

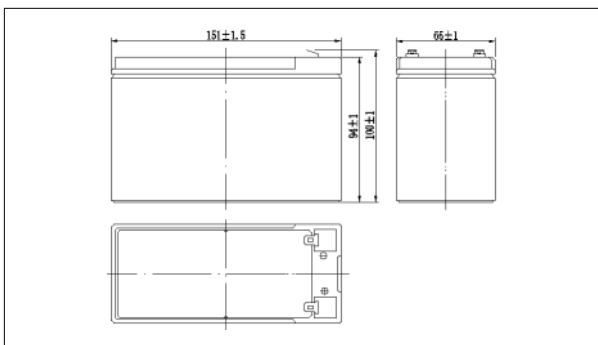
NP12-7.2Ah 12V7.2Ah

Specifications

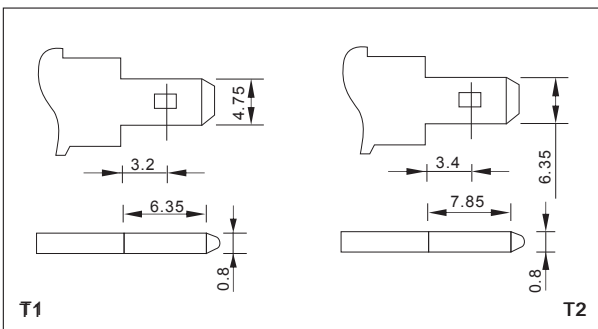
| | | |
|-------------------------------|--------------|---------------------|
| Nominal Voltage | | 12V |
| Rated capacity (20 hour rate) | | 7.2Ah |
| Dimensions | Length | 151±1.5mm(5.94inch) |
| | Width | 65±1mm(2.56inch) |
| | Height | 94±1mm(3.70inch) |
| | Total Height | 100±1mm(3.94inch) |
| Approx. Weight | | 2.2kg(4.85lbs)±4% |



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

| | | |
|---|-------------|---|
| Capacity (25°C) | 20HR(10.5V) | 7.2Ah |
| | 10HR(10.5V) | 6.7Ah |
| | 1HR(9.60V) | 4.4Ah |
| Terminal type | | T1/T2 |
| Internal resistance (Fully charged, 25°C) | | Approx. 30m Ω |
| Capacity affected by temperature (20HR) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-discharge (25°C) | 3 months | Remaining Capacity:91% |
| | 6 months | Remaining Capacity:82% |
| | 12 months | 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 15.00V Temperature compensation: -30mV/°C |
| Maximum charging current | | 2.16A |
| Maximum discharge current | | 108A(5 sec.) |
| Designed floating life(20°C) | | 5 years |

Construction

| Component | Positive plate | Negative plate | Container | Cover | Separator | Electrolyte | Safety valve | Terminal |
|--------------|----------------|----------------|-----------|-------|-----------|---------------|--------------|----------|
| Raw material | Lead dioxide | Lead | ABS | ABS | AGM | Sulfuric acid | Rubber | Copper |

Constant Current Discharge Characteristics Unit:A(25°C,77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V | 27.5 | 17.4 | 13.6 | 7.67 | 4.72 | 2.58 | 1.78 | 1.48 | 1.26 | 0.68 | 0.37 |
| 9.90V | 26.7 | 16.9 | 13.3 | 7.51 | 4.65 | 2.56 | 1.77 | 1.47 | 1.25 | 0.68 | 0.36 |
| 10.2V | 25.6 | 16.2 | 12.8 | 7.28 | 4.53 | 2.54 | 1.76 | 1.46 | 1.24 | 0.68 | 0.36 |
| 10.5V | 24.5 | 15.5 | 12.4 | 7.11 | 4.44 | 2.50 | 1.75 | 1.45 | 1.23 | 0.67 | 0.36 |
| 10.8V | 23.1 | 14.6 | 11.7 | 6.85 | 4.30 | 2.44 | 1.70 | 1.40 | 1.19 | 0.66 | 0.35 |

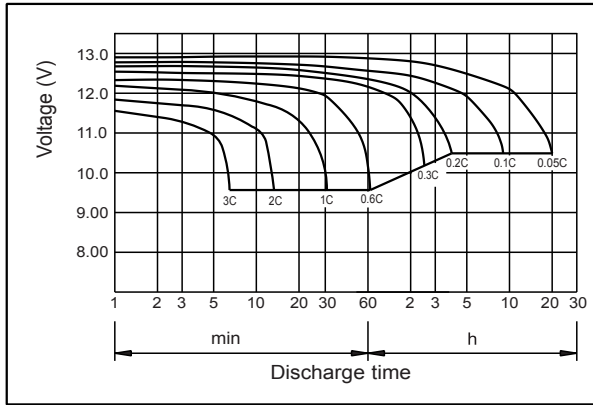
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 9.60V | 307 | 197 | 155 | 87.9 | 54.6 | 30.2 | 21.2 | 17.6 | 15.0 | 8.18 | 4.38 |
| 9.90V | 298 | 191 | 151 | 86.1 | 53.8 | 30.0 | 21.1 | 17.5 | 14.9 | 8.15 | 4.37 |
| 10.2V | 285 | 183 | 146 | 83.5 | 52.4 | 29.7 | 20.9 | 17.4 | 14.8 | 8.11 | 4.35 |
| 10.5V | 273 | 175 | 141 | 81.5 | 51.4 | 29.3 | 20.8 | 17.2 | 14.7 | 8.06 | 4.32 |
| 10.8V | 258 | 165 | 133 | 78.5 | 49.8 | 28.5 | 20.2 | 16.7 | 14.3 | 7.90 | 4.23 |

