

### Specification

|                                  |   |                               |
|----------------------------------|---|-------------------------------|
| Nominal Voltage                  | 6V  |                               |
| Nominal Capacity(20HR)           | 6.0AH   |                               |
| Dimensions                       | Length  | 70 ± 1mm (2.76 inches)        |
|                                  | Width   | 47 ± 1mm (1.85 inches)        |
|                                  | Container Height  | 100 ± 1mm (3.94 inches)       |
|                                  | Total Height (with Terminal)  | 106 ± 2mm (4.17 inches)       |
|                                  | Approx Weight   | Approx 0.88 kg (1.94lbs)      |
| Terminal                         | T1/T2   |                               |
| Container Material               | ABS   |                               |
| Rated Capacity                   | 6.00 AH/0.300A  | (20hr, 1.80V/cell, 25°C/77°F) |
|                                  | 5.58 AH/0.558A  | (10hr, 1.80V/cell, 25°C/77°F) |
|                                  | 5.05 AH/1.01A   | (5hr, 1.75V/cell, 25°C/77°F)  |
|                                  | 4.41 AH/1.47A   | (3hr, 1.75V/cell, 25°C/77°F)  |
|                                  | 3.64 AH/3.64A   | (1hr, 1.60V/cell, 25°C/77°F)  |
| Max. Discharge Current           | 90A (5s)  |                               |
| Internal Resistance              | Approx 16mΩ   |                               |
| 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 1.8A. 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 | 11.5 | 8.03  | 6.62  | 5.74  | 4.61  | 3.54  | 2.90 | 1.77 | 1.35 | 1.11 | 0.941 | 0.815 | 0.648 | 0.539 | 0.297 |
| 1.80V/cell | 14.2 | 9.58  | 7.68  | 6.50  | 5.10  | 3.86  | 3.12 | 1.88 | 1.42 | 1.17 | 0.982 | 0.851 | 0.672 | 0.558 | 0.300 |
| 1.75V/cell | 16.8 | 10.8  | 8.47  | 7.07  | 5.45  | 4.10  | 3.28 | 1.96 | 1.47 | 1.20 | 1.01  | 0.872 | 0.690 | 0.569 | 0.303 |
| 1.70V/cell | 19.0 | 12.0  | 9.17  | 7.60  | 5.72  | 4.26  | 3.42 | 2.04 | 1.52 | 1.23 | 1.03  | 0.893 | 0.701 | 0.578 | 0.308 |
| 1.65V/cell | 21.0 | 12.9  | 9.70  | 7.97  | 5.96  | 4.43  | 3.56 | 2.10 | 1.55 | 1.26 | 1.06  | 0.910 | 0.712 | 0.586 | 0.313 |
| 1.60V/cell | 22.0 | 13.4  | 10.1  | 8.23  | 6.13  | 4.53  | 3.64 | 2.17 | 1.59 | 1.29 | 1.08  | 0.928 | 0.727 | 0.596 | 0.314 |

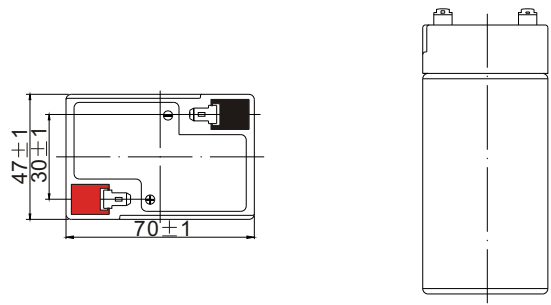
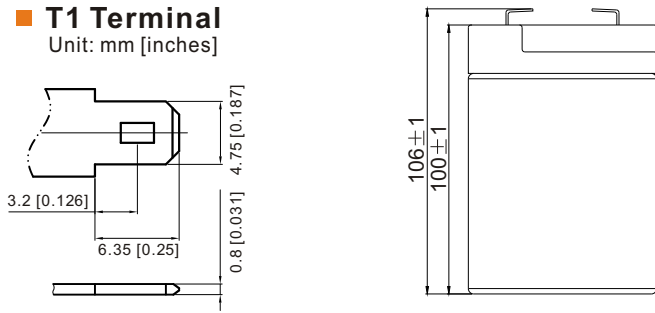
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

