ONE 712014 - 6FM14DC

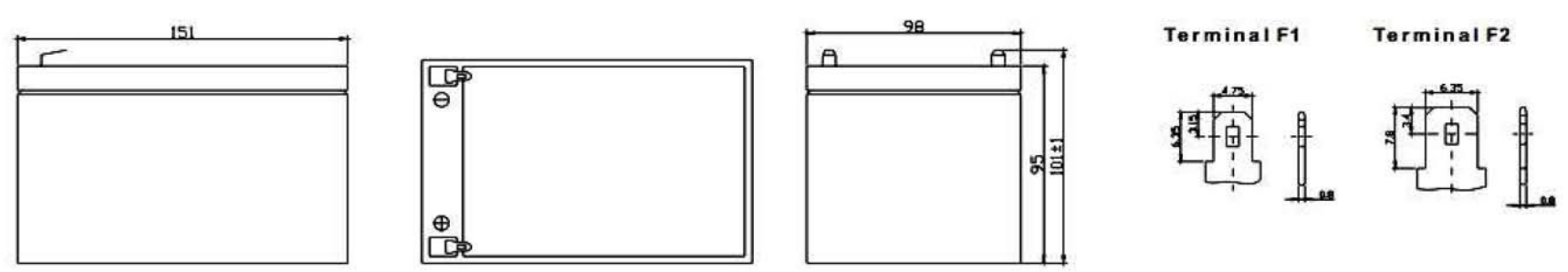
6FM14DC is AGM deep cycle battery, with specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it can deliver more than 450 cycles at 100% DOD. It is applicable for electric bicycle, golf cart, electric wheelchair, etc..

Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	14AH@20hr-rate to 1.75V per cell @ 25℃
Weight	Approx. 4.2kg (Tolerance±3%)
Max. Discharge Current	120A(5sec)
Internal Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25±5℃
Float Charging Voltage	13.6 to 13.8 VDC/unit Average at 25℃
Recommended Maximum Charging Current Limit	3.6A
Equalization and Cycle service	14.6 to 14.8 VDC /unit Average at 25℃
Self Discharge	ONE7 Vale Regulated Lead Acid(VRLA) Can be stored for more than 6 months at 25℃. Self-discharge ratio less than 3% per month at25℃. Please charge batteries before using .
Terminal	Terminal F2(NO.250)
Container Material	A.B.S. UL94-HB, Flammability resistance of UL94-V2 can be avail upon request

Dimensions

Unit: mm Dimension: 151(L)×98(W)×101(H)



Constant Current Discharge Characteristics: A(25℃)

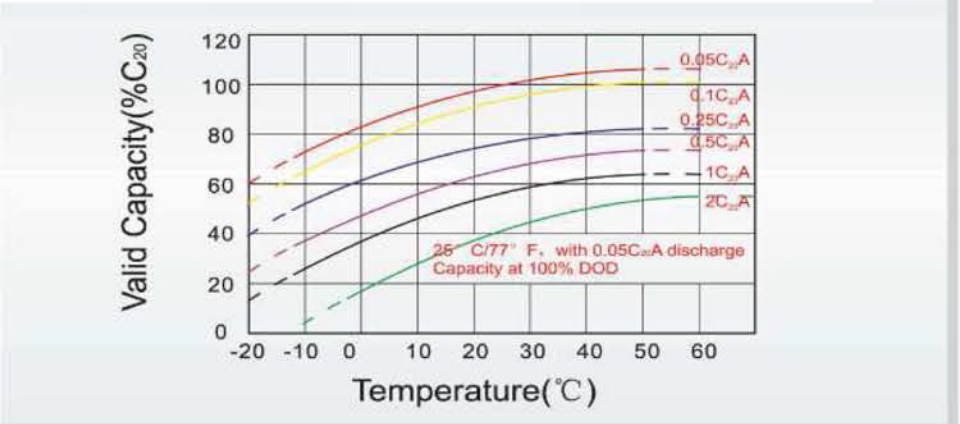
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	94.4	48.9	39.49	22.38	12.42	7.15	4.62	3.38	2.806	1.787	1.547	0.869
10.0V	91.0	47.7	38.23	22.09	12.08	7.01	4.53	3.33	2.759	1.780	1.532	0.837
10.5V	77.0	42.4	35.06	21.16	11.73	6.84	4.45	3.27	2.696	1.748	1.501	0.797
10.8V	69.0	39.6	33.08	20.46	11.52	6.79	4.40	3.25	2.668	1.742	1.476	0.751
11.1V	60.4	36.3	30.51	19.88	11.21	6.78	4.31	3.22	2.640	1.728	1.453	0.738

Constant Power Discharge Characteristics: W(25℃)

