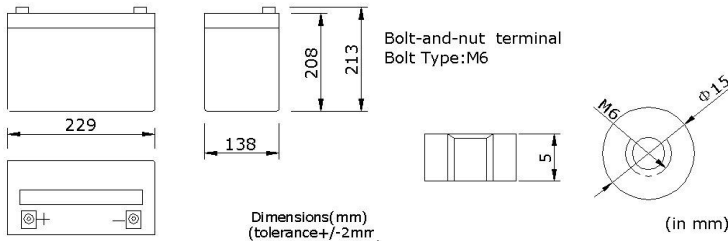


PHYSICAL SPECIFICATION

| | | |
|-------------------------|------------------|--|
| Nominal Voltage | | 12V |
| Nominal Capacity (10HR) | | 55Ah |
| Dimension | Length | 229±2mm (9.02 inches) |
| | Width | 138±2mm (5.43 inches) |
| | Container Height | 208±2mm (8.19 inches) |
| | Total Height | 213±2mm (8.39 inches) |
| Weight | | Approx. 18Kg ±3% (39.67lbs) |
| Standard Terminal | | Bolt-and-nut terminal Bolt Type: M6 |



Shimastu NPH series High-Rate Discharge Batteries are suitable for high-power discharge by using strong grids and specially designed active material, it offers 20% more power output than the standard range, suitable for UPS/EPS, data centers where high current loads are required.

Features:

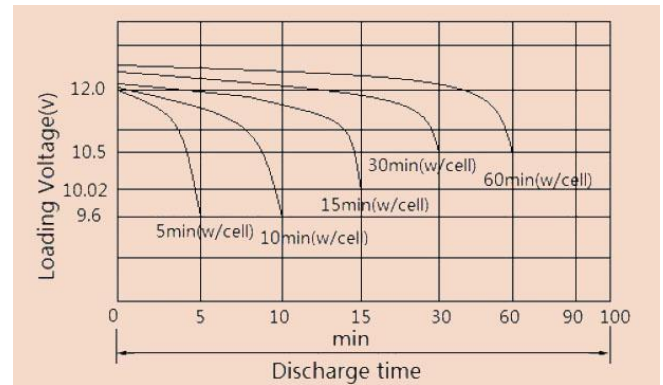
1. Extremely low self-discharge by using high pure material, allowing for a long rest period
2. High quality Adsorbed glass fiber separators, with a gas recombination efficiency of 99%, no need for replenishment with water
3. Long design life up to 10 years in float service at 25°C
4. PbCaSn alloy for plate grids, suitable for high-power discharge

ELECTRICAL SPECIFICATION

Characteristics

Discharge curves @ 25°C (77 °F)

| | | |
|----------------------------------|---|--|
| Capacity | 15 min wattage @1.67vpc 10 hour rate(5.5A,10.8V) 20 hour rate(2.9A,10.8V) | 200W/cell 55.0Ah 58.0Ah |
| Capacity affected by temperature | 40°C (104 °F) 25°C (77 °F) 0°C (32 °F) | 102% 100% 85% |
| Max Discharge Current | 600A(5 Sec) | |
| Short Circuit Current | 1390A | |
| Internal Resistance | Full charged battery (25°C,77 °F) 6mΩ | |
| Constant Voltage Charge | Cycle | Initial Charging Current less than 13.7A Voltage 14.1~14.4V at 25°C (77 °F) Temperature Coefficient -30mV/°C |
| | Standby | No limit on Initial Charging Current Voltage 13.5~13.8V at 25°C (77 °F) Temperature Coefficient -20mV/°C |



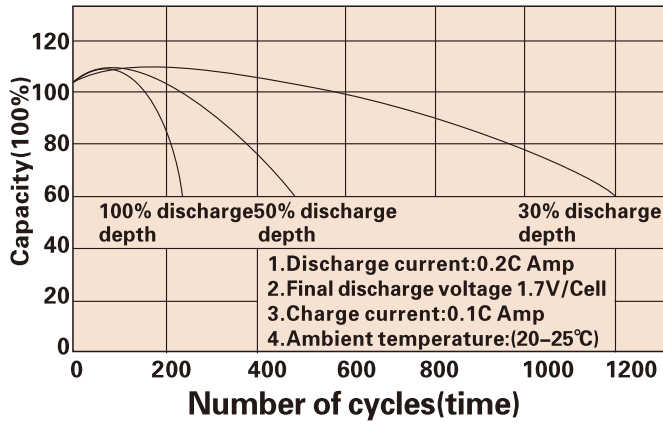
CONSTANT CURRENT DISCHARGE RATING A@25°C

