

**Specifications**

|   |              |   |
|---|--------------|---|
| Nominal Voltage                           |              | 12 V  |
| Capacity (25°C)                           | 20HR(10.5V)  | 17Ah  |
|   | 10HR(10.5V)  | 15.8Ah  |
|   | 1HR(9.60V)   | 11.1Ah  |
| Dimension                                 | Length       | 181 ± 2mm (7.13inch)                                  |
|   | Width        | 77 ± 1mm (3.03inch)                                   |
|   | Height       | 167 ± 2mm (6.57inch)                                  |
|   | Total Height | 167 ± 2mm (6.57inch)                                  |
| Approx. Weight                            |              | 5.1kg (11.2lbs) ± 4%                                  |
| Terminal type                             |              | T3/T8   |
| Internal resistance (Fully charged, 25°C) |              | Approx. 17mΩ  |
| Capacity affected by temperature (20HR)   | 40°C         | 102%  |
|   | 25°C         | 100%  |
|   | 0°C          | 85%   |
|   | -15°C        | 65%   |
| Self-discharge (25°C)                     | 3 month      | Remaining Capacity: 91%                               |
|   | 6 month      | Remaining Capacity: 82%                               |
|   | 12 month     | 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)              |              | 13.60 to 13.80V<br>Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C)             |              | 14.50 to 14.90V<br>Temperature compensation: -30mV/°C |
| Maximum charging current                  |              | 5.1A  |
| Terminal material                         |              | Copper  |
| Maximum discharge current                 |              | 255A(5 sec.)  |
| Designed floating life(20°C)              |              | 10years   |

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

**Constant Current Discharge Characteristics (A, 25°C)**

| F.V/TIME | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 40.8  | 32.3  | 18.0  | 11.1  | 6.04 | 4.34 | 3.47 | 2.95 | 1.91 | 1.60 | 0.86 |
| 9.90V    | 39.6  | 31.5  | 17.7  | 10.9  | 6.00 | 4.31 | 3.45 | 2.93 | 1.90 | 1.60 | 0.86 |
| 10.2V    | 37.9  | 30.4  | 17.1  | 10.6  | 5.95 | 4.28 | 3.42 | 2.91 | 1.88 | 1.59 | 0.86 |
| 10.5V    | 36.3  | 29.3  | 16.7  | 10.4  | 5.86 | 4.25 | 3.40 | 2.89 | 1.87 | 1.58 | 0.85 |
| 10.8V    | 34.3  | 27.8  | 16.1  | 10.1  | 5.71 | 4.12 | 3.30 | 2.80 | 1.81 | 1.55 | 0.83 |

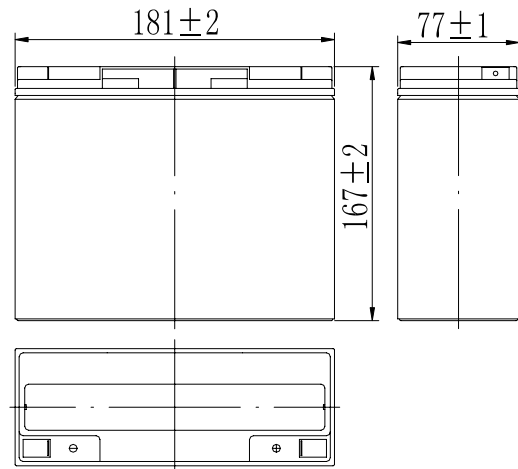
**Constant Power Discharge Characteristics (Watt, 25°C)**

| F.V/TIME | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 460   | 368   | 207   | 128   | 70.7 | 51.5 | 41.3 | 35.2 | 22.9 | 19.3 | 10.4 |
| 9.90V    | 446   | 359   | 202   | 126   | 70.2 | 51.2 | 41.1 | 35.0 | 22.8 | 19.2 | 10.3 |
| 10.2V    | 428   | 346   | 196   | 123   | 69.6 | 50.8 | 40.8 | 34.7 | 22.6 | 19.1 | 10.3 |
| 10.5V    | 410   | 334   | 191   | 120   | 68.6 | 50.5 | 40.5 | 34.5 | 22.4 | 19.0 | 10.2 |
| 10.8V    | 387   | 317   | 184   | 117   | 66.8 | 49.0 | 39.3 | 33.5 | 21.8 | 18.6 | 10.0 |

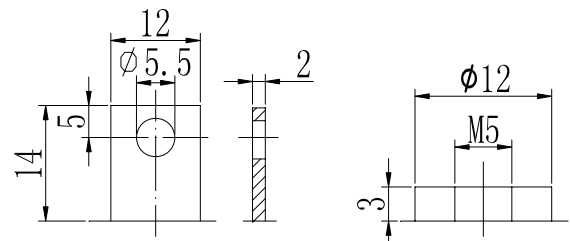
Note: The above characteristics data can be obtained within three charge/discharge cycles.



