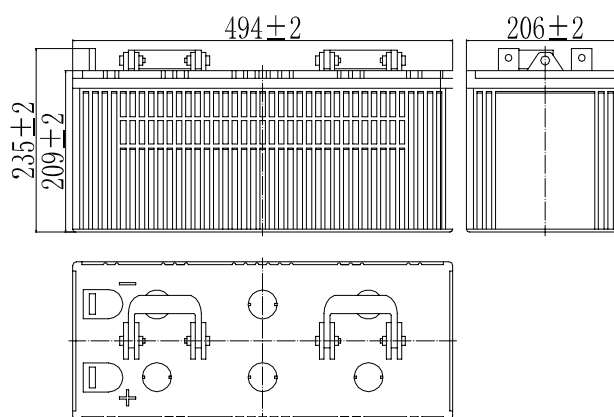


Specifications

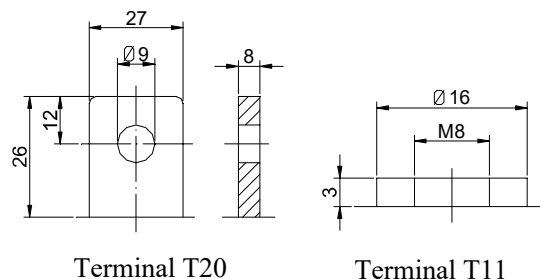
| | | |
|---|--------------|---|
| Nominal Voltage | | 12 V |
| Capacity (25°C) | 10HR(10.8V) | 180 Ah |
| | 5HR(10.5V) | 157.5Ah |
| | 1HR(9.60V) | 112Ah |
| Dimension | Length | 494 ± 2mm (19.45inch) |
| | Width | 206 ± 2mm (8.11inch) |
| | Height | 209 ± 2mm (8.23inch) |
| | Total Height | 235 ± 2mm (9.25inch) |
| Approx. Weight | | 54kg (119.1lbs) ± 4% |
| Terminal type | | T20/T11 |
| Internal resistance (Fully charged, 25°C) | | Approx. 3.3m Ω |
| Capacity affected by temperature (10HR) | 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) | | 13.50 to 13.80V Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.50 to 14.90V Temperature compensation: -30mV/°C |
| Maximum charging current | | 54A |
| Terminal material | | T20: Lead, T11: Copper |
| Maximum discharge current | | 1400A(5 sec.) |
| Designed floating life(20°C) | | 12 years |



Dimensions



Terminal



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

Constant Current Discharge Characteristics (A, 25°C)

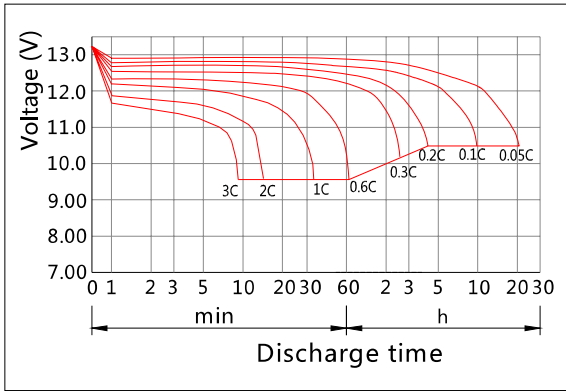
| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 9.60V | 354 | 297 | 180 | 112 | 65.8 | 45.9 | 37.6 | 32.1 | 28.1 | 22.0 | 18.3 | 9.62 |
| 9.90V | 344 | 290 | 176 | 110 | 65.4 | 45.6 | 37.4 | 31.9 | 27.9 | 21.9 | 18.3 | 9.60 |
| 10.2V | 330 | 279 | 171 | 107 | 64.8 | 45.3 | 37.2 | 31.7 | 27.7 | 21.8 | 18.2 | 9.57 |
| 10.5V | 315 | 270 | 167 | 105 | 63.8 | 45.0 | 36.9 | 31.5 | 27.5 | 21.6 | 18.1 | 9.52 |
| 10.8V | 298 | 255 | 161 | 102 | 62.2 | 43.7 | 35.8 | 30.6 | 26.7 | 21.0 | 18.0 | 9.45 |

Constant Power Discharge Characteristics (Watt, 25°C)