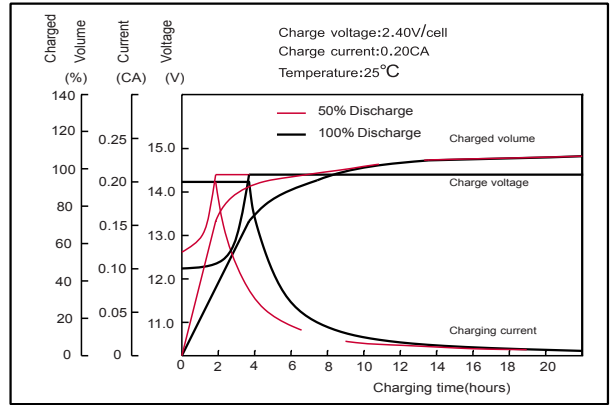
Note: The above characteristics data can be obtained within three charge or discharge cycles.

NP12-7.2Ah 12V7.2Ah

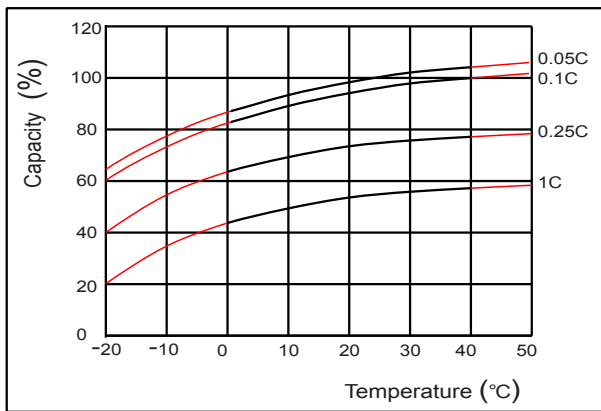
Discharge characteristics(25°C)



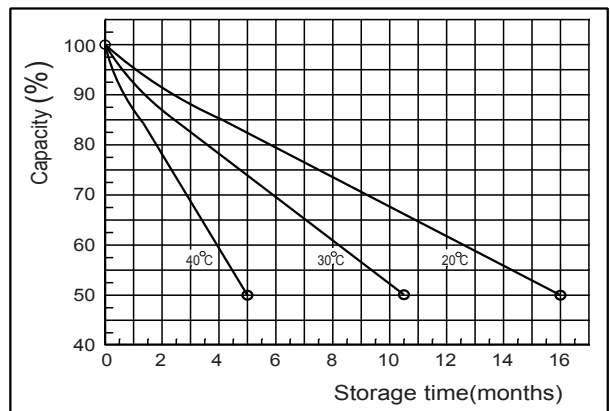
Charging characteristics (25°C)



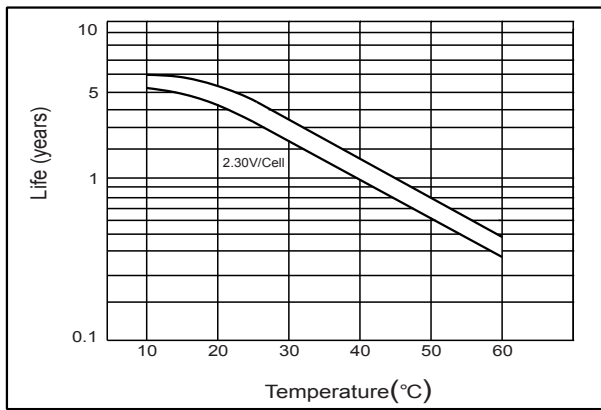
Effect of temperature on capacity



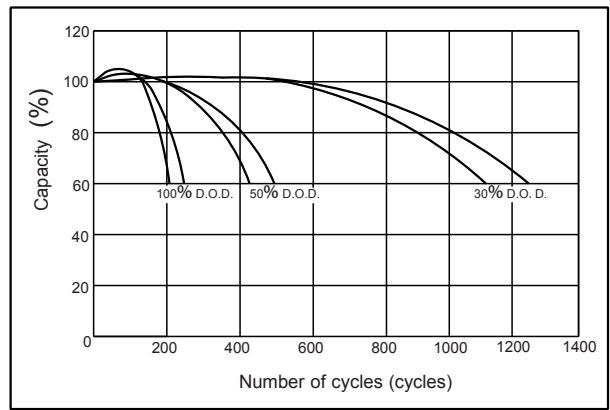
Self-discharge characteristics



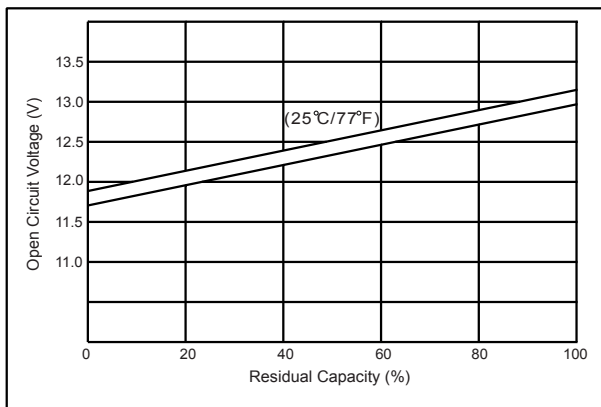
Floating life on temperature



Cycle life on D.O.D(25°C)



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

