

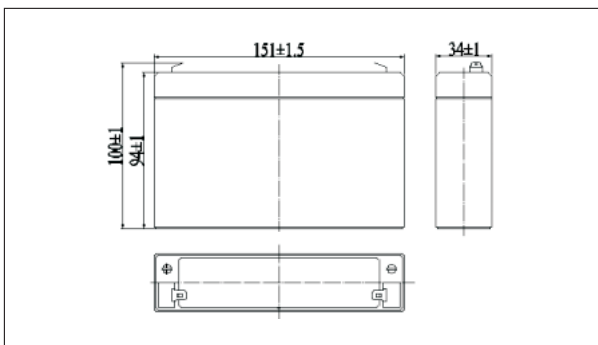
## NP6-9Ah 6V9Ah

### Specifications

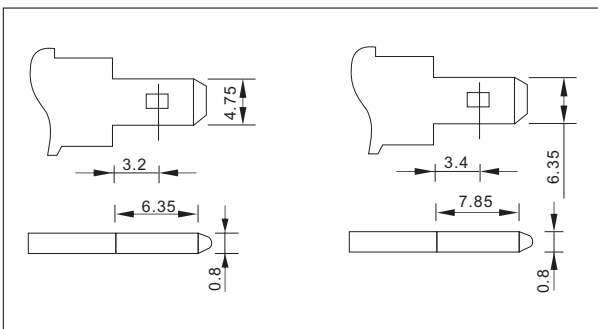
|                               |              |                     |
|-------------------------------|--------------|---------------------|
| Nominal Voltage               |              | 6V                  |
| Rated capacity (20 hour rate) |              | 9Ah                 |
| Dimensions                    | Length       | 151±1.5mm(5.94inch) |
|                               | Width        | 34±1mm(1.34inch)    |
|                               | Height       | 94±1mm(3.70inch)    |
|                               | Total Height | 100±1mm(3.94inch)   |
| Approx. Weight                |              | 1.28kg(2.82lbs)±5%  |



### Outer dimensions (mm)



### Terminal Type (mm)



### Construction

| Component    | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte   | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide   | Lead           | ABS       | ABS   | AGM       | Sulfuric acid | Rubber       | Copper   |

### Constant Current Discharge Characteristics Unit:A(25°C,77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 4.80V    | 30.6 | 19.4  | 15.1  | 8.52  | 5.24  | 2.87 | 1.98 | 1.64 | 1.40 | 0.76 | 0.41 |
| 4.95V    | 29.6 | 18.8  | 14.8  | 8.35  | 5.16  | 2.85 | 1.97 | 1.63 | 1.39 | 0.75 | 0.40 |
| 5.10V    | 28.4 | 18.0  | 14.2  | 8.09  | 5.03  | 2.82 | 1.96 | 1.62 | 1.38 | 0.75 | 0.40 |
| 5.25V    | 27.2 | 17.2  | 13.7  | 7.90  | 4.93  | 2.78 | 1.94 | 1.61 | 1.37 | 0.75 | 0.40 |
| 5.40V    | 25.7 | 16.3  | 13.0  | 7.61  | 0.78  | 2.71 | 1.89 | 1.56 | 1.33 | 0.73 | 0.39 |

### Constant Power Discharge Characteristics Unit:W(25°C,77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 10h  | 20h  |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 4.80V    | 171  | 109   | 86.2  | 48.8  | 30.3  | 16.8 | 11.8 | 9.77 | 8.33 | 4.55 | 2.44 |
| 4.95V    | 165  | 106   | 84.1  | 47.8  | 29.9  | 16.7 | 11.7 | 9.71 | 8.28 | 4.53 | 2.43 |
| 5.10V    | 159  | 102   | 81.0  | 46.4  | 29.1  | 16.5 | 11.6 | 9.64 | 8.22 | 4.51 | 2.41 |
| 5.25V    | 152  | 97.2  | 78.3  | 45.3  | 28.5  | 16.3 | 11.5 | 9.58 | 8.17 | 4.48 | 2.40 |
| 5.40V    | 143  | 91.7  | 74.1  | 43.6  | 27.7  | 15.9 | 11.2 | 9.29 | 7.92 | 4.39 | 2.35 |

