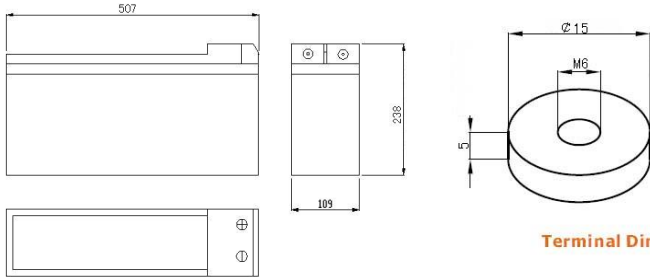


## PHYSICAL SPECIFICATION

Nominal Voltage		12V
Nominal Capacity (10HR)		105Ah
Dimension	Length	507±2mm (19.96inches)
	Width	109±2mm (4.29 inches)
	Container Height	238±2mm (9.37 inches)
	Total Height	238±2mm (9.37inches)
Weight		Approx. 34Kg ±3% (74.9lbs)
Standard Terminal		Bolt-and-nut terminal Bolt Type: M6



Terminal Dimensions

Shimastu FA series Front Access Backup Batteries are specially designed for telecommunications industry with 15 years design life in float service. With terminals at the front, these batteries are easy to be installed and maintained. Dimensions of the terminals fit in a 19-inch and 23-inch standard power cabinet.

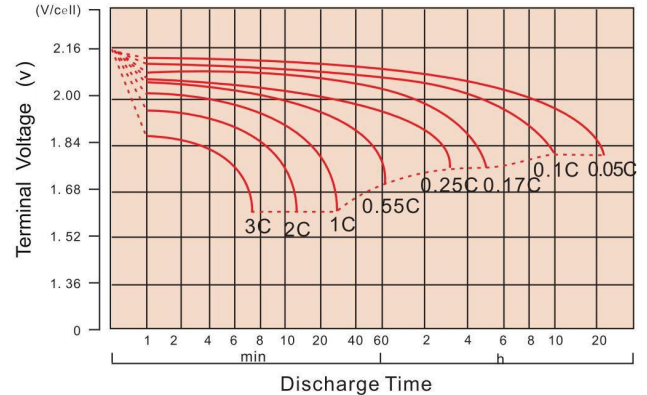
**Features:**

1. Designed floating charge life of 15 years at 25°C (77°F).
2. Extremely low self-discharge by using high pure material, allowing for a long period of rest
3. Adopting a new & High quality Adsorbed glass fiber separators, with a gas recombination efficiency of 99%, no need for replenishment with water
4. PbCaSn alloy for plate grids, suitable for high-power discharge
5. A narrow and high structure with good heat dissipation performance & high reliability

## ELECTRICAL SPECIFICATION

Characteristics		
Capacity	20 hour rate	(5.57A) 111Ah
	10 hour rate	(10.5A) 105Ah
	5 hour rate	(17.9A) 90Ah
	3 hour rate	(26.3A) 79Ah
	1 hour rate	(57.8A) 58Ah
Capacity affected by temperature	45°C (117 °F)	105%
	40°C (104 °F)	102%
	25°C (77 °F)	100%
	0°C (32 °F)	85%
Max. Discharge Current	1050A (5 sec)	
Short Circuit Current	2100A	
Internal Resistance	Full charged battery (25°C, 77 °F) 4.5mΩ	
Designed life	≥15 years ( floating ) at 25°C ( 77 °F )	
Constant Voltage Charge	Cycle	Initial Charging Current less than 25A 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