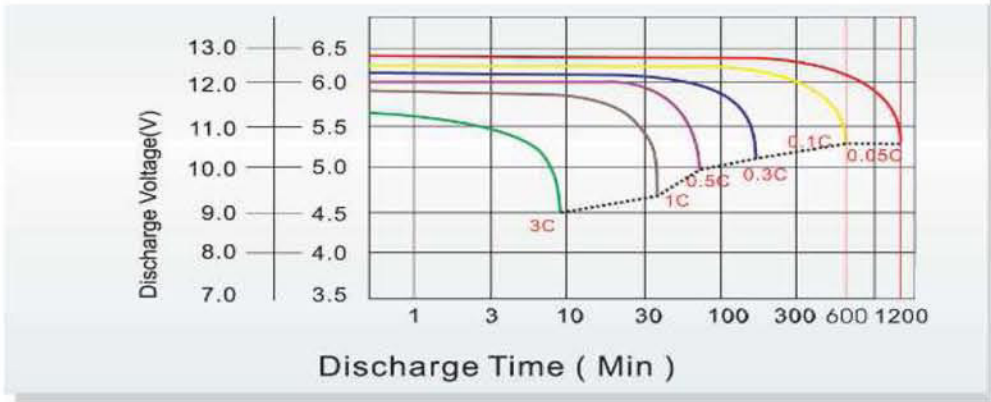
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	993.3	520.6	422.84	256.20	144.24	83.46	53.96	39.99	33.22	21.41	18.54	10.41
10.0V	967.4	509.8	416.75	253.55	142.07	82.74	53.84	39.90	33.05	21.32	18.36	10.04
10.5V	839.8	469.4	389.87	246.24	139.19	81.56	53.42	39.21	32.34	20.98	18.00	9.57
10.8V	757.7	439.1	368.34	240.41	136.92	80.88	52.80	39.06	32.01	20.89	17.72	9.02
11.1V	668.2	408.8	346.92	233.84	134.34	78.09	51.77	38.67	31.70	20.74	17.47	8.88

All mentioned values are average values.

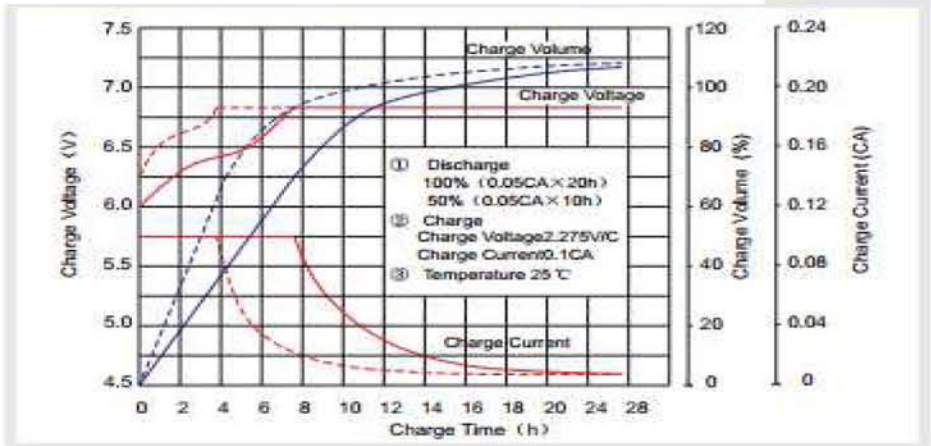
Temperature and Valid Capacity



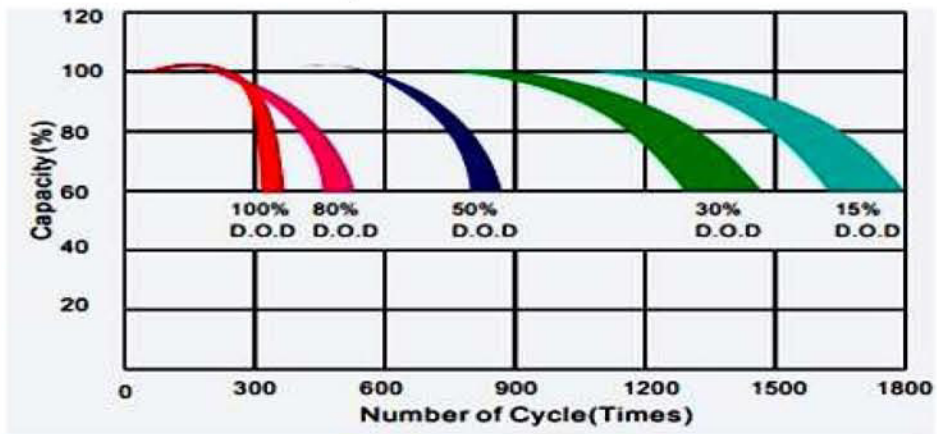
Discharg Characteristics at Various Rates @25℃/77℃



Charge characteristic curve for standby use



Life characteristics of cyclic use



Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	A≤0.2C	0.2C≤A≤1.0C	≥1.0C

Charge the batteries at least once every six months, if they are stored at 25℃

Charging Method:

Constant Voltage	-0.2C*2h+2.4-2.45V/cell*24h, Max. Current 0.3CA
Constant Current	-0.2C*2h+0.1CA*12h
Fast	-0.2C*2h+0.3CA*4.0h

Maintenance & Cautions

Float Service
※ Every month, recommend inspection every battery voltage
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. Current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h
※ Effect of temperature on float charge voltage: -3mV/Cell.
※ Length of service life will be directly affected by the number of discharge
cycles, depth of discharge, ambient temperature and charging voltage.