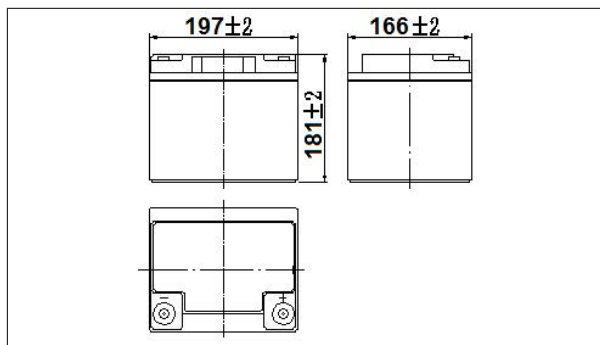


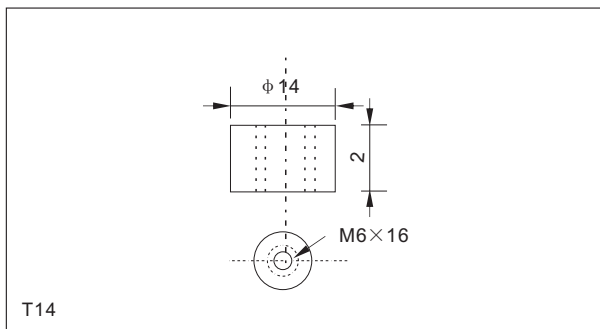
### Specifications

|                              |              |                    |
|------------------------------|--------------|--------------------|
| Nominal Voltage              |              | 12V                |
| Rated capacity (10hour rate) |              | 40Ah               |
| Dimensions                   | Length       | 197±2mm(7.73inch)  |
|                              | Width        | 166±2mm(6.54inch)  |
|                              | Height       | 174±2mm(6.85inch)  |
|                              | Total Height | 181±2mm(7.13inch)  |
| Approx. Weight               |              | 12.6kg(27.7lbs)±3% |

### 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 | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 78.0  | 64.0  | 38.8  | 24.0  | 14.6 | 10.4 | 8.16 | 6.94 | 4.90 | 4.07 | 2.17 |
| 9.90V    | 75.7  | 62.5  | 38.0  | 23.6  | 14.5 | 10.3 | 8.11 | 6.90 | 4.87 | 4.06 | 2.16 |
| 10.2V    | 72.5  | 60.2  | 36.9  | 23.0  | 14.4 | 10.3 | 8.06 | 6.85 | 4.83 | 4.05 | 2.15 |
| 10.5V    | 69.4  | 58.1  | 36.0  | 22.3  | 14.2 | 10.2 | 8.00 | 6.80 | 4.80 | 4.03 | 2.13 |
| 10.8V    | 65.5  | 55.0  | 34.6  | 21.6  | 13.8 | 10.0 | 7.76 | 6.60 | 4.66 | 4.00 | 2.12 |

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

| F.V/Time | 10min | 15min | 30min | 60min | 2h  | 3h  | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|-----|-----|------|------|------|------|------|
| 9.60V    | 842   | 703   | 435   | 274   | 169 | 122 | 96.0 | 82.0 | 58.2 | 48.6 | 26.1 |
| 9.90V    | 817   | 686   | 427   | 269   | 168 | 122 | 95.4 | 81.5 | 57.8 | 48.5 | 25.9 |
| 10.2V    | 783   | 661   | 414   | 263   | 167 | 121 | 94.7 | 80.9 | 57.4 | 48.4 | 25.8 |
| 10.5V    | 750   | 638   | 404   | 254   | 164 | 120 | 94.1 | 80.4 | 57.0 | 48.1 | 25.6 |
| 10.8V    | 708   | 604   | 389   | 246   | 160 | 118 | 91.3 | 78.0 | 55.3 | 47.8 | 25.4 |

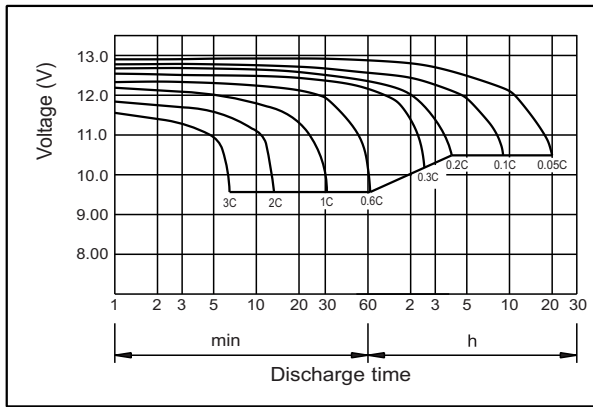
Note: The above characteristics data can be obtained within three charge or discharge cycles.



