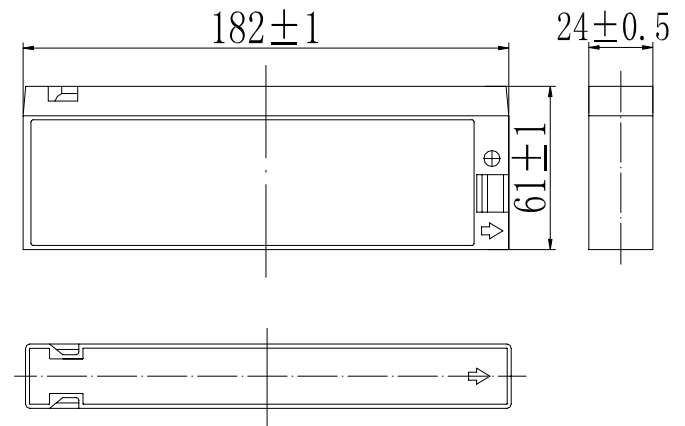


**Specifications**

|   |   |                             |
|---|---|-----------------------------|
| Nominal Voltage                           |   | 12 V                        |
| Capacity (25°C)                           | 20HR(10.5V)   | 2.0Ah                       |
|   | 10HR(10.5V)   | 1.86Ah                      |
|   | 1HR(9.60V)  | 1.3Ah                       |
| Dimension                                 | Length  | 182 ± 1mm (7.17inch)        |
|   | Width   | 24 ± 0.5mm (0.94inch)       |
|   | Height  | 61 ± 1mm (2.40inch)         |
|   | Total Height  | 61 ± 1mm (2.40inch)         |
| Approx. Weight                            |   | 0.71kg (1.57lbs) ± 5%       |
| Terminal type                             |   | Tab                         |
| Internal resistance (Fully charged, 25°C) |   | Approx. 130m Ω              |
| 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                  | 0.69A   |                             |
| Terminal material                         | Copper  |                             |
| Maximum discharge current                 | 11.5A(5 sec.)   |                             |
| Designed floating life(20°C)              | 10years   |                             |

**Dimensions**



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

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

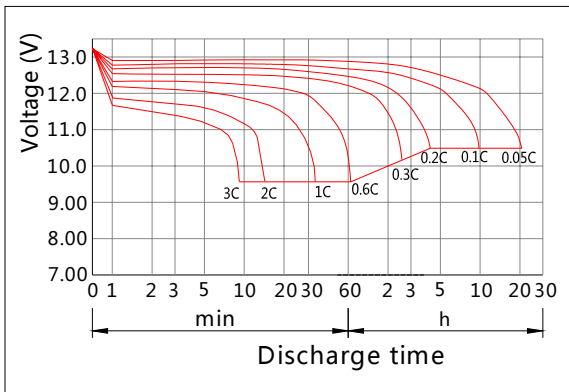
| F.V/TIME | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h   | 20h   |
|----------|-------|-------|-------|-------|------|------|------|------|------|-------|-------|
| 9.60V    | 7.60  | 4.80  | 3.80  | 2.12  | 1.30 | 0.71 | 0.51 | 0.41 | 0.35 | 0.189 | 0.102 |
| 9.90V    | 7.37  | 4.66  | 3.71  | 2.08  | 1.28 | 0.71 | 0.51 | 0.41 | 0.34 | 0.188 | 0.101 |
| 10.2V    | 7.07  | 4.46  | 3.57  | 2.01  | 1.25 | 0.70 | 0.50 | 0.40 | 0.34 | 0.187 | 0.101 |
| 10.5V    | 6.76  | 4.27  | 3.45  | 1.97  | 1.22 | 0.69 | 0.50 | 0.40 | 0.34 | 0.186 | 0.100 |
| 10.8V    | 6.38  | 4.03  | 3.27  | 1.89  | 1.19 | 0.67 | 0.49 | 0.39 | 0.33 | 0.182 | 0.098 |

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

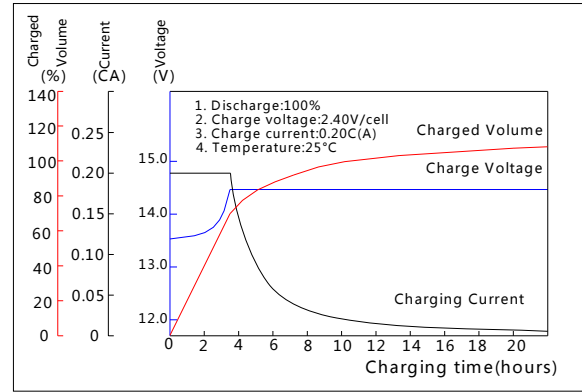
| F.V/TIME | 10min | 15min | 30min | 60min | 2h   | 3h   | 4h   | 5h   | 8h   | 10h  | 20h  |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V    | 84.8  | 54.1  | 43.3  | 24.3  | 15.1 | 8.31 | 6.06 | 4.86 | 4.14 | 2.27 | 1.22 |
| 9.90V    | 82.3  | 52.5  | 42.3  | 23.8  | 14.8 | 8.26 | 6.02 | 4.83 | 4.12 | 2.26 | 1.21 |
| 10.2V    | 78.9  | 50.4  | 40.7  | 23.1  | 14.5 | 8.19 | 5.98 | 4.80 | 4.09 | 2.25 | 1.21 |
| 10.5V    | 75.5  | 48.2  | 39.3  | 22.5  | 14.2 | 8.07 | 5.94 | 4.76 | 4.06 | 2.23 | 1.20 |
| 10.8V    | 71.2  | 45.5  | 37.3  | 21.7  | 13.7 | 7.86 | 5.76 | 4.62 | 3.94 | 2.19 | 1.18 |

