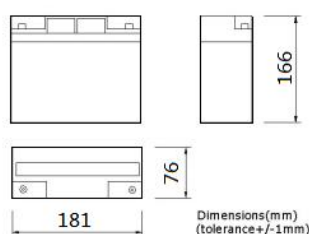
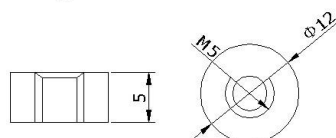


PHYSICAL SPECIFICATION

Nominal Voltage Nominal Capacity (20HR)		12V 22Ah
Dimension	Length	181±1mm (7.13 inches)
	Width	76±1mm (2.99 inches)
	Container Height	166±1mm (6.54 inches)
	Total Height	166±1mm (6.54 inches)
Weight		Approx. 6Kg ±3% (13.22lbs)
Standard Terminal		Bolt and nuts lead terminal Bolt Type:M5



Bolt-and-nut terminal
Bolt Type:M5



Shimastu NP series AGM VRLA Batteries have been developed as general purpose batteries, they're valve-regulated lead acid batteries with high quality Absorbed Glass Mat(AGM) separators & high purity raw materials, featured by perfectly good performance and reliable standby service life.

Features:

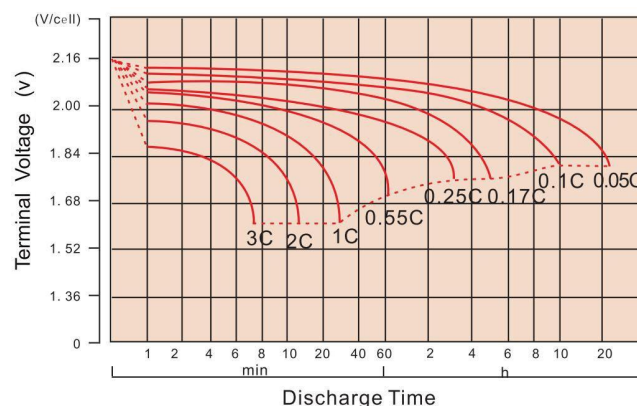
- 1.Non-spillable
- 2.Sealed and Maintenance-free Operation
- 3.High Quality and High Reliability
- 4.Less gassing,low Self-discharge
- 5.Low internal resistance
- 6.Long design life up to 8 years in float service at 25°C (77 °F)

ELECTRICAL SPECIFICATION

Characteristics

Capacity	20 hour rate	(1.111A)	22.2Ah
	10 hour rate	(2.078A)	20.8Ah
	5 hour rate	(3.775A)	18.9Ah
	3 hour rate	(5.554A)	16.7Ah
	1 hour rate	(12.22A)	12.2Ah
Capacity affected by temperature	40℃	(104 ℉)	102%
	25℃	(77 ℉)	100%
	0℃	(32 ℉)	85%
Max Discharge Current		220A(5 Sec)	
Short Circuit Current		830A	
Internal Resistance		Full charged battery (25℃,77 ℉) 10mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 6.6A Voltage 14.4~15.0V at 25℃ (77 ℉) Temperature Coefficient -30mV/℃	
	Standby	No limit on Initial Charging Current Voltage 13.5~13.8V at 25℃ (77 ℉) Temperature Coefficient -20mV/℃	

Discharge curves @ 25°C (77 °F)



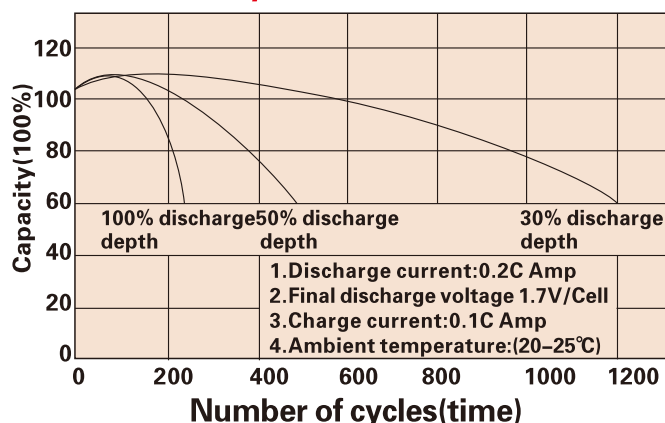
CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	79.83	56.43	40.79	24.79	13.60	6.267	4.191	2.193	1.154
1.65V	74.24	53.32	39.00	23.80	13.11	6.073	4.083	2.163	1.138
1.70V	66.98	49.09	36.52	22.75	12.68	5.909	3.977	2.132	1.125
1.75V	60.02	44.92	33.98	21.75	12.22	5.732	3.877	2.104	1.111
1.80V	52.70	40.67	31.39	20.78	11.75	5.554	3.775	2.078	1.100

