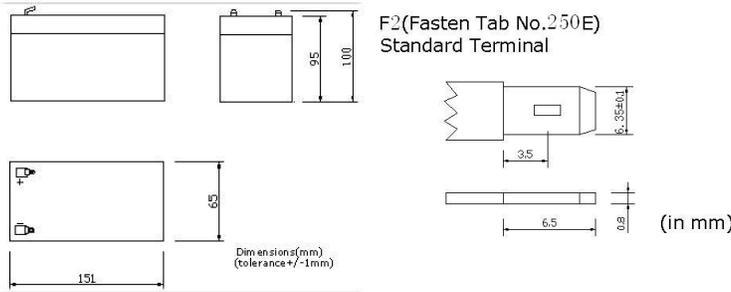


PHYSICAL SPECIFICATION

Nominal Voltage		12V
Nominal Capacity (20HR)		9Ah
Dimension	Length	151±1mm (5.94 inches)
	Width	65±1mm (2.56 inches)
	Container Height	95±1mm (3.74 inches)
	Total Height	100±1mm (3.94 inches)
Weight		Approx. 2.62 Kg ±3% (5.77lbs)
Standard Terminal		Fasten Tab No.250E(F2)



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:

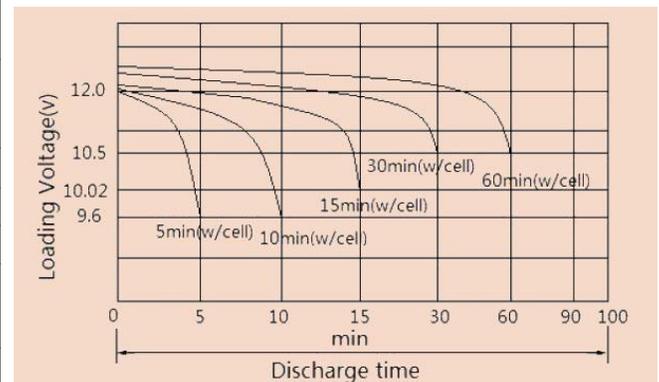
1. Extremely low self-discharge by using high pure material, allowing for a long rest period
2. High quality Adsorbed glass fiber separators, with a gas recombination efficiency of 99%, no need for replenishment with water
3. Long design life up to 6 years in float service at 25°C
4. PbCaSn alloy for 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(0.85A,10.8V) 20 hour rate(0.45A,10.8V)	36W/cell 8.5Ah 9.0Ah
Capacity affected by temperature	40°C (104 °F) 25°C (77 °F) 0°C (32 °F)	102% 100% 85%
Max Discharge Current	100A(5 Sec)	
Short Circuit Current	510A	
Internal Resistance	Full charged battery (25°C,77 °F) 20mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 2.7A Voltage 14.4~15.0V 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



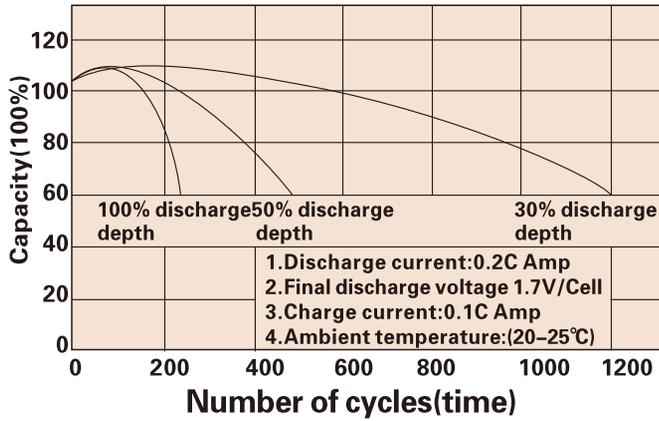
CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	47.17	41.47	33.13	28.40	20.95	16.47	11.74	6.58	4.67
1.67V	42.81	37.63	30.30	26.18	19.60	15.55	11.12	6.27	4.47
1.70V	40.96	36.01	29.09	25.24	18.99	15.14	10.84	6.14	4.38
1.75V	37.94	33.36	27.10	23.65	17.94	14.37	10.39	5.93	4.25
1.80V	34.75	30.55	25.05	22.06	17.03	13.70	9.94	5.71	4.10

