

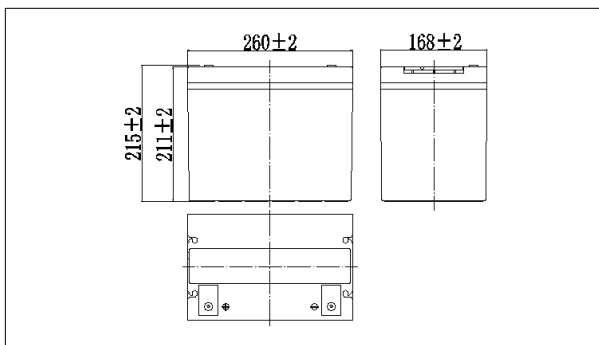
NPD12-80Ah 12V80Ah

● Specifications

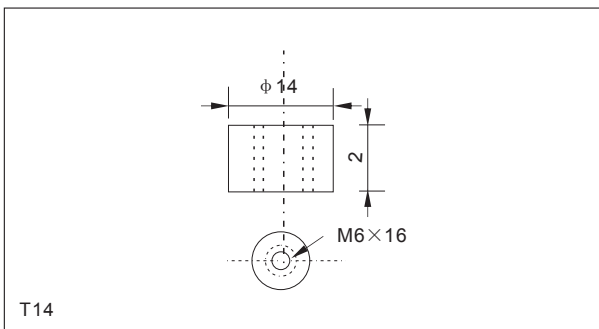
| | | |
|-------------------------------|--------------|--------------------|
| Nominal Voltage | | 12V |
| Rated capacity (10 hour rate) | | 80Ah |
| Dimensions | Length | 260±2mm(10.24inch) |
| | Width | 168±2mm(6.61inch) |
| | Height | 211±2mm(8.31inch) |
| | Total Height | 215±2mm(8.46inch) |
| Approx. Weight | | 25.3kg(55.8lbs)±3% |



● Outer dimensions (mm)



● Terminal Type (mm)



● Characteristics

| | | |
|---|-------------|---|
| Capacity (25°C) | 10HR(10.8V) | 80Ah |
| | 3HR(10.8V) | 61.5Ah |
| | 1HR(10.5V) | 46Ah |
| Terminal type | | T14 |
| Internal resistance (Fully charged, 25°C) | | Approx. 5m Ω |
| Capacity affected by temperature (10HR) | 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 | | 24A |
| Maximum discharge current | | 700A(5 sec.) |
| Designed floating life(20°C) | | 10years |

● 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 | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 9.60V | 179 | 138 | 82.4 | 50.7 | 30.0 | 21.6 | 17.2 | 14.7 | 10.1 | 8.35 | 4.42 |
| 9.90V | 173 | 134 | 80.8 | 49.9 | 29.8 | 21.5 | 17.1 | 14.6 | 10.1 | 8.33 | 4.42 |
| 10.2V | 166 | 129 | 78.3 | 48.6 | 29.5 | 21.3 | 17.0 | 14.5 | 9.99 | 8.31 | 4.40 |
| 10.5V | 159 | 125 | 76.4 | 47.1 | 29.1 | 21.2 | 16.9 | 14.4 | 9.92 | 8.26 | 4.38 |
| 10.8V | 150 | 118 | 73.6 | 45.6 | 28.3 | 20.5 | 16.4 | 14.0 | 9.62 | 8.20 | 4.35 |

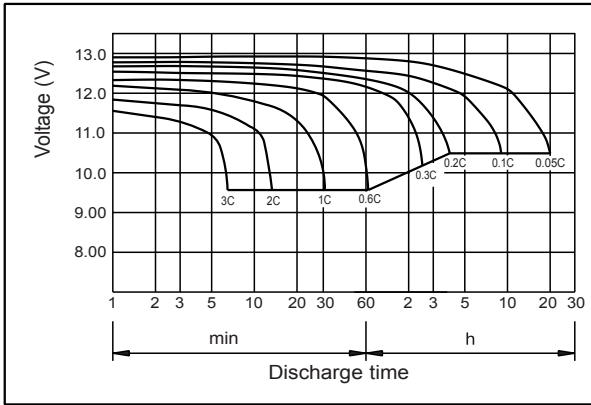
● Constant Power Discharge Characteristics Unit:W(25°C,77°F)

| F.V/Time | 10min | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 8h | 10h | 20h |
|----------|-------|-------|-------|-------|-----|-----|-----|-----|-----|------|------|
| 9.60V | 1931 | 1513 | 925 | 578 | 347 | 254 | 203 | 174 | 120 | 99.7 | 53.1 |
| 9.90V | 1873 | 1476 | 906 | 569 | 345 | 252 | 201 | 173 | 120 | 99.5 | 53.0 |
| 10.2V | 1795 | 1422 | 878 | 555 | 342 | 251 | 200 | 172 | 119 | 99.2 | 52.8 |
| 10.5V | 1718 | 1373 | 857 | 537 | 337 | 249 | 199 | 171 | 118 | 98.6 | 52.5 |
| 10.8V | 1622 | 1301 | 826 | 520 | 328 | 241 | 193 | 165 | 114 | 97.9 | 52.2 |

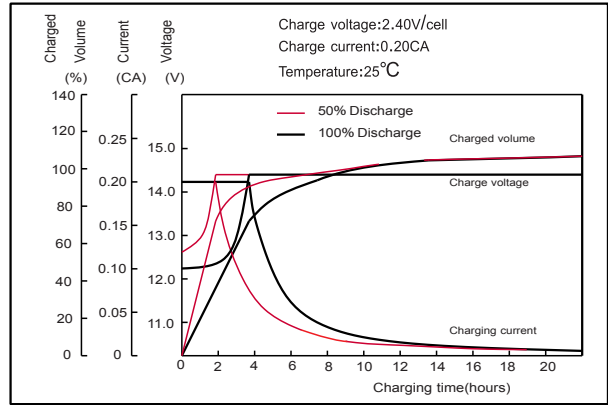
Note: The above characteristics data can be obtained within three charge or discharge cycles.