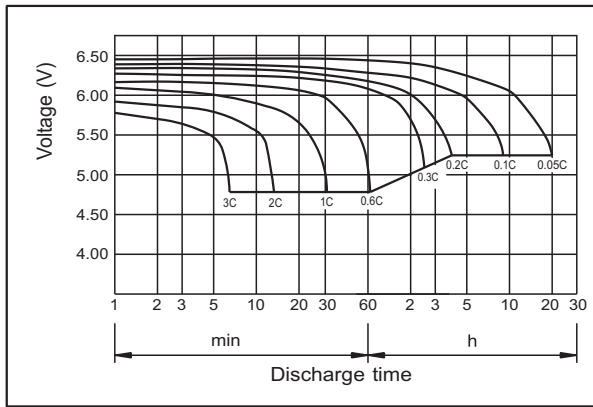
Note: The above characteristics data can be obtained within three charge or discharge cycles.

### Characteristics

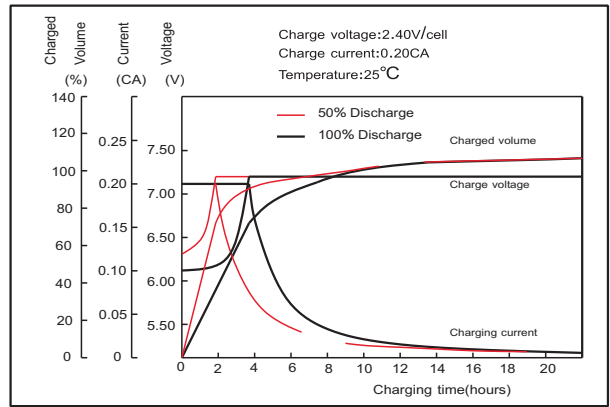
|  |             |   |
|--|-------------|---|
| Capacity (25°C)                          | 20HR(5.25V) | 9Ah   |
|  | 10HR(5.25V) | 6.5Ah   |
|  | 1HR(4.80V)  | 4.2Ah   |
| Terminal type                            |             | T1/T2   |
| Internal resistance (Fully charged,25°C) |             | Approx.10m Ω  |
| Capacity affected by temperature (20HR)  | 40°C        | 102%  |
|  | 25°C        | 100%  |
|  | 0°C         | 85%   |
|  | -15°C       | 65%   |
| Self-discharge (25°C)                    | 3month      | Remaining Capacity:91%                              |
|  | 6month      | Remaining Capacity:82%                              |
|  | 12month     | Remaining Capacity:65%                              |
| Nominal operating temperature            |             | 25°C ±3°C(77°F ±5°F)                                |
| Operating temperature range              | Discharge   | -15°C~50°C(5°F~122°F)                               |
|  | Charge      | -10°C~50°C(14°F~122°F)                              |
|  | Storage     | -20°C~50°C(-4°F~122°F)                              |
| Float charging voltage(25°C)             |             | 6.75 to 6.90V<br>Temperature compensation: -9mV/°C  |
| Cyclic charging voltage(25°C)            |             | 7.25 to 7.50V<br>Temperature compensation: -15mV/°C |
| Maximum charging current                 |             | 2.1A  |
| Maximum discharge current                |             | 105A(5 sec.)  |
| Designed floating life(20°C)             |             | 5 years   |