| F.V/Time   | 5min | 10min | 15min | 20min | 30min | 45min | 1h   | 2h   | 3h   | 4h   | 5h   | 6h   | 8h   | 10h  | 20h   |
|------------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|
| 1.85V/cell | 21.7 | 15.3  | 12.7  | 11.1  | 8.99  | 6.95  | 5.71 | 3.50 | 2.68 | 2.21 | 1.88 | 1.63 | 1.30 | 1.09 | 0.600 |
| 1.80V/cell | 26.4 | 18.1  | 14.6  | 12.5  | 9.88  | 7.53  | 6.11 | 3.70 | 2.80 | 2.31 | 1.95 | 1.70 | 1.34 | 1.12 | 0.603 |
| 1.75V/cell | 30.9 | 20.2  | 16.0  | 13.5  | 10.5  | 7.95  | 6.40 | 3.84 | 2.88 | 2.37 | 1.99 | 1.73 | 1.37 | 1.13 | 0.605 |
| 1.70V/cell | 34.7 | 22.1  | 17.2  | 14.4  | 10.9  | 8.21  | 6.63 | 3.98 | 2.96 | 2.41 | 2.03 | 1.76 | 1.38 | 1.14 | 0.612 |
| 1.65V/cell | 37.7 | 23.4  | 17.9  | 14.9  | 11.3  | 8.48  | 6.86 | 4.07 | 3.02 | 2.45 | 2.07 | 1.78 | 1.40 | 1.15 | 0.618 |
| 1.60V/cell | 39.0 | 24.1  | 18.5  | 15.2  | 11.5  | 8.58  | 6.96 | 4.17 | 3.07 | 2.50 | 2.09 | 1.81 | 1.42 | 1.17 | 0.618 |

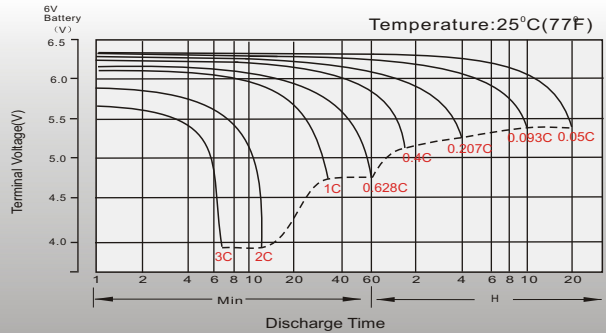
## Dimensions

### T1 Terminal

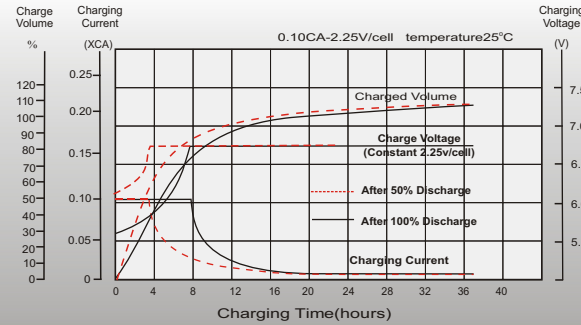
Unit: mm [inches]



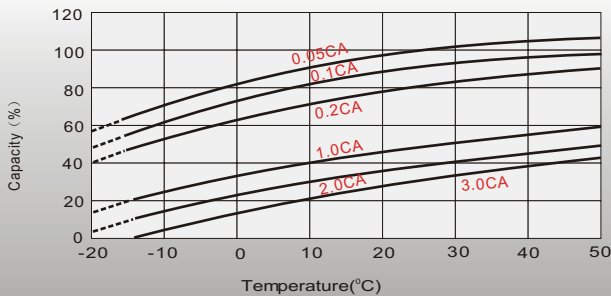
## Discharge Characteristics



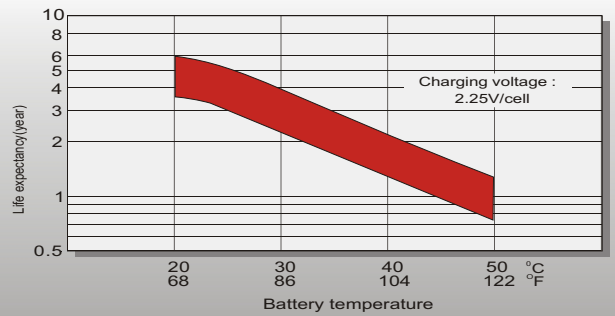
## Float Charging Characteristics



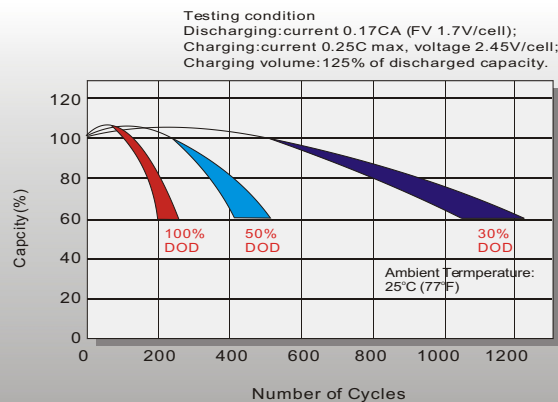
## Temperature Effects in Relation to Battery Capacity



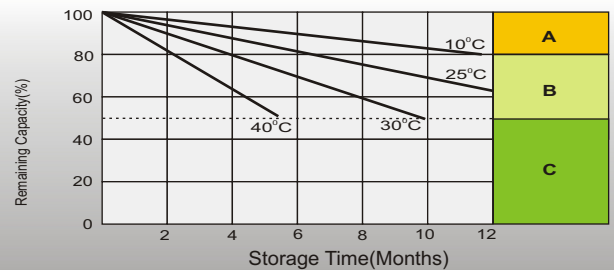
## Effect of Temperature on Long Term Float Life



## 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.)

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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