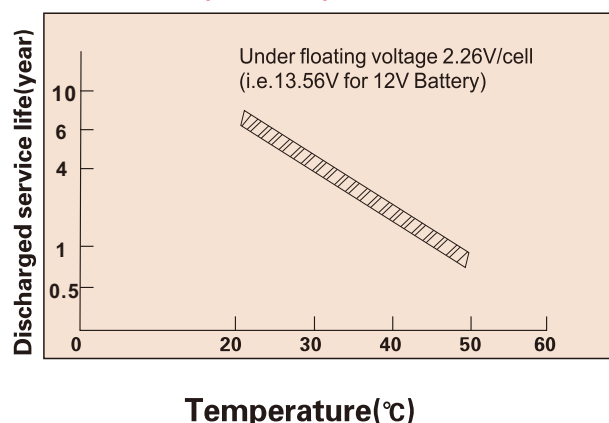
CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	132.30	95.90	71.31	45.03	25.57	11.99	8.096	4.316	2.282
1.65V	124.48	92.37	69.18	43.68	24.83	11.67	7.916	4.269	2.250
1.70V	114.88	86.60	65.77	42.17	24.17	11.41	7.736	4.211	2.225
1.75V	105.21	80.71	62.09	40.72	23.43	11.11	7.568	4.160	2.201
1.80V	94.35	74.33	58.13	39.31	22.66	10.81	7.399	4.112	2.182

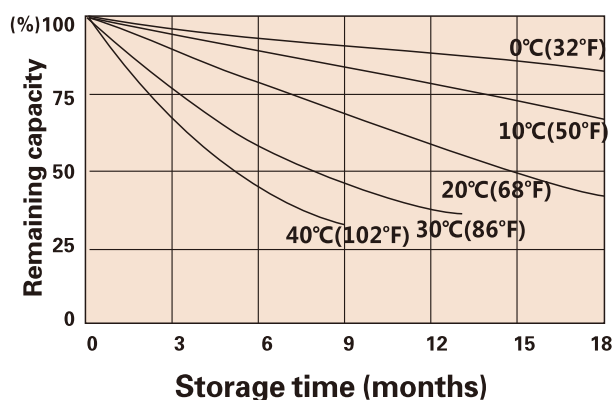
Cycle service life



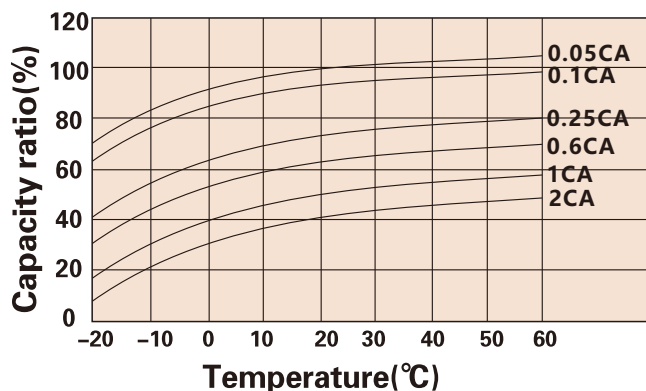
Trickle(or float) service life



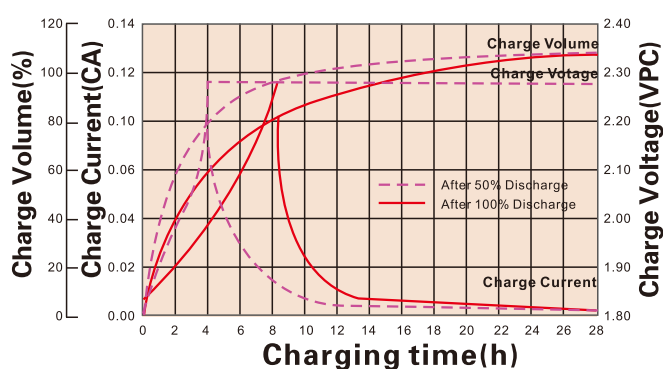
Storage time(months)



Temperature and discharge capacity



Charging characteristic



Storage Temperature	Supplementary Charge Interval	Charge Method
$\leq 20^{\circ}\text{C}$	Every 12 months	Less or 24 hours with a constant voltage of 2.3V/cell
$20-30^{\circ}\text{C}$	Every 8 months	12-18 hours with a constant voltage of 2.45V/cell
$\geq 30^{\circ}\text{C}$	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.

Shimastu Electronic Technology Co., Limited

URL: www.shimastu.com

Tel: +86-760-23133619 Fax: +86-760-23133629 Email: export@shimastu.com