NPD12-80Ah 12V80Ah

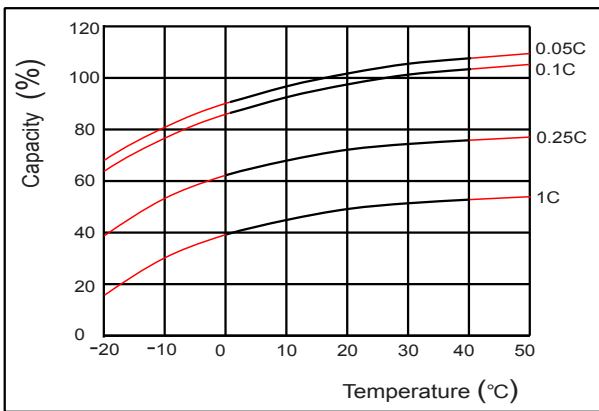
● **Discharge characteristics(25°C)**



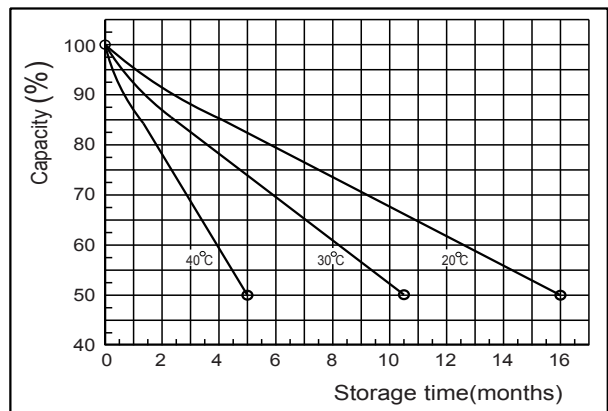
● **Charging characteristics (25°C)**



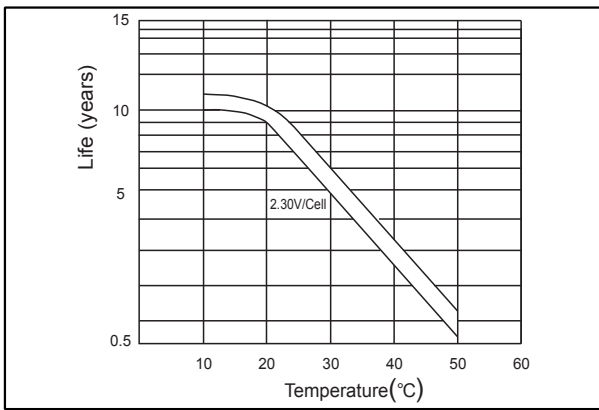
● **Temperature effects on Capacity**



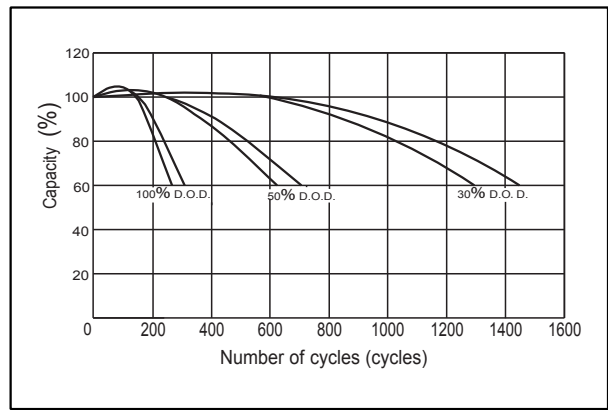
● **Self-discharge characteristics**



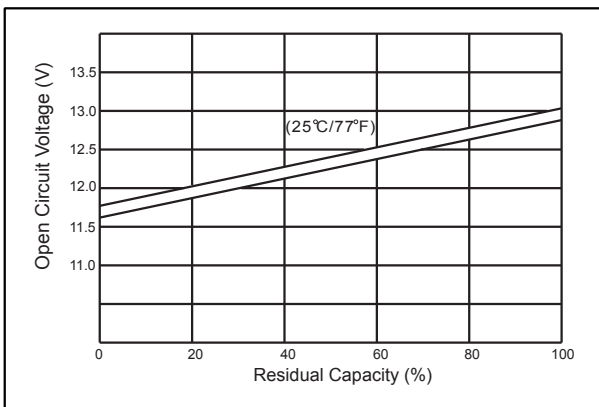
● **Floating life on Temperature**



● **Cycle life on D.O.D (25°C)**



● **The relationship for OCV and Capacity (25°C)**



● **The relationship for Charging voltage and Temperature**

