

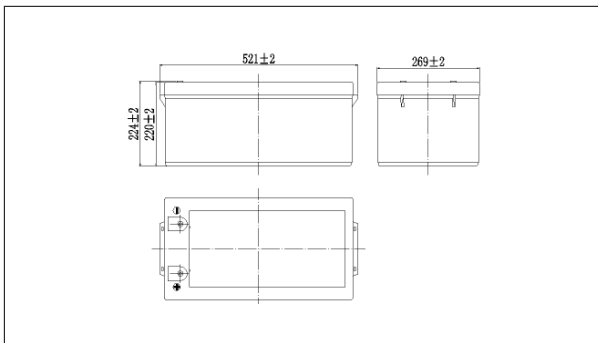
NPD12-250Ah 12V250Ah

● Specifications

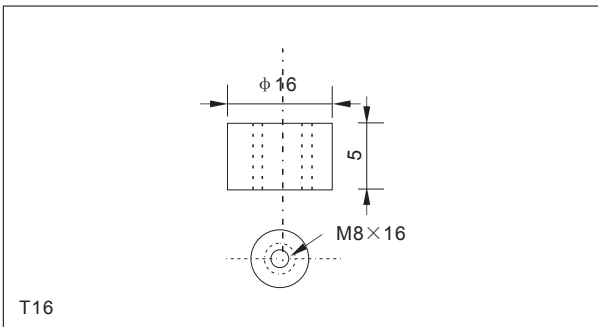
| | | |
|-------------------------------|---------------------|--------------------|
| Nominal Voltage | 12V | |
| Rated capacity (10 hour rate) | 250Ah | |
| Dimensions | Length | 521±2mm(20.51inch) |
| | Width | 269±2mm(10.59inch) |
| | Height | 220±2mm(8.66inch) |
| | Total Height | 224±2mm(8.82inch) |
| Approx. Weight | 74.5kg(164.2lbs)±3% | |



● Outer dimensions (mm)



● Terminal Type (mm)



● Characteristics

| | | |
|---|-------------|---|
| Capacity (25°C) | 10HR(10.8V) | 250Ah |
| | 3HR(10.8V) | 189Ah |
| | 1HR(10.5V) | 140Ah |
| Terminal type | | T16 |
| Internal resistance (Fully charged, 25°C) | | Approx. 2.6m 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 | | 75A |
| Maximum discharge current | | 1500A(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 | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 9.60V | 428 | 256 | 158 | 93.2 | 67.1 | 53.6 | 45.8 | 39.8 | 31.5 | 26.0 | 13.8 |
| 9.90V | 418 | 251 | 155 | 92.6 | 66.7 | 53.3 | 45.5 | 39.6 | 31.3 | 25.9 | 13.7 |
| 10.2V | 403 | 243 | 151 | 91.8 | 66.3 | 52.9 | 45.2 | 39.3 | 31.1 | 25.8 | 13.7 |
| 10.5V | 389 | 238 | 147 | 90.4 | 65.8 | 52.5 | 44.9 | 39.0 | 30.9 | 25.7 | 13.6 |
| 10.8V | 368 | 229 | 142 | 88.1 | 63.8 | 51.0 | 43.5 | 37.8 | 29.9 | 25.5 | 13.5 |

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

| F.V/Time | 15min | 30min | 60min | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h |
|----------|-------|-------|-------|------|-----|-----|-----|-----|-----|-----|-----|
| 9.60V | 4704 | 2875 | 1797 | 1079 | 789 | 630 | 541 | 470 | 374 | 310 | 165 |
| 9.90V | 4591 | 2818 | 1770 | 1073 | 785 | 626 | 538 | 468 | 372 | 309 | 165 |
| 10.2V | 4422 | 2732 | 1725 | 1063 | 779 | 622 | 534 | 464 | 369 | 308 | 164 |
| 10.5V | 4271 | 2666 | 1671 | 1047 | 774 | 618 | 530 | 461 | 367 | 307 | 163 |
| 10.8V | 4045 | 2568 | 1617 | 1021 | 750 | 599 | 515 | 447 | 356 | 304 | 162 |