### Discharge curves @ 25°C (77°F)



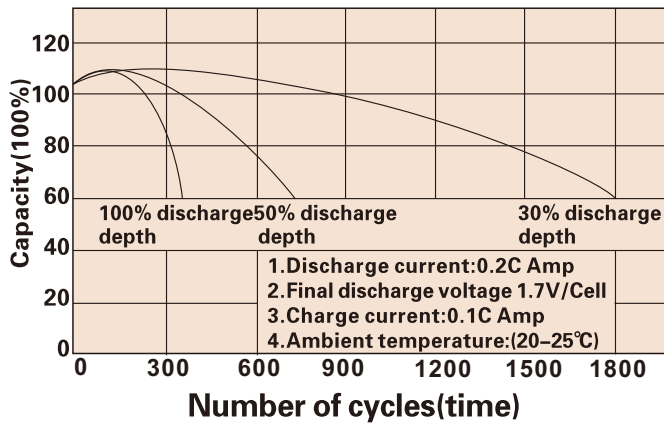
### CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	10MIN	15MIN	30MIN	1HR	3HR	5HR	8HR	10HR	20HR
1.60V	251.8	191.3	114.1	65.1	29.7	19.9	13.4	11.1	5.78
1.65V	238.0	182.9	109.5	62.6	28.8	19.3	13.2	11.0	5.73
1.70V	219.1	171.2	104.7	60.3	28.0	18.8	13.0	10.8	5.63
1.75V	200.5	159.3	100.1	57.8	27.1	18.4	12.8	10.6	5.57
1.80V	181.5	147.2	95.7	55.7	26.3	17.9	12.6	10.5	5.50

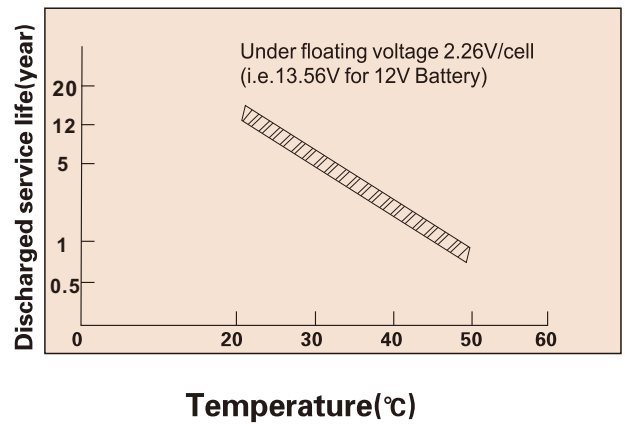
### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	10MIN	15MIN	30MIN	1HR	3HR	5HR	8HR	10HR	20HR
1.60V	428.0	334.3	207.4	122.4	56.7	38.4	26.3	21.9	11.3
1.65V	412.3	324.4	201.2	118.4	55.2	37.4	25.8	21.5	11.2
1.70V	386.4	308.5	194.2	114.6	53.9	36.5	25.4	21.2	11.1
1.75V	360.2	291.2	187.5	110.5	52.6	35.7	25.1	21.0	11.0
1.80V	331.6	272.7	181.1	107.1	51.0	34.9	24.8	20.7	10.9

### Cycle service life



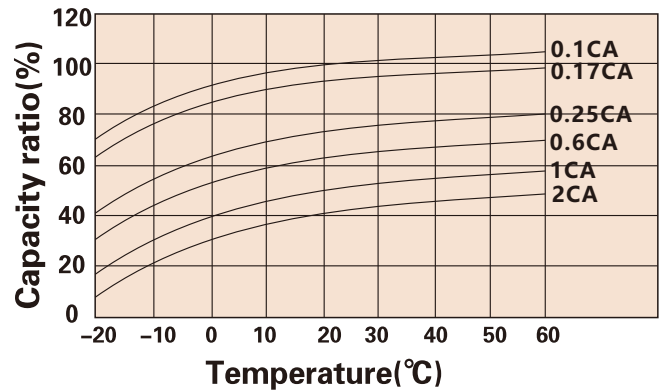
### Trickle(or float) service life



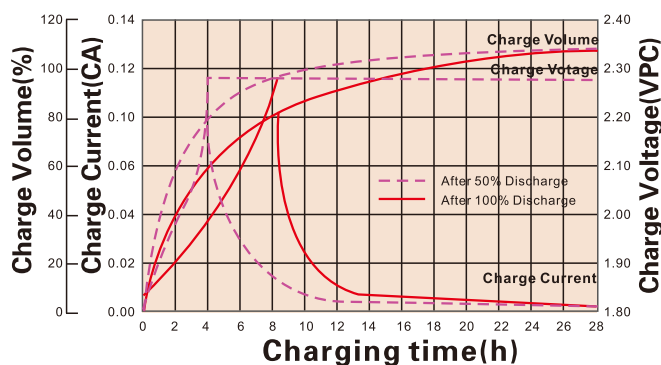
### Storage time(months)



### 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.

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