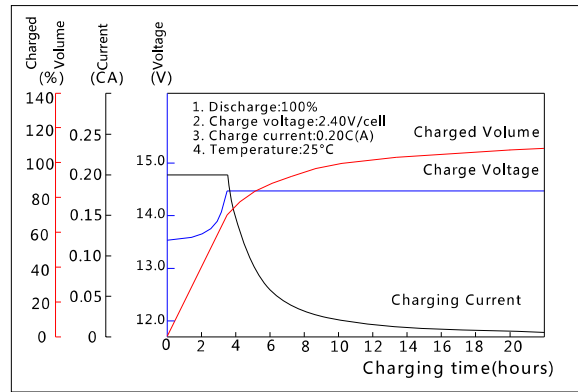
| F.V/TIME | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|
| 9.60V | 3828 | 3261 | 2020 | 1272 | 762 | 540 | 443 | 380 | 332 | 262 | 219 | 115 |
| 9.90V | 3713 | 3183 | 1979 | 1253 | 757 | 537 | 440 | 378 | 330 | 260 | 218 | 115 |
| 10.2V | 3560 | 3065 | 1919 | 1221 | 750 | 533 | 437 | 375 | 328 | 258 | 218 | 115 |
| 10.5V | 3407 | 2961 | 1872 | 1197 | 739 | 529 | 434 | 372 | 326 | 257 | 216 | 114 |
| 10.8V | 3215 | 2805 | 1804 | 1160 | 720 | 513 | 421 | 361 | 316 | 249 | 215 | 113 |

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

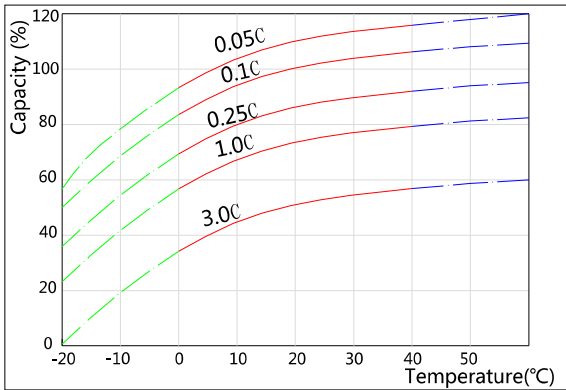
Discharge Characteristics(25°C)



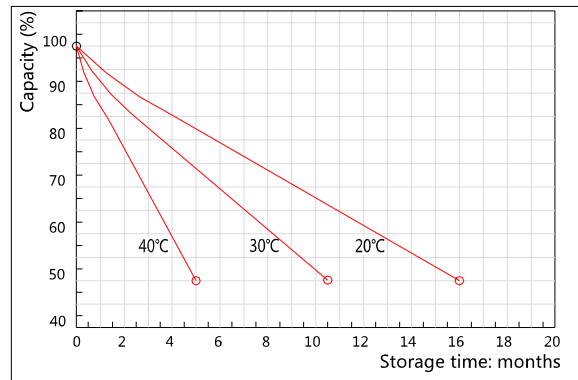
Charging Characteristics(25°C)



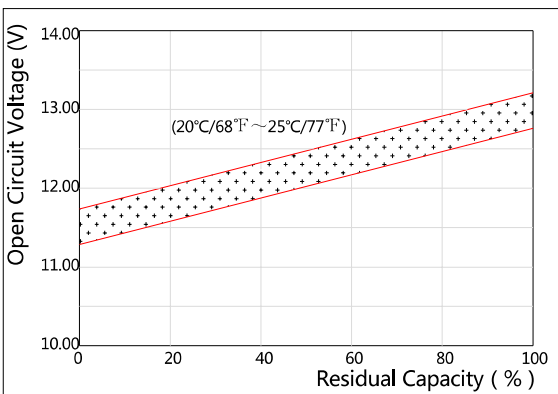
Effect of Temperature on Capacity



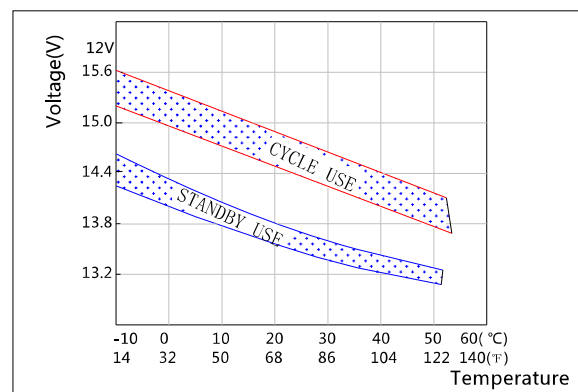
Self-discharge Characteristics



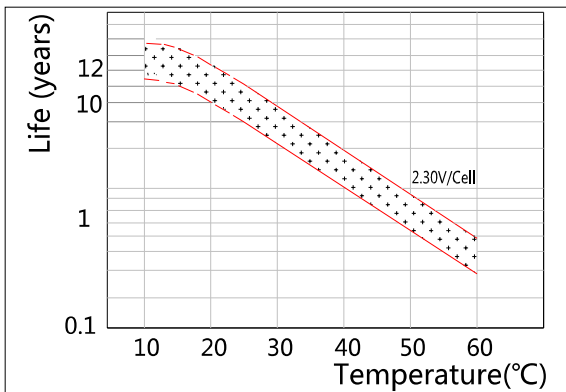
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

