

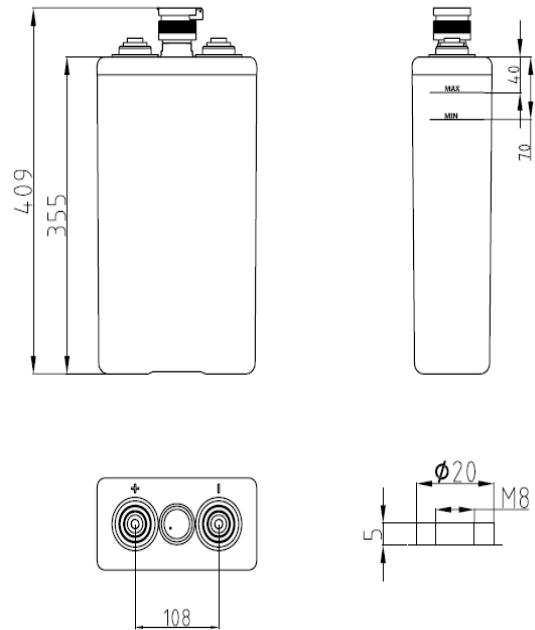
Specifications

| | | |
|-------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nominal Voltage | | 2 V |
| Capacity (20°C) | 10HR(1.80V) | 100 Ah |
| | 3HR(1.75V) | 76.5Ah |
| | 1HR(1.60V) | 56.0Ah |
| Battery Weigh | Dry | 8.5kg (18.7lbs)±5% |
| | Wet | 13.5kg (29.7lbs)±5% |
| Acid Weight (d=1.24kg/l) | | Approx.5kg (11.0lbs) |
| Terminal type /material | | T10 / Copper |
| Internal resistance (Fully charged, 25°C) | | Approx. 2.5 mΩ |
| Self-discharge | 1 month | Remaining Capacity: 86%(20°C) |
| Nominal operating temperature | | 20°C±5°C(68°F±9°F) |
| Operating temperature range | Discharge | -15°C~50°C(5°F~122°F) |
| | Charge | 10°C~45°C(50°F~113°F) |
| | Storage | 10°C~30°C(50°F~86°F) |
| Initial charging | Constant current | Charge the battery at 0.05 C ₁₀ for 72h. |
| | Constant voltage | Charge the battery at 0.1 C ₁₀ to 2.35v/cell; then Charge the battery with 2.35v/cell until the whole charge time up to 100h. |
| Mark of Fully charged | Constant current | The battery voltage and density of electrolyte remain stable over 2h at the end of charging , and strong bubbles generated within the electrolyte |
| | Constant voltage | The charging current and density of electrolyte kept constant for more than 3h at the end of the charge; and the charging current is about 0.002~0.005 C ₁₀ amp. |
| Supplementary charge | | Charge the battery at 0.05 C ₁₀ to fully charged. |
| Equalizing charging | | Charge the battery with 2.40v/cell for 48h. |
| Battery operation | Float charging | Charge the battery with 2.23V (25°C); Equalizing charging the battery when the abnormal occurs |
| | Charge& discharge | Equalizing charging the battery after discharged and per 3months |
| | Backup | Supplementary charge the battery per 3 or 6 months. |
| Maximum charging current | | 25.0A(0.25C ₁₀) |
| Max. discharge current | | 500A(5 sec.) |
| Designed cycle life | | 1600@80% DOD (30°C) |
| Designed floating life | | 20 years(20°C) |

CHARACTERISTICS:

- ◆ Tubular Positive Plate;
- ◆ Flooded Battery;
- ◆ Porous Rubber and Porous PVC Separator
- ◆ Transparent Container.

Dimensions



Constant Current Discharge Characteristics (A, 25°C)

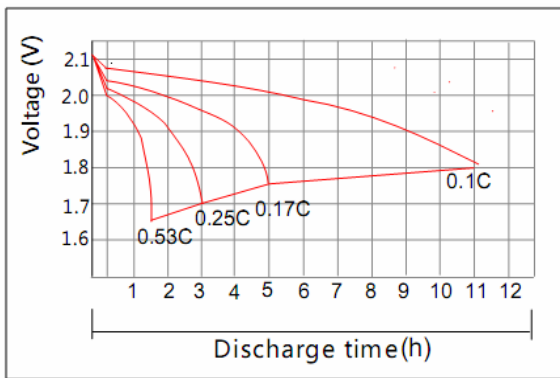
| F.V/TIME | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 24h | 48h | 120h |
|----------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.70V | 78.0 | 54.0 | 33.0 | 25.7 | 20.6 | 18.1 | 15.4 | 11.8 | 10.1 | 5.45 | 4.76 | ---- | ---- |
| 1.75V | 76.0 | 52.5 | 32.5 | 25.5 | 20.5 | 18.0 | 15.3 | 11.7 | 10.1 | 5.45 | 4.73 | ---- | ---- |
| 1.80V | 73.0 | 51.0 | 31.7 | 24.7 | 19.9 | 17.5 | 14.8 | 11.3 | 10.0 | 5.40 | 4.70 | 2.41 | ---- |
| 1.85V | 69.0 | 48.0 | 29.8 | 23.2 | 18.7 | 16.5 | 13.9 | 10.6 | 9.50 | 5.15 | 4.47 | 2.41 | 1.00 |

Constant Power Discharge Characteristics (Watt, 25°C)