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

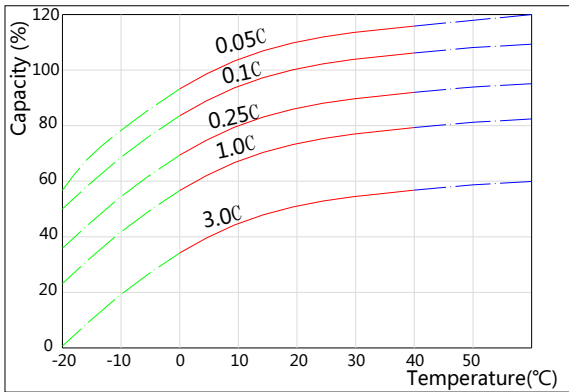
**Discharge Characteristics(25°C)**



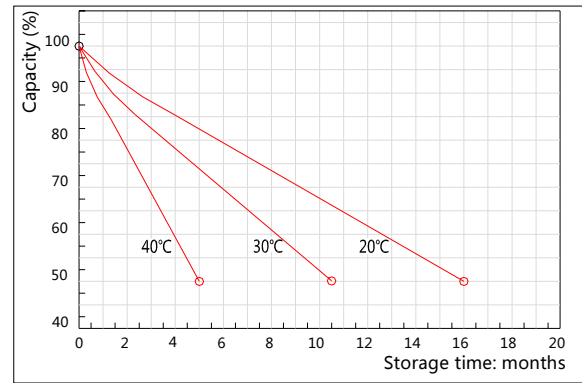
**Charging Characteristics(25°C)**



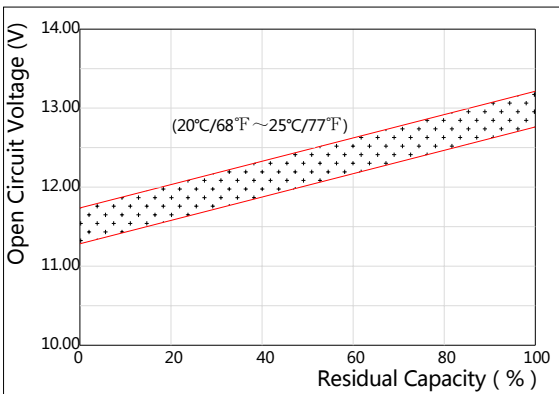
**Effect of Temperature on Capacity**



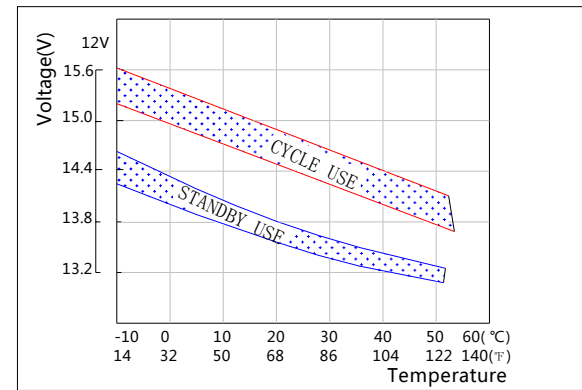
**Self-discharge Characteristics**



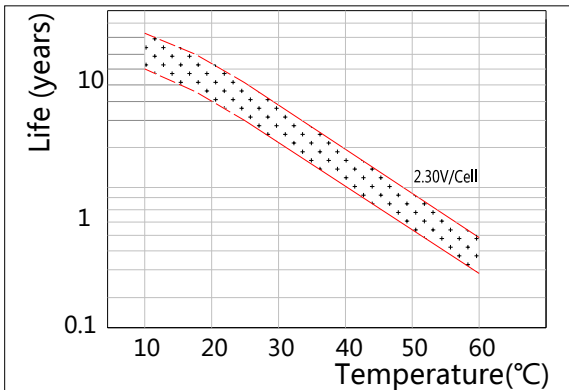
**The Relationship for Open Circuit Voltage and Residual Capacity (25°C)**



**The Relationship for Charging Voltage and Temperature**



**Floating Life on Temperature**



**Cycle Life on D.O.D(25°C)**

