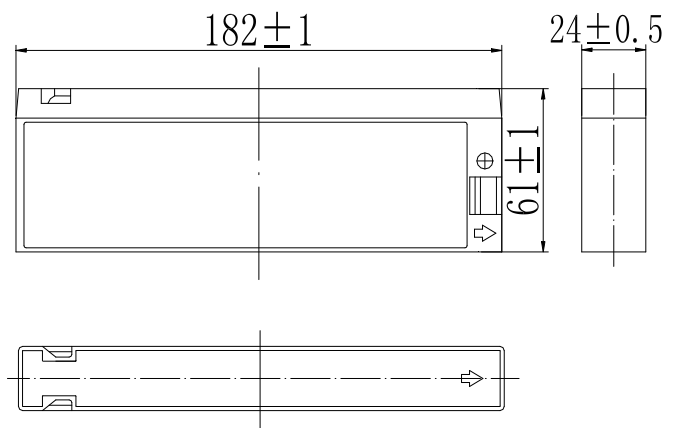


Specifications

| | | |
|---|--------------|---|
| Nominal Voltage | | 12 V |
| Capacity (25°C) | 20HR(10.5V) | 2.3Ah |
| | 10HR(10.5V) | 2.1Ah |
| | 1HR(9.60V) | 1.5Ah |
| 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 (1.56lbs) ± 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 Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.50 to 14.90V 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)

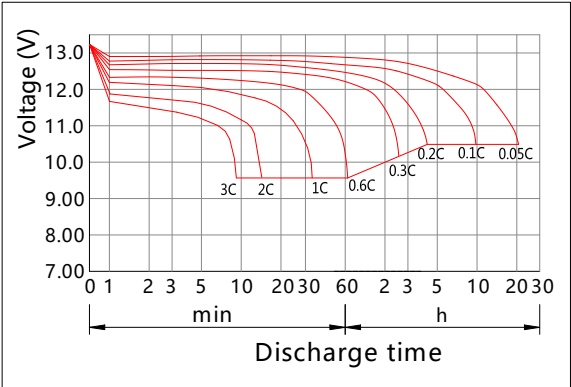
| F. V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|-----------|-------|-------|-------|-------|------|------|------|------|------|------|-------|
| 9.60V | 5.24 | 4.15 | 2.34 | 1.46 | 0.80 | 0.58 | 0.47 | 0.4 | 0.26 | 0.22 | 0.117 |
| 9.90V | 5.08 | 4.06 | 2.29 | 1.43 | 0.79 | 0.57 | 0.47 | 0.4 | 0.26 | 0.22 | 0.116 |
| 10.2V | 4.87 | 3.90 | 2.23 | 1.40 | 0.79 | 0.57 | 0.46 | 0.39 | 0.26 | 0.22 | 0.116 |
| 10.5V | 4.66 | 3.77 | 2.17 | 1.37 | 0.77 | 0.57 | 0.46 | 0.39 | 0.25 | 0.21 | 0.115 |
| 10.8V | 4.41 | 3.57 | 2.09 | 1.32 | 0.75 | 0.55 | 0.45 | 0.38 | 0.25 | 0.21 | 0.113 |

Constant Power Discharge Characteristics (Watt, 25°C)

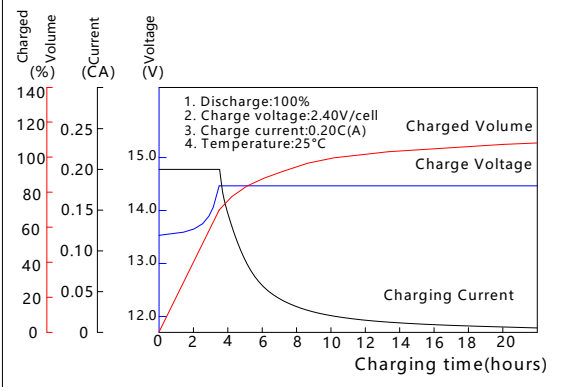
| F. V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|-----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 59.2 | 47.3 | 26.8 | 16.8 | 9.36 | 6.87 | 5.59 | 4.77 | 3.11 | 2.64 | 1.41 |
| 9.90V | 57.4 | 46.3 | 26.2 | 16.4 | 9.24 | 6.75 | 5.59 | 4.77 | 3.11 | 2.64 | 1.40 |
| 10.2V | 55.0 | 44.5 | 25.5 | 16.1 | 9.24 | 6.75 | 5.47 | 4.65 | 3.11 | 2.64 | 1.40 |
| 10.5V | 52.7 | 43.0 | 24.8 | 15.8 | 9.01 | 6.75 | 5.47 | 4.65 | 2.99 | 2.52 | 1.39 |
| 10.8V | 49.8 | 40.7 | 23.9 | 15.2 | 8.78 | 6.52 | 5.36 | 4.53 | 2.99 | 2.52 | 1.36 |