**NP6-8Ah 6V8Ah**

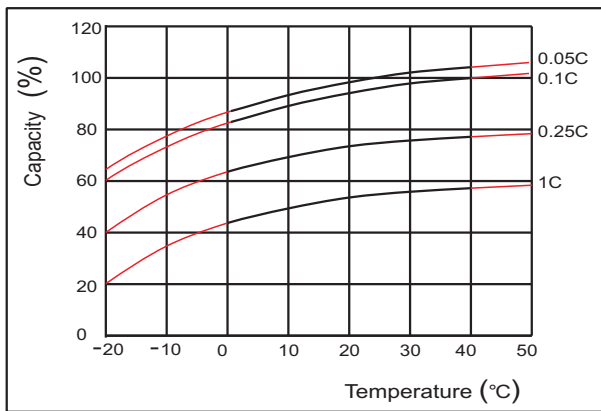
**Discharge characteristics(25°C)**



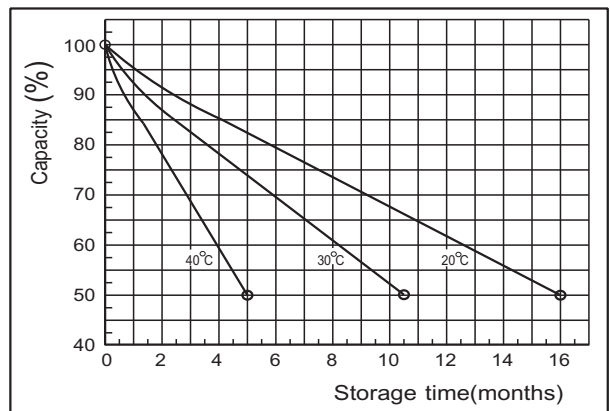
**Charging characteristics (25°C)**



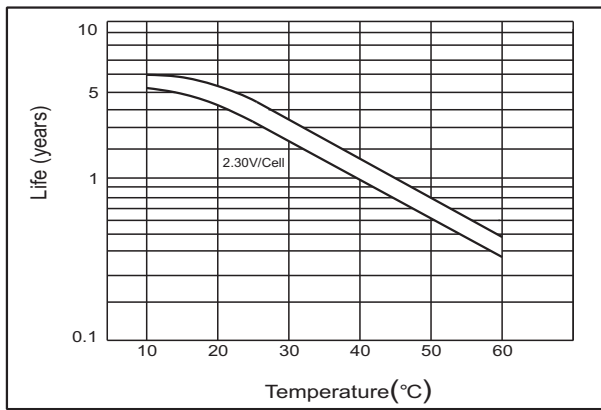
**Effect of temperature on capacity**



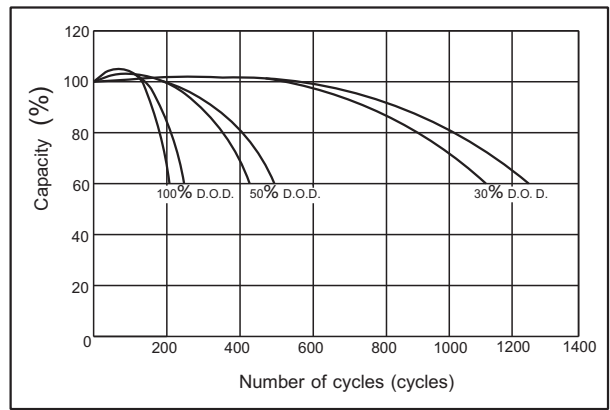
**Self-discharge characteristics**



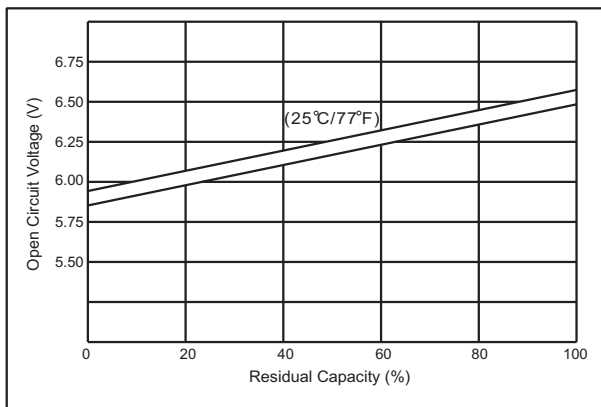
**Floating life on temperature**



**Cycle life on D.O.D(25°C)**



**The relationship for OCV and Capacity (25°C)**



**The relationship for Charging voltage and Temperature**

