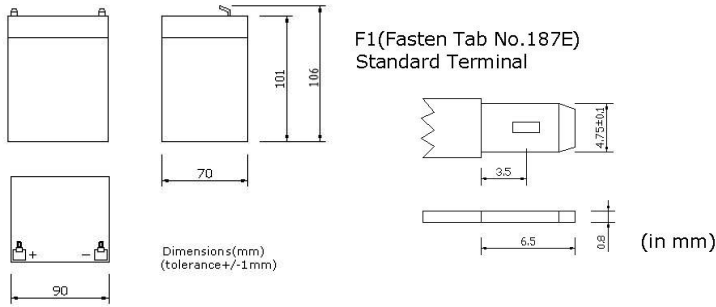


## PHYSICAL SPECIFICATION

Nominal Voltage		12V	
Nominal Capacity (20HR)		5.5Ah	
Dimension	Length	90±1mm	(3.54 inches)
	Width	70±1mm	(2.76 inches)
	Container Height	101±1mm	(3.98 inches)
	Total Height	106±1mm	(4.17 inches)
Weight		Approx. 1.55Kg ±3% (3.42lbs)	
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:**

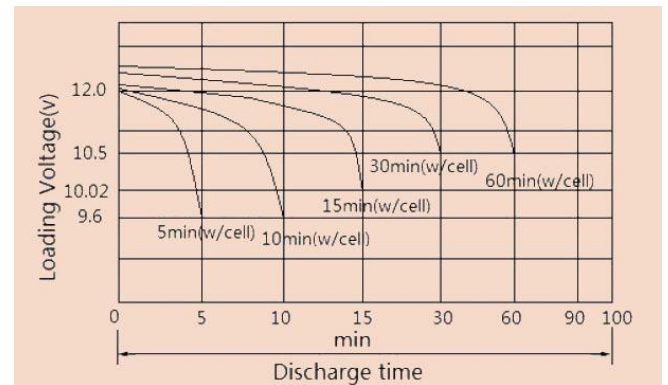
1. Extremely low self-discharge by using high pure material, allowing for a long rest period
2. High quality Adsorbed glass fiber separators, with a gas recombination efficiency of 99%, no need for replenishment with water
3. Long design life up to 6 years in float service at 25°C
4. PbCaSn alloy for 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(0.51A,10.8V) 20 hour rate(0.275A,10.8V)	22W/cell 5.1Ah 5.5Ah
Capacity affected by temperature	40°C (104 °F) 25°C (77 °F) 0°C (32 °F)	102% 100% 85%
Max Discharge Current	60A(5 Sec)	
Short Circuit Current	280A	
Internal Resistance	Full charged battery (25°C,77 °F) 30mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 1.65A 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	28.83	25.34	20.25	17.36	12.80	10.06	7.17	4.02	2.85
1.67V	26.17	22.99	18.52	16.00	11.95	9.50	6.80	3.83	2.73
1.70V	25.03	22.01	17.78	15.42	11.61	9.25	6.63	3.75	2.68
1.75V	23.18	20.39	16.56	14.45	10.96	8.79	6.35	3.62	2.60
1.80V	21.24	18.67	15.31	13.48	10.41	8.37	6.07	3.49	2.51

### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	3MIN	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN
1.60V	51.81	45.55	36.51	31.42	23.40	18.53	13.25	7.54	5.40
1.67V	47.60	41.84	33.85	29.38	22.00	17.69	12.76	7.26	5.21
1.70V	45.97	40.41	32.76	28.51	21.65	17.31	12.46	7.14	5.13
1.75V	42.99	37.79	30.87	27.05	20.64	16.65	12.07	6.94	5.00
1.80V	39.91	35.08	28.88	25.50	19.71	15.99	11.67	6.74	4.87

### Cycle service life



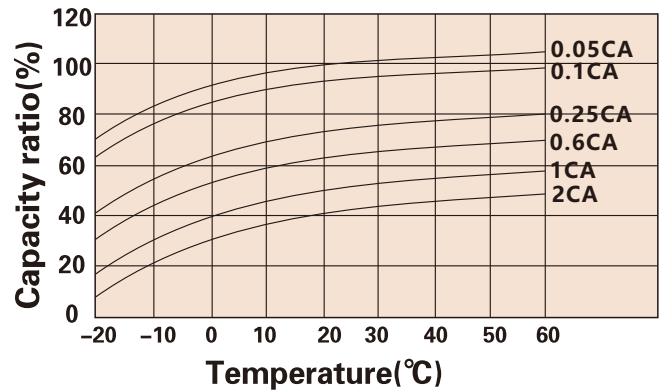
### Trickle(or float) service life



### 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.