

VRLA AGM Battery

BT-6M12AC[6V12Ah]



General Features

- Designed floating charging service life: 8 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic
- Wide operating temperature range from 0°C~40°C
- Lead Aluminum calcium Tin alloy high energy, prevent corrosion

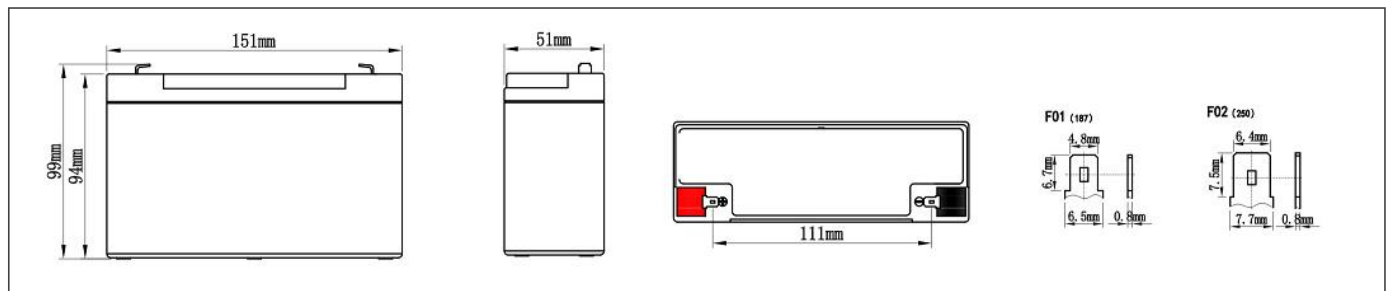
Application

- DC power supply
- Medical equipments
- UPS/EPS power supply
- Emergency lighting systems
- Alarm and security systems

Physical Specifications

Nominal Voltage	Nominal Capacity (20HR)	Dimension				Weight ±2%	Internal Resistance (In full charge status)	Standard Terminals
		L	W	H	TH			
6V	12AH	151±2mm	51±2mm	94±2mm	99±2mm	Approx 1.60kg (3.52lbs)	≈11.8 mΩ	F01/F02 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.6A)	12.00AH
10 hour rate (1.2A)	11.40AH
5 hour rate (2.04A)	10.10AH
27 minute rate (12A)	5.40AH
7 minute rate (36A)	4.20AH
Capacity affected by Temperature	
40°C(104°F)	103%
25°C(77°F)	100%
0°C(32°F)	86%

Cycle Application

1. Limit initial current less than 3.6A.
2. Charge until battery voltage (under charge) reaches 7.05V to 7.20V at 25°C(77°F).
3. Hold at 7.05V to 7.20V until current drop to under 0.072A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -15mV/°C.

Standby Service

1. Hold battery across constant voltage source of 6.8 to 6.9 volts with current limit 3.6A continuously .When held at this voltage , the battery will seek its own current level and maintain itself in a fully charge status.
2. Temperature compensation coefficient of charging voltage is -9mV/°C.

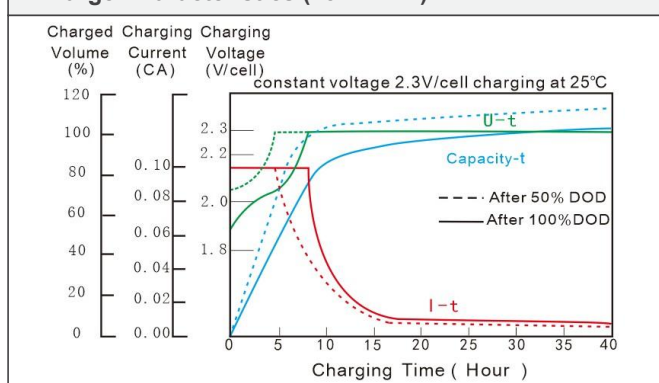
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

