

VRLA AGM Battery

6IP4.5VA[6V4.5Ah]



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

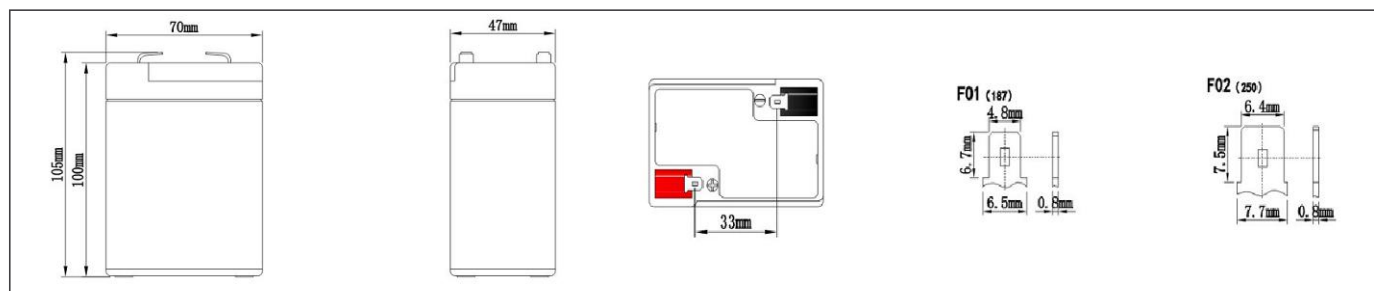
Application

- 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	4.5AH	70±2mm	47±1mm	100±2mm	105±2mm	Approx 0.7kg (1.54lbs)	≈31.2 mΩ	F01/F02 (standard)

Dimensions



Constant-Voltage Charge

Rated Capacity	
20 hour rate (0.225A)	4.56AH
10 hour rate (0.45A)	4.28AH
5 hour rate (0.76A)	3.70AH
27 minute rate (4.5A)	2.03AH
7 minute rate (13.5A)	1.58AH
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 1.35A.
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 0.027A 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 1.35A 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.

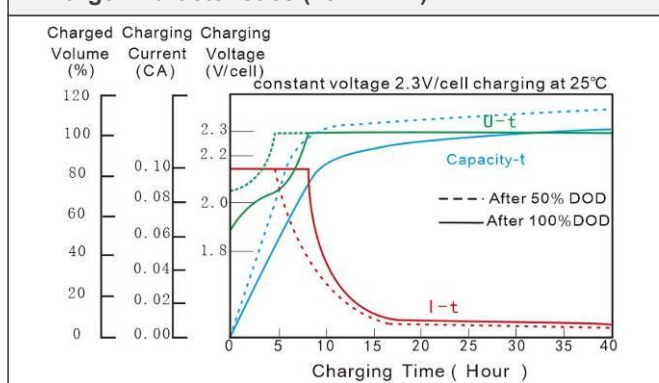
NOTE : The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation

Battery Discharge Table

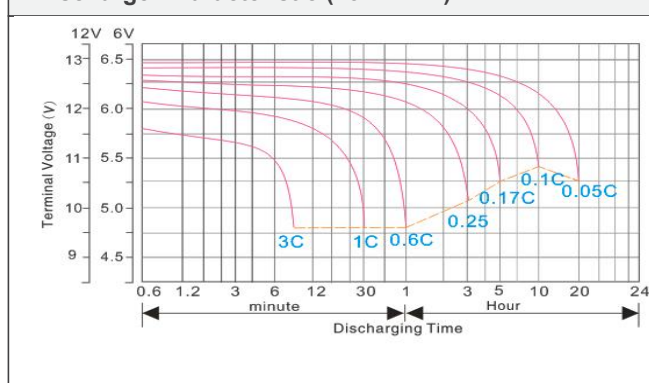
End Voltage	Minute (M)				Hour (H)							
	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
4.80V	12.2	9.75	5.01	3.65	2.70	2.20	1.68	1.26	0.79	0.525	0.446	0.235
4.95V	11.7	9.28	4.77	3.53	2.63	2.14	1.64	1.23	0.77	0.515	0.441	0.232
5.10V	11.1	8.84	4.54	3.41	2.57	2.09	1.60	1.20	0.75	0.505	0.437	0.230
5.25V	10.9	8.65	4.40	3.33	2.55	2.05	1.54	1.16	0.74	0.500	0.433	0.228
5.40V	10.6	8.41	4.24	3.19	2.53	2.00	1.47	1.12	0.73	0.495	0.428	0.225
Constant Power Discharge Data Sheet (@25°C) Unit: W												
4.80V	72.1	58.4	33.0	23.4	17.4	13.4	10.1	7.18	4.73	3.30	2.62	1.41
4.95V	68.7	55.6	31.4	22.6	17.0	13.0	9.81	7.00	4.61	3.23	2.60	1.39
5.10V	65.4	53.0	29.9	21.8	16.6	12.7	9.57	6.83	4.50	3.17	2.57	1.38
5.25V	63.2	51.4	29.3	21.3	16.3	12.5	9.43	6.68	4.45	3.15	2.53	1.36
5.40V	60.9	49.7	28.4	20.8	16.1	12.4	9.30	6.56	4.40	3.11	2.49	1.34

