



3-FM-5Ah Valve-regulated Lead Acid Battery Specification

We are an ISO9001 certified organization. And the products are approved by CE&UL. The nominal voltage of this series is 12V. And the capacity ranges from 1.2Ah to 24Ah. Their typical applications include: Emergency lighting systems, Electricity power supply systems, Communication systems, UPS systems, Starting systems, Solar systems etc.

Battery Construction

Component	-----	Material
Positive Plate	-----	Lead Dioxide
Negative Plate	-----	Lead
Container	-----	ABS
Cover	-----	ABS
Safety Valve	-----	Rubber
Terminal	-----	Copper
Separator	-----	AGM glass
Electrolyte	-----	Sulfuric Acid

General Features

Maintenance free
Convenient for installation
Safety and no leakage
Excellent recharge and discharge performance
Low self-discharge rate, charge each standby 6 months, temperature 25°C
Adapt to high or low temperature
Good deep discharge performance
Longer cycle life
UL approval

Performance Characteristics

1. Dimension and Weight

Length	-----	70mm
Width	-----	47mm
Height	-----	100mm
Total Height	-----	104mm
Reference Weight	-----	0.78kg

2. Functional Parameter

Rated Voltage	-----	6V
Numbers of cells	-----	3 Cells
Designed Life	-----	3~5 Years

3. Rated Capacity at 25°C(77°F)

20 hours rate (0.1C, 10.8V)	-----	5Ah
5 hours rate (0.25C, 10.8V)	-----	4.2Ah
1 hours rate (0.55C, 10.5V)	-----	3Ah

4. Capacity Affected by Temperature(10 hours rate)

40 °C (104°F)	-----	103%
25 °C (77 °F)	-----	100%
0 °C (32 °F)	-----	85%
-15°C (5 °F)	-----	65%

5. Charge Method: Constant-Voltage Charging at 25°C(77°F)

Cyclic Use	-----	7.2~7.45V
Maximum Charging Current	-----	1.5A
Temperature Compensation	-----	-15mV/°C
Float Use	-----	6.8~6.9V
Temperature Compensation	-----	-10mV/°C

6. Environment Temperature Requirements

Discharge Temperature	-----	-15~50°C
Charge Temperature	-----	0~40°C
Storage Temperature	-----	-15~40°C

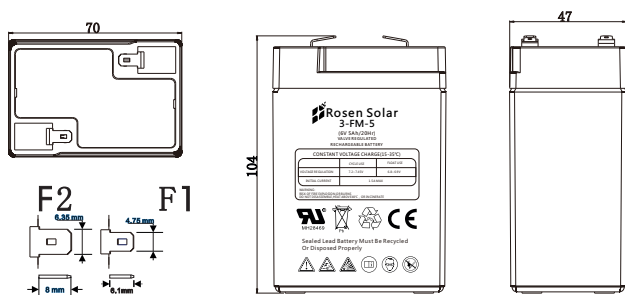
7. Inner Resistance & Max. Discharge Current

A fully charge battery at 25°C(77°F)	-----	24mΩ
Max. Discharge Current	-----	75A(5S)
Short Circuit Current	-----	250A

8. Self-discharge

3% of the capacity per month at 25°C(77°F)	
Capacity after 3 month storage	----- 91%
Capacity after 6 month storage	----- 82%
Capacity after 12 month storage	----- 64%

Dimensions(mm)



3D Model Review



Constant-Current Discharge Parameter Unit: A(25°C)

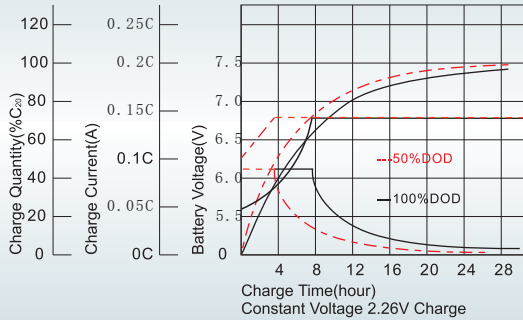
F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	12.80	9.34	7.32	6.19	4.78	3.47	2.82	1.25	0.83	0.47	0.250
1.75V/Cell	14.40	10.30	7.99	6.66	4.96	3.60	2.95	1.28	0.85	0.48	0.253
1.70V/Cell	15.90	11.20	8.53	7.00	5.16	3.74	3.04	1.31	0.87	0.49	0.257
1.65V/Cell	17.50	12.10	9.07	7.44	5.45	3.84	3.11	1.37	0.90	0.50	0.261
1.60V/Cell	19.30	13.10	9.71	7.92	5.75	4.00	3.14	1.41	0.93	0.50	0.262