| F.V/TIME | 3MIN | 5MIN | 10MIN | 15MIN | 20MIN | 25MIN | 30MIN | 45MIN | 60MIN |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V | 315.8 | 248.6 | 164.4 | 119.3 | 99.2 | 84.3 | 73.5 | 54.2 | 42.7 |
| 1.67V | 294.7 | 238.6 | 154.4 | 115.3 | 96.2 | 83.2 | 72.5 | 53.6 | 42.0 |
| 1.70V | 283.7 | 213.5 | 147.4 | 113.3 | 95.2 | 82.4 | 71.9 | 53.3 | 41.7 |
| 1.75V | 261.7 | 195.5 | 138.3 | 108.3 | 92.2 | 79.8 | 69.7 | 52.1 | 41.2 |
| 1.80V | 248.6 | 183.5 | 125.3 | 99.2 | 85.2 | 73.1 | 65.3 | 50.1 | 39.8 |

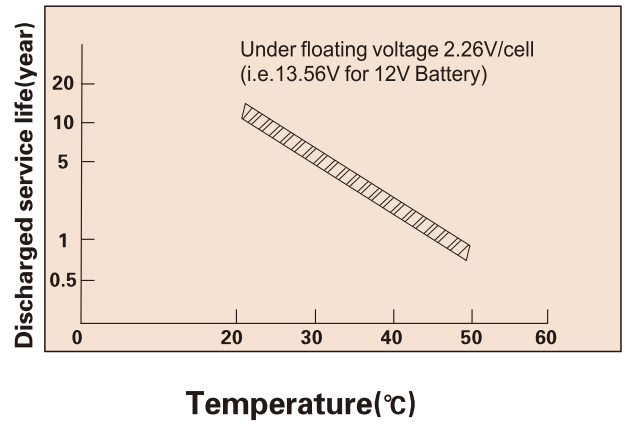
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

| F.V/TIME | 3MIN | 5MIN | 10MIN | 15MIN | 20MIN | 25MIN | 30MIN | 45MIN | 60MIN |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V | 498.2 | 392.0 | 275.7 | 204.5 | 172.4 | 149.4 | 131.3 | 101.3 | 76.6 |
| 1.67V | 467.2 | 385.0 | 270.7 | 200.0 | 170.0 | 144.4 | 128.3 | 97.9 | 76.4 |
| 1.70V | 454.1 | 354.9 | 258.6 | 196.5 | 166.4 | 142.4 | 126.3 | 96.6 | 76.2 |
| 1.75V | 426.1 | 334.8 | 240.6 | 188.5 | 163.4 | 141.4 | 123.3 | 94.5 | 74.6 |
| 1.80V | 406.0 | 316.8 | 222.6 | 177.4 | 152.4 | 132.3 | 118.3 | 91.6 | 72.8 |

Cycle service life



Trickle(or float) service life



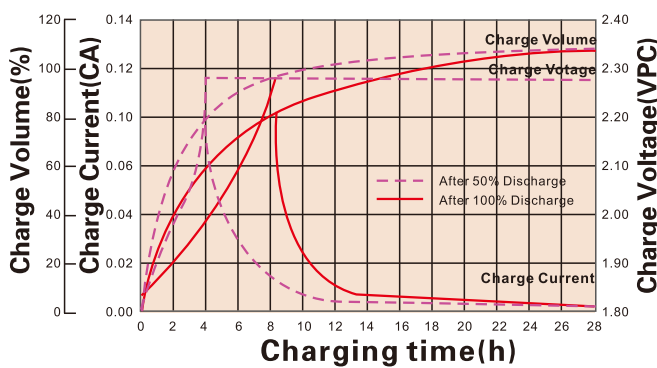
Storage time(months)



Temperature and discharge capacity



Charging characteristic



| Storage Temperature | Supplementary Charge Interval | Charge Method |
|---------------------|-------------------------------|---|
| ≤20°C | Every 12 months | Less or 24 hours with a constant voltage of 2.3V/cell |
| 20-30°C | Every 8 months | 12-18 hours with a constant voltage of 2.45V/cell |
| ≥30°C | Storage to be avoided | 8-12 hours with a constant current of 0.05CA |

APPLICATIONS

Standby Usage:

- UPS
- Emergency Lights
- Alarm Systems
- Telecommunication Systems

Cyclic Usage:

- Medical Equipments
- Electric Instruments
- Toys
- Camcorder and Solar Systems

Motive Usage:

- Golf Cars
- Wheelchairs
- Lawnmowers
- Motorcycle

(Note) All above information shall be changed without prior notice, Shimastu reserves the right to explain and update the latest information.