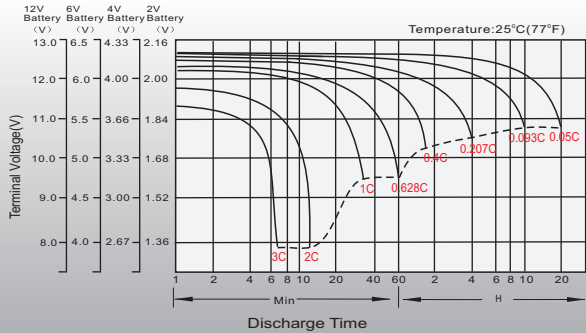
# Dimensions

## Terminal

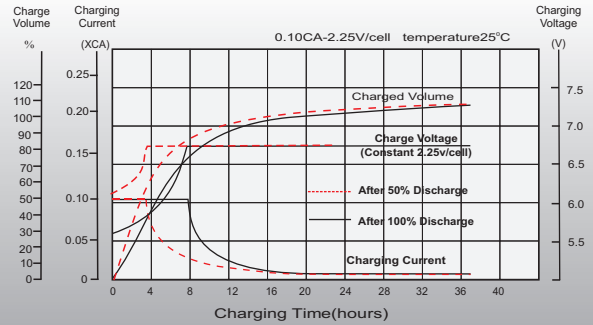
Unit: mm [inches]



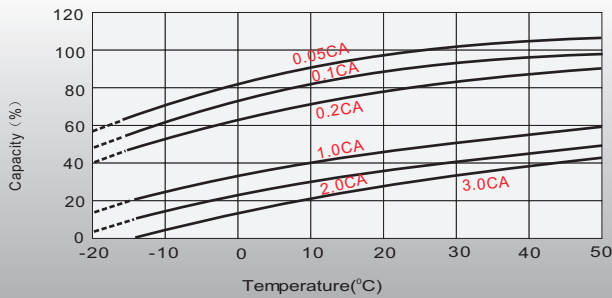
## Discharge Characteristics



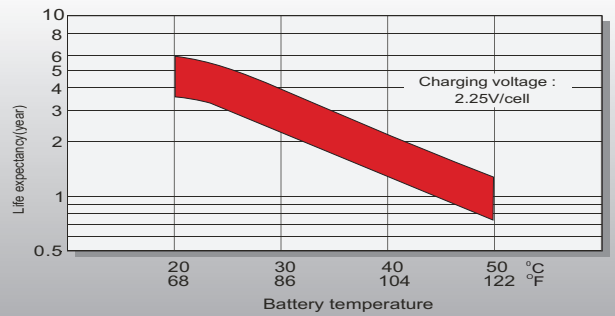
## Float Charging Characteristics



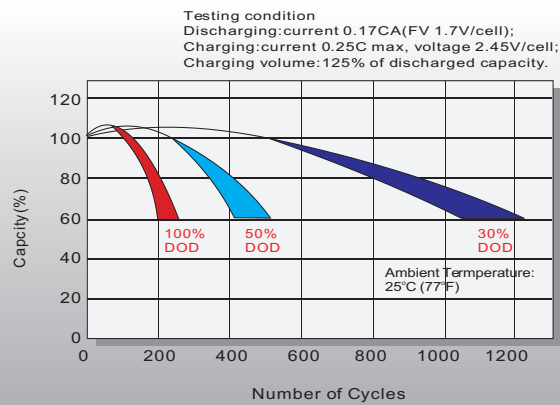
## Temperature Effects in Relation to Battery Capacity



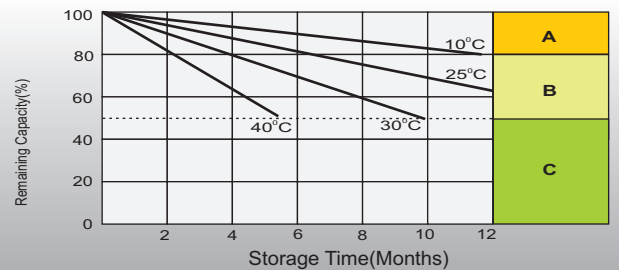
## Effect of Temperature on Long Term Float Life



## 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

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Http://www.leoch.com