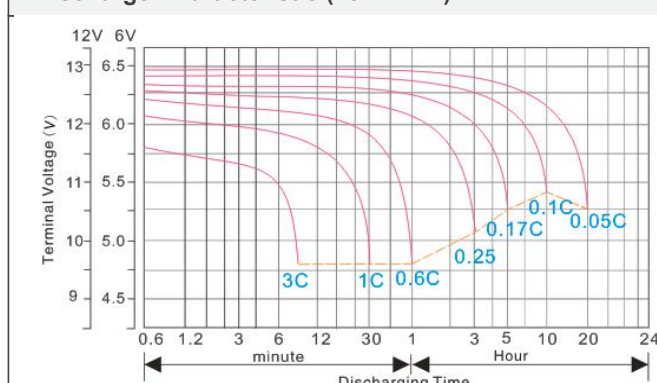
End Voltage	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
4.80V	31.9	24.9	12.7	8.98	7.56	6.02	4.48	3.38	2.16	1.44	1.18	0.624
4.95V	30.3	23.7	12.1	8.67	7.38	5.87	4.37	3.30	2.11	1.41	1.17	0.618
5.10V	28.9	22.6	11.5	8.38	7.20	5.73	4.26	3.22	2.06	1.38	1.16	0.612
5.25V	28.6	22.4	11.5	8.30	7.15	5.63	4.10	3.11	2.02	1.37	1.15	0.606
5.40V	28.3	22.2	11.3	8.22	7.10	5.52	3.94	3.00	1.98	1.35	1.14	0.600
Constant Power Discharge Data Sheet (@25°C) Unit: W												
4.80V	193	155	87.9	62.2	46.4	35.6	26.8	19.1	12.6	8.79	6.98	3.75
4.95V	184	148	83.7	60.1	45.3	34.8	26.1	18.7	12.3	8.62	6.91	3.72
5.10V	175	141	79.7	58.1	44.2	33.9	25.5	18.2	12.0	8.45	6.84	3.68
5.25V	169	137	78.1	56.8	43.5	33.4	25.2	17.8	11.9	8.39	6.74	3.63
5.40V	163	133	75.8	55.4	42.8	32.9	24.8	17.5	11.7	8.30	6.63	3.58

Performance Characteristics

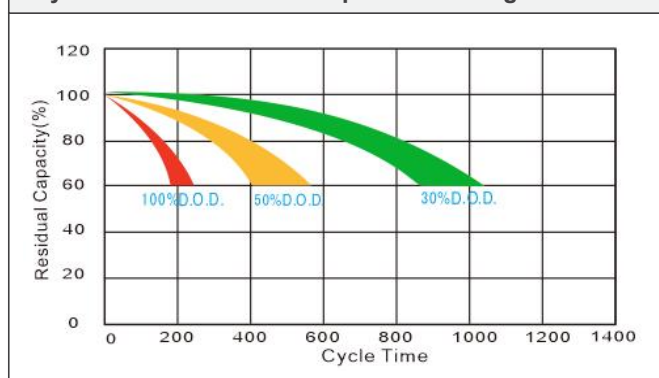
Charge Characteristics (25°C/77°F)



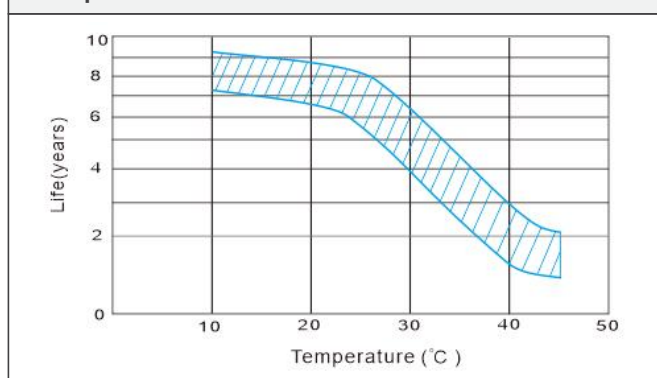
Discharge Characteristic (25°C/77°F)



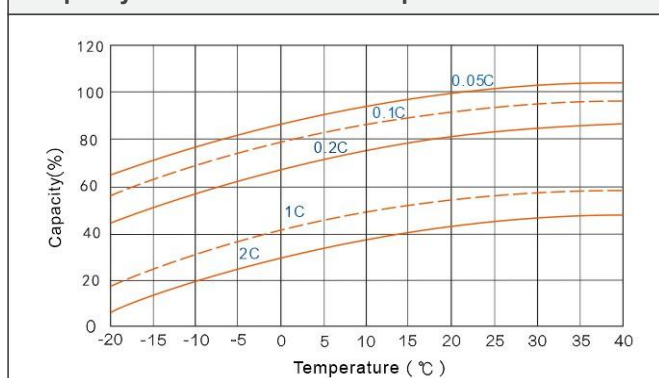
Cycle Life in Relation to Depth of Discharge



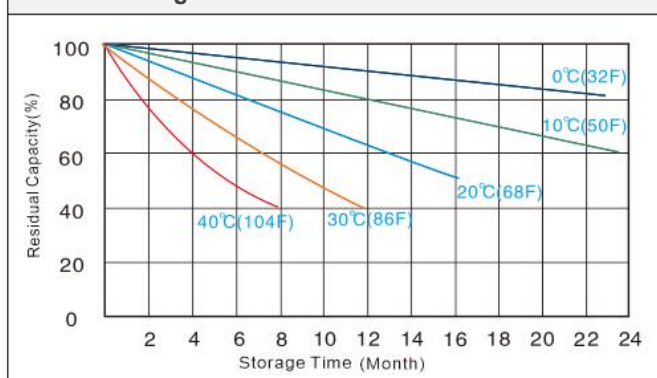
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



☆The datasheet subjects to change without prior notice, please contact with us if have any questions.