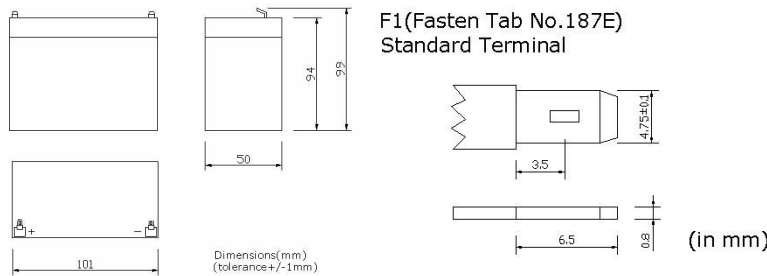


PHYSICAL SPECIFICATION

Nominal Voltage		4V
Nominal Capacity (20HR)		10Ah
Dimension	Length	101±1mm (3.98 inches)
	Width	50±1mm (1.97 inches)
	Container Height	94±1mm (3.70 inches)
	Total Height	99±1mm (3.90 inches)
Weight		Approx. 1.15Kg ±3% (2.53lbs)
Standard Terminal		Fasten Tab No. 187E(F1)



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.

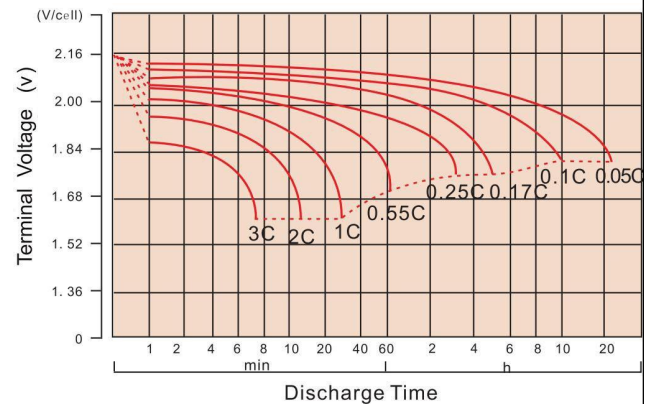
Features:

- 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 6 years in float service at 25°C (77 °F)

ELECTRICAL SPECIFICATION

Characteristics		
Capacity	20 hour rate (0.5A)	10Ah
	10 hour rate (0.935A)	9.35Ah
	5 hour rate (1.7A)	8.5Ah
	3 hour rate (2.5A)	7.5Ah
	1 hour rate (5.5A)	5.5Ah
Capacity affected by temperature	40°C (104 °F)	102%
	25°C (77 °F)	100%
	0°C (32 °F)	85%
Max Discharge Current	100A(5 Sec)	
Short Circuit Current	520A	
Internal Resistance	Full charged battery (25°C,77 °F) 10mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 3A Voltage 4.8~5V at 25°C (77 °F) Temperature Coefficient -18mV/°C
	Standby	No limit on Initial Charging Current Voltage 4.5~4.6V at 25°C (77 °F) Temperature Coefficient -18mV/°C

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	36.87	26.33	19.22	11.04	6.120	2.818	1.884	0.985	0.520
1.65V	34.28	24.879	18.38	10.60	5.911	2.730	1.836	0.975	0.511
1.70V	30.94	22.91	17.21	10.130	5.710	2.658	1.789	0.958	0.505
1.75V	27.72	20.97	16.02	9.686	5.500	2.577	1.745	0.946	0.500
1.80V	24.33	18.97	14.80	9.257	5.290	2.500	1.700	0.935	0.496

CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	61.130	44.750	33.600	20.060	11.500	5.382	3.632	1.936	1.023
1.65V	57.490	43.110	32.600	19.450	11.170	5.236	3.553	1.919	1.008
1.70V	53.060	40.420	30.990	18.790	10.860	5.120	3.473	1.889	0.997
1.75V	48.590	37.660	29.260	18.130	10.520	4.986	3.399	1.866	0.988
1.80V	43.560	34.670	27.410	17.510	10.180	4.855	3.323	1.847	0.982

Cycle service life



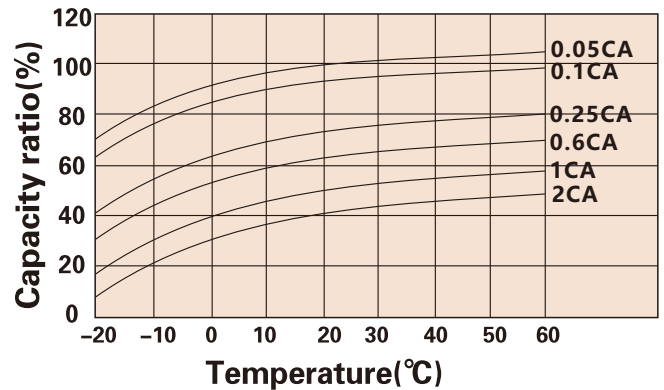
Trickle(or float) service life



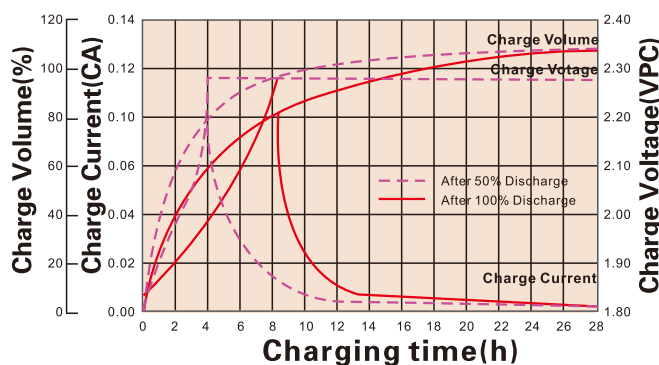
Storage time(months)



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.