Constant-Power Discharge Parameter Unit: W(25°C)

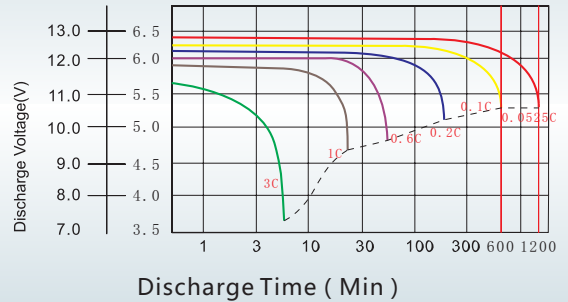
F.V/Time	5min	10min	15min	20min	30min	45min	1h	3h	5h	10h	20h
1.80V/Cell	23.10	17.10	13.50	11.5	8.97	6.62	5.40	2.43	1.62	0.92	0.495
1.75V/Cell	25.50	18.40	14.50	12.30	9.23	6.80	5.63	2.46	1.65	0.94	0.499
1.70V/Cell	27.30	19.60	15.30	12.80	9.56	7.05	5.79	2.53	1.69	0.96	0.507
1.65V/Cell	29.70	21.00	16.10	13.50	10.00	7.16	5.88	2.62	1.73	0.98	0.514
1.60V/Cell	32.00	22.30	17.00	14.20	10.50	7.42	5.90	2.69	1.78	0.99	0.516

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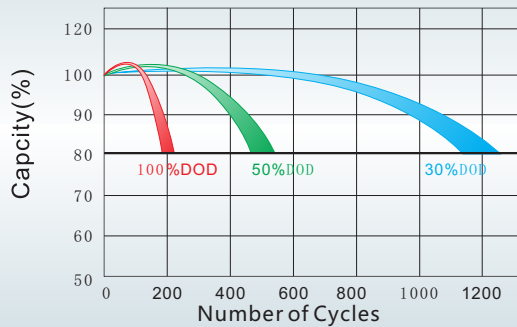
Charge Characteristics for Float Use @25°C/77°F



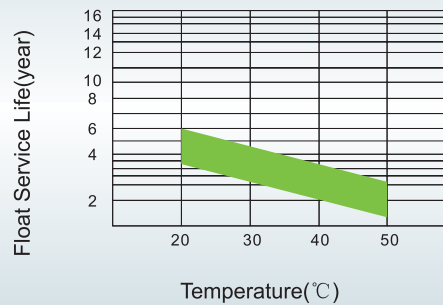
Discharge Characteristics at Various Rates @25°C/77°F



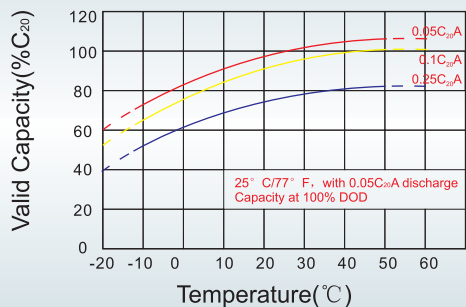
Cycle Life in Relation to Depth of Discharge



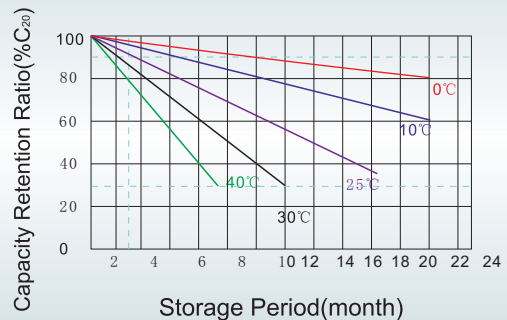
Float Service Life



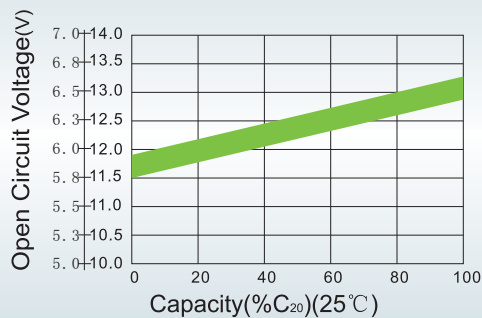
Temperature and Valid Capacity



Self Discharge Characteristics



Capacity and Open Circuit Voltage



Relationship between Charging Voltage and Temperature

