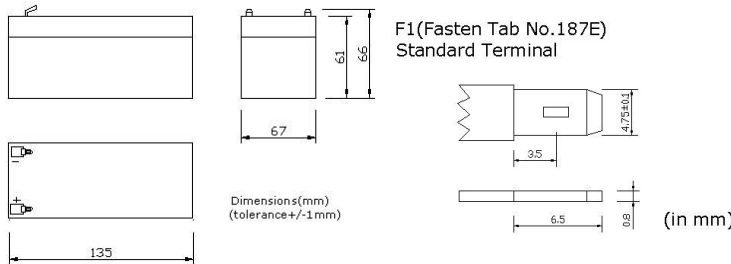


PHYSICAL SPECIFICATION

Nominal Voltage		12V
Nominal Capacity (20HR)		3.2Ah
Dimension	Length	135±1mm (5.31 inches)
	Width	67±1mm (2.64 inches)
	Container Height	61±1mm (2.40 inches)
	Total Height	66±1mm (2.60 inches)
Weight		Approx. 1.35Kg ±3% (2.98lbs)
Standard Terminal		Fasten Tab No.187E(F1)



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(0.298A,10.8V) 20 hour rate(0.16A,10.8V)	13.5W/cell 2.98Ah 3.2Ah		
Capacity affected by temperature	40°C (104 °F) 25°C (77 °F) 0°C (32 °F)	102% 100% 85%		
Max Discharge Current	35A(5 Sec)			
Short Circuit Current	166A			
Internal Resistance	Full charged battery (25°C, 77 °F) 50mΩ			
Constant Voltage Charge	Cycle	Initial Charging Current less than 0.96A 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		

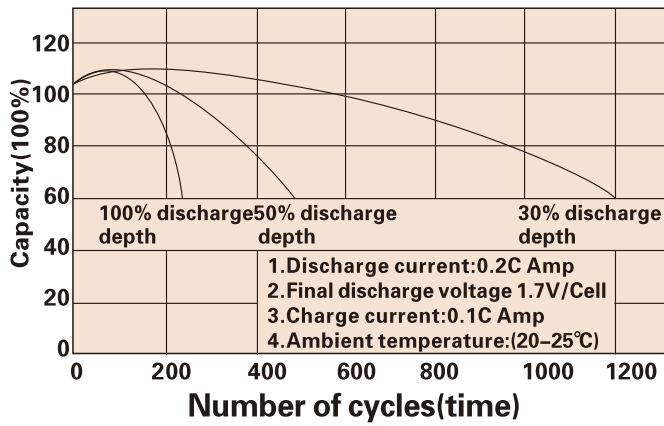
CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	17.61	15.48	12.36	10.60	7.82	6.15	4.38	2.46	1.74
1.67V	15.98	14.04	11.31	9.77	7.31	5.80	4.15	2.34	1.67
1.70V	15.29	13.44	10.86	9.42	7.09	5.65	4.05	2.29	1.64
1.75V	14.16	12.45	10.12	8.83	6.70	5.37	3.88	2.21	1.59
1.80V	12.97	11.40	9.35	8.23	6.36	5.11	3.71	2.13	1.53

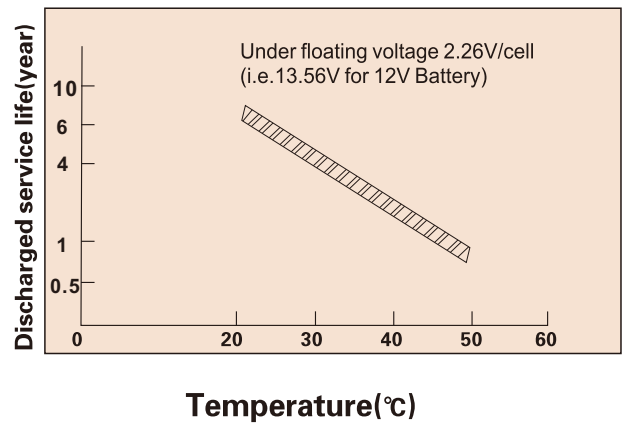
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	31.64	27.82	22.31	19.19	14.29	11.32	8.09	4.61	3.30
1.67V	29.08	25.56	20.67	17.94	13.50	10.80	7.79	4.43	3.18
1.70V	28.07	24.68	20.01	17.41	13.23	10.57	7.61	4.36	3.13
1.75V	26.26	23.08	18.85	16.53	12.60	10.17	7.37	4.24	3.06
1.80V	24.37	21.43	17.63	15.58	12.04	9.77	7.13	4.12	2.97

Cycle service life



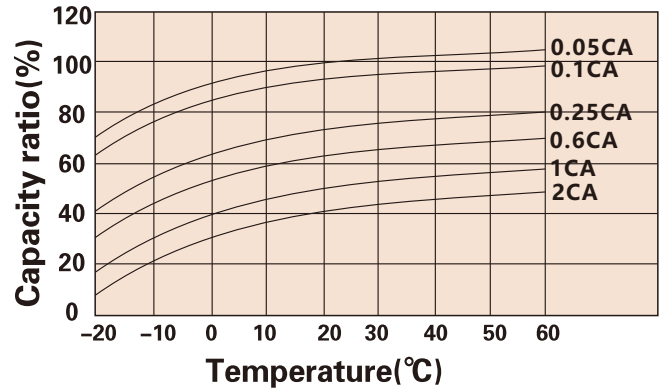
Trickle(or float) service life



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.