Performance Characteristics

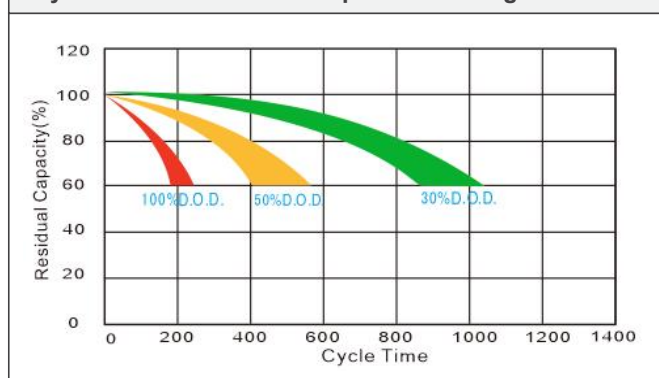
Charge Characteristics (25°C/77°F)



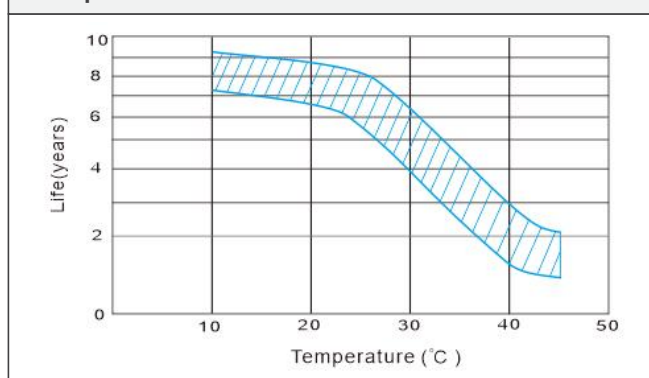
Discharge Characteristic (25°C/77°F)



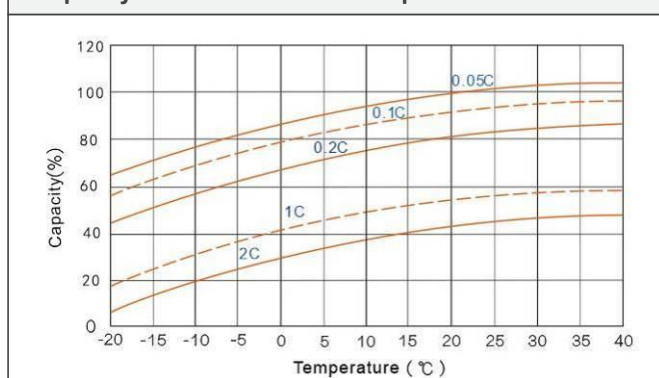
Cycle Life in Relation to Depth of Discharge



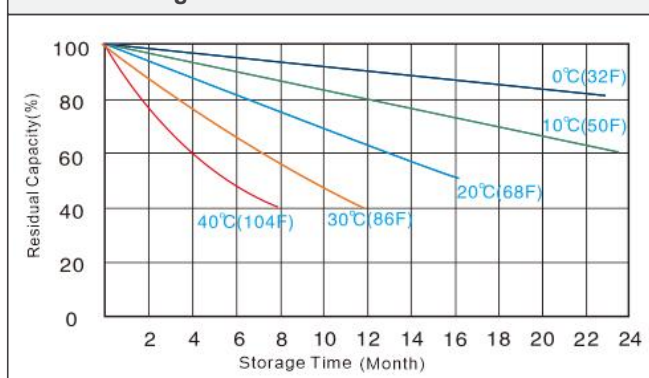
Temperature vs Float Life



Capacity Curve At Different Temperature



Self Discharge Characteristics



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