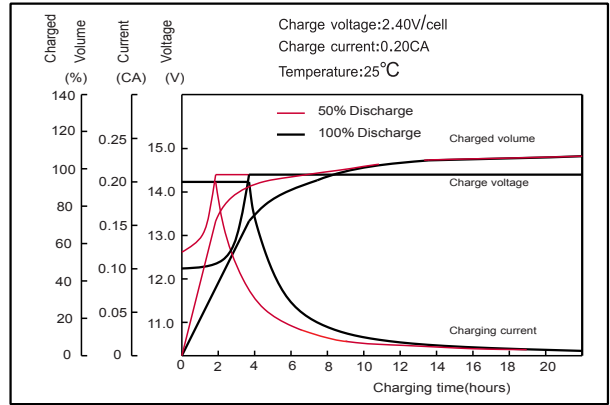
Note: The above characteristics data can be obtained within three charge or discharge cycles.

NPD12-250Ah 12V250Ah

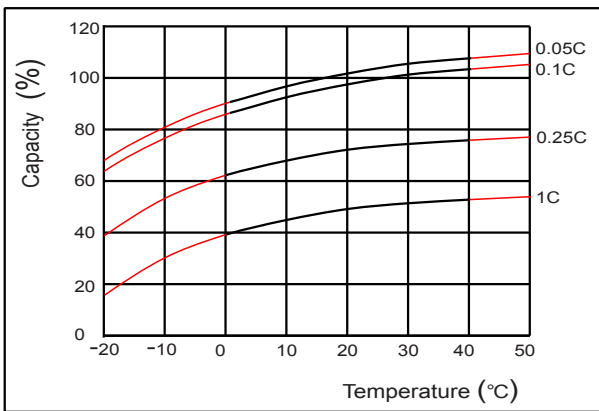
● **Discharge characteristics(25°C)**



● **Charging characteristics (25°C)**



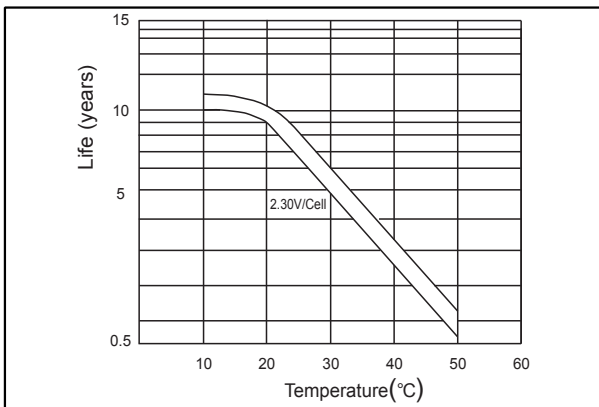
● **Temperature effects on Capacity**



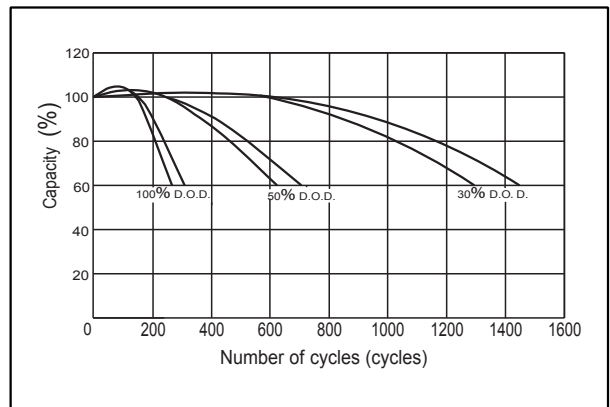
● **Self-discharge characteristics**



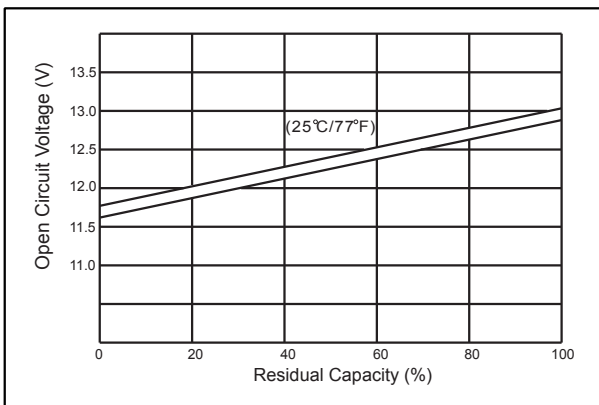
● **Floating life on Temperature**



● **Cycle life on D.O.D (25°C)**



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



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

