

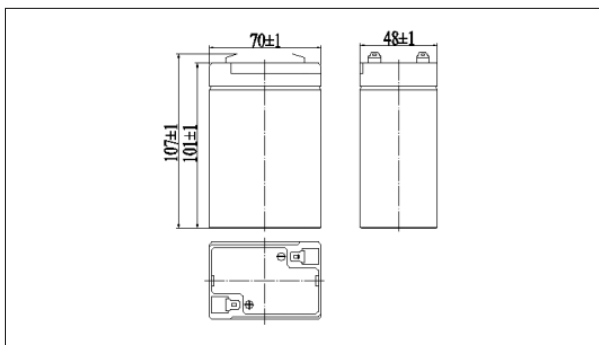
NP6-4.5Ah 6V4.5Ah

Specifications

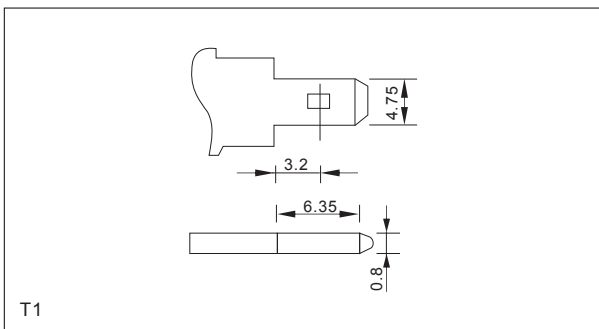
| | | |
|-------------------------------|--------------|--------------------|
| Nominal Voltage | | 6V |
| Rated capacity (20 hour rate) | | 4.5Ah |
| Dimensions | Length | 70±1mm(2.76inch) |
| | Width | 48±1mm(1.89inch) |
| | Height | 101±1mm(3.98inch) |
| | Total Height | 107±1mm(4.21inch) |
| Approx. Weight | | 0.76kg(1.68lbs)±5% |



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

| | | |
|---|-------------|---|
| Capacity (25°C) | 20HR(5.25V) | 4.5Ah |
| | 10HR(5.25V) | 4.2Ah |
| | 1HR(4.80V) | 2.7Ah |
| Terminal type | | T1 |
| Internal resistance (Fully charged, 25°C) | | Approx. 18mΩ |
| 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) | | 6.75 to 6.90V Temperature compensation: -9mV/°C |
| Cyclic charging voltage(25°C) | | 7.25 to 7.50V Temperature compensation: -15mV/°C |
| Maximum charging current | | 1.35A |
| Maximum discharge current | | 68A(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 |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 4.80V | 17.2 | 10.9 | 8.51 | 4.79 | 2.95 | 1.61 | 1.12 | 0.92 | 0.78 | 0.43 | 0.23 |
| 4.95V | 16.7 | 10.6 | 8.30 | 4.70 | 2.90 | 1.60 | 1.11 | 0.92 | 0.78 | 0.42 | 0.23 |
| 5.10V | 16.0 | 10.1 | 7.99 | 4.55 | 2.83 | 1.59 | 1.10 | 0.91 | 0.77 | 0.42 | 0.23 |
| 5.25V | 15.3 | 9.69 | 7.72 | 4.44 | 2.77 | 1.56 | 1.09 | 0.90 | 0.77 | 0.42 | 0.23 |
| 5.40V | 14.4 | 9.15 | 7.31 | 4.28 | 2.69 | 1.52 | 1.06 | 0.88 | 0.75 | 0.41 | 0.22 |

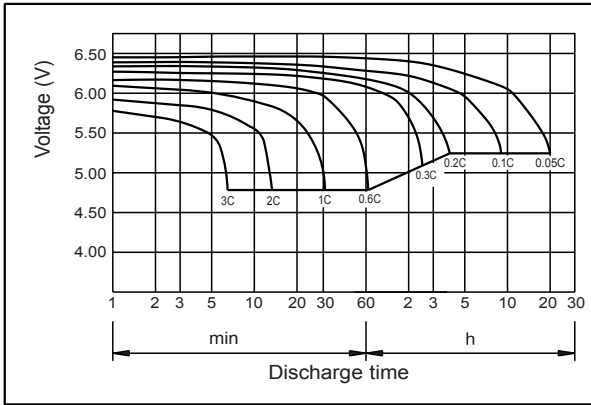
Constant Power Discharge Characteristics Unit:W(25°C,77°F)

| F.V/Time | 5min | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 10h | 20h |
|----------|------|-------|-------|-------|-------|------|------|------|------|------|------|
| 4.80V | 95.9 | 61.4 | 48.5 | 27.5 | 17.1 | 9.43 | 6.63 | 5.49 | 4.69 | 2.56 | 1.37 |
| 4.95V | 93.0 | 59.4 | 47.3 | 26.9 | 16.8 | 9.38 | 6.59 | 5.46 | 4.66 | 2.55 | 1.36 |
| 5.10V | 89.2 | 57.1 | 45.6 | 26.1 | 16.4 | 9.29 | 6.54 | 5.42 | 4.63 | 2.53 | 1.36 |
| 5.25V | 85.4 | 54.7 | 44.0 | 25.5 | 16.1 | 9.15 | 6.50 | 5.39 | 4.59 | 2.52 | 1.35 |
| 5.40V | 80.6 | 51.6 | 41.7 | 24.5 | 15.6 | 8.92 | 6.30 | 5.22 | 4.46 | 2.47 | 1.32 |