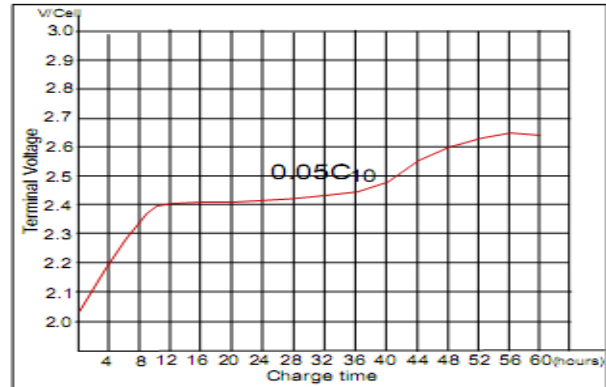
| F.V/TIME | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 24h | 48h | 120h |
|----------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1.70V | 146 | 102 | 63.5 | 50.5 | 40.5 | 35.7 | 30.4 | 23.3 | 20.2 | 10.9 | 9.55 | ---- | ---- |
| 1.75V | 142 | 100 | 62.5 | 50.0 | 40.2 | 35.5 | 30.1 | 23.2 | 20.0 | 10.9 | 9.50 | ---- | ---- |
| 1.80V | 137 | 97.0 | 61.0 | 48.5 | 39.0 | 34.4 | 29.2 | 22.5 | 19.9 | 10.8 | 9.45 | 4.89 | ---- |
| 1.85V | 128 | 90.0 | 57.0 | 45.1 | 36.3 | 32.0 | 27.2 | 20.9 | 18.5 | 10.0 | 9.00 | 4.89 | 2.04 |

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

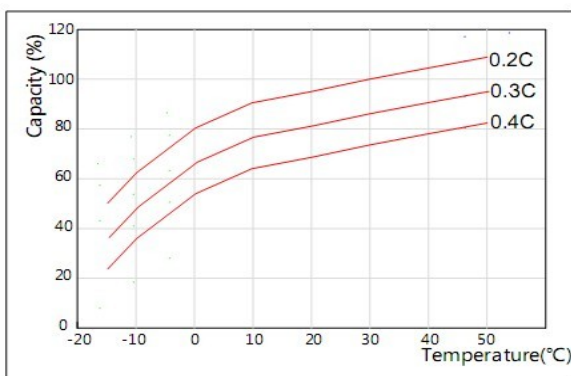
Discharge Characteristics(25°C)



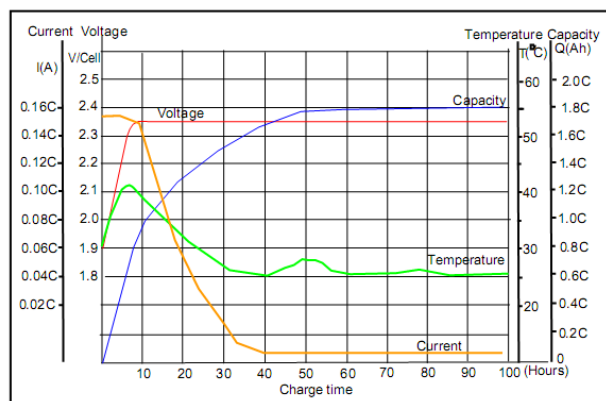
Initial Charging (CC) Characteristics(25°C)



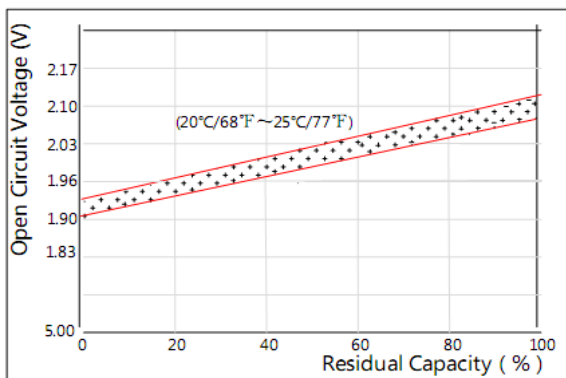
Effect of Temperature on Capacity



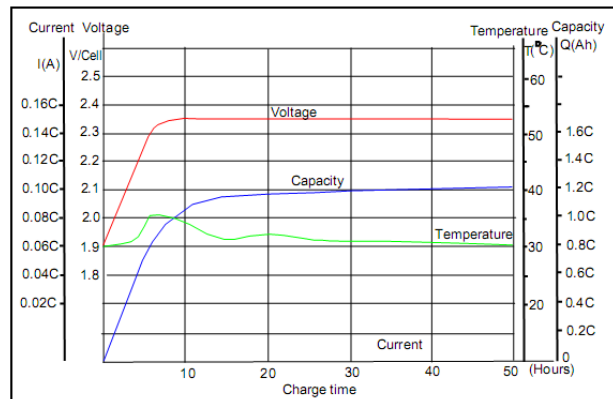
Initial Charging (CV) Characteristics



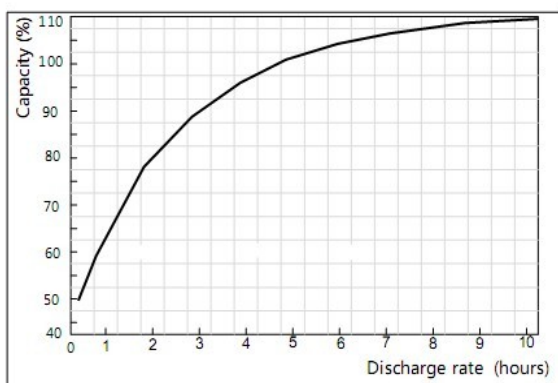
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



Supplementary charge (CV) Characteristics



Effect of Discharge rate on Capacity



Cycle Life on D.O.D(25°C)

