

VRLA AGM Battery

BT-12M5.0AC[12V5.0Ah]



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

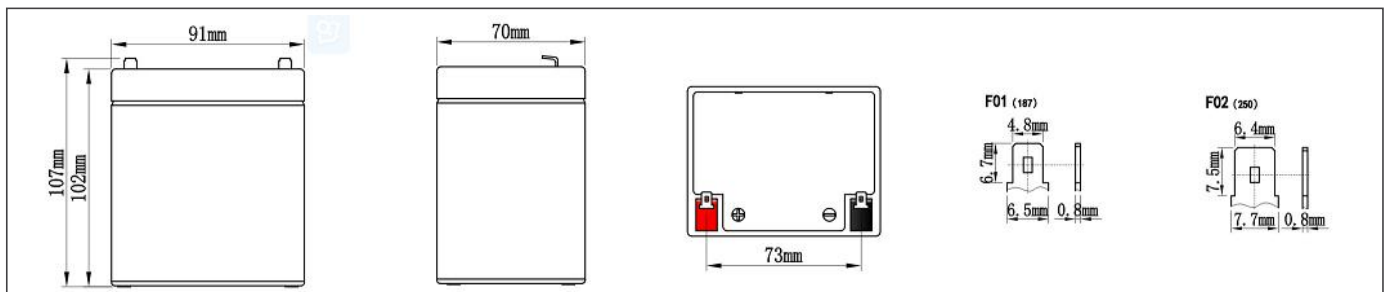
Application

- 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			
12V	5.0AH	91±2mm	70±2mm	102±2mm	107±2mm	Approx 1.56kg (3.43lbs)	≈27.5 mΩ	F01/F02 (standard)

Dimensions



Battery Discharge Table

End Voltage (V)	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												
9.6V	14.7	11.8	6.01	4.39	3.23	2.64	2.02	1.51	0.951	0.631	0.530	0.281
9.9V	14.0	11.1	5.72	4.24	3.16	2.57	1.98	1.48	0.928	0.619	0.525	0.279
10.2V	13.3	10.6	5.45	4.10	3.08	2.51	1.92	1.44	0.905	0.606	0.520	0.276
10.5V	13.1	10.4	5.29	4.00	3.07	2.48	1.87	1.40	0.884	0.600	0.515	0.274
10.8V	12.8	10.1	5.10	3.83	3.04	2.41	1.78	1.35	0.877	0.595	0.510	0.270
Constant Power Discharge Data Sheet (@25°C) Unit: W												
9.6V	174	140	79.2	56.2	41.8	32.1	24.1	17.3	11.3	7.92	6.29	3.39
9.9V	165	133	75.4	54.2	40.9	31.3	23.6	16.8	11.1	7.77	6.23	3.35
10.2V	157	127	71.9	52.4	39.8	30.6	23.0	16.4	10.8	7.61	6.17	3.32
10.5V	152	124	70.4	51.2	39.2	30.2	22.7	16.0	10.7	7.56	6.06	3.28
10.8V	147	120	68.3	49.9	38.6	29.6	22.4	15.8	10.6	7.48	5.97	3.22