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

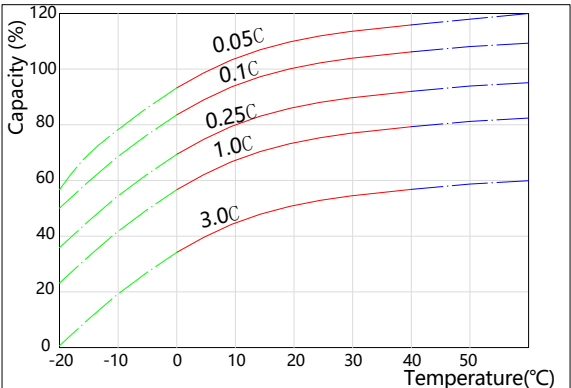
Discharge Characteristics(25°C)



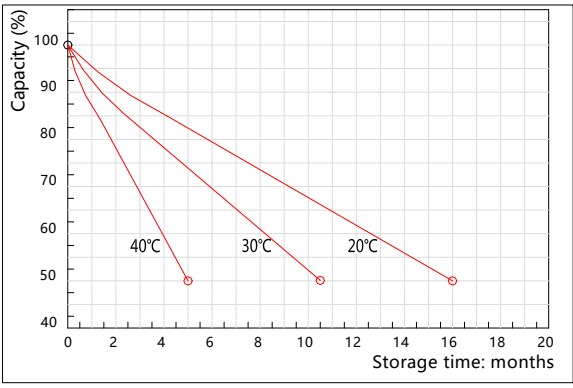
Charging Characteristics(25°C)



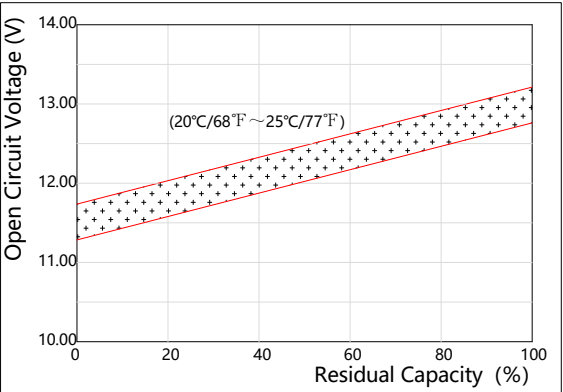
Effect of Temperature on Capacity



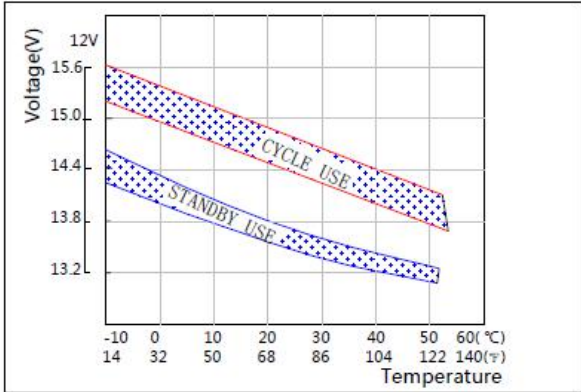
Self-discharge Characteristics



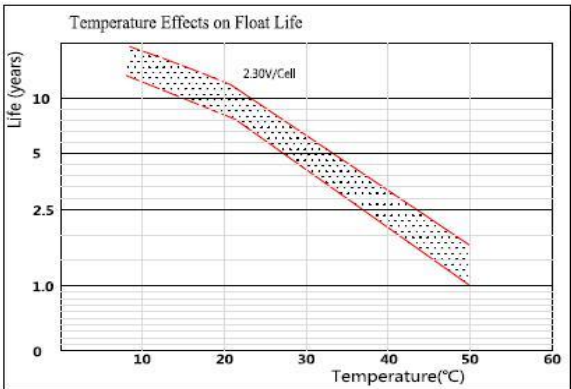
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