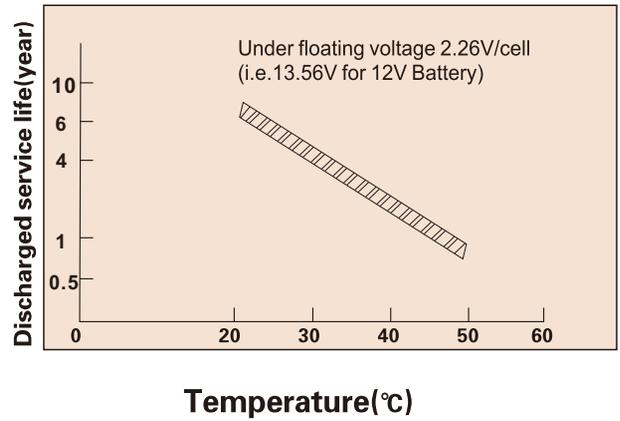
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	84.78	74.53	59.76	51.42	38.29	30.32	21.69	12.34	8.83
1.67V	77.90	68.47	55.39	48.08	36.00	28.93	20.88	11.88	8.53
1.70V	75.21	66.12	53.61	46.65	35.43	28.32	20.39	11.69	8.40
1.75V	70.35	61.84	50.50	44.27	33.77	27.25	19.75	11.37	8.18
1.80V	65.30	57.41	47.25	41.74	32.26	26.17	19.10	11.03	7.96

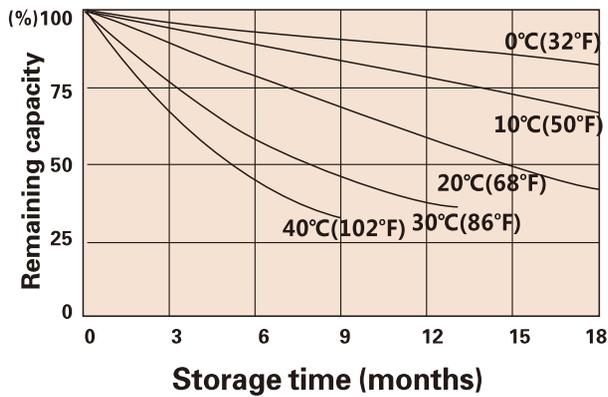
Cycle service life



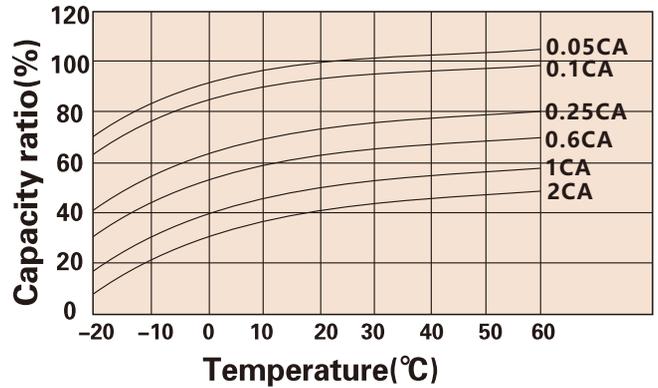
Trickle(or float) service life



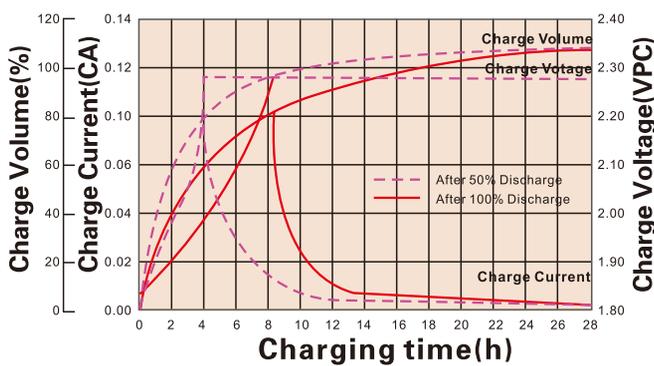
Storage time(months)



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.