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

Constant-Voltage Charge

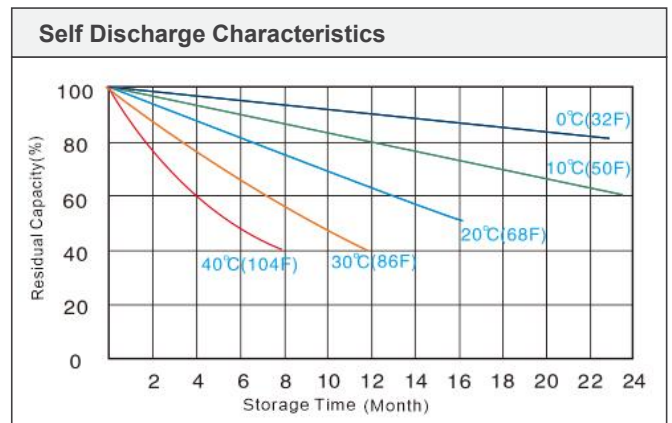
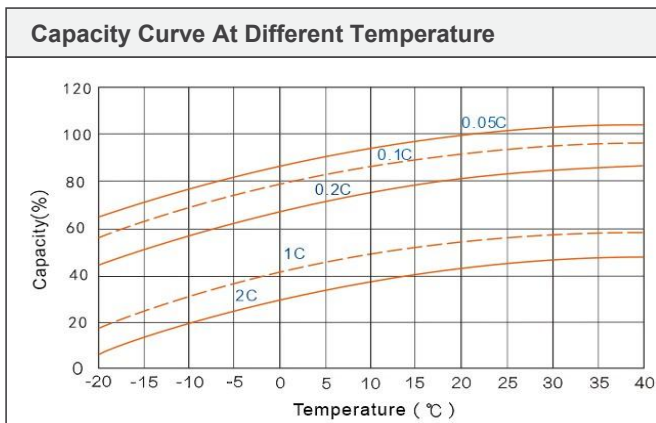
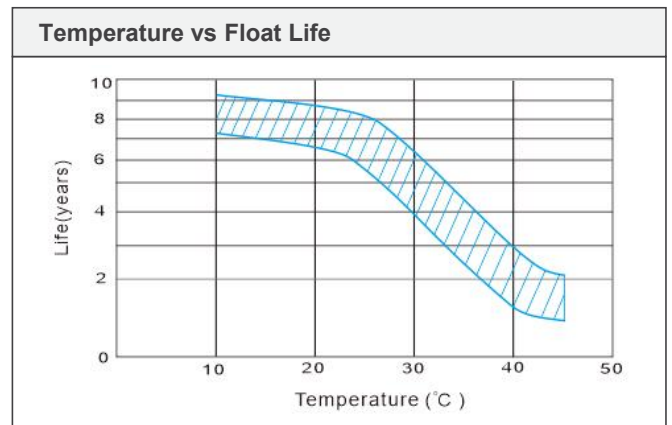
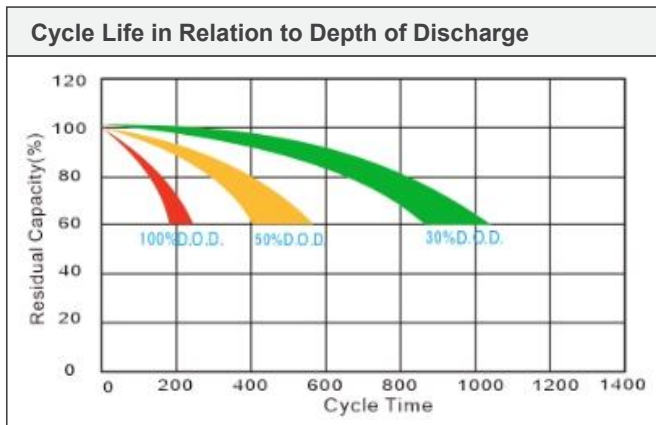
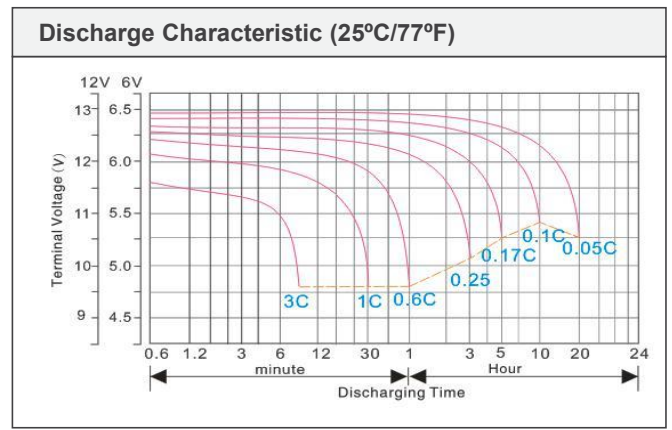
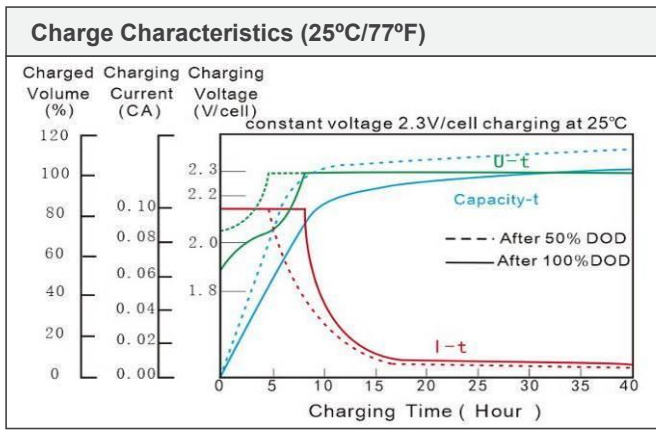
Rated Capacity	
20 hour rate (0.26A)	5.48AH
10 hour rate (0.52A)	5.10AH
5 hour rate (0.884A)	4.42AH
27 minute rate (5.2A)	2.34AH
7 minute rate (15.6A)	1.82AH

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 1.3A.
2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F).
3. Hold at 14.1V to 14.4V until current drop to under 0.031A for at least 3 hours.
4. Temperature compensation coefficient of charging voltage is -30mV/°C.

Standby Service
1. Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit 1.3A 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 -18mV/°C.

Performance Characteristics



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