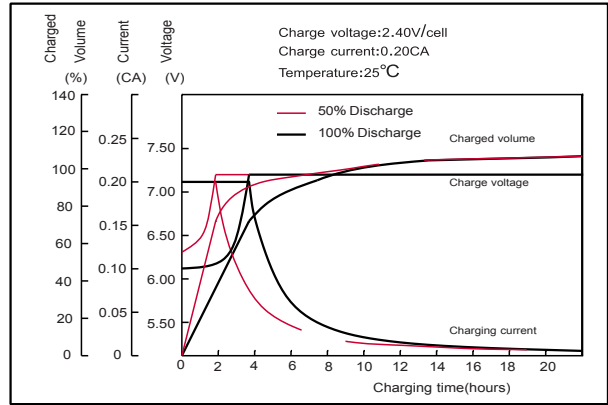
Note: The above characteristics data can be obtained within three charge or discharge cycles.

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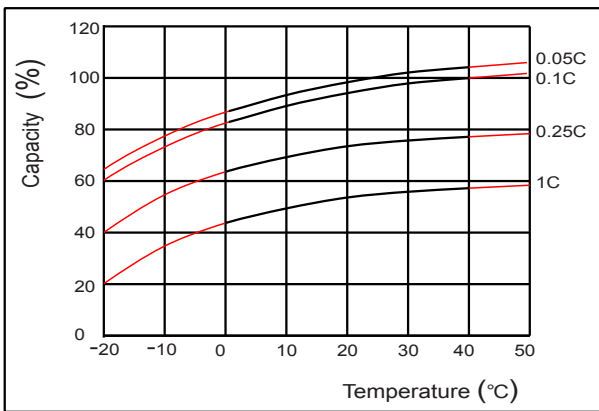
Discharge characteristics(25°C)



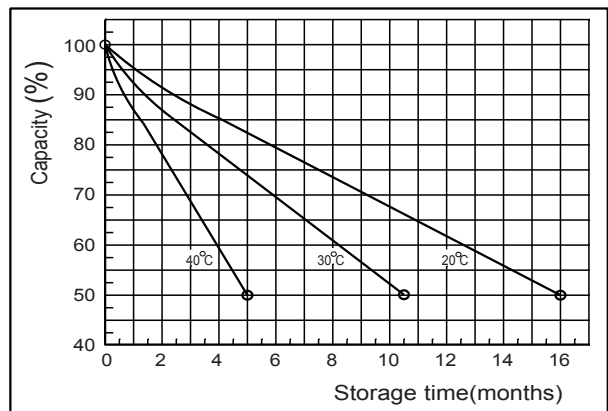
Charging characteristics (25°C)



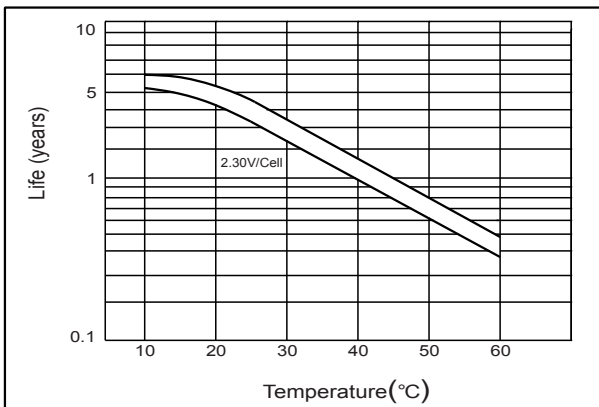
Effect of temperature on capacity



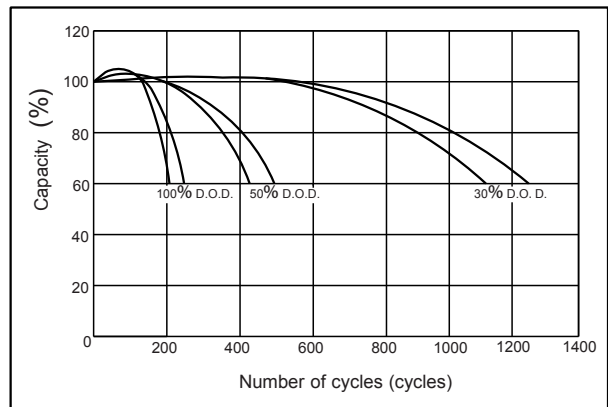
Self-discharge characteristics



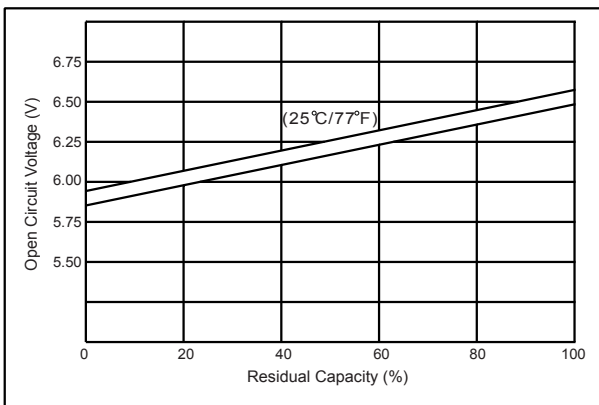
Floating life on temperature



Cycle life on D.O.D(25°C)



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