**Dimensions**



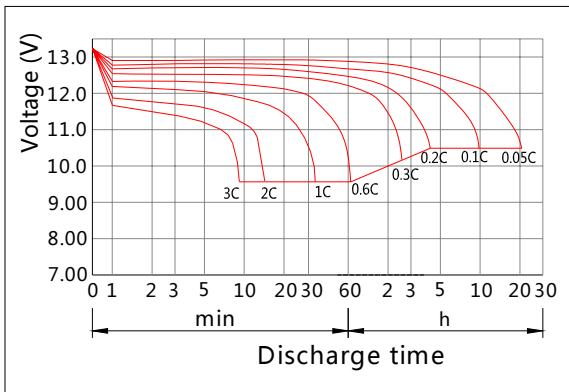
**Terminal**



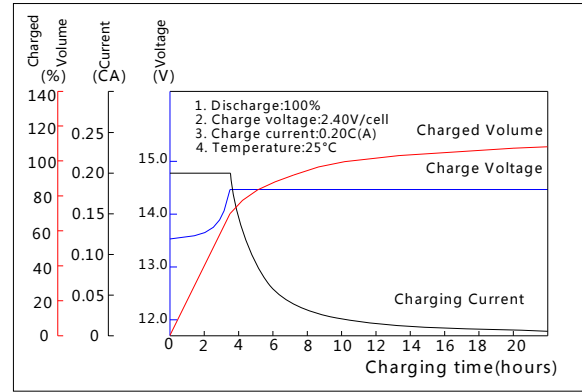
Terminal T3

Terminal T8

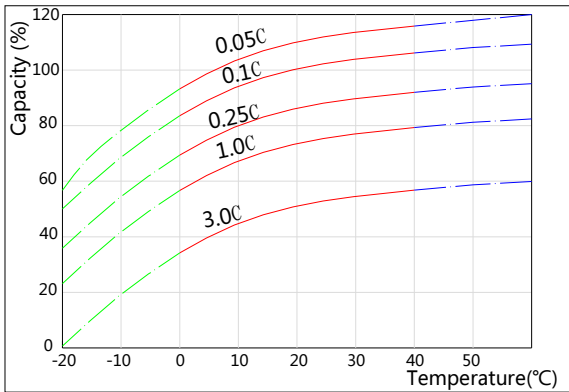
**Discharge Characteristics(25°C)**



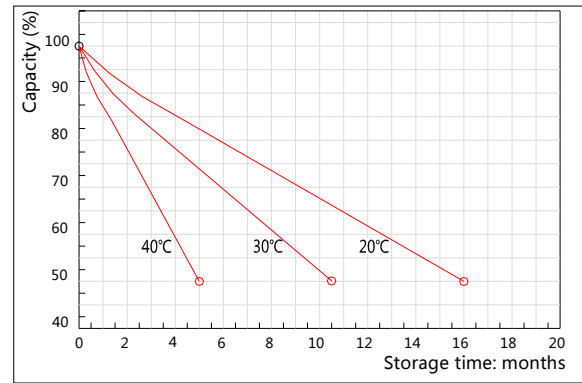
**Charging Characteristics(25°C)**



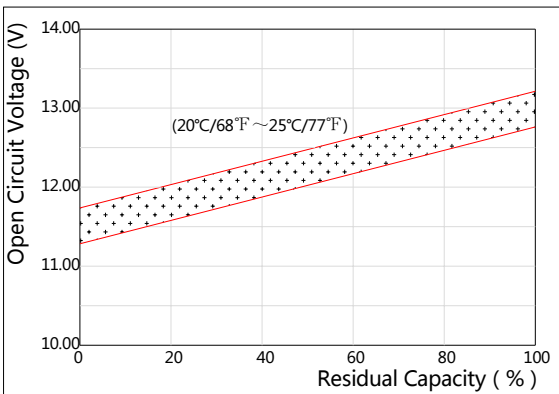
**Effect of Temperature on Capacity**



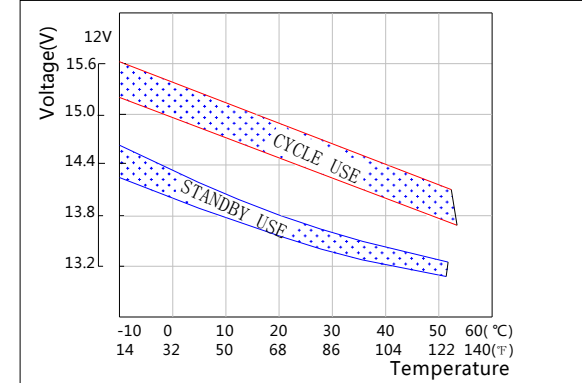
**Self-discharge Characteristics**



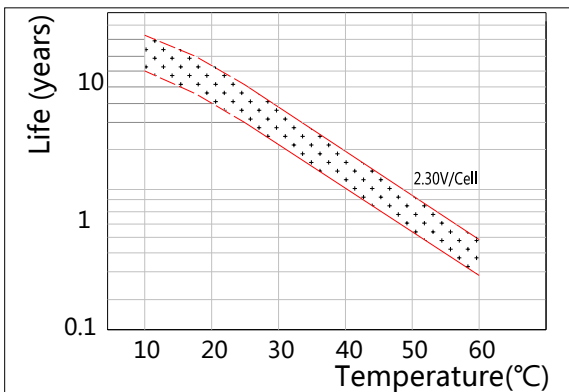
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**