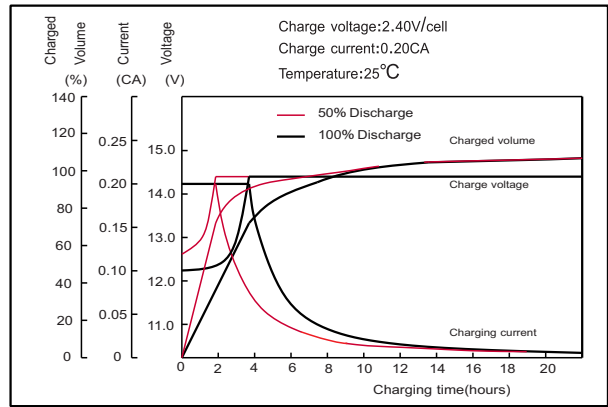
### Characteristics

|  |             |   |
|--|-------------|---|
| Capacity (25°C)                          | 10HR(10.8V) | 40Ah  |
|  | 3HR(10.8V)  | 30Ah  |
|  | 1HR(10.5V)  | 22.3Ah  |
| Terminal type                            |             | T14   |
| Internal resistance (Fully charged,25°C) |             | Approx.8m Ω   |
| Capacity affected by temperature (20HR)  | 40°C        | 102%  |
|  | 25°C        | 100%  |
|  | 0°C         | 85%   |
|  | -15°C       | 65%   |
| Self-discharge (25°C)                    | 3 months    | Remaining Capacity:91%                                |
|  | 6 months    | Remaining Capacity:82%                                |
|  | 12 months   | 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)             |             | 13.50 to 13.80V<br>Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C)            |             | 14.50 to 15.00V<br>Temperature compensation: -30mV/°C |
| Maximum charging current                 |             | 12A   |
| Maximum discharge current                |             | 400A(5 sec.)  |
| Designed floating life(20°C)             |             | 10years   |

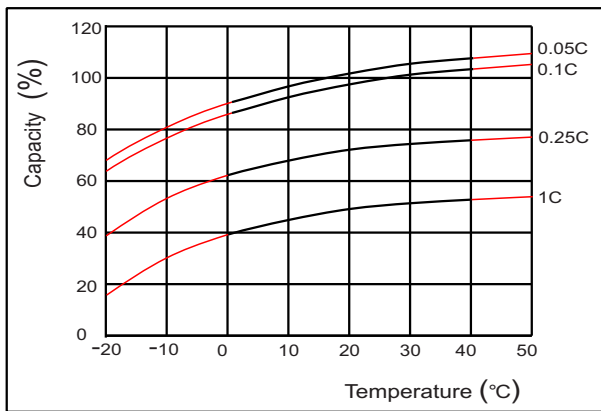
### ● Discharge characteristics(25°C)



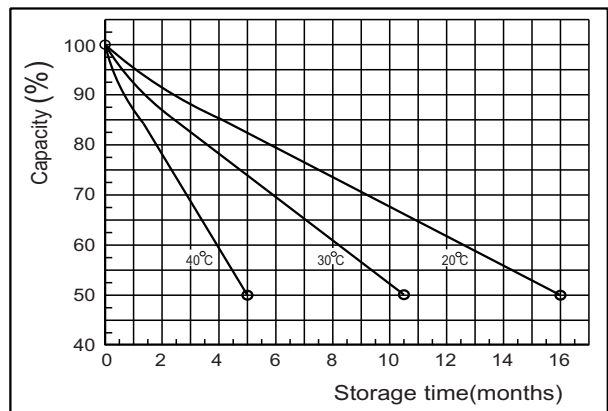
### ● Charging characteristics (25°C)



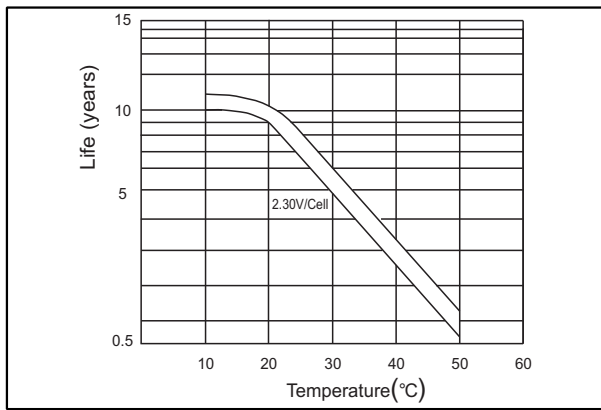
### ● Temperature effects on Capacity



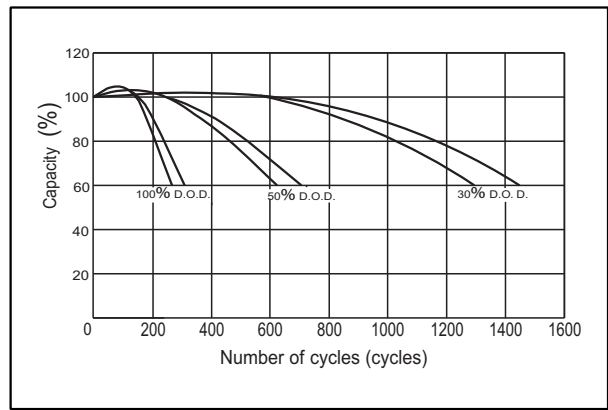
### ● Self-discharge characteristics



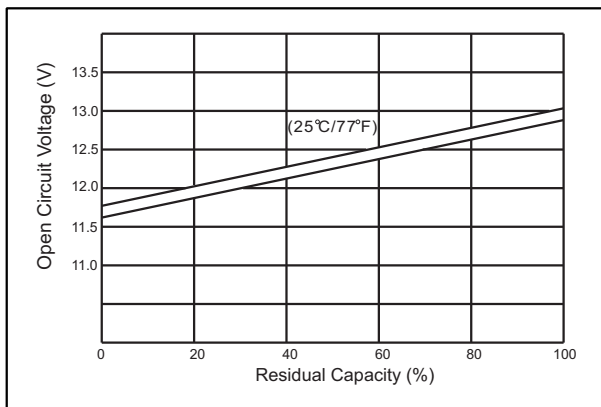
### ● Floating life on Temperature



### ● Cycle life on D.O.D (25°C)



### ● The relationship for OCV and Capacity (25°C)



### ● The relationship for Charging voltage and Temperature

